



Office for Health  
Improvement  
& Disparities

# **National Child Measurement Programme**

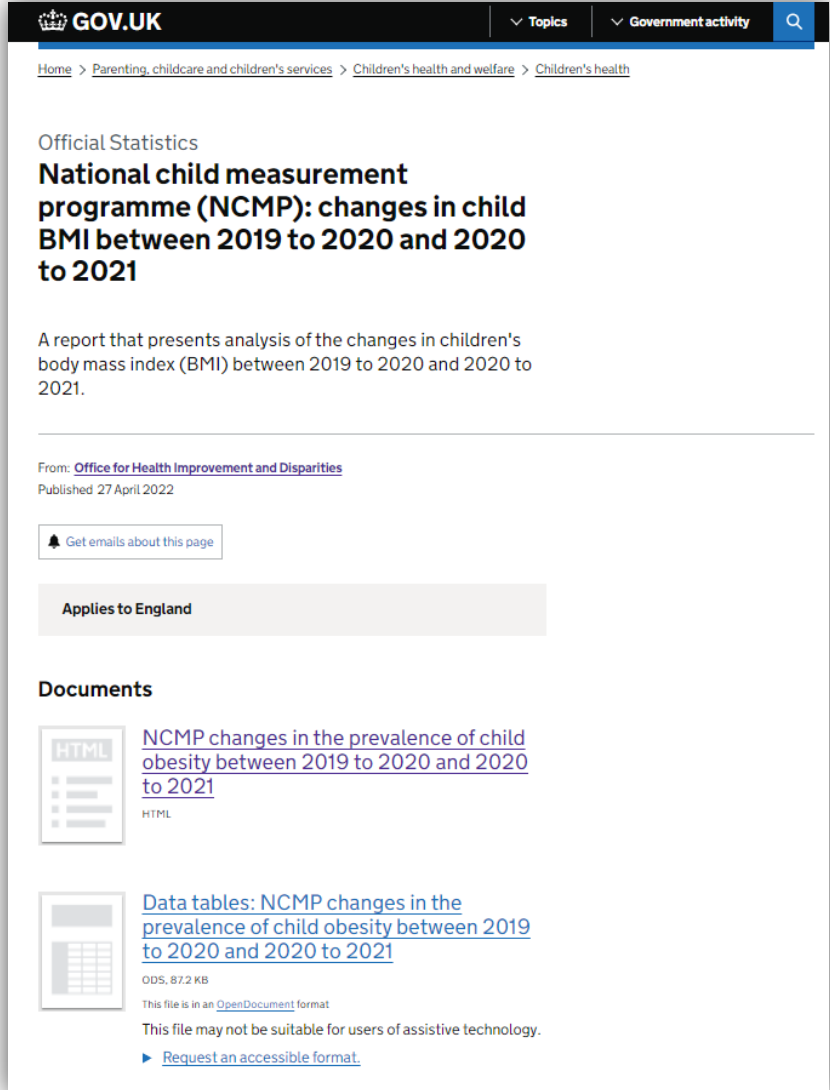
## **Changes in child obesity prevalence in England between 2019/20 and 2020/21**

**Caroline Hancock**

OHID (DHSC) Public Health Analysis directorate

# Introduction

- About the NCMP and 2019/20 - 2020/21 data collections
- Trends from the NCMP since 2006/07
- Changes in obesity and severe obesity prevalence between 2019/20 and 2020/21 by school year, sex and..
  - area level deprivation
  - ethnic group
  - English region
  - rural/ urban classification
- Provisional 2021/22 NCMP results
- Questions, comments and discussion



The screenshot shows the GOV.UK website interface. At the top, there's a navigation bar with the GOV.UK logo, a search icon, and links for 'Topics' and 'Government activity'. Below this, a breadcrumb trail reads: 'Home > Parenting, childcare and children's services > Children's health and welfare > Children's health'. The main heading is 'Official Statistics' followed by the title 'National child measurement programme (NCMP): changes in child BMI between 2019 to 2020 and 2020 to 2021'. A sub-heading describes the report: 'A report that presents analysis of the changes in children's body mass index (BMI) between 2019 to 2020 and 2020 to 2021.' Below this, it says 'From: Office for Health Improvement and Disparities' and 'Published 27 April 2022'. There's a button to 'Get emails about this page'. A grey box indicates 'Applies to England'. Under the 'Documents' section, there are two items: an HTML document titled 'NCMP changes in the prevalence of child obesity between 2019 to 2020 and 2020 to 2021' and an ODS document titled 'Data tables: NCMP changes in the prevalence of child obesity between 2019 to 2020 and 2020 to 2021'. The ODS document is 87.2 KB and is in an OpenDocument format. A note states 'This file may not be suitable for users of assistive technology.' and there's a link to 'Request an accessible format.'

Link to the report:

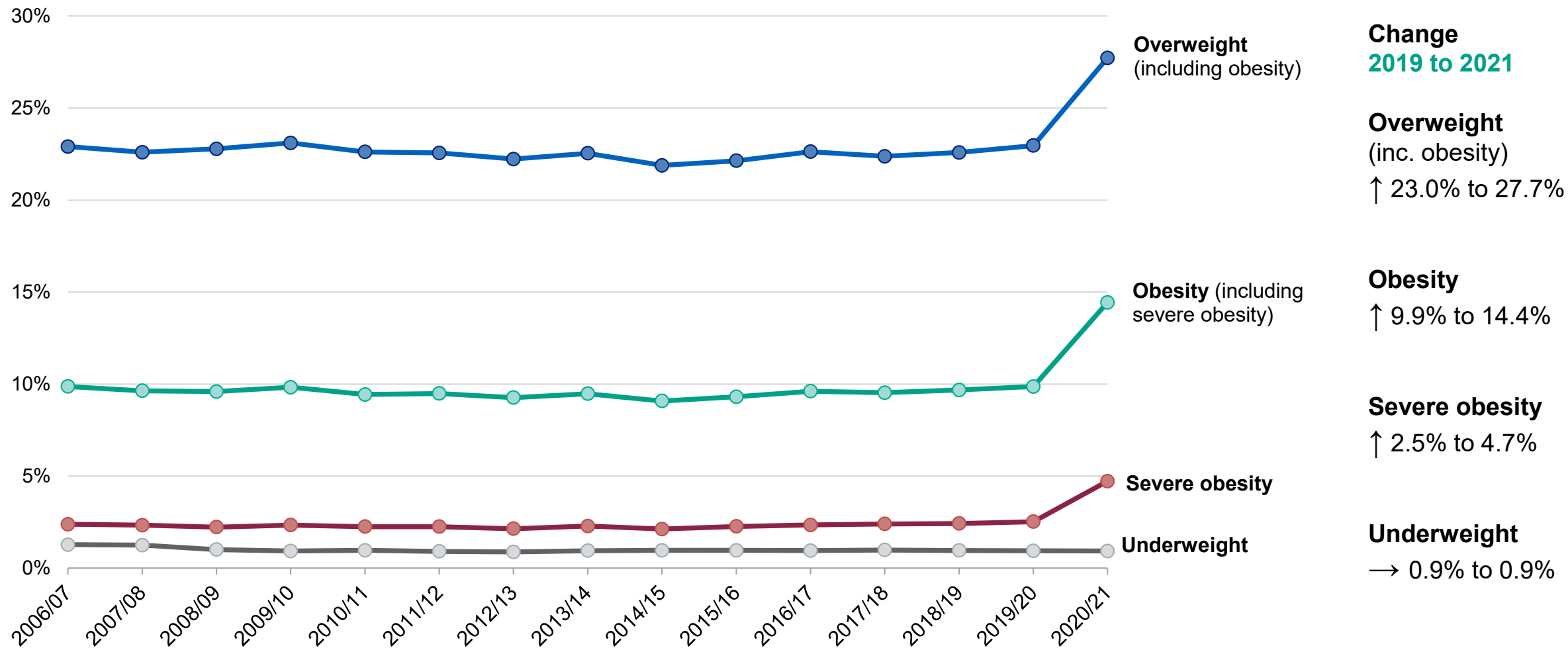
<https://www.gov.uk/government/statistics/national-child-measurement-programme-ncmp-changes-in-child-bmi-between-2019-to-2020-and-2020-to-2021>

