Worcestershire Health and Wellbeing Board

Joint Strategic Needs Assessment Briefing on Childhood Excess Weight

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Summary

- In Worcestershire the percentage of eligible children measured as part of the National Child Measurement Programme (NCMP) has been consistently higher than the target of 85% since 2008/09.
- The percentage of Reception children (age 4-5) in Worcestershire who are overweight has dropped to its lowest level since recording began and is roughly equivalent to the England average.
- Worcestershire continues to have a lower percentage of year 6 children (aged 10-11) who are classified as having excess weight (overweight or obese combined) than the national average.
- Nationally, in both year groups, boys have higher percentages of overweight or obese combined than girls and the gap appears to be widening.
- Disappointingly, by Year 6 the gap between boys and girls in Worcestershire widened considerably in 201718 with boys 5.6 percentage points higher in the combined overweight or obese category.
- Wyre Forest, Redditch and Wychavon Districts have significantly higher percentages of children with excess weight for Reception year than the Worcestershire average in the 3 years pooled data 2015/16–2017/18.
- In the same time period, Wyre Forest District had the highest percentage of Year 6 combined overweight or obese children. However, Redditch is also showing higher rates over the last few years and will need to be monitored.

- The time trend for Wyre Forest District, however, does indicate an improvement in the percentage of combined overweight or obese Reception children.
- The most deprived areas of Worcestershire have higher rates of children with excess weight than the least deprived areas.
- The gap between the most and least deprived areas increases with the age of the child.

Background

In 2016 the Government published 'Childhood Obesity: a Plan for Action' which reaffirms that tackling childhood obesity is a government priority. Younger generations are becoming obese at earlier ages and staying obese for longer. Obese children are more likely to be ill, be absent from school due to illness, experience health-related limitations and require more medical care than normal weight children. Overweight and obese children are also more likely to become obese adults and have a higher risk of disease, disability and premature death in adulthood.

The National Child Measurement Programme (NCMP) was established in 2005 and is one element of the Government's work to tackle childhood obesity. The NCMP involves weighing and measuring children in reception year (aged 4-5) and year 6 (aged 10-11) to assess levels of excess weight.

The results from the annual NCMP survey are used both nationally and locally to support the planning and delivery of services for children.

Key Indicators

Table 1 shows the key NCMP indicators from the Public Health Outcomes Framework (PHOF) in 2017–2018 (school year). Excess weight is defined as children classified as overweight and obese combined.

Table 1 - NCMP Indicators from the PHOF - Worcestershire Compared to National Average

PHOF Indicator	Period	Units	England	West Midlands	Worcestershire	Trend
2.06i – Child excess weight in 4-5 year olds (Reception)	2017 - 2018	Percentage	22.4 (LCI 22.3 – 22.5 UCI)	23.4 (LCI 23.1 – 23.7 UCI)	22.4 (LCI 21.4 – 23.5 UCI)	↓
2.06ii – Child excess weight in 10-11 year olds (Year 6)	2017 - 2018	Percentage	34.3 (LCI 34.2 – 34.4 UCI)	37.1 (LCI 36.8 – 37.5 UCI)	32.8 (LCI 31.6 – 34.0 UCI)	No significant change

Source: Public Health Outcomes Framework, PHE, February 2019

Key

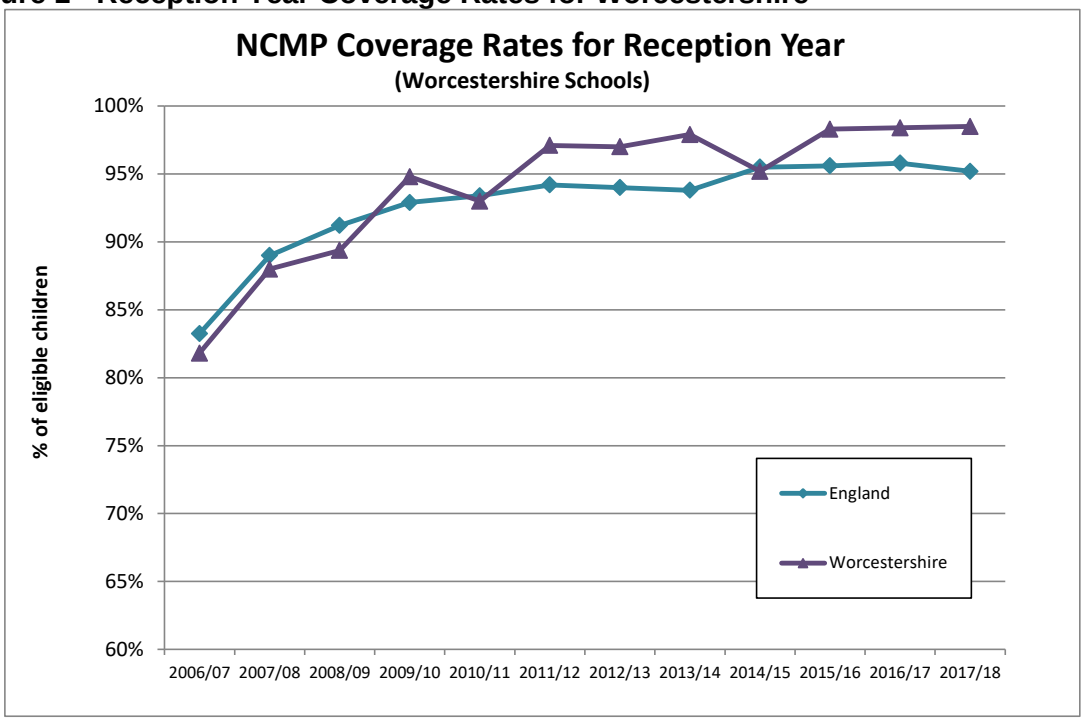
Compared with National benchmark	Better	Similar	Worse

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 average in 2017/18, Worcestershire had a similar percentage of Reception children who had excess weight and a lower percentage of children in year 6.

