National Child Measurement Programme Annual Report 2022-23

Dudley, December 2023

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Page 1 of 16 Dudley ...the historic capital of the Black Country

Executive Summary

- Every year the National Child Measurement Programme (NCMP) measures the Body Mass Index (BMI) of children in the first and last years of primary school. This helps provide information on the numbers of children who have a healthy weight. This report presents the data from the school year 2022/23 in the context of previous years' data.
- In Dudley, one in every four Year 6 children were obese in 2022/23, together with one in every ten children in Reception. This pattern is consistent with previous years.
- The more serious problem of obesity among Year 6 children is highlighted by the fact that fewer than six in every ten children in this group were categorised as having a healthy weight in 2022/23.
- Within the Year 6 cohort there was also a difference in the weight distribution between boys and girls. Obesity appears to be a particular and increasing problem among boys of this age in Dudley.
- Children from Black and minority ethnic (BAME) backgrounds have, over recent years appeared to have a higher prevalence of excess weight. This was also true in 2022/23 – last year as many as 27% of Black children were recorded as obese, compared to 18% of others.
- The last few years have shown that children in the north-east of the Borough have, in general, been more likely to be obese.
- The pattern in Dudley over the last seven years is consistent with obesity being more common among children living in areas of greater deprivation, and this is particularly true for the Year 6 cohort.
- In proportion, more children live with obesity in Dudley than in England, a pattern repeated over several years. Obesity is also more prevalent among children in Dudley than in many local authorities with similar demographic characteristics.



Page **2** of **16**



Contents

Section Page **Executive Summary** 2 Introduction 4 Trends by Weight Category 5 Weight Categories by Sex 6 Weight Categories by Ethnicity 8 Dudley Compared to England 10 Obesity by Dudley Ward 12 **Excess Weight by Deprivation** 14 **Conclusions** 15 Appendix 1 16





Page **3** of **16** ...the historic capital of the Black Country

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Introduction

The National Child Measurement Programme (NCMP) is part of an effort to promote healthy weight by measuring children annually to assess rates of childhood obesity. Obesity in childhood is, in turn, an indicator of excess weight in adults, which can lead to poor health outcomes.

The NCMP began in 2005/06 and, since then, the heights and weights of children in state-maintained schools in both Reception (ages 4-5 years) and Year 6 (ages 10-11) have been used to calculate individuals' weight categories.

Parents of children measured at Dudley schools receive their results via a letter which details their child's weight status and offers further advice and support on how to achieve a healthy weight.

This report is based on the data collected in Dudley over the eight years since 2015/16, including the most recently published data for children in Dudley Borough schools, collected in the academic year 2022/23. The report uses five weight categories, and these are created by

¹ A child's BMI is expressed as a 'centile' in order to show how their BMI compares with children who took part in national surveys. For example, a child

calculating each child's BMI centile¹ and then allocating it to groups as follows:

Underweight less than or equal to 2% Healthy weight more than 2% & less than 85% Overweight more than 85% and less than 95% Living with obesity more than or equal to 95% Living with severe obesity more than or equal to 99.6%

Owing to school closures prompted by the Covid-19 pandemic, data collected in 2020/21 was only a 10% sample and is therefore not included in this report. For England as a whole, more details of the NCMP results for 2022/23 can be found on the NHS Digital webpages².

In this report the phrase 'children living with excess weight' refers to all those who are above a healthy weight (i.e., have a BMI centile of more than 85%). Those referred to as obese, or living with obesity, include children with severe obesity (i.e., all those with a BMI centile of more than 95%).

on the 75th centile is heavier than 75 out of every 100 other children their age. ² National Child Measurement Programme, England, 2022/23 school year



Page **4** of **16**



The charts below show the trends for children in Reception and Year 6. While the trend for Reception children has been relatively stable over the years since 2015/16, for those in Year 6 the trend has been one of slowly increasing levels of obesity.