# The 2019/20 and 2020/21 NCMP data collections

- The NCMP measures the height and weight of children aged 4-5 (Reception) and 10-11 (Year 6) in primary schools in England
- 2019/20 NCMP collected data from Sep 2019 to Mar 2020
  - ~890k measurements (75% of usual full measurement year)
  - Data reliable and comparable to previous years
- 2020/21 NCMP collected data predominantly from Apr 2021 to Jul 2021
  - ~300k measurements (25% of usual full measurement year)
  - Sample not fully representative of child population
  - Weighting applied to make it comparable to previous years of NCMP data

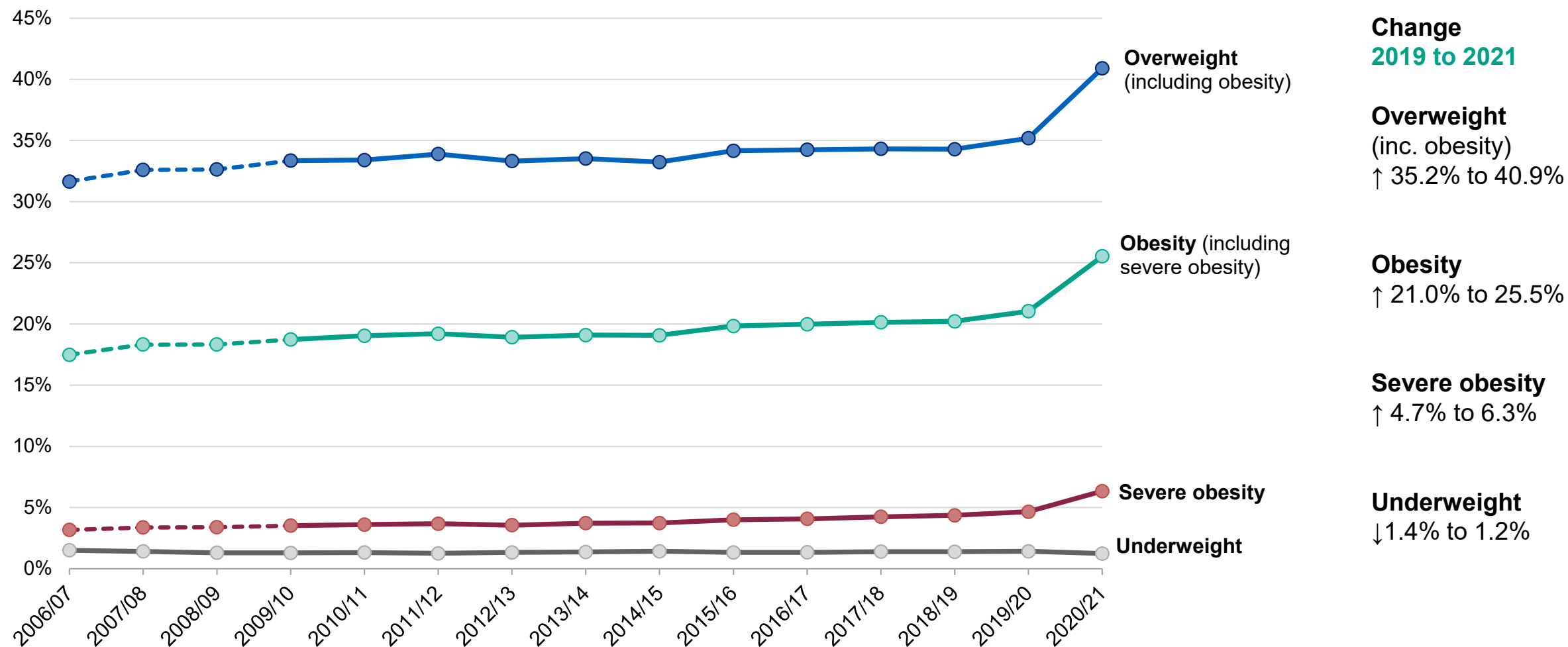
# Trends by body mass index category for children in Reception