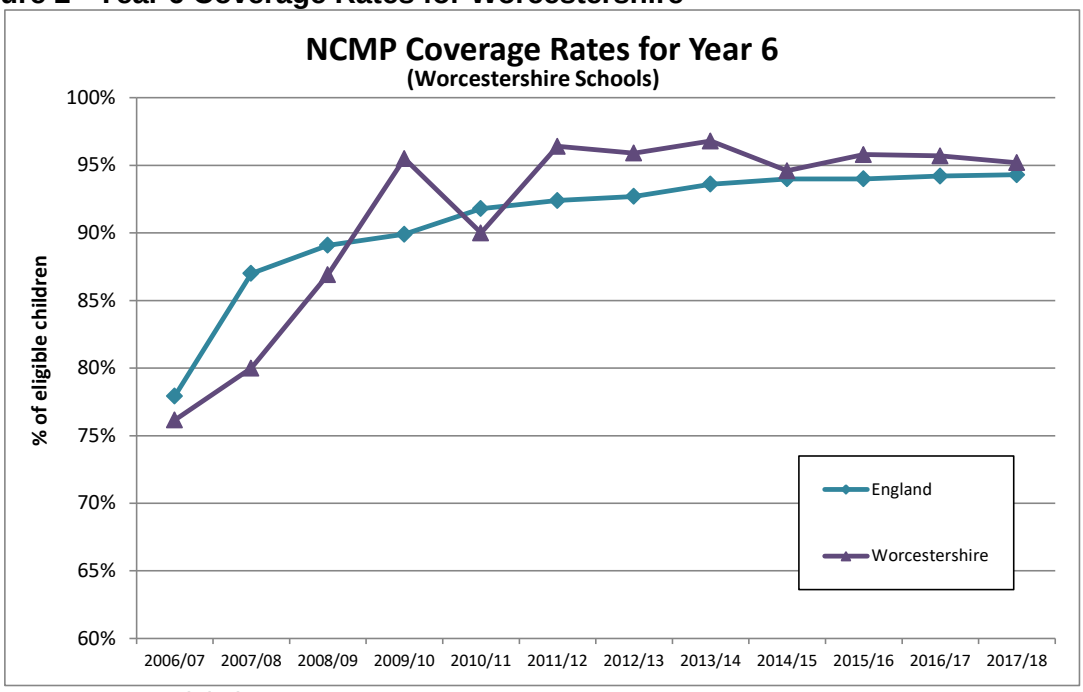
Coverage

Figure 1 - Reception Year Coverage Rates for Worcestershire



Source: NHS Digital

Figure 2 - Year 6 Coverage Rates for Worcestershire

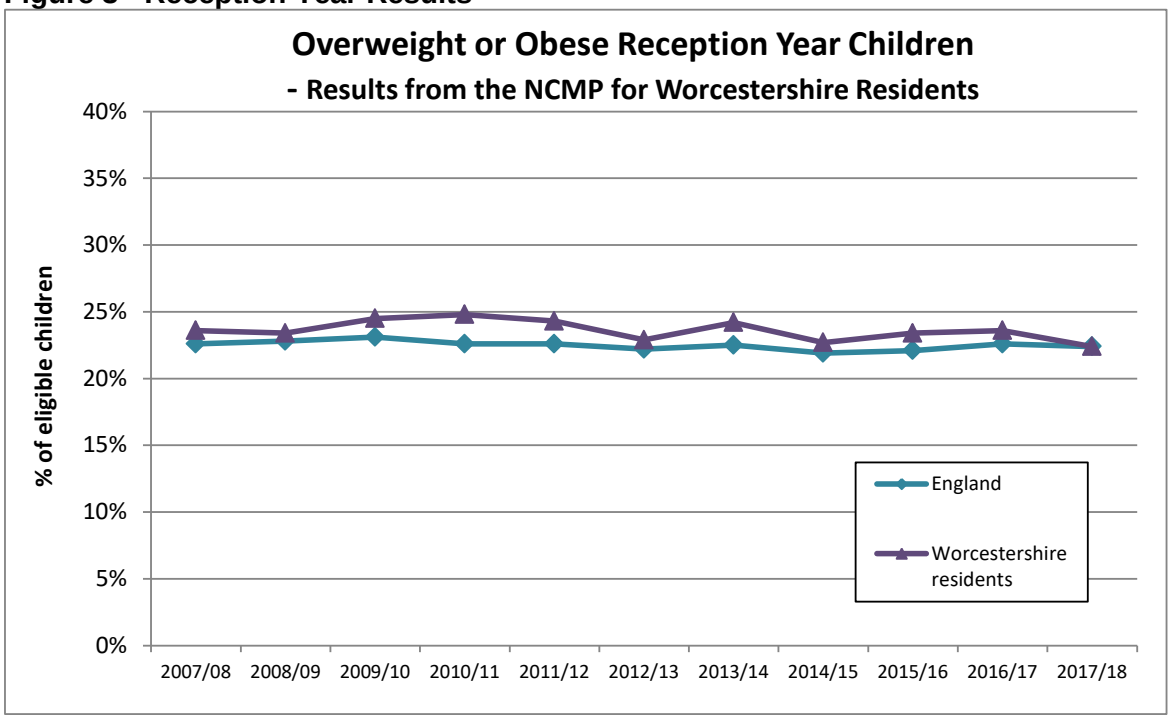


Source: NHS Digital

Apart from a slight dip in 2014/15, coverage rates in Worcestershire have been consistently above the national average over the last 7 years.

Results

Figure 3 - Reception Year Results



Source: NHS Digital

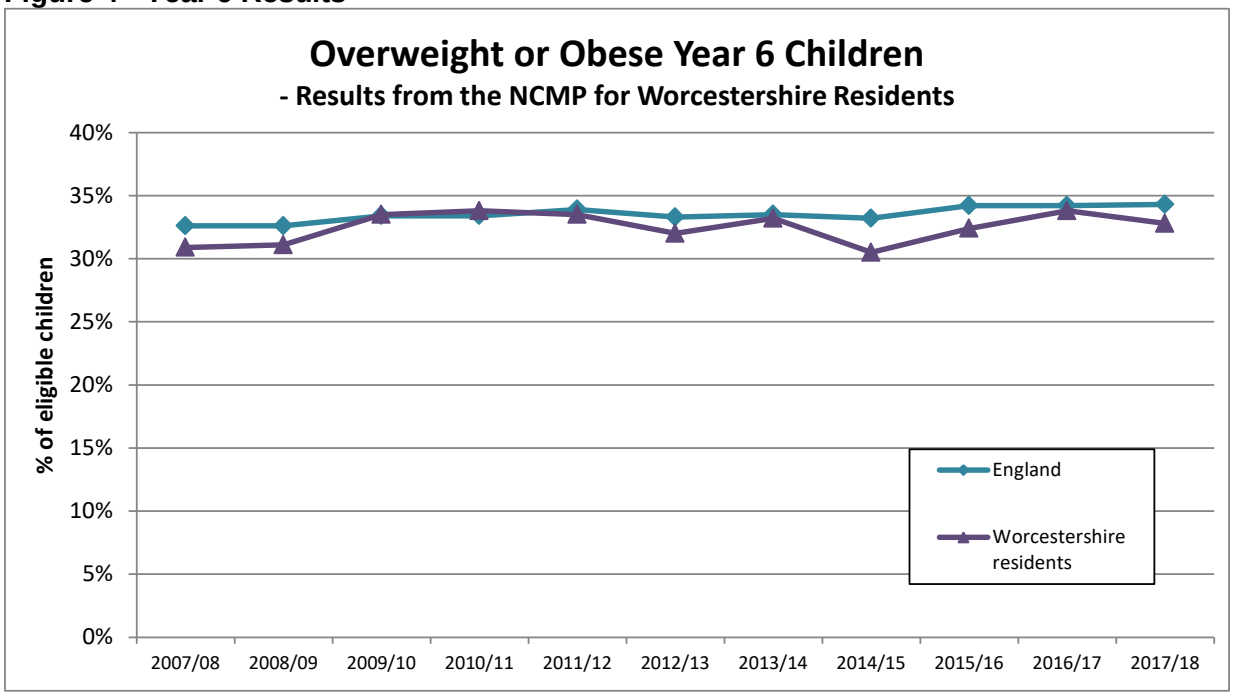
In Reception children both the percentage overweight and those who were classed as obese decreased in 2017/18 in Worcestershire bringing the overall percentage to its lowest level since recording began. Worcestershire has consistently had higher percentages than England, so it is encouraging to see the percentage fall to achieve the same level as the England average.

