

# Patterns and trends in child obesity in East Riding of Yorkshire

A presentation of 2019/20 NCMP data at local authority level



## National Child Measurement Programme

#### Introduction

The data in this slide pack is from the National Child Measurement Programme (NCMP).

The NCMP is an annual programme that measures the height and weight of children in Reception (aged 4 to 5 years) and Year 6 (aged 10 to 11 years) in England.

#### Impact of Covid-19 on NCMP

School closures, in March 2020, due to the Covid-19 pandemic meant that in 2019/20 the number of children measured was around 75% of previous years. Analysis by NHS Digital shows that national and regional level data is reliable and comparable to previous years. The data at local authority level and below is not as robust, as a result a small number of areas do not have published data for 2019/20 and data for some areas has a reliability flag indicating that figures need to be interpreted with caution. Further information is available to download from the Obesity Profile on Fingertips and in the NHS Digital 2019/20 annual report.

NCMP website:

https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme



## National Child Measurement Programme

## 2019/20 data quality

#### Number of children measured

The number of children measured in East Riding of Yorkshire in 2019/20 was 1,865 in Reception, and 2,280 in Year 6.

#### Data quality issues for 2019/20

Data for East Riding of Yorkshire has been flagged as "fit for publication but interpret with caution" for Reception and "fit for publication but interpret with caution" for Year 6. 57.6% of Reception and 69.6% of Year 6 children were measured compared to the average of the previous three years.

#### Data quality issues for three and five year grouped data

In the three and five year grouped NCMP data, for Ward level and local authority inequalities data, we would expect around 33% and 20% respectively of data from each contributing year. Data points are flagged if less than 20% (for 3-year data) or less than 10% (for 5-year data) of data is from 2019/20. The data is still considered to be reliable even with a small amount of data from 2019/20.

Further information on the contribution of 2019/20 data to three and five year combined data is available to download here in an Excel file.



## NCMP methodology note

#### Describing an area as similar, better or worse

For the data in this slide pack a local authority value is described as similar, better or worse based on statistically significant differences from the England value. Statistical comparisons are undertaken by comparing the confidence intervals of a local authority value to see if they overlap with the England value, with non-overlapping confidence intervals being considered as statistically significantly different. Where the England value lies within the confidence interval of a local authority it is described as similar. Where the England value is higher than the confidence interval, local authorities values are described as better and where the value is lower than the confidence interval, local authorities values are described as worse.

#### Missing data in the first year of NCMP

2006/07 data is missing for some local authority areas in the trend data due to low completion of child postcode in the first year of NCMP measurement which results in a child record not being allocated to a local authority of residence.

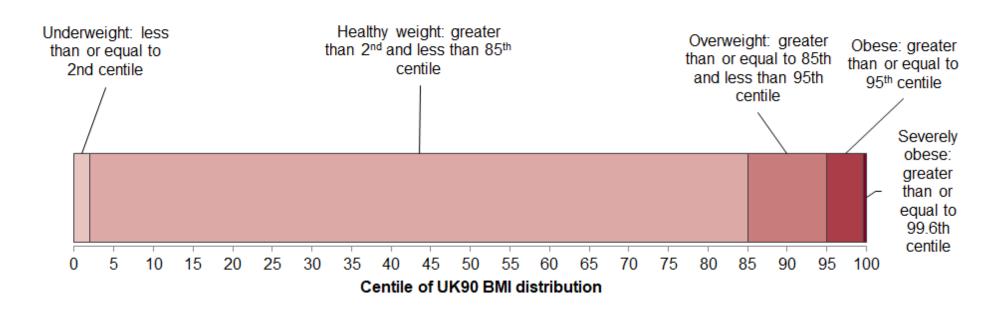
#### New disclosure control rules for NCMP analysis

Disclosure control rules for NCMP analysis changed in October 2020 removing the need for secondary suppression. Therefore healthy weight prevalence can now be shown when underweight is suppressed due to small numbers. Further information on this change in disclosure control is available <a href="here">here</a>.



## Child BMI classification definitions for population monitoring

For population monitoring purposes body mass index (BMI) is classified according to the following image using the British 1990 growth reference (UK90¹). This helps examine patterns in children's weight status across the country and over time.