## 2006/07 to 2020/21

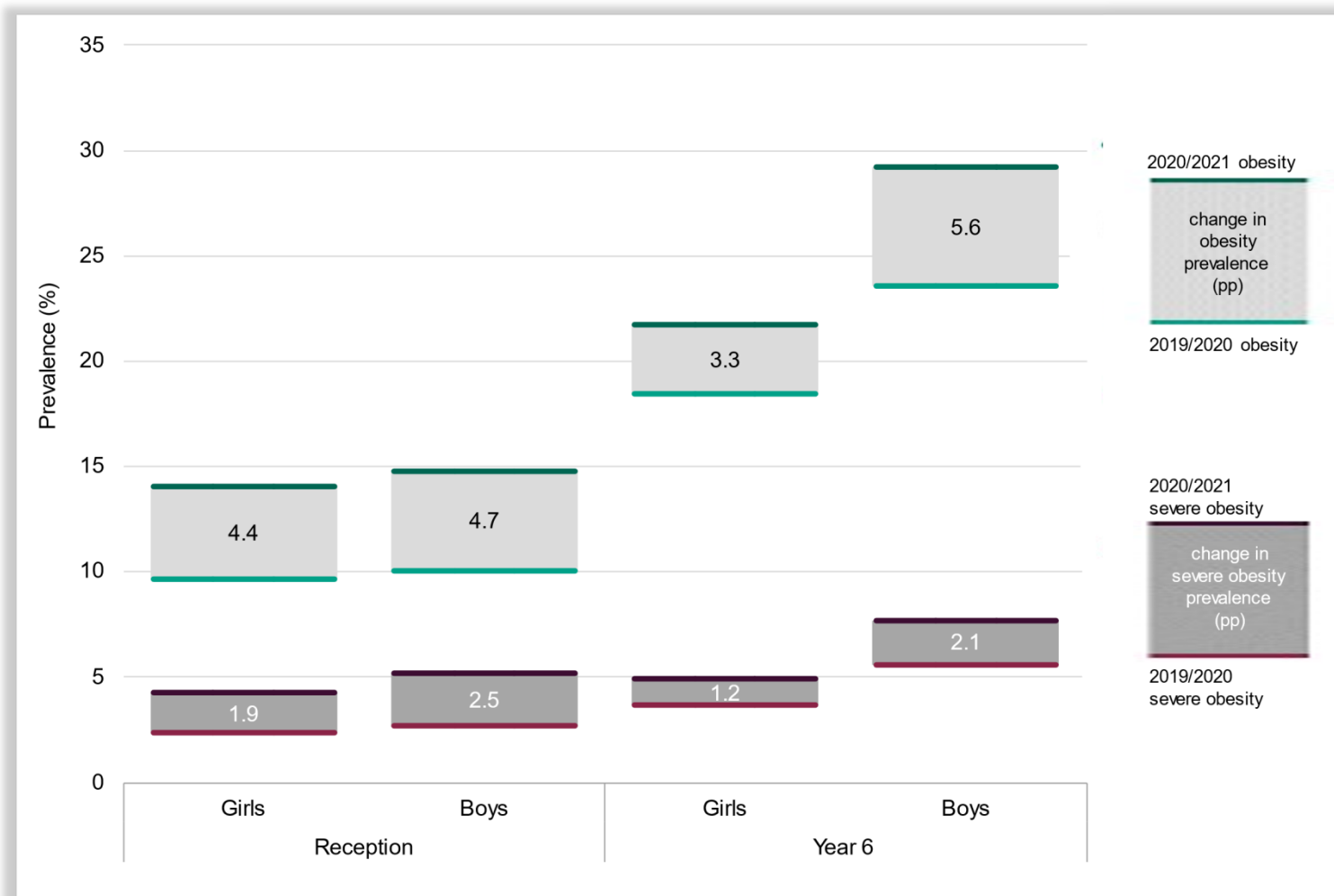


# Trends by body mass index category for children in Year 6

## 2006/07 to 2020/21

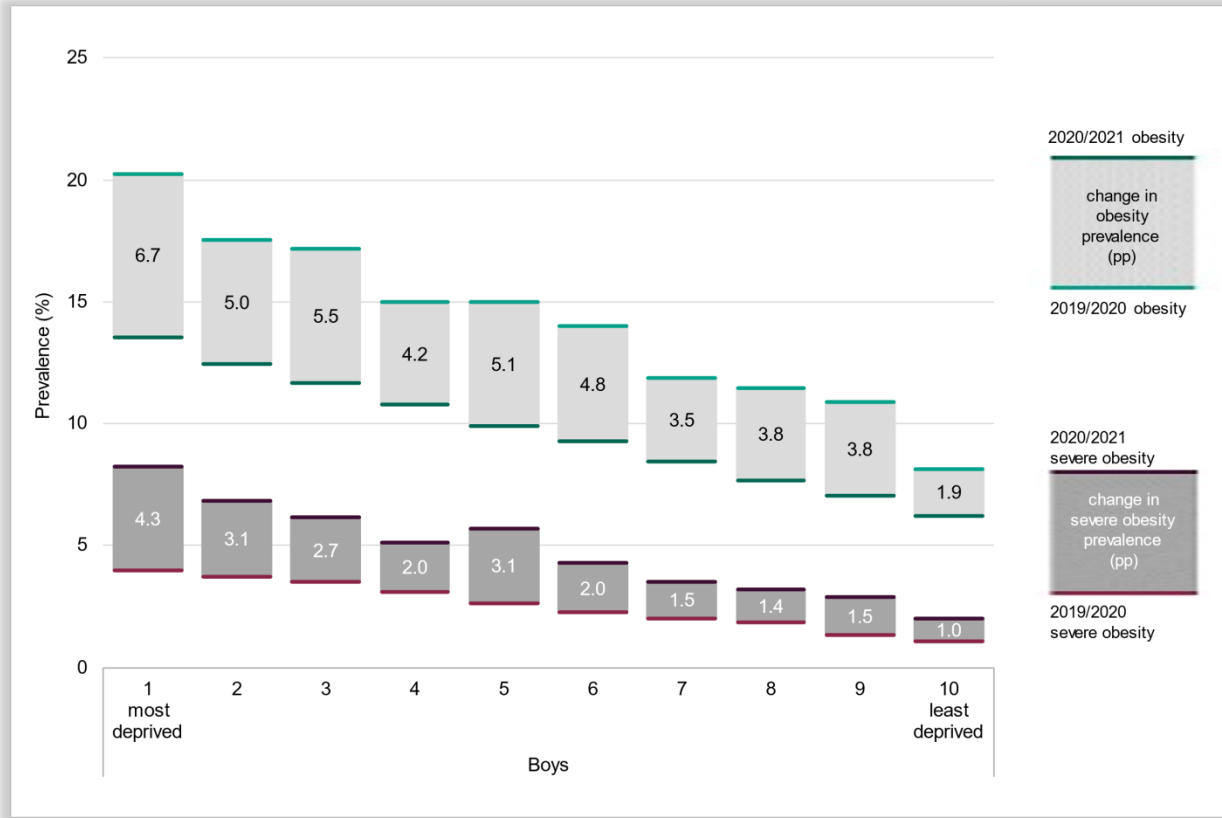
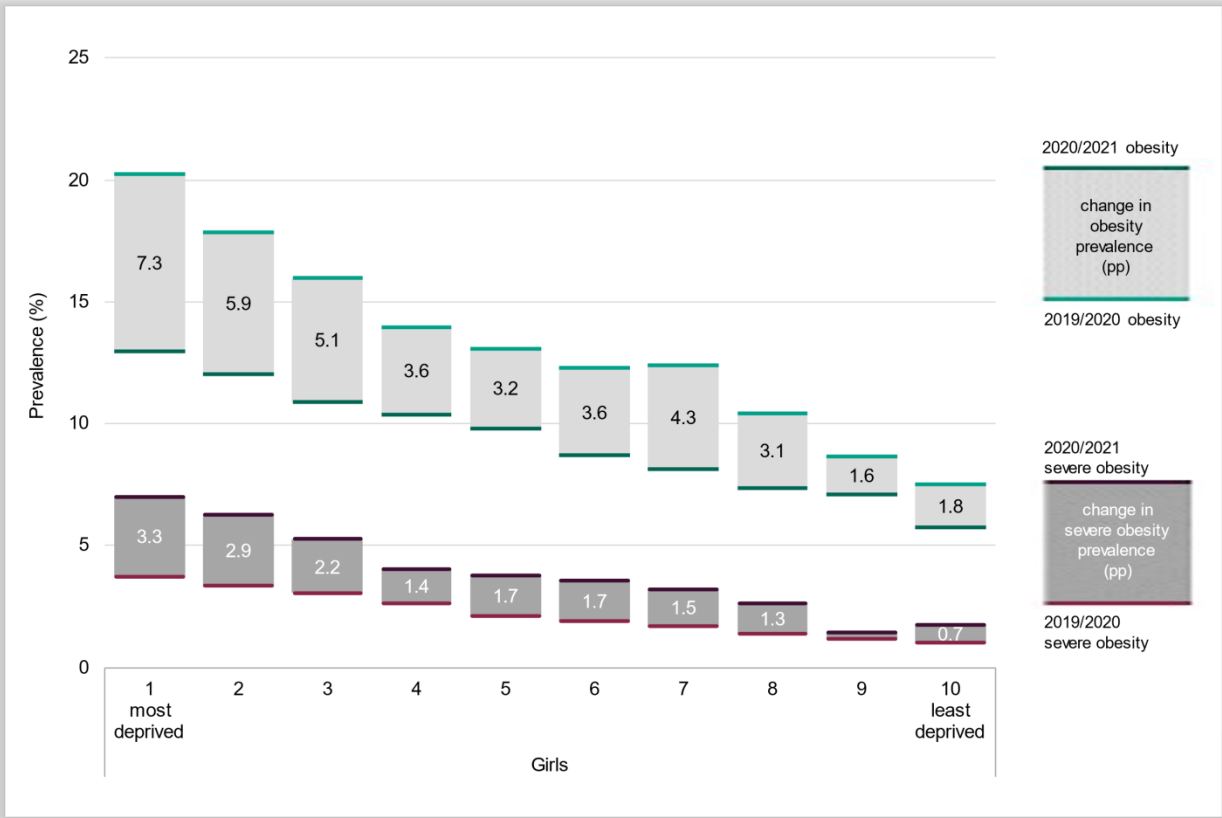


