

National Child Measurement Programme 2017/18

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Background

The National Child Measurement Programme (NCMP) for England is an annual record of height and weight measurements of children in state-maintained schools in reception (aged 4-5 years) and year 6 (aged 10-11 years). The programme was launched in 2005/06, and now holds reliable data from the 2006/07 to 2017/18 school year.

NHS Digital published the most recent [release](#) in October 2018 [1]. The NCMP provides robust data for the child excess weight indicators in the Public Health Outcomes Framework, and is a key element of the Government's approach to tackling child obesity.

The newest data revealed that nationally:



22.4%
of reception
children
were overweight or obese

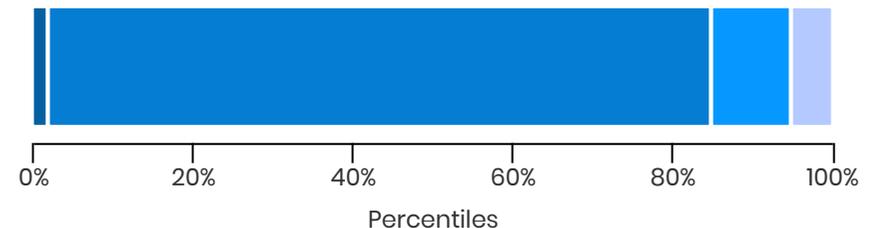
34.3%
of children in
year 6
were overweight or obese

How is childhood obesity measured?

The NCMP uses the British 1990 (UK90) growth reference to assign each child a body mass index (BMI) centile whilst taking into account weight, height, age and gender. The prevalence of children in a BMI classification is calculated by dividing the number of children in that BMI classification by the total number of children and multiplying the result by 100.

They are grouped using the following thresholds:

- **Underweight:** up to the 2nd BMI centile;
- **Healthy weight:** between the 2nd and 85th BMI centile;
- **Overweight:** between the 85th and 95th BMI centile;
- **Obese:** at or above the 95th BMI centile



● Underweight ● Healthy Weight ● Overweight ● Obese

In addition to the above, two further measures are reported:

- **Overweight and obese combined:** children measured overweight or obese (often referred to as prevalence of "excess weight");
- **Severely obese:** at or above 99.6th BMI centile

Research has shown that very few reception children with excess weight return to a healthy weight by year 6 [2]. Similarly, severe obesity at age 5 (reception) is persistent at age 10-11 (year 6) [3]. Whilst the prevalence of severe obesity among children is relatively low (between 2-5% nationally), in absolute terms the number of severely obese children in England is a substantial public health concern.

[1] In addition to the data released by NHS Digital, Public Health England also maintain the [NCMP Local Authority Profile](#) which includes data on severe obesity, gender, ethnicity and deprivation at local authority geographies. The most recent data in the profile is currently 2016/17.

[2] Public Health England (2017). [NCMP: Changes in children's body mass index between 2006/07 and 2015/16](#).

[3] Public Health England (2017). [Changes in the weight status of children between the first and final years of primary school: A longitudinal analysis of data from the NCMP in four local authorities in England between 2006/07 and 2014/15](#)

Reception: National Child Measurement Programme 2017/18

In West Sussex, prevalence of obesity among 4 to 5 year olds (reception) has been below England for a number of years. However, we cannot afford to be complacent; a fifth (19.5%) of reception children in West Sussex were overweight or obese in 2017/18, and there has been little change in prevalence over time.

West Sussex Headlines

Nearly a fifth of children in reception were classified as either overweight or obese in West Sussex (19.5%). This equates to around 1,700 children in the county.

Prevalence of overweight and obesity among reception children in West Sussex remains **significantly below** England (22.4%).

Within West Sussex, **Worthing** had the **highest prevalence** of overweight and obesity among reception children (23.0%), whilst **Horsham** had the **lowest prevalence** (16.9%).

7.5% of reception children were classified as obese in West Sussex (lower than England - 9.5%). Prevalence of obesity was **highest in Worthing** (9.8%) and **lowest in Mid Sussex** (5.5%).