Although the latest annual results show a slight decrease in the proportion of Year 6 children living with excess weight and obesity over the previous year, more generally the last eight years have seen a rising prevalence in both categories.

Those eight years have seen a rise in rate of obesity for Year 6 children from just over 23% to nearly 27% - the latter being the equivalent of eight children living with obesity in every class of thirty, for example.

The wider category of excess weight has, for Year 6 children, increased from 38% to 41% in the same period.

Weight Categories by Year

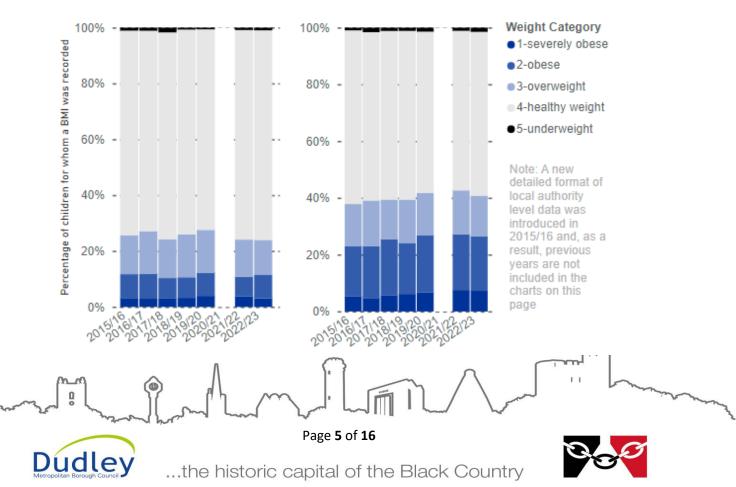
Dudley, 2015/16 to 2022/23

Reception Children

Note: 2020-21 is not included in this chart as a result of <u>Covid</u>-related school closures.

Year 6 Children

Note: 2020-21 is not included in this chart as a result of Covidrelated school closures.



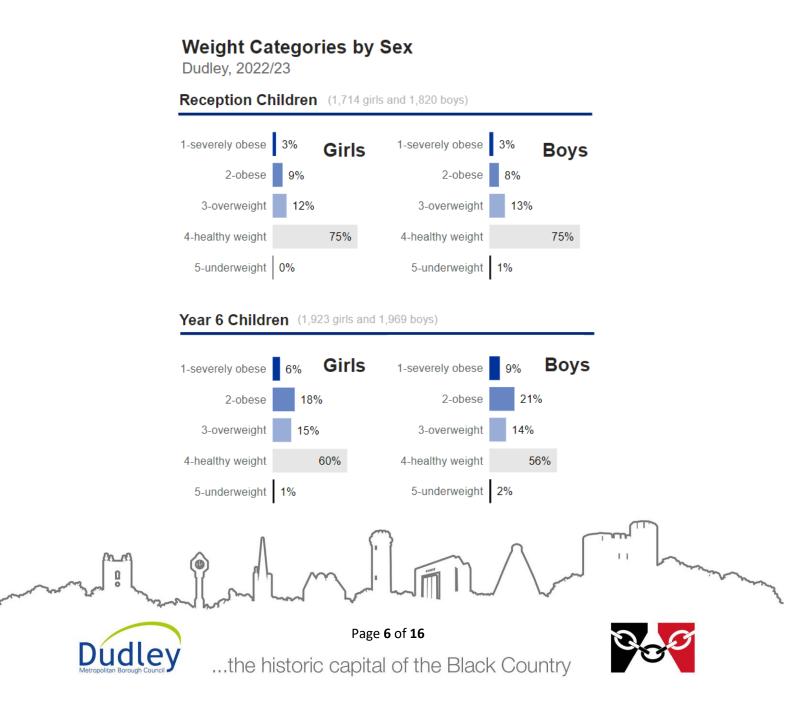
In 2022/23, the percentages of boys and girls in each weight category were, in general, somewhat similar, a pattern continued from previous years.