Table 2 - Reception Year Results Compared to England

Reception Year	Worcestershire			England		
	Overweight	Obese	Overweight and Obese combined	Overweight	Obese	Overweight and Obese combined
2007/08	15.3%	8.3%	23.6%	13.0%	9.6%	22.6%
2008/09	14.1%	9.3%	23.4%	13.2%	9.6%	22.8%
2009/10	14.1%	10.4%	24.5%	13.3%	9.8%	23.1%
2010/11	15.5%	9.3%	24.8%	13.2%	9.4%	22.6%
2011/12	14.3%	10.0%	24.3%	13.1%	9.5%	22.6%
2012/13	13.8%	9.1%	22.9%	13.0%	9.3%	22.2%
2013/14	14.7%	9.5%	24.2%	13.1%	9.5%	22.5%
2014/15	13.3%	9.4%	22.7%	12.8%	9.1%	21.9%
2015/16	13.8%	9.6%	23.4%	12.8%	9.3%	22.1%
2016/17	14.1%	9.5%	23.6%	13.0%	9.6%	22.6%
2017/18	13.1%	9.3%	22.4%	12.8%	9.5%	22.4%

Source: NHS Digital

Figure 4 - Year 6 Results



Source: NHS Digital

It is encouraging to see the overall percentage of Year 6 children who were classed as having excess weight, decrease again to a level which is lower than the England rate.

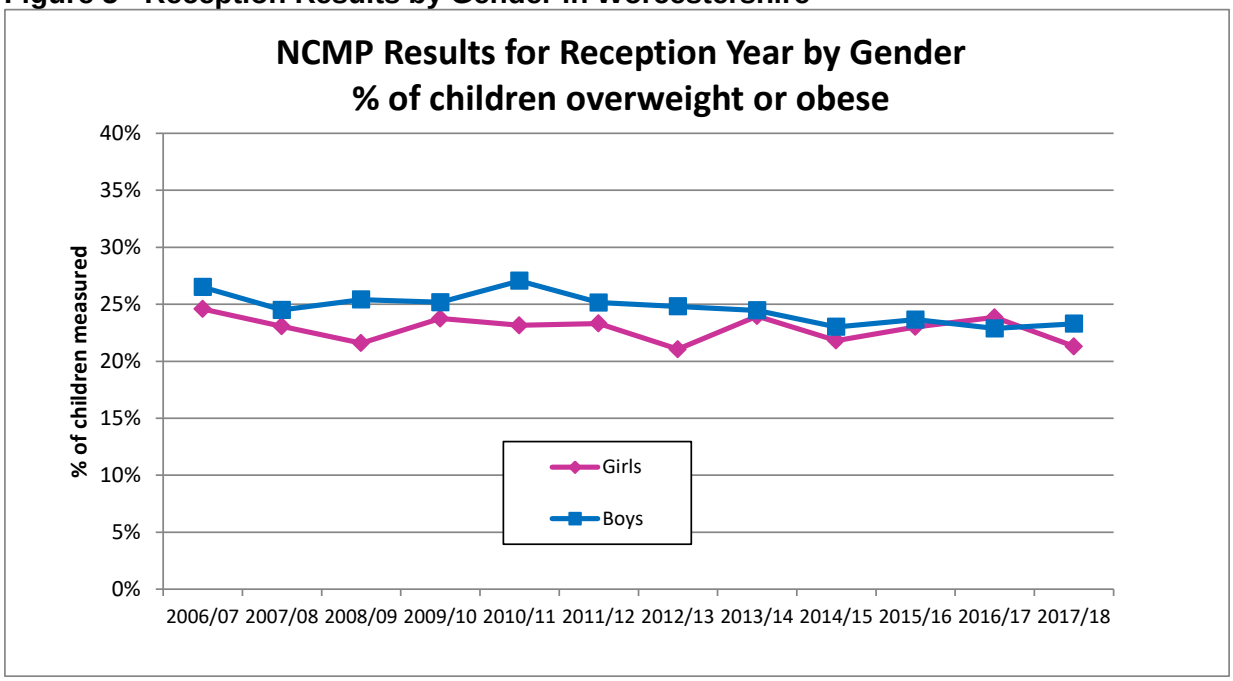
Table 3 - Year 6 Results Compared to England

Year 6	Worcestershire			England		
	Overweight	Obese	Overweight or Obese combined	Overweight	Obese	Overweight or Obese combined
2007/08	14.5%	16.5%	30.9%	14.3%	18.3%	32.6%
2008/09	14.4%	16.7%	31.1%	14.3%	18.3%	32.6%
2009/10	14.7%	18.8%	33.5%	14.6%	18.7%	33.4%
2010/11	15.2%	18.6%	33.8%	14.4%	19.0%	33.4%
2011/12	15.3%	18.2%	33.5%	14.7%	19.2%	33.9%
2012/13	14.4%	17.6%	32.0%	14.4%	18.9%	33.3%
2013/14	14.8%	18.4%	33.2%	14.4%	19.1%	33.5%
2014/15	12.6%	17.9%	30.5%	14.2%	19.1%	33.2%
2015/16	14.0%	18.4%	32.4%	14.3%	19.8%	34.2%
2016/17	14.2%	19.6%	33.8%	14.3%	20.0%	34.2%
2017/18	14.2%	18.6%	32.8%	14.2%	20.1%	34.3%