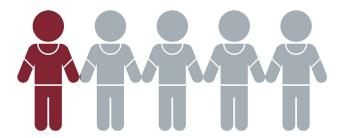
1 Cole TJ, Freeman JV, Preece MA. Body mass index reference curves for the UK, 1990. Archives of Disease in Childhood 1995 73:25-29.



## Prevalence of excess weight by age, 2019/20

Reception (aged 4-5 years) and Year 6 (aged 10-11 years)

Around 1 in 5 children (20.4%) in Reception were overweight or living with obesity



Around 1 in 3 children (31.8%) in Year 6 were overweight or living with obesity



Source: National Child Measurement Programme 2019/20



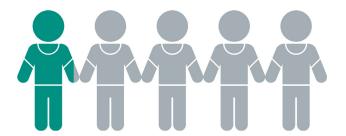
## Prevalence of obesity by age, 2019/20

Reception (aged 4-5 years) and Year 6 (aged 10-11 years)

Almost 1 in 10 children (8.0%) in Reception were living with obesity



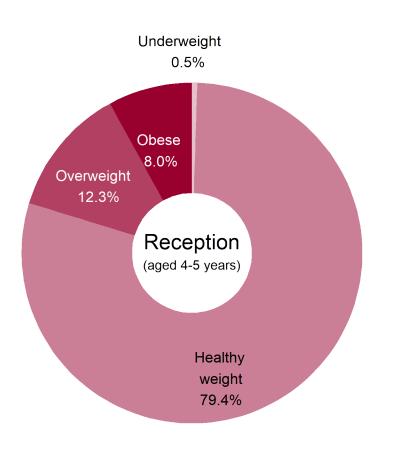
Around 1 in 5 children (18.2%) in Year 6 were living with obesity