Prevalence of severe obesity was highest in Worthing (2.0%) and lowest in Horsham and Mid Sussex (0.7%). **1.3% of reception children were severely obese in West Sussex.**

0.8% of reception children in West Sussex were underweight in 2017/18. This is the **first time since 2011/12** that this is not significantly lower than the **England estimate** (1.0% in 2017/18). Prevalence of underweight at local authority level is constrained by small counts in some areas.

Overall, a **greater proportion** of reception children were a healthy weight in West Sussex (79.7%) than England (76.6%).

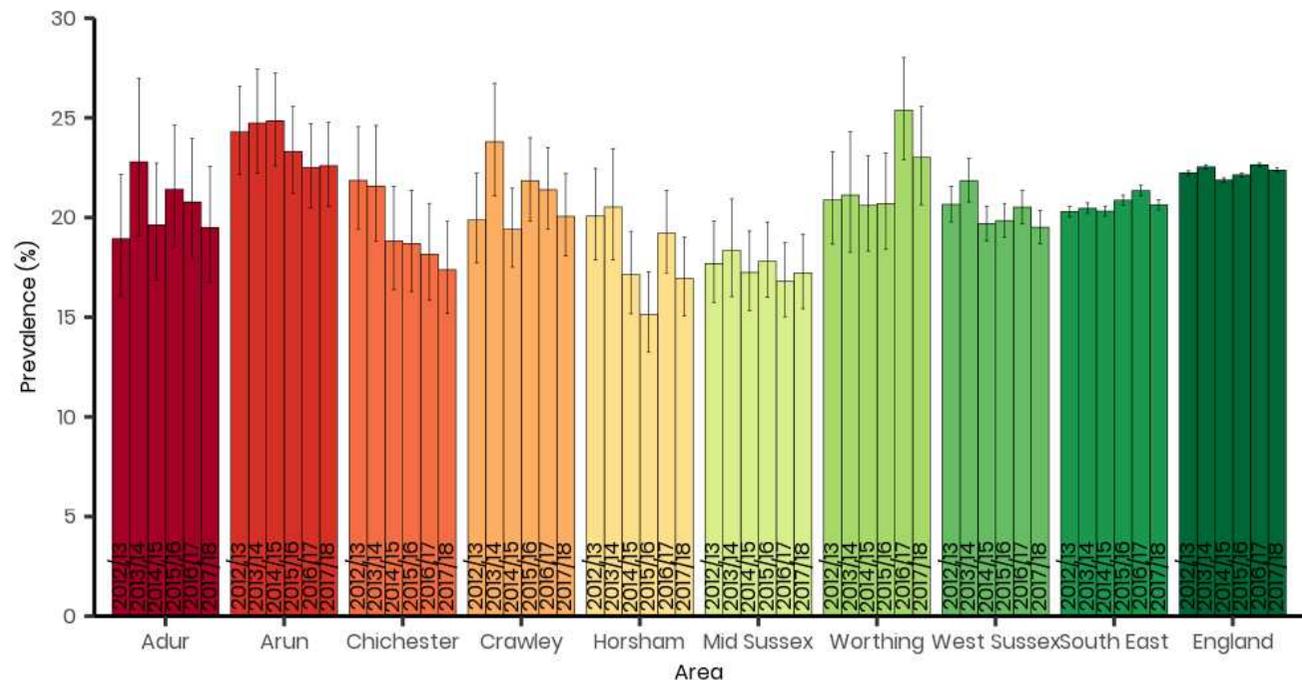
Trends

Whilst prevalence of overweight and obesity was at its lowest in 2017/18, trends show little change in the prevalence among reception children in West Sussex.

Across the districts and boroughs:

- Prevalence of overweight and obesity in Chichester has **decreased** every year since 2012/13, falling to 17.4%
- 23.0% of reception children in Worthing were overweight or obese in 2017/18. Whilst lower than 2016/17 (25.4%), this is still the **second highest prevalence** recorded in Worthing
- Prevalence of overweight and obese in Crawley was significantly **below** England for the first time since 2014/15

Prevalence of excess weight among children in reception (2012/13 to 2017/18) by lower tier local authorities in West Sussex, the South East and England



Reception: How does West Sussex compare to our nearest neighbours?