# Percentage point (pp) change in prevalence of obesity and severe obesity between 2019/20 and 2020/21 by age and sex



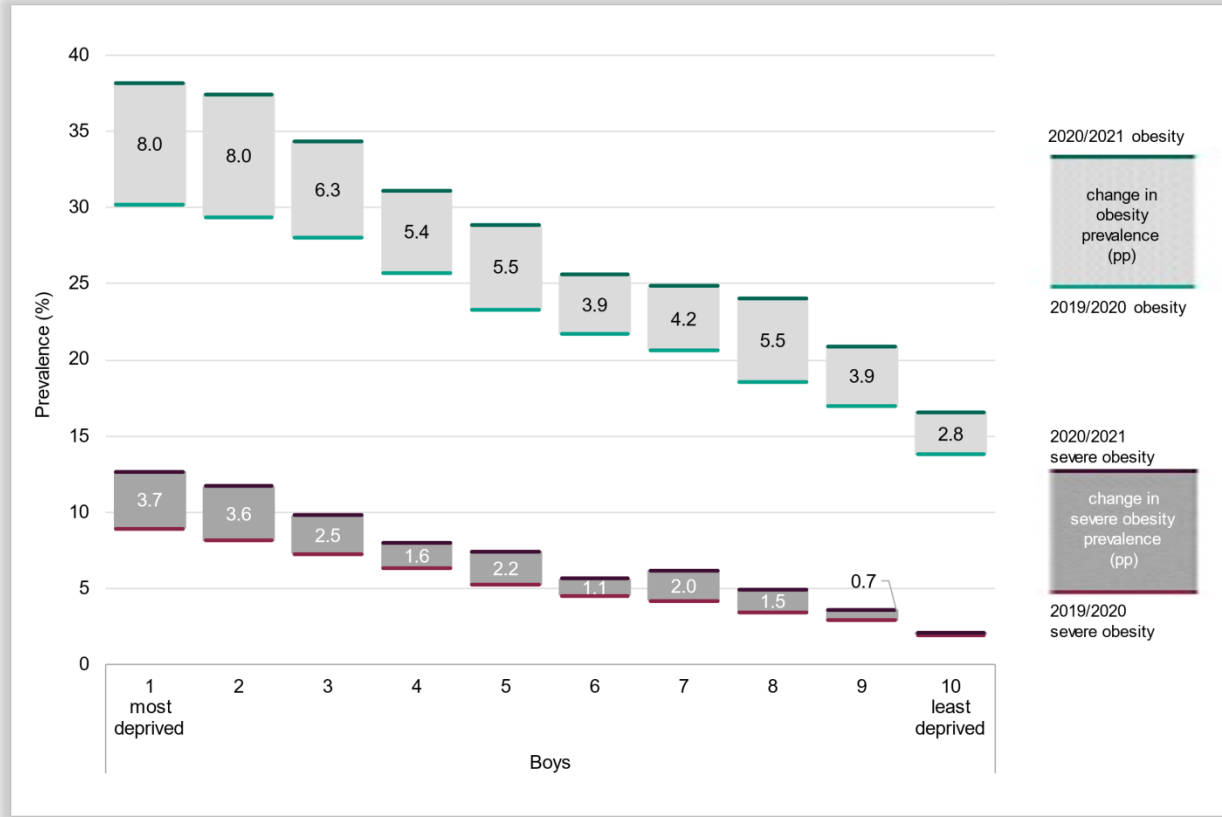
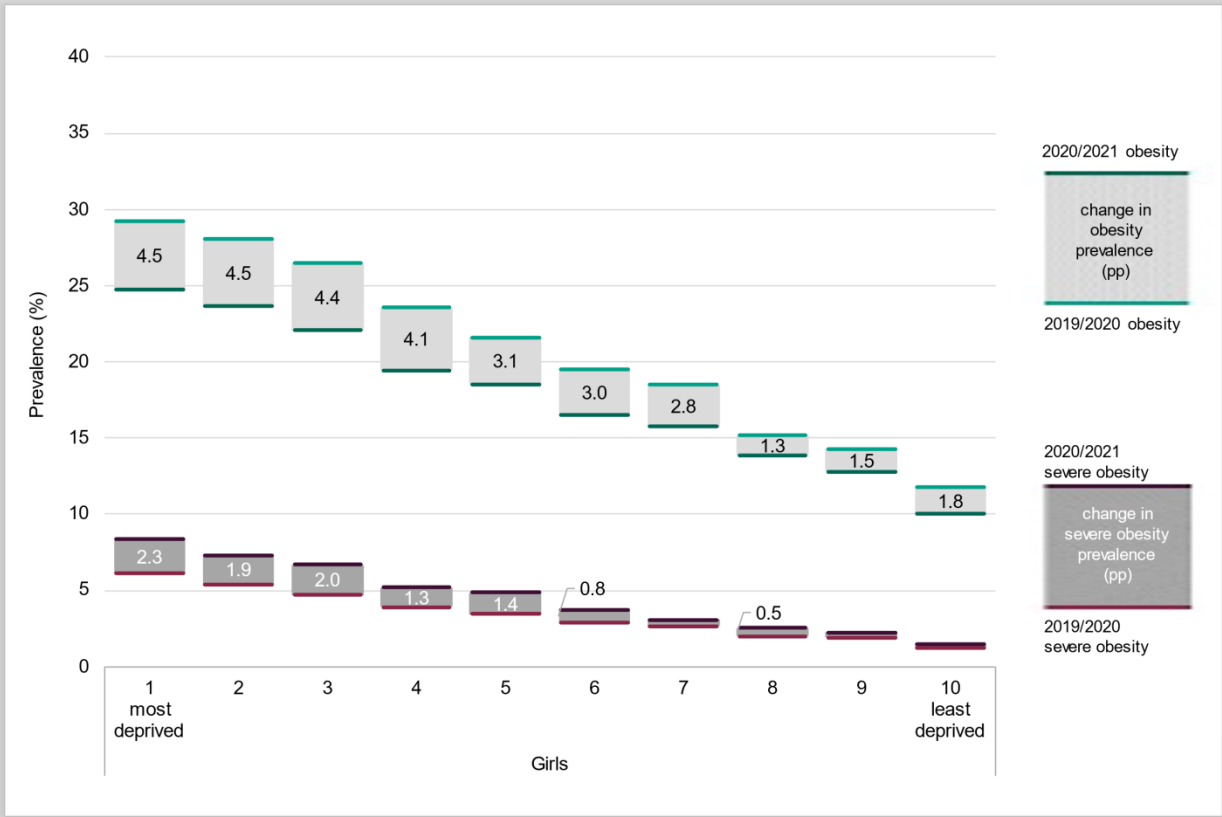
- In 2020/21 there were large increases in obesity and severe obesity prevalence in Reception and Year 6 for both boys and girls
- boys in Year 6 had a larger increase in obesity (5.6pp) and severe obesity (2.1pp) prevalence and from a higher starting point, compared with girls (3.3pp and 1.2pp respectively)

# Percentage point (pp) change in prevalence of obesity and severe obesity between 2019/20 and 2020/21 in Reception by deprivation decile



Note: Percentage point change values are not shown in the charts when the change is not significant.