Source: NHS Digital

Results by Gender

Figure 5 - Reception Results by Gender in Worcestershire



Source: NHS Digital

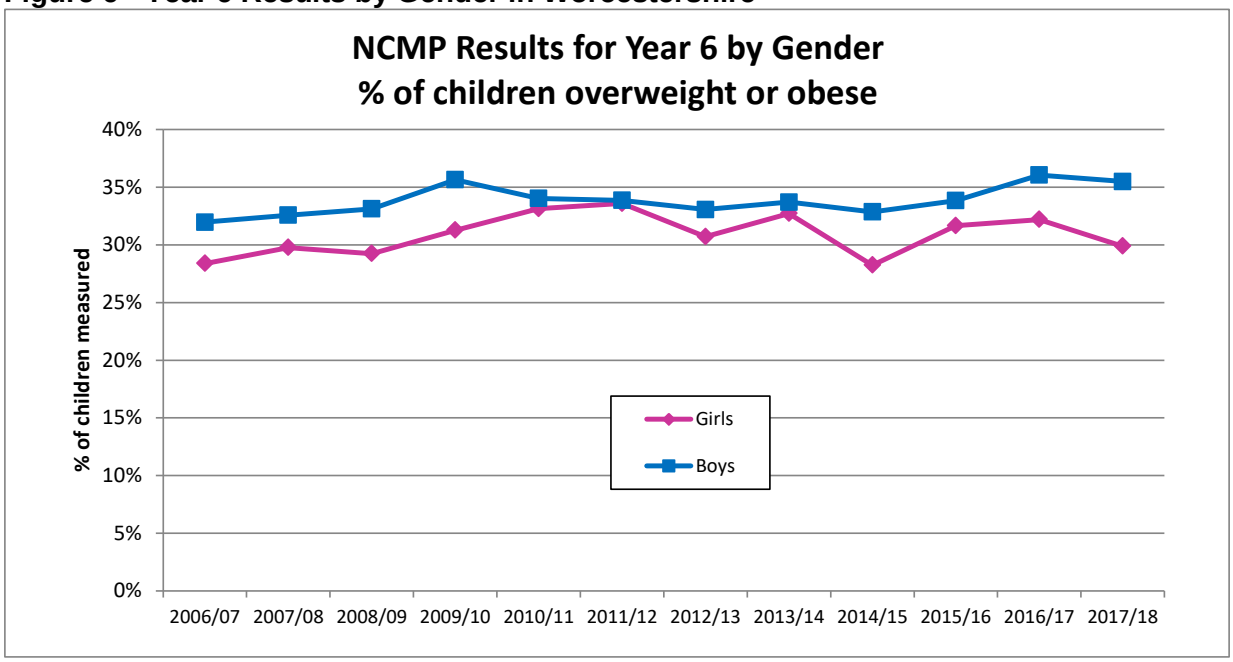
During 2017/18 the percentage of Reception children classed as having excess weight was 23.3% of boys and 21.3% of girls. This shows an increase for boys and a considerable decrease for girls. After a dip in 2016/17 boys have returned to match the national rate in that they there are a higher percentage of boys with excess weight than girls.

Table 4 - Reception Results by Gender in Worcestershire

Reception Year	Boys			Girls		
	Overweight	Obese	Overweight or Obese combined	Overweight	Obese	Overweight or Obese combined
2006/07	15.9%	10.6%	26.5%	15.6%	9.0%	24.6%
2007/08	15.8%	8.6%	24.5%	14.8%	8.2%	23.1%
2008/09	15.4%	10.0%	25.4%	12.8%	8.8%	21.6%
2009/10	14.6%	10.6%	25.2%	13.5%	10.2%	23.7%
2010/11	16.5%	10.6%	27.1%	14.9%	8.3%	23.2%
2011/12	15.0%	10.1%	25.2%	13.4%	9.9%	23.3%
2012/13	14.4%	10.4%	24.8%	13.2%	7.8%	21.1%
2013/14	15.0%	9.4%	24.5%	14.2%	9.7%	24.0%
2014/15	13.4%	9.7%	23.0%	13.1%	8.8%	21.8%
2015/16	13.4%	10.3%	23.7%	13.9%	9.1%	23.0%
2016/17	13.5%	9.4%	22.9%	14.3%	9.6%	23.9%
2017/18	13.7%	9.6%	23.3%	12.6%	8.7%	21.3%

Source: NHS Digital

Figure 6 - Year 6 Results by Gender in Worcestershire



Source: NHS Digital

In Year 6 in Worcestershire there was a decrease in almost all categories this year with 35.5% of boys and 29.9% of girls classed as having excess weight. In boys there was a slight shift between Obese and Overweight, with a slightly higher percentage of overweight boys but obesity dropping by 1 percentage point which meant that the overall combined excess weight percentage dropped. As can be seen most starkly in the graph above, the gap is widening in Worcestershire between genders and this year is over 5.5 percentage points.

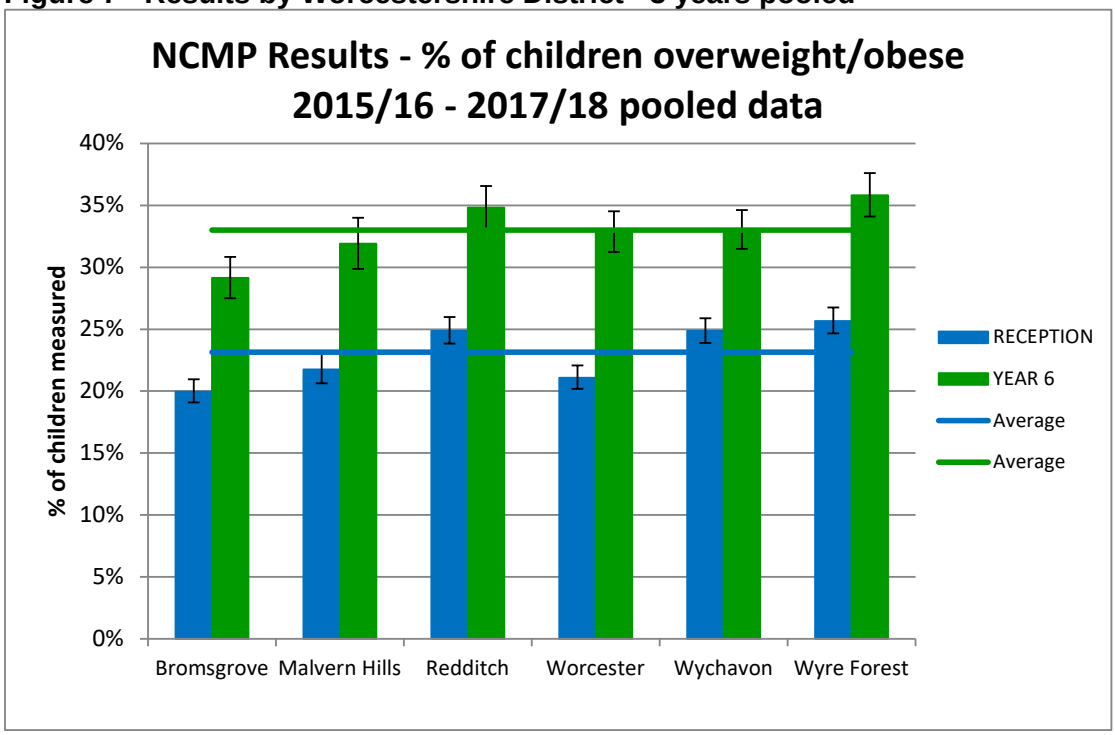
Table 5 - Year 6 Gender Results in Worcestershire