The Chartered Institute of Public Finance and Accountancy (CIPFA) Nearest Neighbours model seeks to measure similarity between Local Authorities on key variables (such as age structure, employment and deprivation). This helps to gain an understanding of how "similar" areas compare in tackling childhood obesity. Prevalence of excess weight among children resident in the 15 nearest neighbours of West Sussex are shown below.

Key Findings:



19.5% of children in reception were measured overweight or obese in West Sussex; a **significantly lower** proportion than the average for England (22.4%) or CIPFA neighbours (21.5%).



Among CIPFA nearest neighbours, West Sussex had the **second lowest proportion** of reception children with excess weight in 2017/18. Cambridgeshire had the lowest prevalence (17.5%), whilst Staffordshire had the highest (25.1%).



Of the 150[4] local authorities in England, West Sussex was **among the 20% local authorities with the lowest prevalence** of excess weight in reception children.



Similarly, West Sussex had the **second lowest prevalence of obesity** in reception children of CIPFA nearest neighbours, at **7.5%**. Prevalence of obesity ranged from 6.5% in Cambridgeshire to 10.4% in Staffordshire.



Prevalence of obesity in reception children was **significantly lower** in West Sussex (7.5%) than England (9.5%).



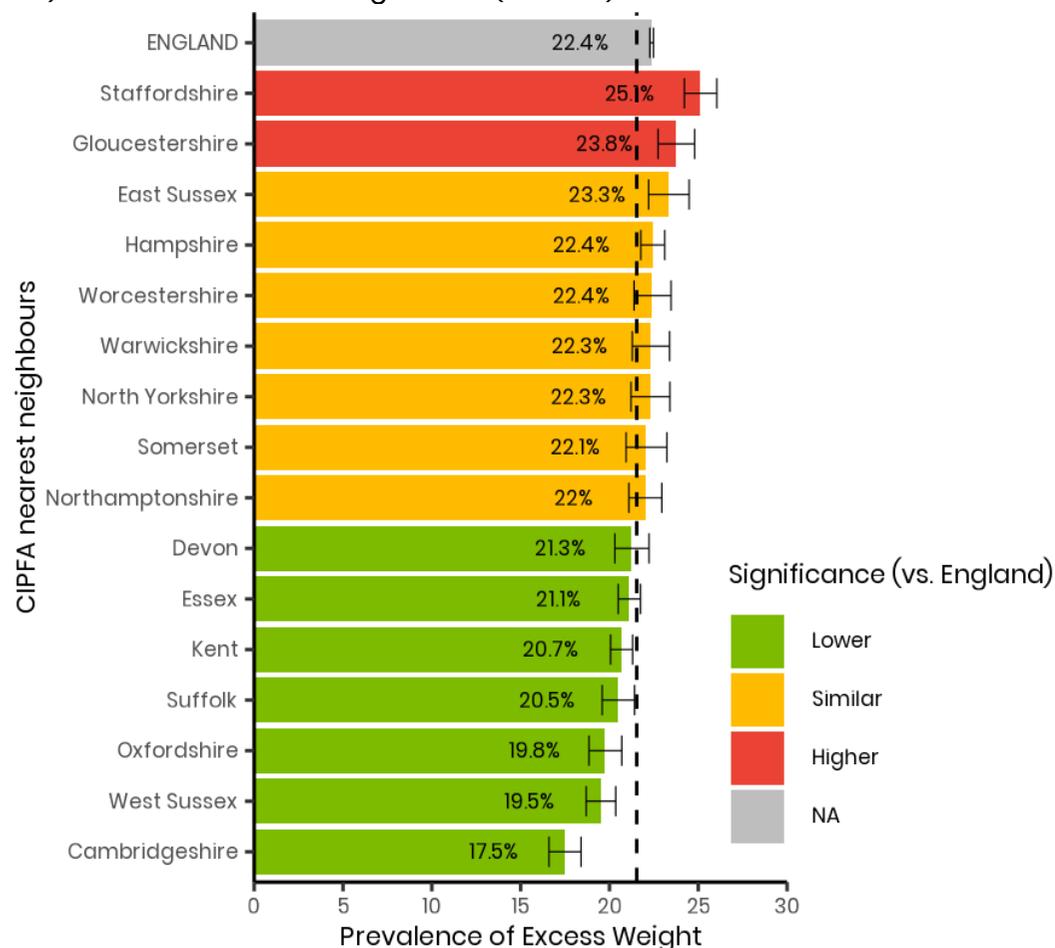
In 2017/18, 2.4% of reception children measured in England were severely obese. West Sussex had a **significantly lower prevalence** of severe obesity than England (1.3% in West Sussex compared to 2.4%), and was the **lowest** of the CIPFA nearest neighbours (average prevalence: 1.9%).