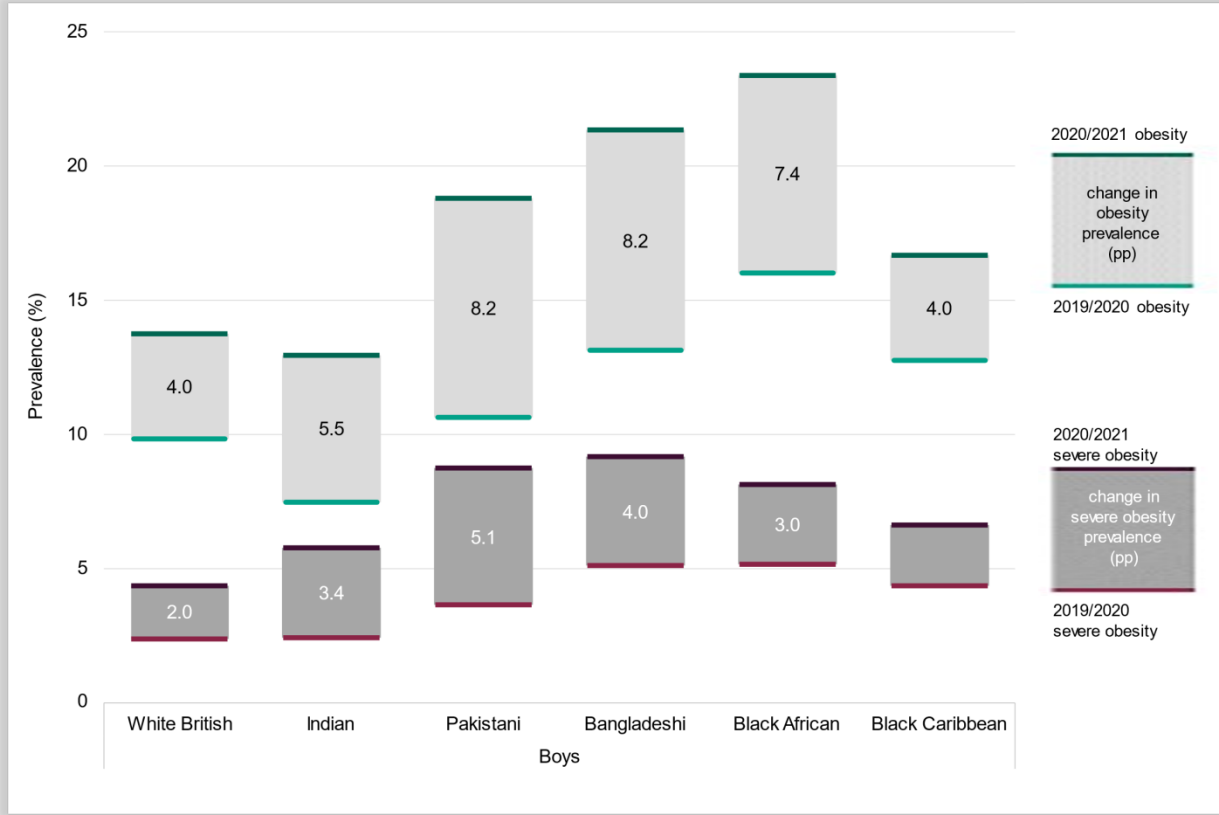
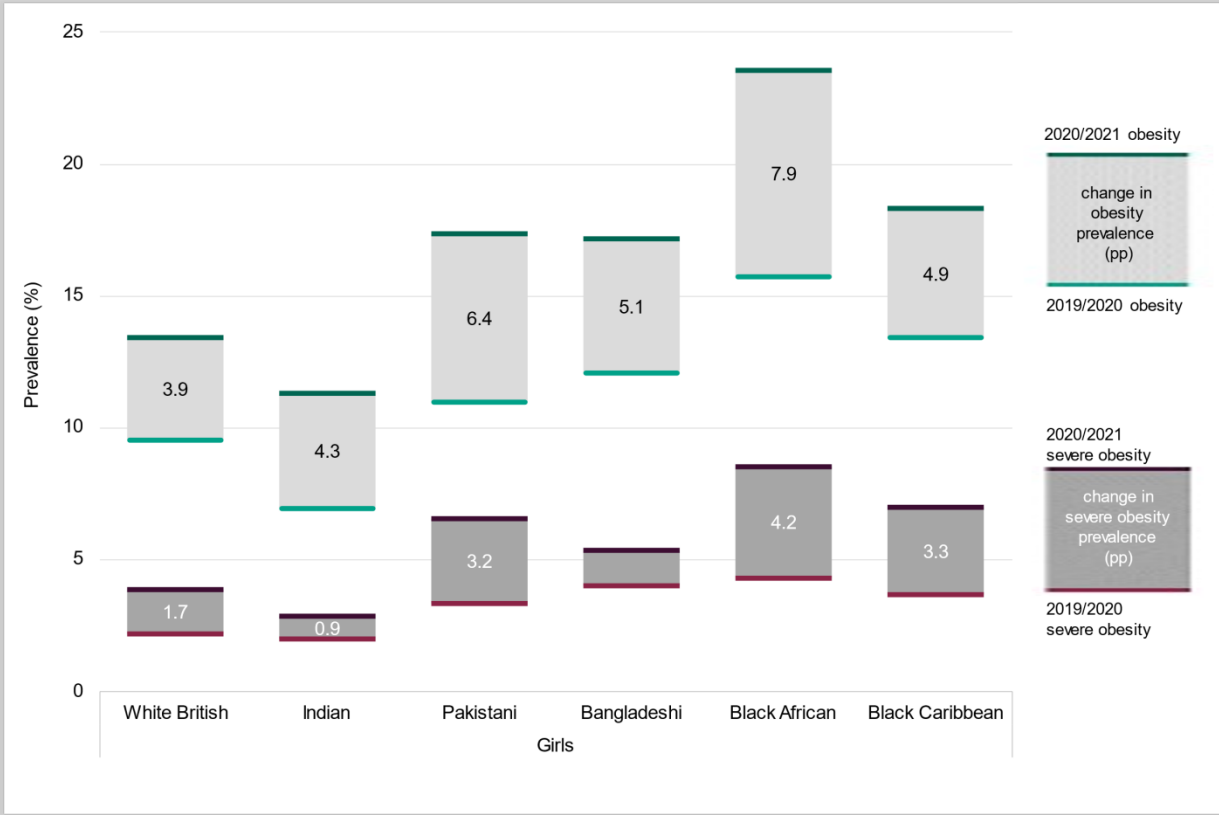
# Percentage point (pp) change in prevalence of obesity and severe obesity between 2019/20 and 2020/21 in Year 6 by deprivation decile



Note: Percentage point change values are not shown in the charts when the change is not significant.

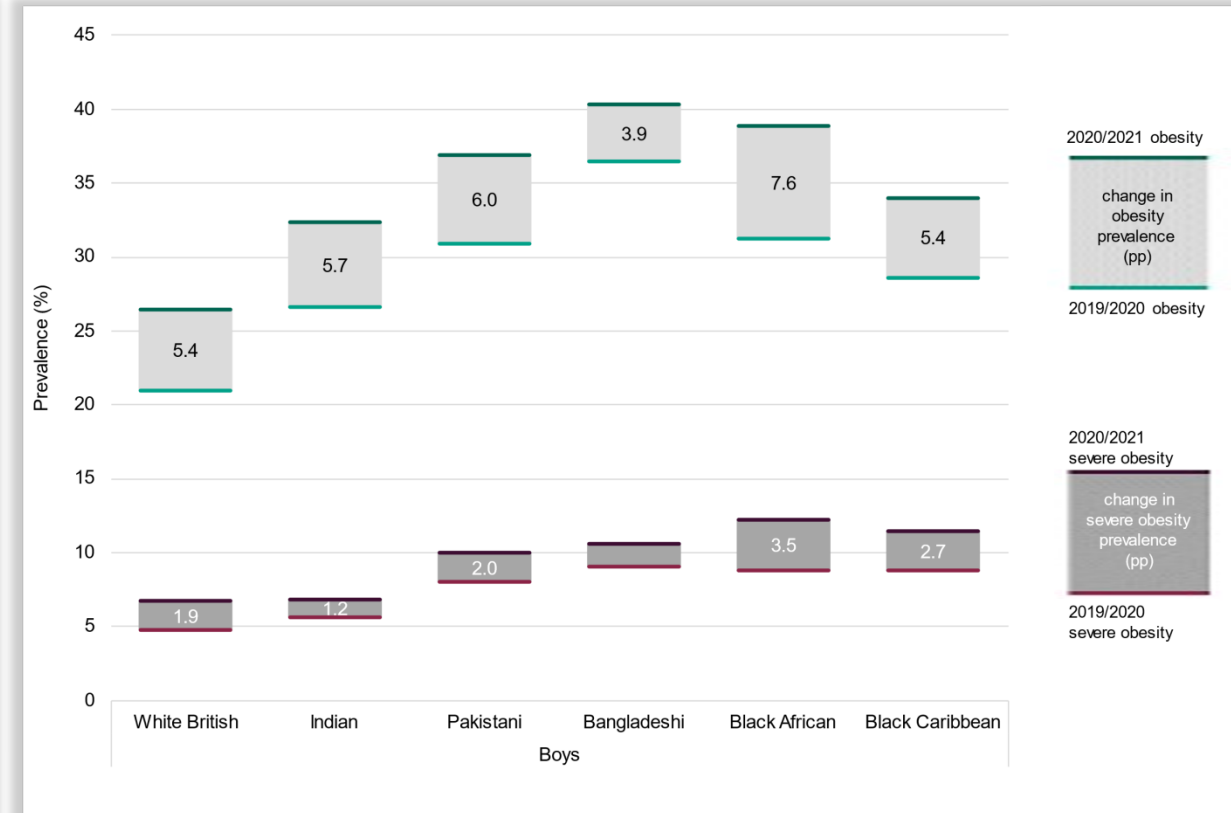
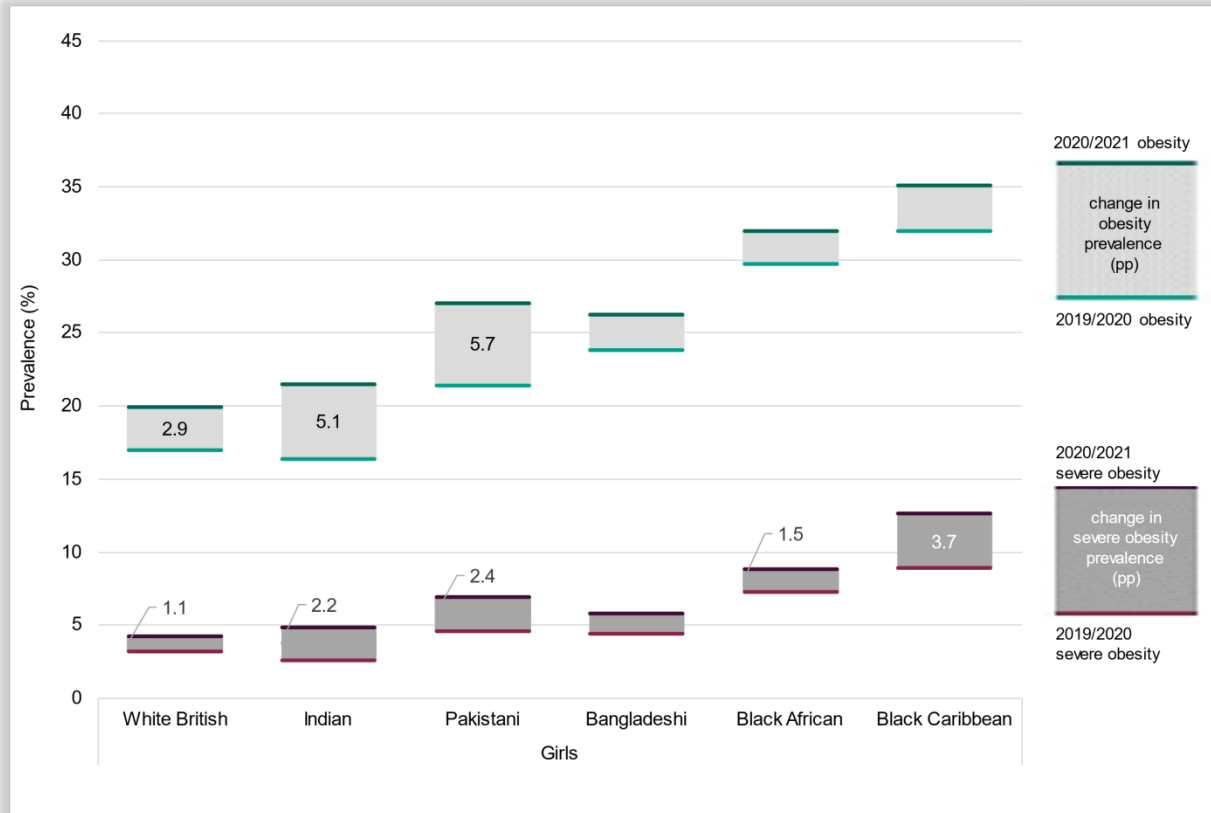