Year 6	Boys			Girls		
	Overweight	Obese	Overweight or Obese	Overweight	Obese	Overweight or Obese
2006/07	14.7%	17.3%	32.0%	15.6%	12.8%	28.4%
2007/08	14.1%	18.4%	32.6%	14.9%	14.9%	29.8%
2008/09	13.9%	19.2%	33.1%	14.8%	14.4%	29.2%
2009/10	14.3%	21.3%	35.7%	14.8%	16.4%	31.3%
2010/11	15.0%	19.1%	34.0%	15.2%	18.0%	33.1%
2011/12	14.6%	19.3%	33.9%	16.5%	17.0%	33.6%
2012/13	14.5%	18.5%	33.1%	14.3%	16.4%	30.7%
2013/14	14.7%	19.0%	33.7%	14.9%	17.8%	32.7%
2014/15	13.3%	19.5%	32.9%	12.2%	16.1%	28.2%
2015/16	13.5%	20.3%	33.8%	14.5%	17.1%	31.7%
2016/17	14.4%	21.7%	36.1%	14.3%	17.9%	32.2%
2017/18	14.8%	20.7%	35.5%	13.5%	16.4%	29.9%

Source: NHS Digital

Results by District

Figure 7 - Results by Worcestershire District - 3 years pooled



Source: NCMP Enhanced Dataset analysed by WCC Public Health Dept

Looking at three years pooled data, Wyre Forest, Redditch and Wychavon Districts have higher percentages of children with excess weight for Reception year than the Worcestershire average, whereas Bromsgrove and Worcester Districts have lower rates.

Wyre Forest District once again has the highest percentage of excess weight year 6 children over the three year period. Wyre Forest and Redditch Districts had higher percentages than the Worcestershire average whereas Bromsgrove District had lower percentages.

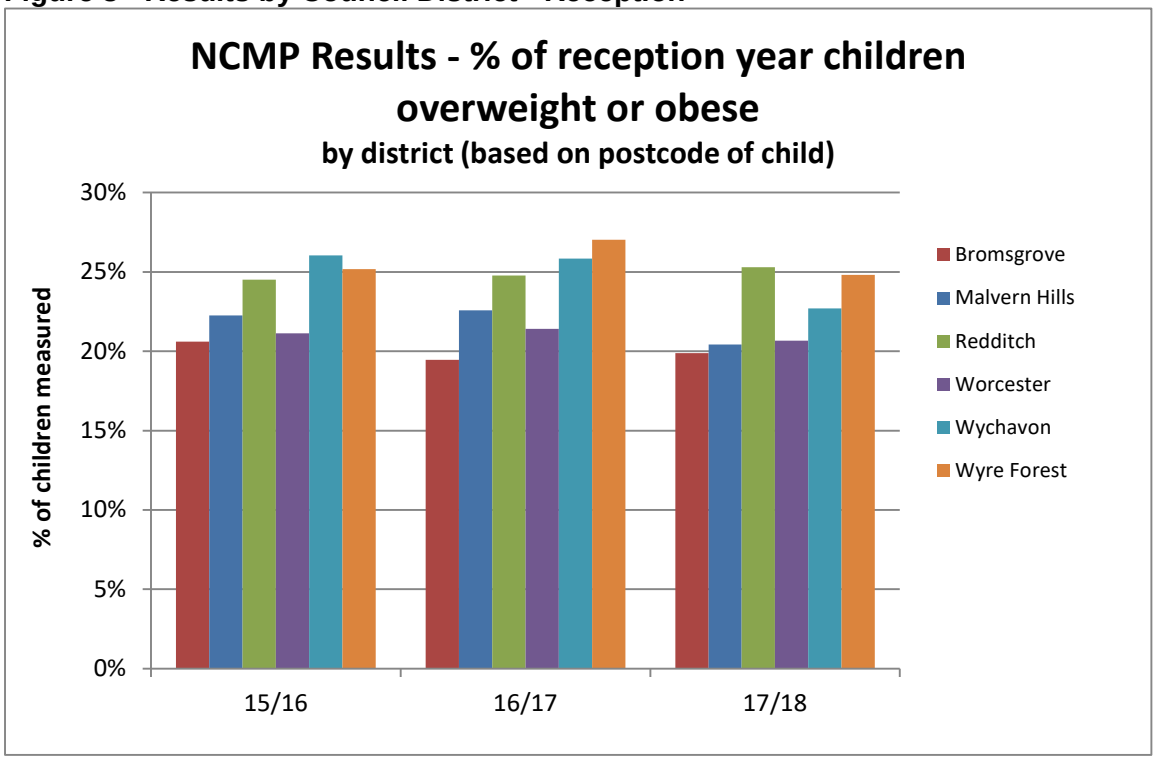
The following tables and graphs show the annual figures by council district based on the postcode of the child.

Table 6 - Reception Year Results by Council District

District	Overweight			Obese			Overweight or Obese combined		
	15/16	16/17	17/18	15/16	16/17	17/18	15/16	16/17	17/18
Bromsgrove	12.2%	12.9%	12.1%	8.4%	6.5%	7.7%	20.6%	19.5%	19.9%
Malvern Hills	12.3%	14.4%	13.2%	9.9%	8.2%	7.2%	22.3%	22.6%	20.4%
Redditch	14.0%	13.9%	14.6%	10.6%	10.9%	10.7%	24.5%	24.8%	25.3%
Worcester	12.1%	12.6%	11.6%	9.0%	8.8%	9.0%	21.1%	21.4%	20.7%
Wychavon	15.6%	14.4%	12.9%	10.4%	11.5%	9.8%	26.0%	25.8%	22.7%
Wyre Forest	15.8%	16.4%	14.4%	9.3%	10.6%	10.4%	25.2%	27.0%	24.8%
All Districts	13.8%	14.1%	13.1%	9.6%	9.5%	9.3%	23.4%	23.6%	22.4%