Overall, prevalence of healthy weight among reception children in West Sussex was **79.7%**. This is **significantly higher** than England (76.6%) and the **second highest** of CIPFA neighbours (average prevalence: 77.8%).

Prevalence of excess weight in reception by West Sussex CIPFA nearest neighbours (2017/18)

Nationally, 22.4% of children in reception were overweight or obese in 2017/18. Prevalence of excess weight for reception children was **significantly lower** in West Sussex than the average for England (**grey bar**) and CIPFA nearest neighbours (**--- line**)



[4] Data for City of London has been combined with Hackney and data for Isles of Scilly have been combined with Cornwall

Year 6: National Child Measurement Programme

Prevalence of excess weight for children in Year 6 has not changed hugely in West Sussex, with 28.3% of 10–11 yr olds classified as overweight or obese in 2017/18. Childhood obesity varies across the county, with greater prevalence in areas that tend to be more deprived. Most local authorities in West Sussex have seen little change overtime, besides Horsham where a decreasing trend is evident.

West Sussex Headlines

In 2017/18, 28.3% of children in year 6 were classified as overweight or obese in West Sussex. This equates to around 2,300 children aged 10–11 resident in the county.

Prevalence of overweight and obesity among year 6 children in West Sussex remains **significantly below** England (34.3%).

Within West Sussex, **Arun had the highest prevalence** of overweight and obesity among children in year 6 (32.1%), whilst **Horsham had the lowest prevalence** (22.7%).

In West Sussex, **15.1% of children in year 6** were classified as obese (lower than England – 20.1%). Prevalence of obesity was **highest in Arun** (18.5%) and **lowest in Mid Sussex** (11.6%).

In 2017/18, **2.5%** of year 6 children were severely obese in West Sussex. This equates to more than **200 children** resident in the county. Severe obesity was **highest in Crawley** (3.8%), and lowest in Mid Sussex (1.5%).

1.5% of children in year 6 were classified as **underweight** in West Sussex. Prevalence of underweight at local authority level is constrained by small counts in some areas.

Overall, a **greater proportion** of year 6 children were a **healthy weight** in West Sussex (70.2%) than England (64.3%).