# Percentage point (pp) change in prevalence of obesity and severe obesity between 2019/20 and 2020/21 in Reception by ethnic group



Note: Percentage point change values are not shown in the charts when the change is not significant.

# Percentage point (pp) change in prevalence of obesity and severe obesity between 2019/20 and 2020/21 in Year 6 by ethnic group



Note: Percentage point change values are not shown in the charts when the change is not significant.

# **National Child Measurement Programme**

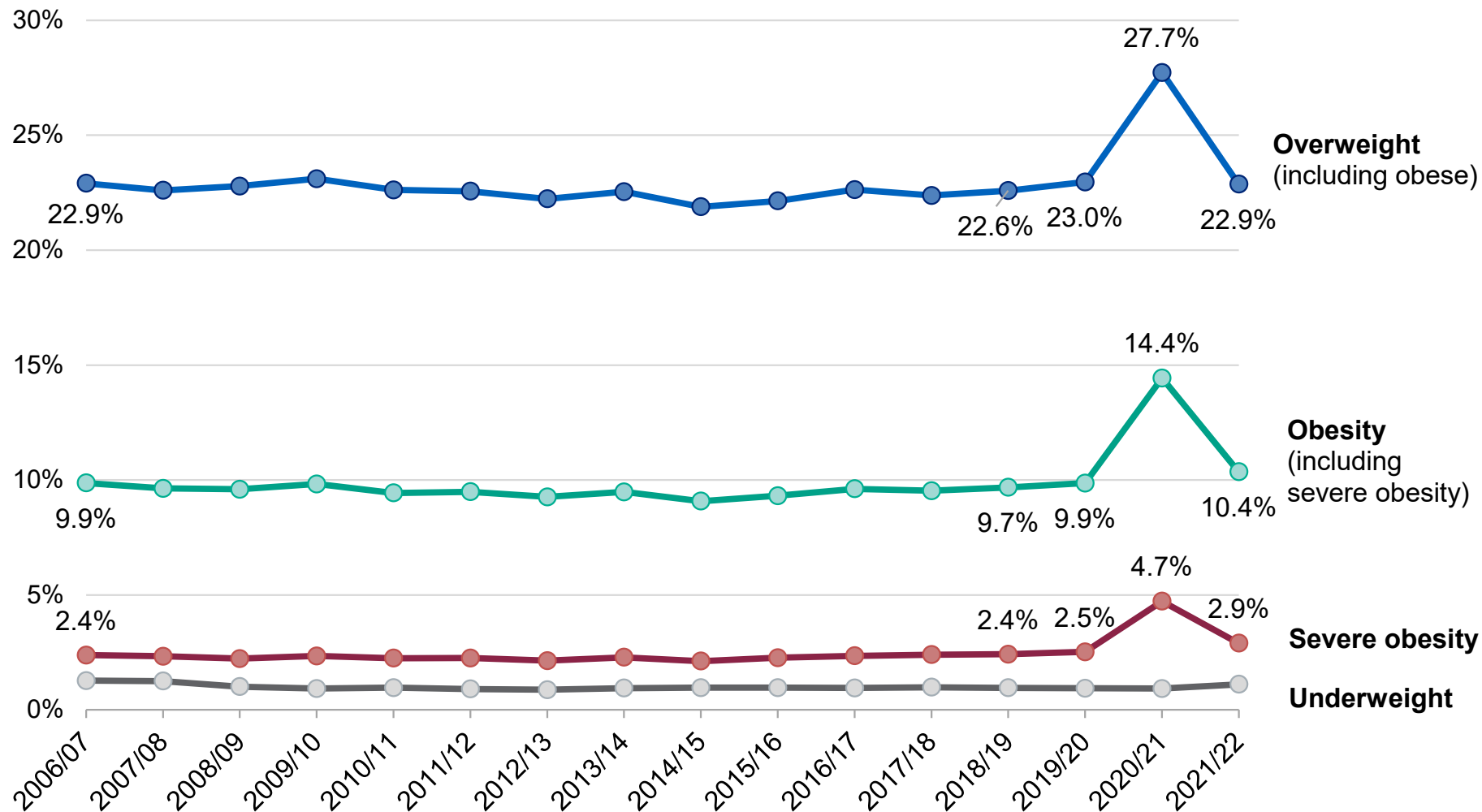
Provisional data from 2021/22

# Provisional data from the 2021/22 NCMP

- Data has been published covering child measurements collected and submitted between Sept 2021 and May 2022
  - ~809k measurement records submitted during this period 68% of a usual full measurement year
  - Data reliable and comparable to previous years
- The full NCMP 2021/22 report will be published in November 2022