For both boys and girls, the proportion of children living with obesity in Year 6 was considerably larger than for their younger counterparts in Reception.

However, perhaps the most marked difference between the sexes for rates

of obesity (including severe obesity) has been in Year 6. Last year this meant that while the obesity rate for girls was 24% (or one in every four), the equivalent for boys was 30% (close to one in every three).

This difference between boys and girls in Year 6 is part of a pattern repeated over several years, as can be seen on the next page.



Not only did boys seem more likely to be obese, but the changes in obesity rates possibly suggest a growing difference between male and female children, and between the status of children in Reception and Year 6.

In the case of children in Reception, the trend in the percentage of children living with obesity has been relatively flat, showing little or no change in the period since 2015/16.

However, in the case of Year 6 children, there appears to have been a

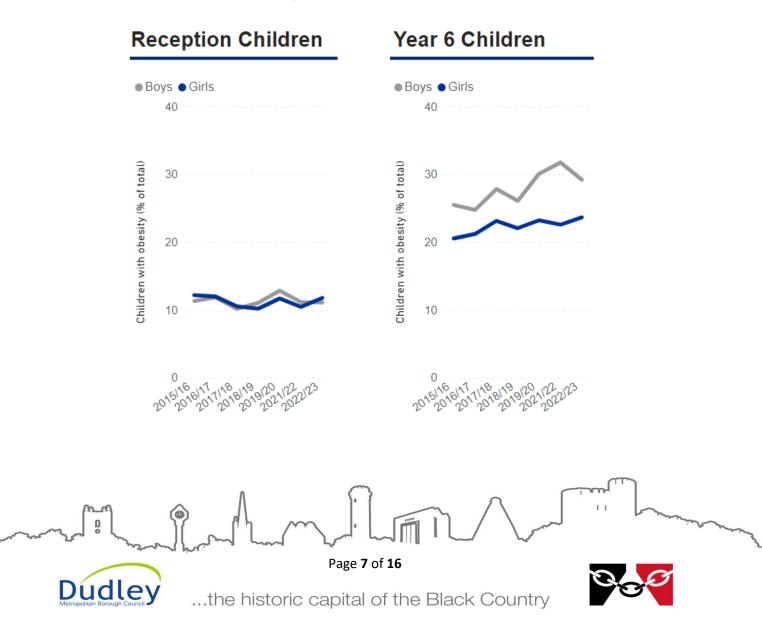
difference between the trend for boys and that for girls.

While both groups of Year 6 children show a much higher rate of obesity than for their counterparts in Reception, the difference between boys in the two different year-groups is much larger.

In 2022/23, the gap in obesity prevalence between girls in Reception and Year 6 was 12 percentage points. But the same gap for boys was 18 percentage points.

Children Living with Obesity

by School Year and Sex (N.B. 2020/21 data is missing from these charts)

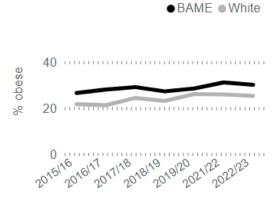


Over recent years children in Dudley Schools from Black and minority ethnic (BAME) groups appear to have had a higher prevalence of obesity.

This pattern continued in 2022/23, and the difference seems larger in the Year 6 cohort compared to Reception children. In Year 6 nearly a third (30%) of BAME children in Dudley were living with obesity, compared to a quarter (25%) of White children. This is illustrated by the chart below.

Year 6 Children Living with Obesity

as a percentage of the total (N.B. 2020/21 data is missing from this chart)

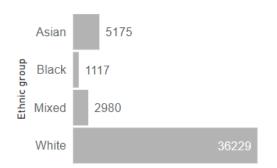


For each broad ethnic group recorded in the NCMP data, the charts on the following page show how the weight categories are represented.