Source: NHS Digital

Figure 8 - Results by Council District - Reception



Source: NHS Digital

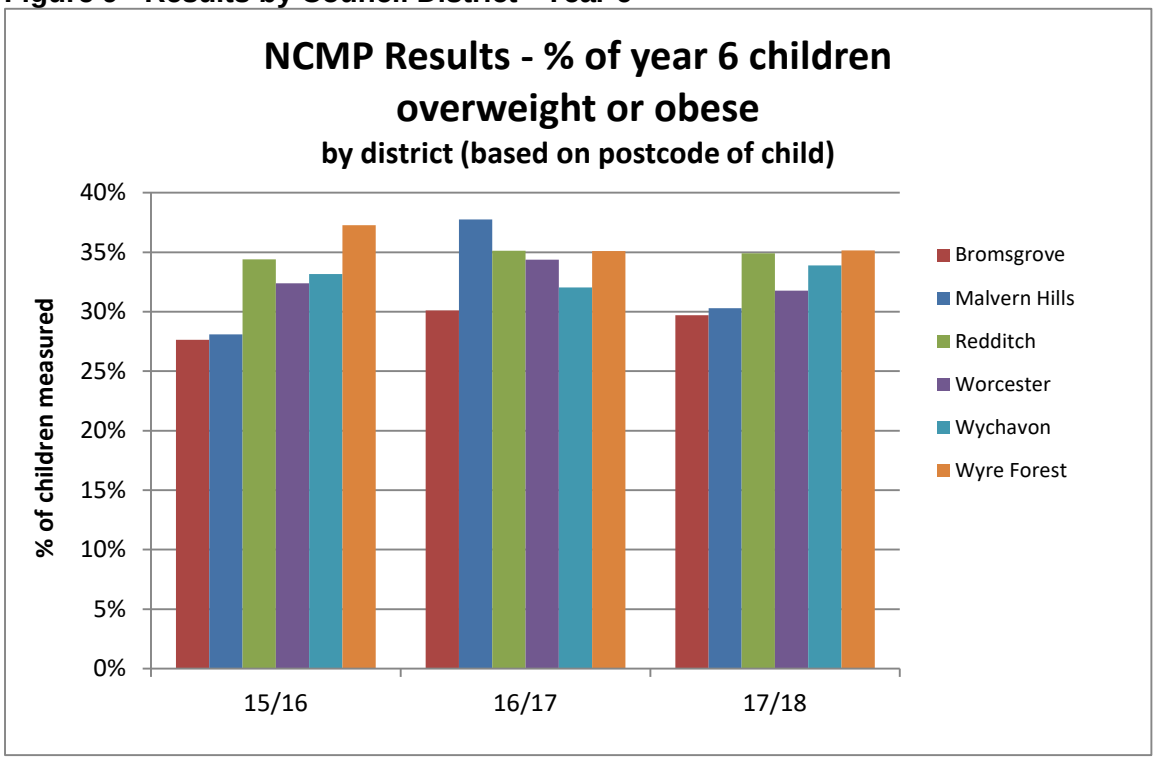
Redditch, Wyre Forest and Wychavon Districts have had consistently high rates of reception children with excess weight, although Wychavon and Wyre Forest District rates have decreased slightly in 2017/18.

Table 7 - Year 6 Results by Council District

District	Overweight			Obese			Overweight or Obese combined		
	15/16	16/17	17/18	15/16	16/17	17/18	15/16	16/17	17/18
Bromsgrove	13.6%	13.5%	13.3%	14.0%	16.6%	16.4%	27.6%	30.1%	29.7%
Malvern Hills	13.1%	16.5%	16.6%	15.0%	21.3%	13.7%	28.1%	37.8%	30.3%
Redditch	13.0%	12.4%	14.3%	21.4%	22.7%	20.6%	34.4%	35.1%	34.9%
Worcester	15.0%	14.2%	12.5%	17.4%	20.2%	19.2%	32.4%	34.4%	31.8%
Wychavon	14.4%	14.4%	15.3%	18.8%	17.6%	18.6%	33.2%	32.0%	33.9%
Wyre Forest	14.6%	15.1%	14.2%	22.6%	20.0%	21.0%	37.3%	35.1%	35.2%
All Districts	14.0%	14.2%	14.2%	18.4%	19.6%	18.6%	32.4%	33.8%	32.8%

Source: NHS Digital

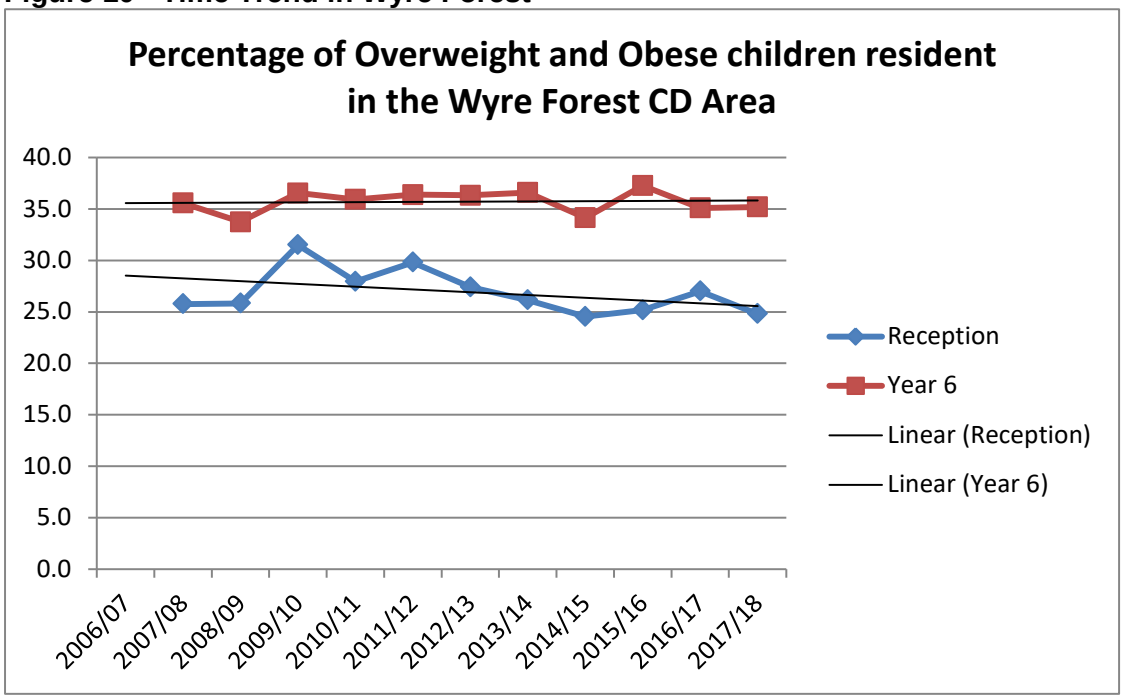
Figure 9 - Results by Council District - Year 6



Source: NHS Digital

Although Wyre Forest District continues to have a high percentages of year 6 excess weight, the longer-term trend seems to be improvement, especially in the Reception year group where there does appear to be a slight downward trend. The Year 6 trend, however, is fairly static.