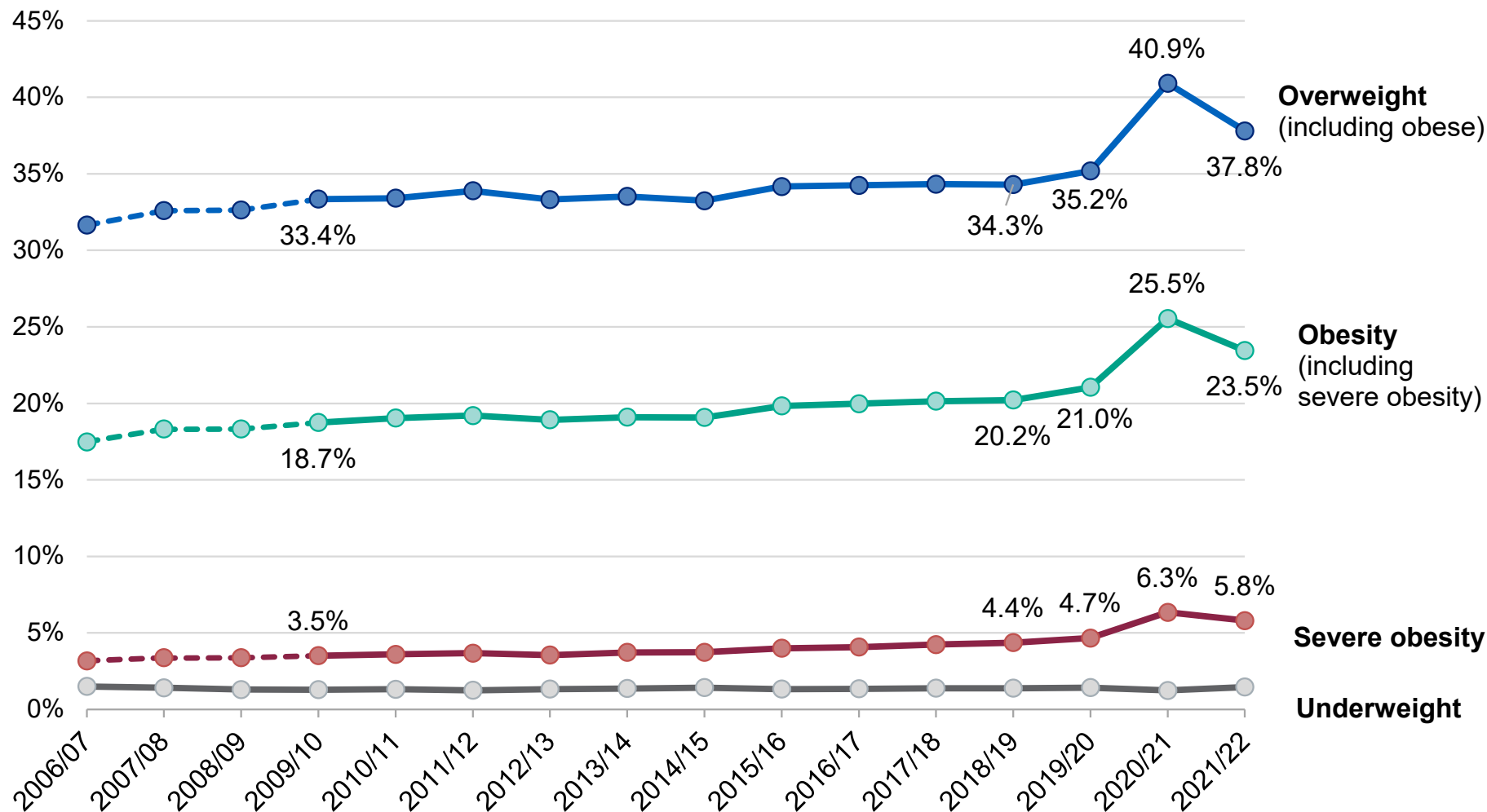
# Trends by body mass index category for children in Reception

## 2006/07 to 2021/22



# Trends by body mass index category for children in Year 6

## 2006/07 to 2021/22



# Provisional data from the 2021/22 NCMP

- Note the sample is not a cohort, we do not know the change in prevalence of obesity for children who were in Reception and Year 6 in 2020/21 and therefore in Year 1 and Year 7 in 2021/22



# Questions | Comments | Discussion

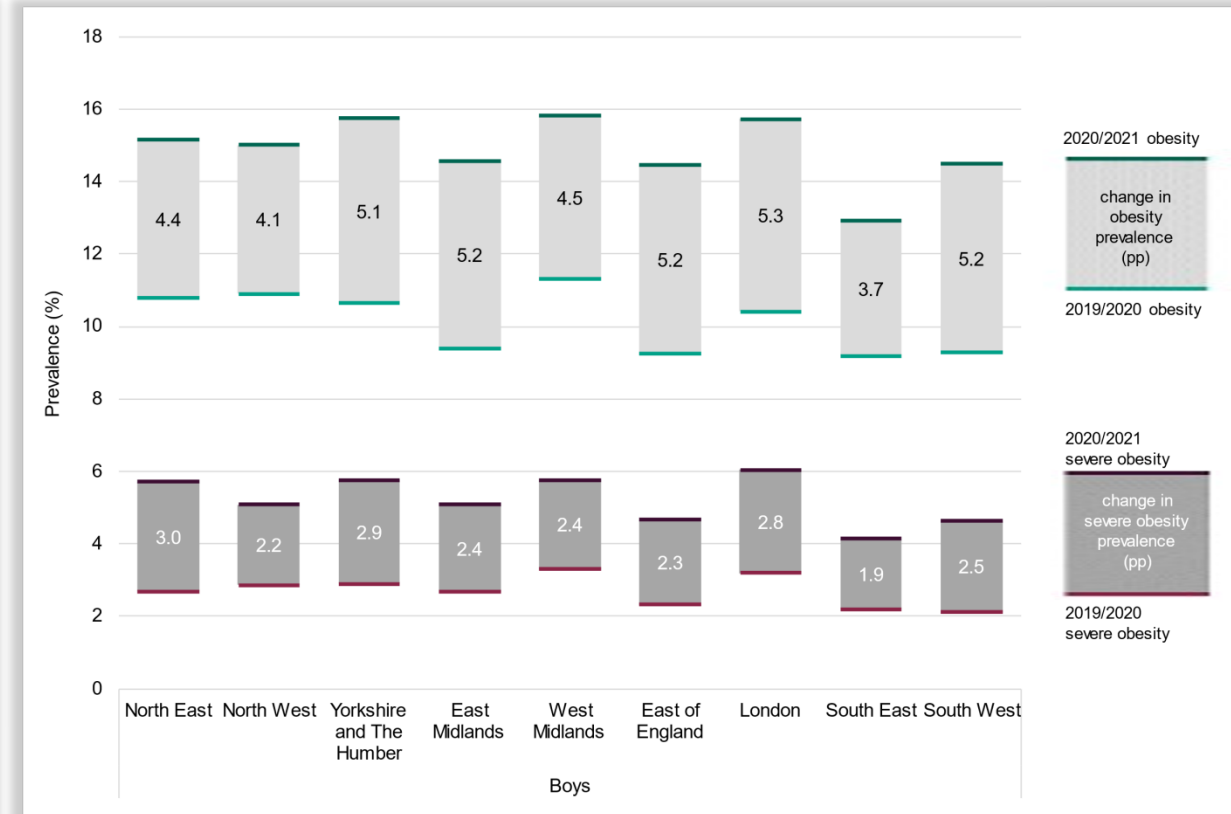
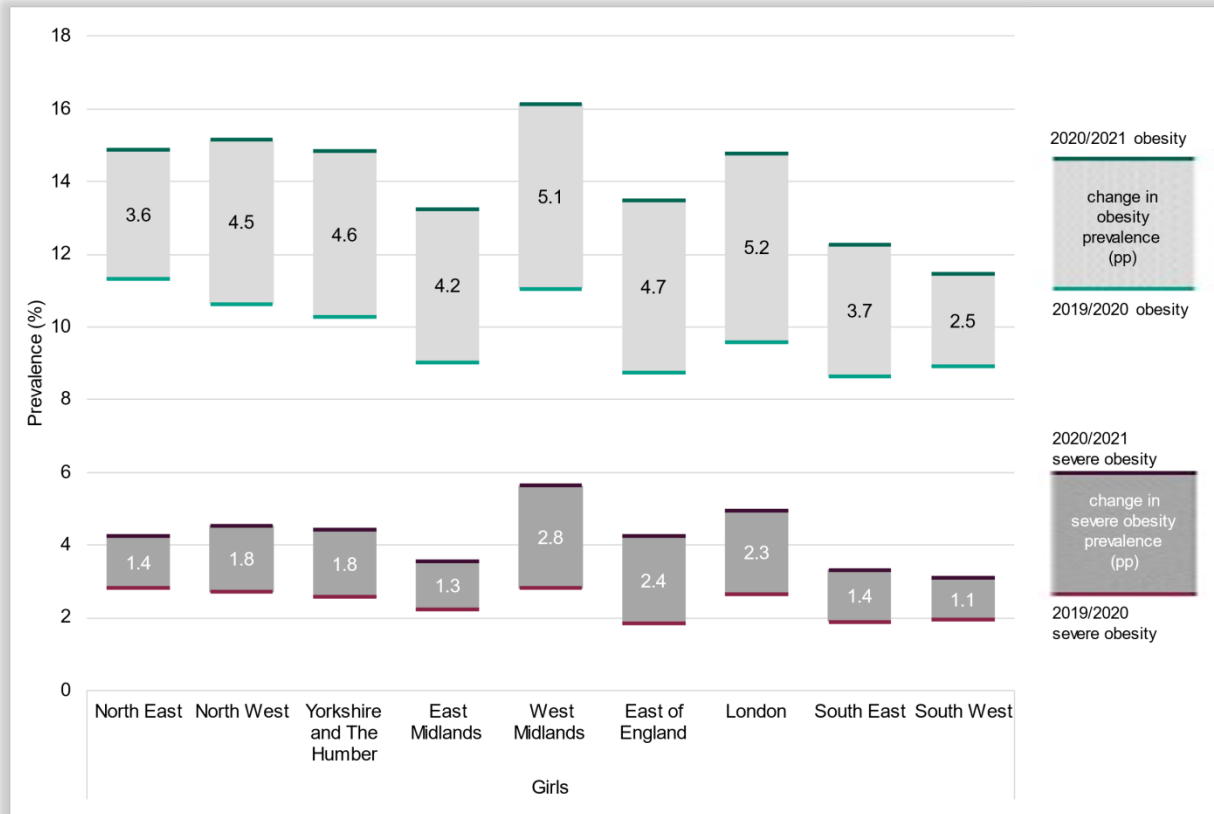