³ <u>National Child Measurement Programme,</u> England, 2022/23 school year; <u>Changes in the</u> The smallest of the broad ethnic groups relates to Black ethnicity, as illustrated by the chart below. But this group has contained the largest share living with obesity (in proportion to the size of the group). As many as 27% of Black children were recorded as obese, compared to 18% for others.

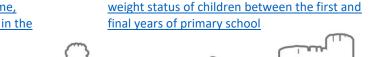
Children Measured by NCMP

by ethnic group, Dudley, aggregated over seven years 2015/16 to 2022/23



Another potential issue which the data shows is that within the relatively small group of underweight pupils, Asian children may be overrepresented.

Both the relatively high prevalence of obesity among Black children and the proportionately high number of underweight Asian children are findings also found elsewhere³.



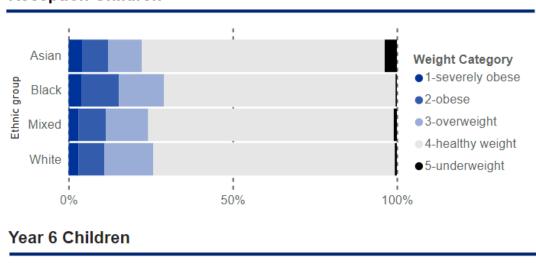


Page **8** of **16**



Weight Categories by Broad Ethnic Group

Dudley, aggregated over seven years 2015/16 to 2022/23



Reception Children

Mixed

White

Dudley

0%



ł

50%



Page **9** of **16**

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Weight Category 1-severely obese

2-obese

100%

3-overweight

4-healthy weight

• 5-underweight

Dudley Compared to England

The NCMP data shows that, for its population, Dudley has more children living with obesity than at a national level. For Year 6 children, for example, the rate of obesity among Dudley children has been higher than for England in all the years for which data is available. This is a statistically significant difference⁴.

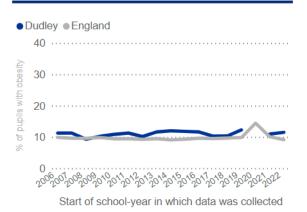
The arrival of the Covid pandemic saw a growth in the percentage of children in England with excess weight, and the largest annual rise in obesity the NCMP had ever recorded⁵. Subsequently, rates have fallen back somewhat, even if they have stayed relatively high for the Year 6 cohort. In 2022/23, the proportion of Reception children with obesity in Dudley was higher than for England (11.5% compared to 9.2%). But Year 6 saw a greater difference (26.3% and 22.7% respectively).

By these measures Dudley children are at a disadvantage compared to elsewhere in England. Dudley's position is also among the worst in its group of 'nearest neighbour' authorities, i.e., those areas with similar characteristics⁶. In the case of Year 6, Dudley was among the worst five of sixteen authorities in 2022/23, while for Reception, it was the second worst authority in the group.

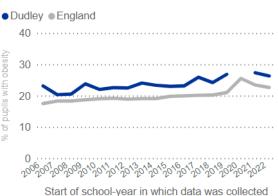
Children with Obesity

Dudley and England, 2006/07 to 2022/23 (data for Dudley in 2020/21 excluded)

Reception Children



Year 6 Children



⁴ <u>Fingertips.phe.org.uk</u>.
 ⁵ <u>Changes in the Prevalence of Child Obesity</u>

⁶ Nearest neighbour authorities are those matched to Dudley by <u>CIPFA</u>. Source: <u>fingertips.phe.org.uk</u>.