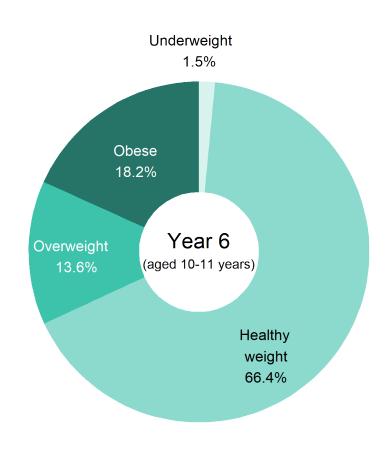


Source: National Child Measurement Programme 2019/20



## BMI status of children by age, 2019/20



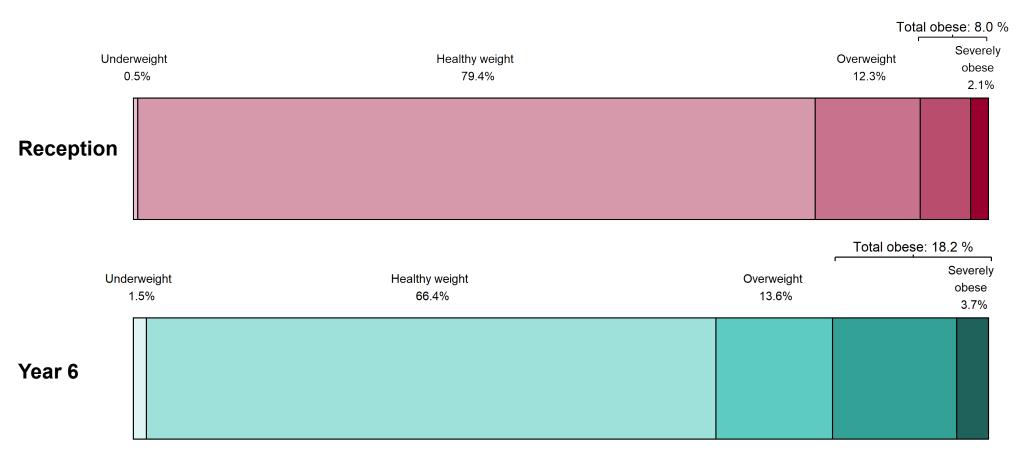


Source: National Child Measurement Programme 2019/20

Totals may not sum due to rounding



BMI status of children by age, 2019/20



Source: National Child Measurement Programme 2019/20

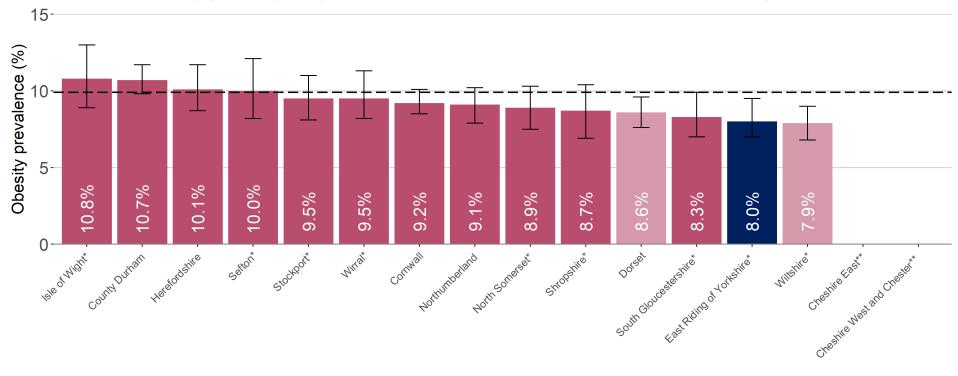
Totals may not sum due to rounding



### Prevalence of obesity, 2019/20

East Riding of Yorkshire compared to its statistical nearest neighbours, CIPFA 2019





Better East Riding of Yorkshire (Better) Similar

95% confidence intervals are shown Local authorities are compared to England value shown as a dashed line on the chart Source: National Child Measurement Programme 2019/20 \*Interpret with caution: see notes on slide 3 for more information
and download Excel file for LA data

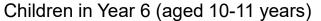
\*\*Data value suppressed

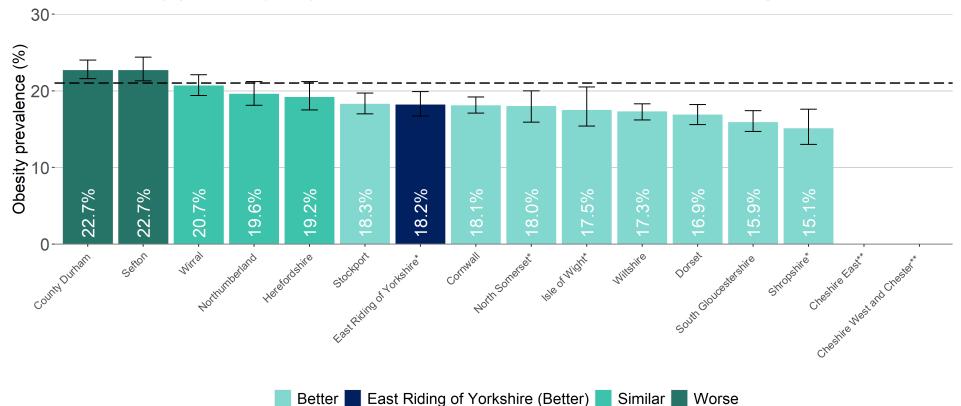
**England: 9.9%** 



## Prevalence of obesity, 2019/20

East Riding of Yorkshire compared to its statistical nearest neighbours, CIPFA 2019





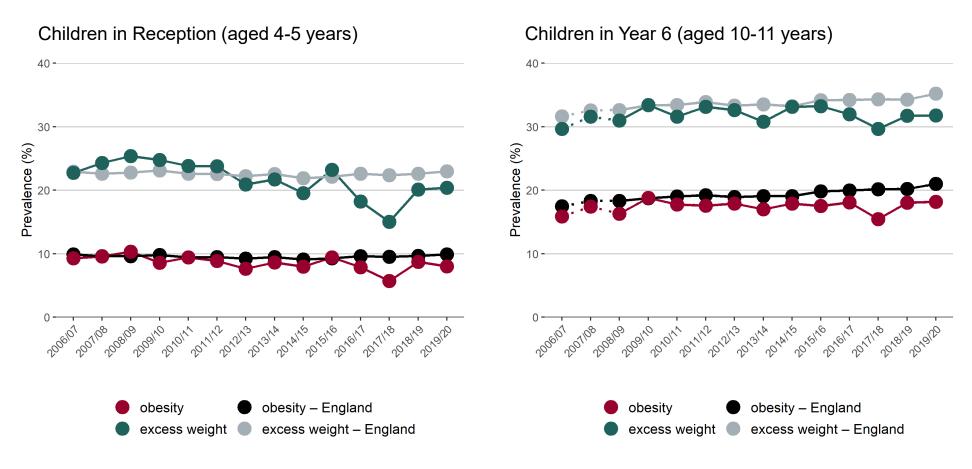
95% confidence intervals are shown Local authorities are compared to England value shown as a dashed line on the chart Source: National Child Measurement Programme 2019/20 \*Interpret with caution: see notes on slide 3 for more information and download Excel file for LA data