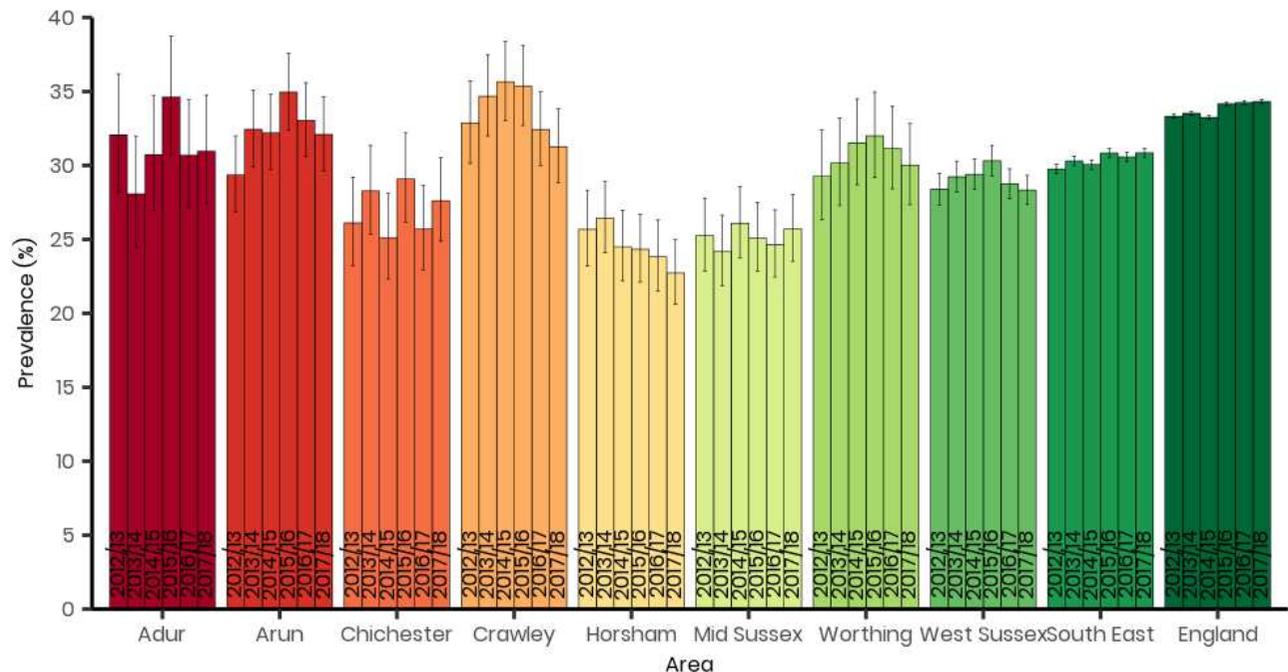
Trends

There has been little change in prevalence of overweight and obesity among year 6 children in West Sussex.

Across the districts and boroughs:

- Prevalence of excess weight in **Crawley** has **fallen below England** for the first time since 2007/08
- In contrast to England, prevalence of **excess weight continues to decline in Horsham**
- Whilst **Worthing** has changed little over time, prevalence of excess weight among year 6 children has remained **below England** for the second year running
- **Adur and Arun** have seen **little change** in prevalence of excess weight in 10–11 yr olds
- Prevalence of excess weight among year 6 children in **Chichester and Mid Sussex** remains **significantly below England**

Prevalence of excess weight among children in year 6 (2012/13 to 2017/18) by lower tier local authorities in West Sussex, the South East and England



Year 6: How does West Sussex compare to our nearest neighbours?

The Chartered Institute of Public Finance and Accountancy (CIPFA) Nearest Neighbours model seeks to measure similarity between Local Authorities on key variables (such as age structure, employment and deprivation). This helps to gain an understanding of how "similar" areas compare in tackling childhood obesity. Prevalence of excess weight among children resident in the 15 nearest neighbours of West Sussex are shown below.

Key Findings:



28.3% of children in year 6 were measured overweight or obese in West Sussex; a **significantly lower** proportion than the average for England (34.3%) or CIPFA neighbours (31.2%).



In 2017/18, West Sussex had the **second lowest proportion** of children in year 6 with excess weight when compared with nearest neighbours. Devon had the lowest prevalence (27.7%), whilst Staffordshire had the highest (34.5%).



Similarly to reception children, West Sussex was **among the 20% local authorities in England with the lowest prevalence** of excess weight in year 6 children.



For obesity only, West Sussex and Cambridgeshire had the **second lowest prevalence of obesity in year 6 children** (15.1%) when compared with CIPFA nearest neighbours. Devon had the lowest prevalence of obesity (14.5%) and Staffordshire had the highest (19.9%).



In 2017/18, **2.5%** of children in year 6 in West Sussex were severely obese. This is a **significantly lower prevalence** than England (4.2%), and the **lowest** of CIPFA nearest neighbours (average prevalence: 3.3%).