Page **10** of **16**



Prevalence of Overweight & Obesity: Dudley, West Midlands & England Compared

2022/23, From National Child Measurement Programme Data

RECEPTION CHILDREN	Dudley	West Midlands Region	England	Dudley compared to England	Recent Trend
Overweight (incl. obesity)	23.8%	22.2%	21.3%	•	⇒
Obesity (incl. severe obesity)	11.5%	10.1%	9.2%	•	➡
Severe Obesity	3.2%	2.9%	2.5%		>

YEAR 6 CHILDREN	Dudley	West Midlands Region	England	Dudley compared to England	Recent Trend
Overweight (incl. obesity)	40.5%	39.3%	36.6%	•	→
Obesity (incl. severe obesity)	26.3%	25.2%	22.7%		➡
Severe Obesity	7.1%	6.7%	5.7%	•	⇒

Key: = Dudley value worse than England value = Recent trend: No significant change

Source: Office for Health Improvement & Disparities. Public Health Profiles. Accessed 11/12/2023 https://fingertips.phe.org.uk © Crown copyright 2023





Page **11** of **16**



Obesity by Dudley Ward

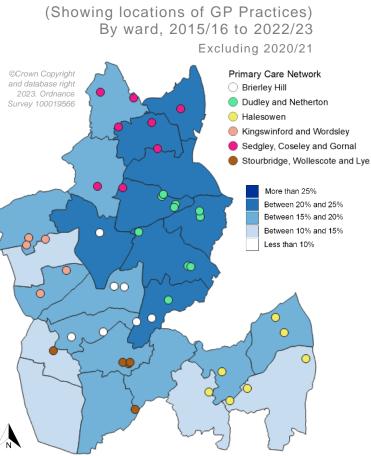
The last few years has shown that children living in the north-east of the Borough have, in general, been more likely to be obese.

Over the course of the period since 2015/16, the ward with the highest proportion of children living with obesity has been *Castle and Priory*, with an average of 23% in this category. By contrast, the ward with the lowest percentage has been *Halesowen South* with 12%.

A full list of wards and rates of obesity among children in 2022/23 is in <u>Appendix 1</u> of this report.



Average Percentage of Children with Obesity



In addition, further interpretation of wardlevel results can be found at the fingertips.phe.org.uk website.

The maps on the following page show the distribution of excess weight by year group.



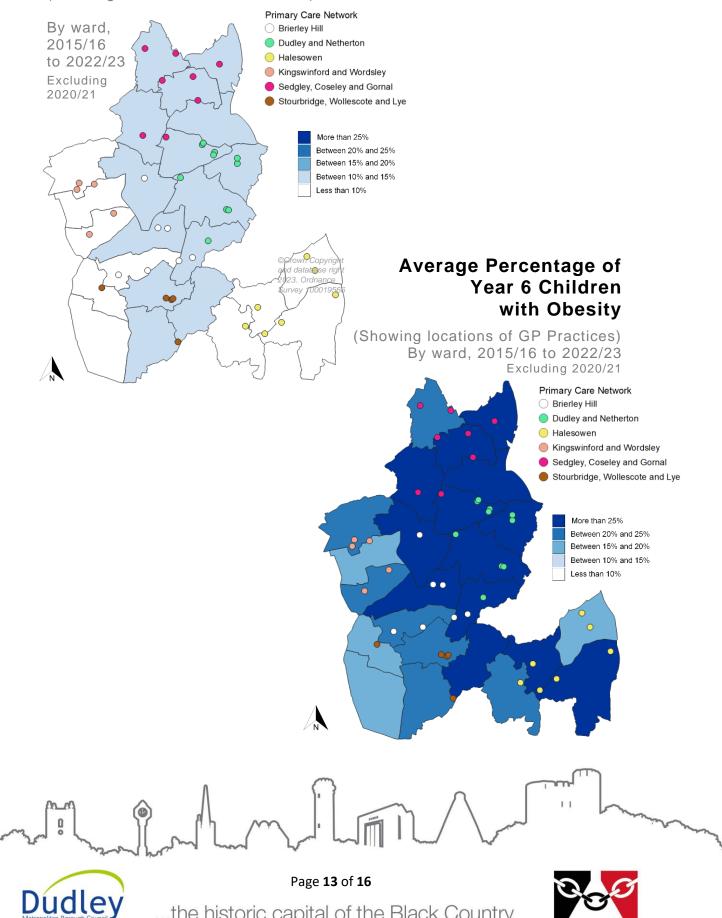


Page **12** of **16**





(Showing locations of GP Practices)