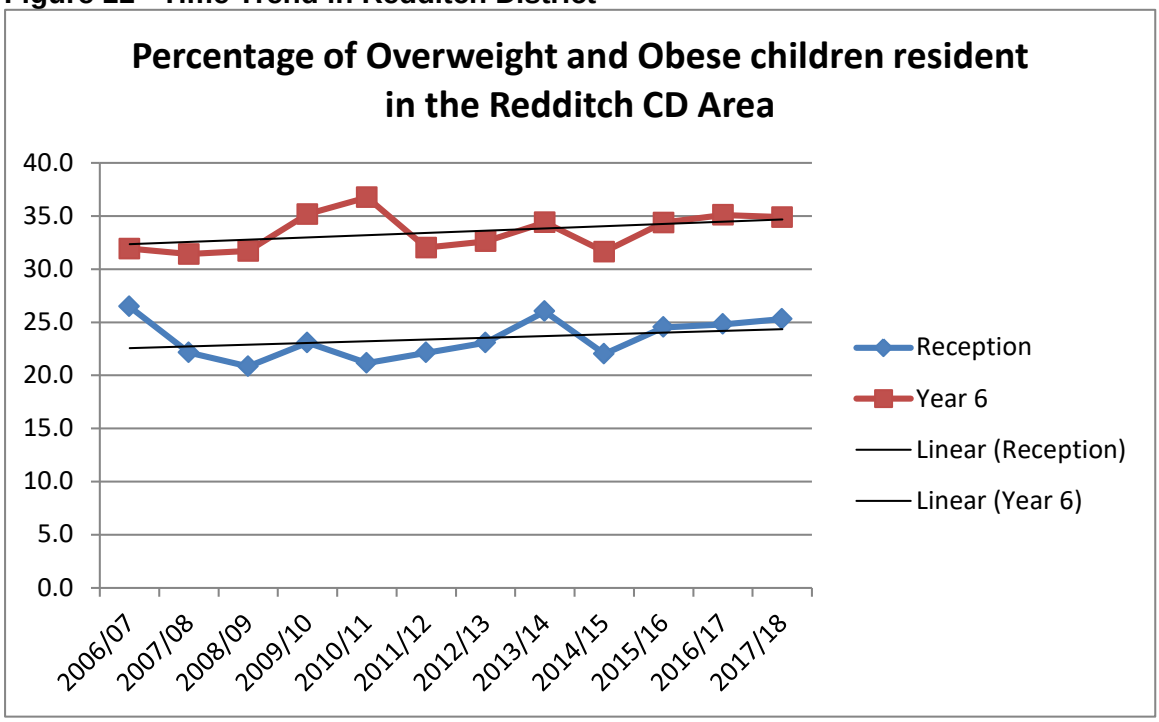
Figure 10 - Time Trend in Wyre Forest



Source: NHS Digital

Redditch District, however, has only started to worsen over the last 3 years where it has rates which have increased. The rate of children with excess weight in Reception has been higher than England for the last 3 years. This situation will continue to be monitored.

Figure 11 - Time Trend in Redditch District



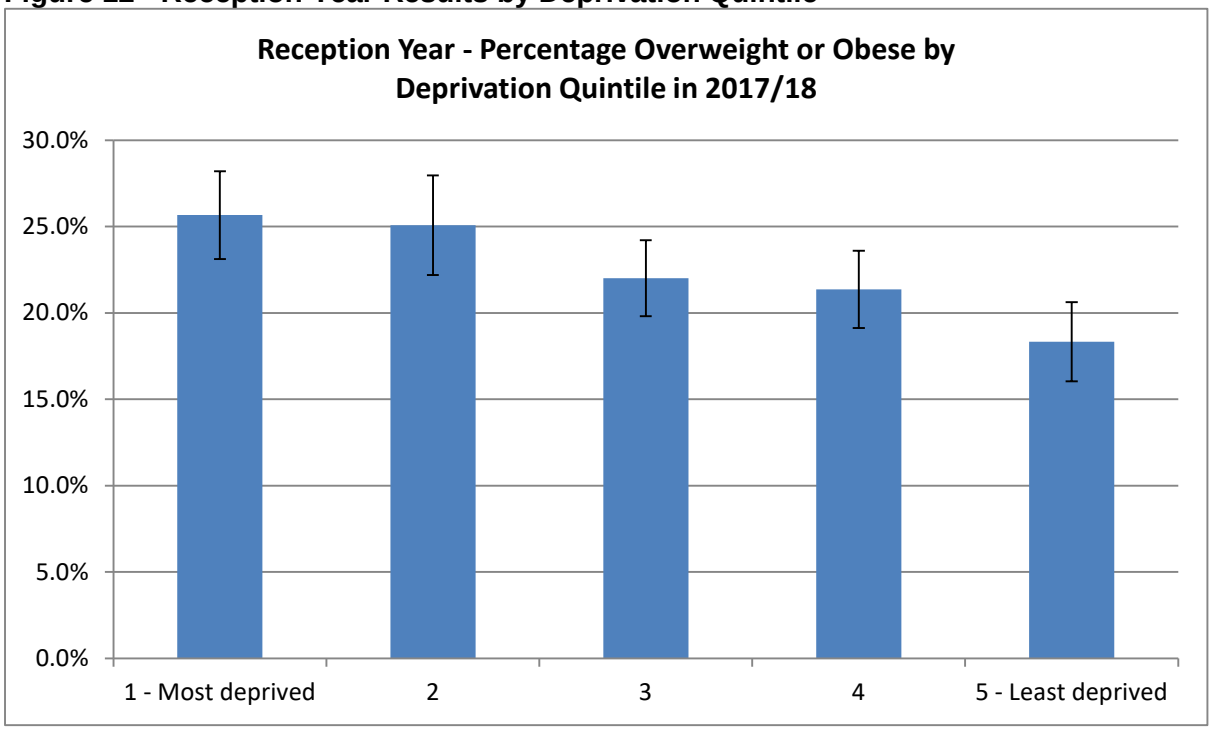
Source: NHS Digital

Results by Deprivation

The Index of Multiple Deprivation 2015 (IMD) is a measure of relative deprivation at small area level namely LSOA (lower super output area – average population of 1,500). The IMD is made up of 37 indicators covering seven domains and the result is a single score for each LSOA. For each child measured we can derive the LSOA in which they live through their postcode. In the following analysis children were allocated into one of five groups (or quintiles) according to the ranking of their LSOA deprivation score nationally. This was done separately for each age group measured and includes all children who attend state schools in Worcestershire, regardless of their district of residence.

In Worcestershire schools we have a higher percentage of LSOAs in Quintiles 3, 4 and 5 and less in the top 2 deprived quintiles, consequently the percentage in the top two quintiles is more sensitive to change, as it is based on smaller numbers. An increase in the number of children who were very overweight in quintile 1, for example, would have a greater effect on the percentage than in a quintile with a larger base population, for example quintile 3. This should be borne in mind when looking at the figures contained in this section.