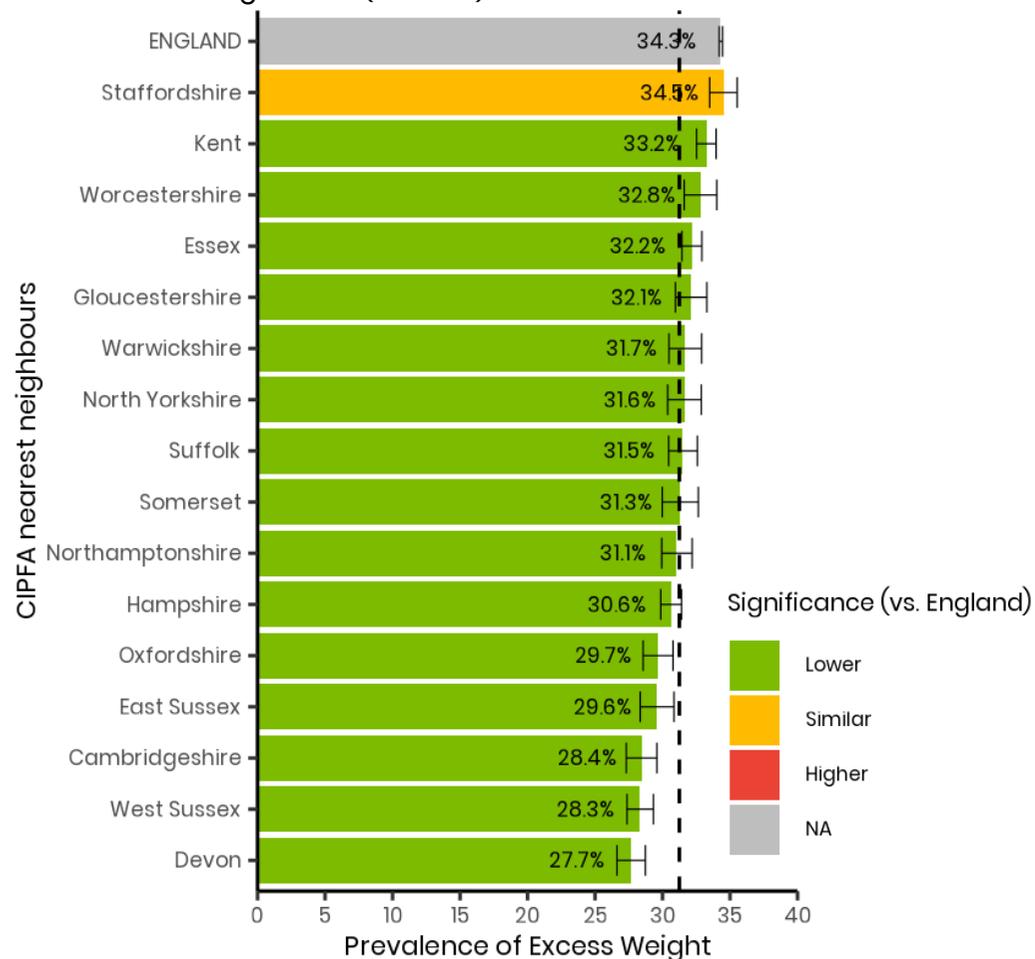
1.5% of year 6 children in West Sussex were underweight in 2017/18. Cambridgeshire, West Sussex and East Sussex had the **highest underweight prevalence** of CIPFA neighbours.



Overall, prevalence of healthy weight among children in year 6 was 70.2% in West Sussex. This is **significantly higher** than England (64.3%) and the **second highest** of CIPFA neighbours (average prevalence: 67.6%).

Prevalence of excess weight in year 6 by West Sussex CIPFA nearest neighbours (2017/18)

Nationally, 34.3% of children in year 6 were overweight or obese in 2017/18. Prevalence of excess weight for children in year 6 was **significantly lower** in West Sussex than for England (**grey bar**) and CIPFA nearest neighbours (**--- line**)



Inequalities in child excess weight

National picture

Inequalities in childhood obesity persist:



Prevalence of overweight and obesity tends to be **higher among boys than girls** in both age groups, although the difference is more notable at year 6



For both school years, **obesity prevalence** for children living in the most deprived areas of England was **more than double** that of those living in the least deprived areas



Childhood obesity varies by ethnic group. Obesity prevalence was **highest for Black children** in both school years, and lowest for Chinese children in reception and Chinese and White children in year 6

Within West Sussex:

Differences by sex (2017/18)

20.2%
of boys



in reception were
overweight or obese
compared with



18.8%
of girls

30.3%
of boys

in year 6 were
overweight or obese
compared with

26.5%
of girls

Differences by ethnicity (2015/16 to 2017/18)*

For reception, prevalence of excess weight was **significantly higher for Black children (26.1%)** and **lower for Asian children (15.8%)** than the West Sussex average (across the three years - 20.0%).

At year 6, prevalence of excess weight was **highest for Black (37.6%) or Asian children (38.2%) or children from Any Other Ethnic Group (37.3%)**, significantly exceeding the West Sussex average (29.2%).