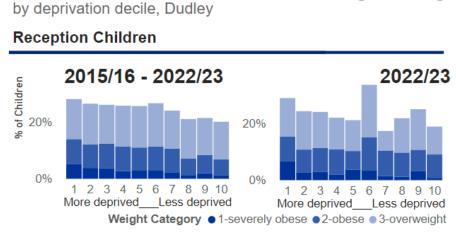


The charts on this page present the way that children's excess weight has varied by their social circumstances.

To show this, we have used the postcode of the child's home and the <u>Index of Multiple Deprivation</u> for each neighbourhood, to allocate a deprivation score to each child. This score is then used to allocate each child to one of ten equal groups. The charts show how the weight categories vary at each of these ten levels of deprivation. Those in more deprived areas are on the left of each chart.

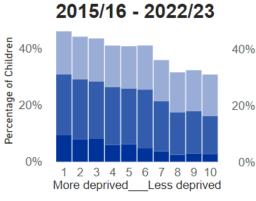
The pattern over a 7-year period (in the charts on the left) is consistent with excess weight being more common in areas of greater deprivation.

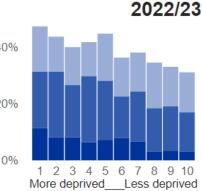
Distribution of Children between Weight Categories



Year 6 Children

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Page **14** of **16**

Conclusions

There are a number of areas of concern highlighted by the data analysed in this report.

In general, the number of primary school children living with obesity in Dudley has been shown to be higher than the average for England. The Borough also does not compare particularly well with other parts of the country with similar socio-economic conditions.

Of additional concern are some of the inequalities between groups of children in Dudley: for example, the apparently

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rising trend in obesity among Year 6 boys, the levels of obesity among children from Black ethnic groups, the disparity between Dudley wards, and the rates of obesity and excess weight in more deprived parts of the Borough.

While all of these are reflected to a greater or lesser degree in patterns revealed by NCMP data at a national level, they nevertheless highlight potential areas of local action by agencies in Dudley.







Appendix 1: Electoral Wards by Percentage of Resident Children Living with Obesity

in 2022/23 (in descending order)

Ward (ranked by obesity)	Reception	Year 6	Total ▼
Castle and Priory	14.56	35.37	25.52
Netherton, Woodside and St Andrews	12.00	37.08	24.65
Quarry Bank and Dudley Wood	16.96	29.73	22.88
Brockmoor and Pensnett	16.92	28.71	22.83
St Thomas's	15.84	26.70	21.51
St James's	13.50	29.27	21.41
Gornal	12.00	29.58	21.35
Lye and Stourbridge North	13.64	26.71	21.09
Kingswinford North and Wall Heath	14.29	25.41	20.66
Coseley East	10.53	29.79	20.44
Kingswinford South	13.22	26.06	20.15
Amblecote	9.02	29.37	20.00
Hayley Green and Cradley South	10.66	22.42	17.42
Upper Gornal and Woodsetton	11.56	23.40	17.36
Belle Vale	9.86	23.60	17.16
Cradley and Wollescote	9.22	22.67	16.61
Halesowen North	8.13	25.00	16.32
Wordsley	8.76	24.41	16.29
Pedmore and Stourbridge East	9.80	22.45	16.00
Sedgley	9.76	20.18	15.82
Norton	11.22	19.27	15.46
Brierley Hill	7.50	23.08	14.92
Wollaston and Stourbridge Town	8.27	20.16	14.12
Halesowen South	0.95	23.39	13.10
Total	11.55	26.52	19.32



Page **16** of **16**