\*\*Data value suppressed

**England: 21.0%** 



## Trend in the prevalence of obesity and excess weight by age



Source: National Child Measurement Programme

Note: for Year 6, comparisons are not possible with the first years of the NCMP (2006/07 to 2008/09) as low participation levels led to underestimation of obesity prevalence

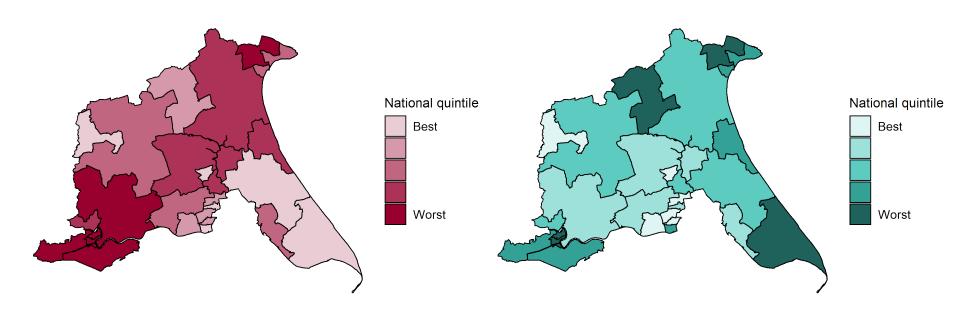


### Prevalence of obesity by age, 2017/18-2019/20

East Riding of Yorkshire Wards

Children in Reception (aged 4-5 years)

Children in Year 6 (aged 10-11 years)



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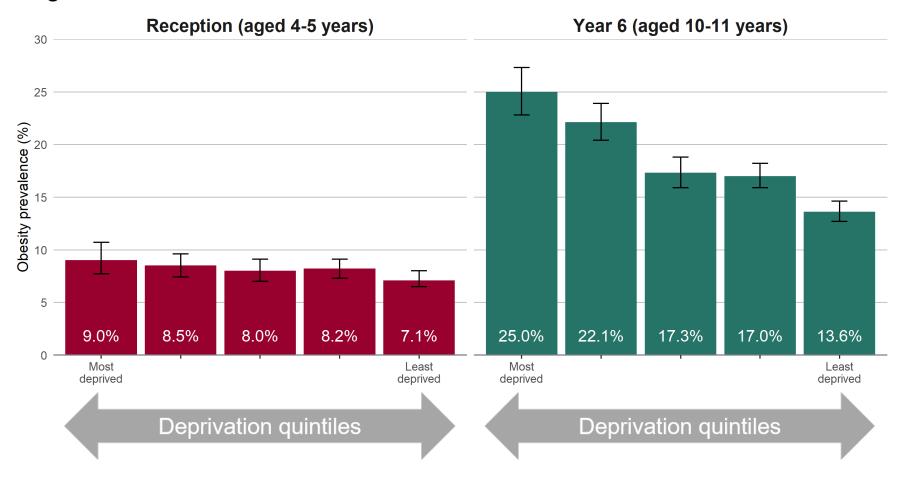
Contains Ordnance Survey data © Crown copyright and database right 2021. Contains National Statistics data © Crown copyright and database right 2021.