Within West Sussex:

Deprivation*



37.0% of year 6 children resident in areas of West Sussex among the 20% most deprived nationally were classified as overweight or obese (2015/16 to 2017/18 data pooled).

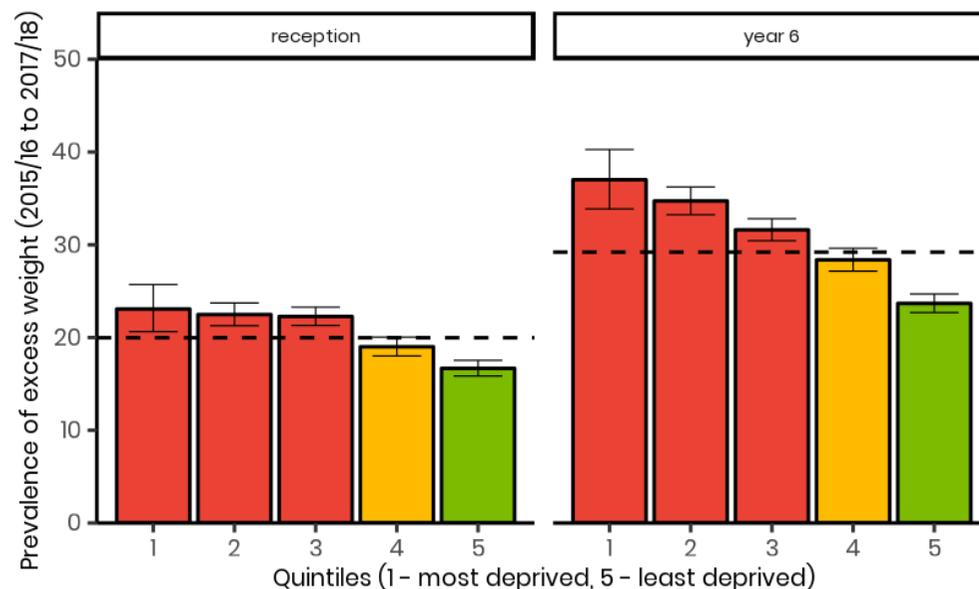


This is **1.6 times greater** than the prevalence for year 6 children living in areas of West Sussex that are among the 20% least deprived nationally.



For reception, **23.1%** of children living in areas of West Sussex that are among the 20% most deprived nationally were overweight or obese, compared with **16.7%** living in areas among the 20% least deprived nationally.

Fig. Prevalence of excess weight (2015/16 to 2017/18) by deprivation quintiles in West Sussex, for children in reception and year 6
Bar colours represent significance compared to the West Sussex average (--- line)
Red = higher, green = lower, yellow = no significant difference



*Due to small counts for some ethnic groups and deprivation quintiles, data was aggregated across three years to improve reliability (2015/16 to 2017/18).

What are we doing to tackle childhood obesity?

Although obesity in both age groups is lower than the England prevalence the local figures continue to demonstrate that there is a need for both prevention and weight management within West Sussex's child and young people's population.

These include:

- Maintain **high levels of participation** with the NCMP. In 2017/18, participation rates in West Sussex were 94.5% for reception and 93.1% for Year 6
- Since January 2017 the school meal provider, Chartwells, has been delivering the **Eat Right Stay Bright programme** to primary phase schools in West Sussex. The award winning programme employs a nutritionist who supports and delivers healthy eating messages with schools by delivering assemblies and workshops for pupils and parents. Areas with higher proportions of pupils receiving free school meals, or excess weight are prioritised for the programme. Outcomes and interactions are recorded and monitored.
- Public health specialist staff work with the County Catering Service to ensure school meals and meals in residential settings (e.g. Children Looked After) meet national school food and government food buying standards and requirements.
- Over the last 4 years the amount of **sugar in primary phase school meals has been reduced by 75%** on average. A local five-pronged sugar reduction programme supporting the national PHE approach includes development of sugar reduction champions, school debates, a campaign brand and community events. More recently, this programme has started working with dentists.
- The **West Sussex Sugar Reduction Programme** launched the **West Sussex Sugar Smart Dental Toolkit pilot** in May 2018 in 12 local dental practices. Aligned to the national Change4Life and 'Top tips for teeth' campaigns, the toolkit included badges, stickers, promotional materials, social media links, and prescription pads supporting dental teams to promote sugar reduction awareness amongst patients. Patients were also directed to healthy lifestyle services within their local wellbeing hub for more support if required. This work raised awareness of the harms of sugar on teeth and its effect on general health, with the toolkit winning a national Public Health England award in September 2018, for its innovative approach.
- A Members Task and Finish Group on Child Obesity in early 2017 made a number of resolutions on behalf of West Sussex County council. For example:
 - The national guidelines for implementation of healthier food in leisure centres will be provided to the Cabinet member and guidance and support is offered to the District and Boroughs as commissioners of leisure, to help this sector achieve these standards
 - To implement the national healthy rating scheme for schools being developed as a result of the Child Obesity Plan published in August 2016
 - An approach for partnership working with WSCC strategic planning colleagues is developed by them and public health