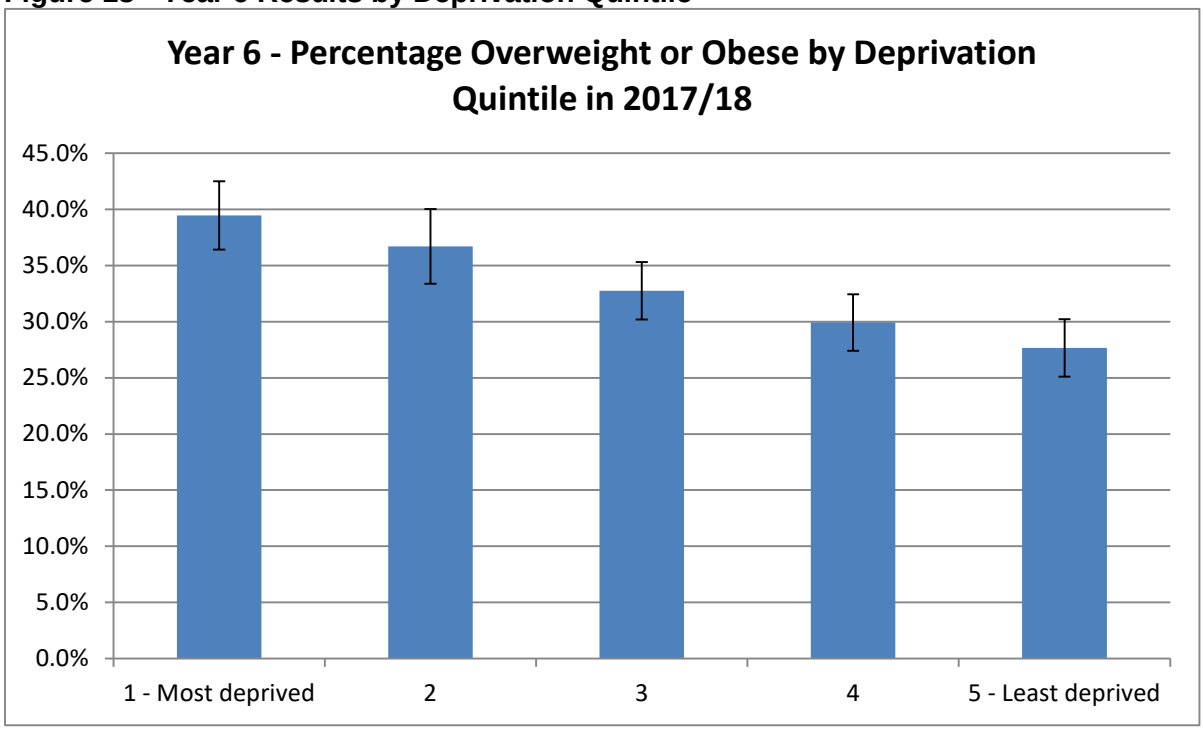
Figure 12 - Reception Year Results by Deprivation Quintile



Source: NCMP Enhanced Dataset analysed by WCC Public Health Dept

In 2017/18, there were 25.7% reception children classed as having excess weight living in the most deprived quintile of Worcestershire. This compares with just 18.3% in the least deprived quintile. This is over 7 percentage points difference between children living in the most and least deprived areas of Worcestershire. This inequalities gap has not really changed over the last 7 years.

Figure 13 - Year 6 Results by Deprivation Quintile



Source: NCMP Enhanced Dataset analysed by WCC Public Health Dept

In 2017/18, there were 39.5% year 6 children classed as having excess weight living in the most deprived quintile of Worcestershire. This compares with just 27.7% in the least deprived quintile. This is 11.8 percentage points difference between children living in the most and least deprived areas of Worcestershire. Despite a welcome reduction last year, the inequalities gap has returned to its previous high level.

Results by Rurality

Nationally obesity prevalence in urban areas was higher than in rural areas for both the age groups measured. Worcestershire is showing a similar pattern. At Reception age there was only a small difference between rural and urban areas but for Year 6 there was a much higher percentage of obese children in urban areas compared with the more rural areas of Worcestershire.

The Office for National Statistics (ONS) Area Classification

The Office for National Statistics (ONS) area classification is a system of population stratification that categorises local areas into groups based on a range of socio-demographic characteristics, including deprivation, ethnicity and urban/rural environment.

Worcestershire has similar results to the national picture where obesity prevalence was highest in 'disadvantaged urban communities' and 'multicultural city life' for both year groups.

Results by Ethnicity

Results by ethnicity are similar in Worcestershire to the national figures with the highest percentage of obesity prevalence occurring in the Black category for both year groups. However, these figures should be treated with caution due to the relatively small numbers of minority ethnic groups in Worcestershire.

Data Notes

All figures included in the report are based on results for children attending Worcestershire schools with the exception of the overall Worcestershire and Council District analysis which is based on the figures submitted for all Worcestershire residents regardless of the school attended by the child.

Organisations who carried out the original collection and analysis of the data bear no responsibility for its further analysis or interpretation.

Defining children as overweight or obese is a much more complex process than for adults. A guide produced by the national obesity observatory gives more background to the methodology.[1]

[1] http://webarchive.nationalarchives.gov.uk/20170110173352/http://www.noo.org.uk/uploads/doc/vid_11762_classifyingBMIinchildren.pdf

Associated Documents and Information

National Policy

Childhood Obesity – A Plan for Action. Department of Health and Social Care (2017). Available at: https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action

NICE Guidance

National Institute for Health and Care Excellence (NICE) (2017). *PH47* - Weight Management: lifestyle services for overweight or obese children and young people NICE Public Health Guideline. Available at: https://www.nice.org.uk/guidance/ph47

National Institute for Health and Care Excellence (NICE) (2017). *PH42 - Obesity: working with local communities*. NICE Public Health Guideline. Available at: https://www.nice.org.uk/guidance/ph42

National Institute for Health and Care Excellence (NICE) (2017). *PH11 - Maternal and child nutrition*, NICE Public Health Guideline. Available at: http://www.nice.org.uk/guidance/ph11

National Institute for Health and Care Excellence (NICE) (2015). *NG7 - Preventing excess weight gain*. NICE Guideline. Available at: https://www.nice.org.uk/guidance/ng7

National Institute for Health and Care Excellence (NICE) (2015). *CG43 - Obesity prevention*. NICE Clinical Guideline. Available at: https://www.nice.org.uk/guidance/cg43

National Institute for Health and Care Excellence (NICE) (2015). *QS94 - Obesity in children and young people: prevention and lifestyle weight management programmes*. NICE Quality Standard. Available at: https://www.nice.org.uk/guidance/qs94

Other Organisations

Local Government Association (2017). *Healthy weight, healthy futures: Local government action to tackle childhood obesity*. Available at: https://www.local.gov.uk/healthy-weight-healthy-futures-local-government-action-tackle-childhood-obesity

Key Statistics

NHS Digital - National Child Measurement Programme - England, 2017-18. Final report and tables. NHS Digital. (2018).
Available at: https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2017-18-school-year

PHE Public Health Outcomes Framework - NCMP and Child Obesity Fingertips Profile (2018). Available at: https://fingertips.phe.org.uk/profile/national-child-measurement-programme

Further Information and Feedback

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

This document can be provided in alternative formats such as large Print, audio recording or Braille. Please contact Janette Fulton on 01905 843359 or by email at jfulton@worcestershire.gov.uk.