Source: National Child Measurement Programme 2017/18-2019/20

Data combined 3-years, see note on slide 3 Ward boundaries 2020



## Obesity prevalence by deprivation and age, 2015/16-2019/20

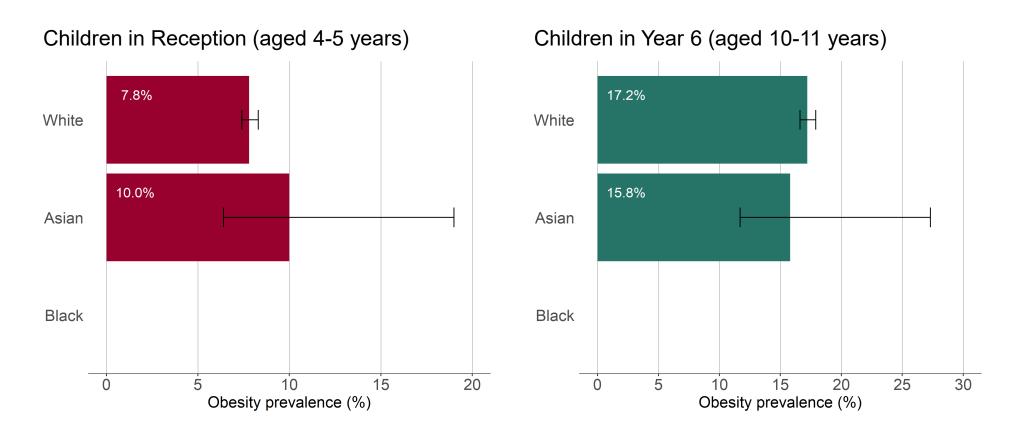


Index of Multiple Deprivation 2019 Source: National Child Measurement Programme 2015/16-2019/20

Data combined 5-years, see note on slide 3 95% confidence intervals are displayed on the chart



## Obesity prevalence by ethnic group, 2015/16-2019/20

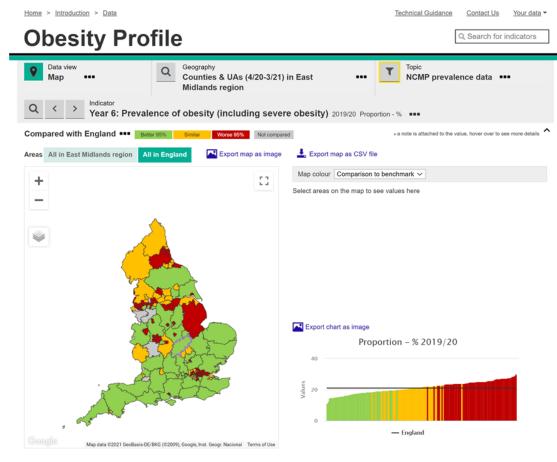


Data missing on the chart is due to suppression for disclosure control reasons Source: National Child Measurement Programme 2015/16-2019/20

Data combined 5-years, see note on slide 3 95% confidence intervals are displayed on the chart



## Obesity Profile NCMP data in an online tool



Child obesity data from the NCMP 2006/07 to 2019/20 is available in an online tool.

The tool provides local authority level child data (underweight, healthy weight, overweight, obesity, excess weight - overweight including obesity, severe obesity) for Reception (aged 4-5 years) and Year 6 (aged 10-11 years).

The tool also presents trend data and enables easy comparison of local authority data, allowing users to compare regional neighbours and local authorities with similar characteristics. Inequalities data (sex, deprivation and ethnic group) is also available by local authority.

View the online tool:

http://fingertips.phe.org.uk/profile/national-child-measurement-programme

Screenshot of webpage



## **Further information**

#### PHE Obesity Intelligence Knowledge Hub:

Sign up on https://khub.net/ and join the PHE Obesity Intelligence group

#### PHE Obesity Intelligence Knowledge Hub public library (no need to join):

https://khub.net/web/phe-obesity-intelligence/public-library

#### PHE Web:

https://www.gov.uk/guidance/phe-data-and-analysis-tools#obesity-diet-and-physical-activity

Email: ncmp@phe.gov.uk

#### **CIPFA** nearest neighbour:

https://fingertips.phe.org.uk/documents/Comparators%20Briefing%20-%20technical.pdf

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Published July 2021

PHE publications gateway number: GW-8338