Integrated Prevention and Earliest Help (IPEH) Service

Within the **IPEH Service**, a Making Every Contact Count (MECC) approach will be used to promote healthy eating and lifestyles consistently in both universal and targeted work with children and families.

Universal services:

- Using analysis of IPEH baseline skills audit, formulate a workforce development plan to provide support and training for the IPEH workforce (Council and NHS staff) to:
 - Deliver consistent messages regarding Healthy Weight
 - Use motivational interviewing techniques
 - Ensure earliest identification of those at risk of becoming overweight and obese, with early intervention and appropriate referral to healthy eating programmes
- Work with the IPEH workforce to produce a set of standards involving engagement with children and families. To include healthy snacks at engagement events, rewards involving physical activity, avoidance of meetings in fast food venues, encouragement of active play and physical activity.

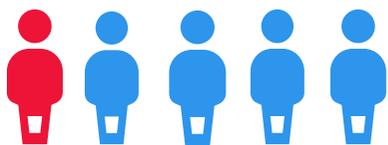
Targeted services:

- All IPEH direct work will include providing support to families to modify dietary intake and take opportunities to be active where appropriate (delivery of key messages, motivational interviewing techniques)
- The Healthy Child Programme will lead the delivery of a weight management programme

Summary

Key Messages in West Sussex:

Reception



Whilst prevalence of excess weight is generally lower than England, a fifth (19.5%) of reception children were overweight or obese in West Sussex in 2017/18



Trend data suggests little change in the prevalence of excess weight among reception children in West Sussex over time



In 2017/18, prevalence of excess weight among reception children was lower in West Sussex than its nearest neighbours (combined). West Sussex had the second smallest prevalence of excess weight; Cambridgeshire had the lowest (17.6%).

Year 6

28.3% of children in year 6 were overweight or obese in West Sussex in 2017/18, equating to around 2,300 children



Prevalence of excess weight for year 6 children varied across the county, ranging from less than a quarter in Horsham (22.7%) to nearly a third in Arun (32.1%)



Similarly to reception, trend data does not suggest much change in prevalence of overweight and obesity among 10-11 year olds in West Sussex



Horsham is a notable exception, where prevalence of excess weight among year 6 children continues to fall

West Sussex has a lower prevalence of excess weight than its statistical neighbours (combined) and England.

Inequalities



Similarly to national data, prevalence of excess weight is greater for boys than girls. This difference is more apparent at 10-11 yrs (year 6) than 4-5 yrs (reception)



At both school years, Black children had a greater prevalence of excess weight than average - although a large degree of missing ethnicity data at the West Sussex geography means this finding should be viewed with caution

1.6 x

For children in year 6, prevalence of excess weight was 1.6 times greater for children living in areas of West Sussex that are among the most deprived in the country compared with those living in areas among the least deprived



Variation in excess weight prevalence by deprivation was more apparent at year 6 than reception

Contacts and Further Information

The most recent [report](#) by NHS Digital and an [interactive NCMP visualisation tool](#) for local authorities are available to explore.

The [NCMP Local Authority Profile](#) can also be used to understand patterns, trends and inequalities in BMI classifications for the child population at local authority, regional and national geographies.

This report was drafted by the West Sussex Public Health and Social Research Team, based in West Sussex County Council.

For further information please contact:
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