# Key findings: NCMP 2019/20 to 2020/21

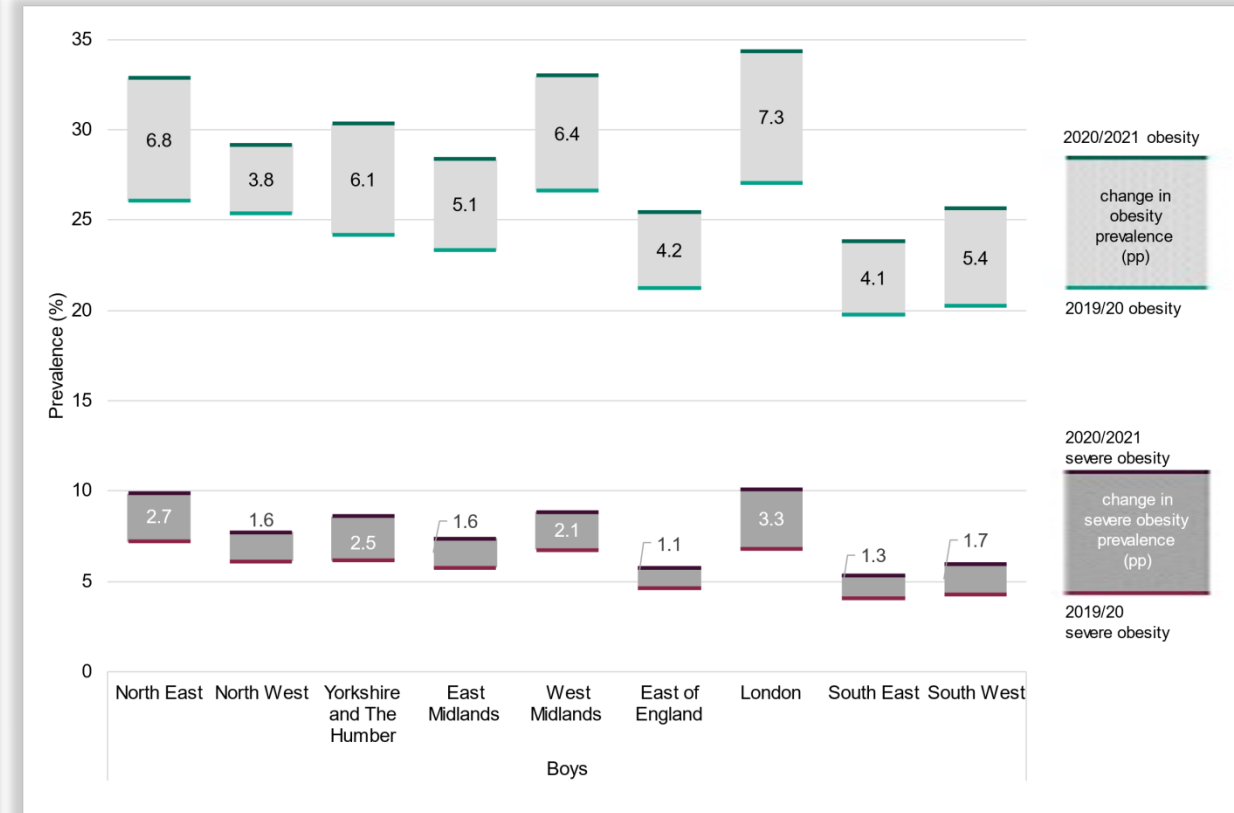
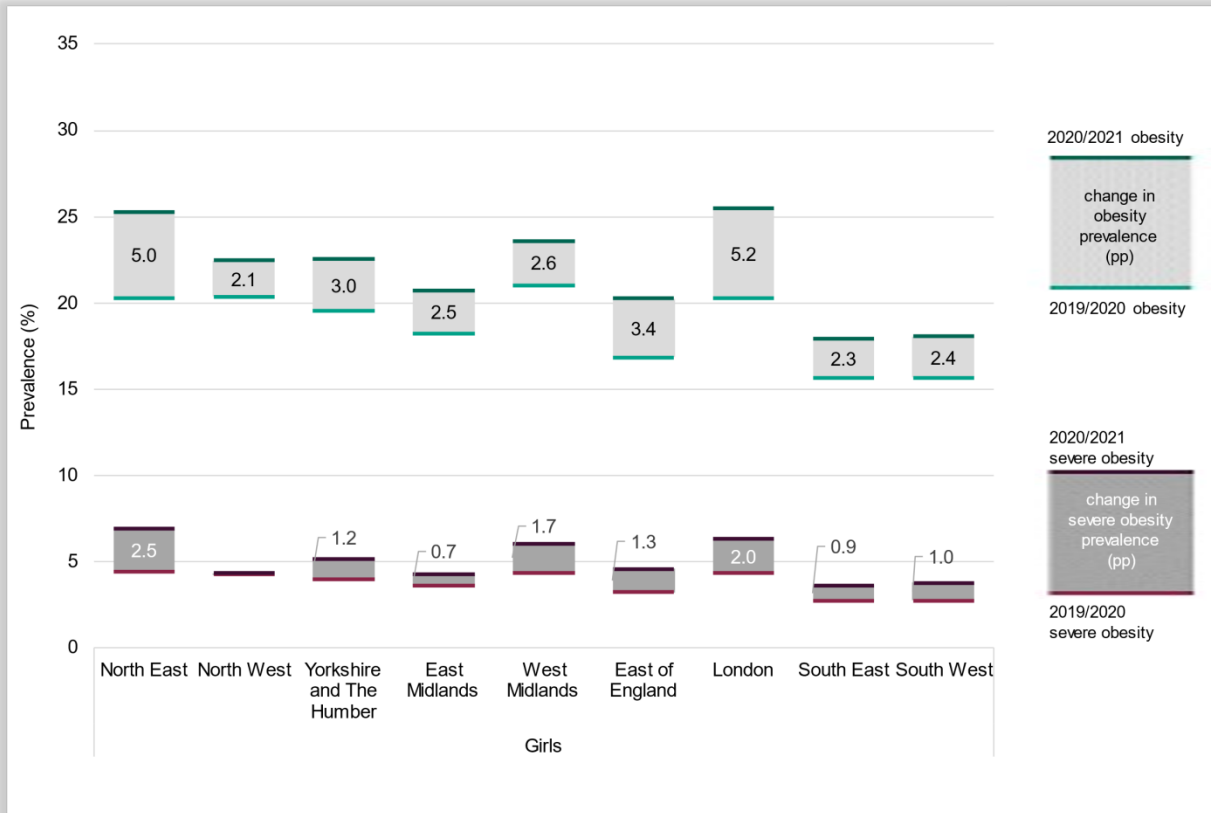
- Prior to 2020/21 prevalence of obesity and severe obesity has seen only small annual changes that have not exceeded 1.1 percentage points.
- In 2020/21 unprecedented increases were seen in the prevalence of obesity of 4.7 percentage points in Reception boys, 4.4 percentage points in Reception girls, 5.6 percentage points in Year 6 boys and 3.3 percentage points in Year 6 girls.
- Boys, particularly in Year 6, have experienced the largest increases in obesity and severe obesity.
- The largest increases in the prevalence of obesity and severe obesity in boys and girls have occurred in the most deprived areas of England, resulting in the large and persistent disparities in child obesity having worsened.
- Disparities in obesity prevalence between ethnic groups have also increased with the ethnic groups that previously had the highest obesity prevalence, in the most part, experiencing the largest increases.
- These increases in child obesity and severe obesity prevalence in 2020/21 follow the COVID-19 pandemic which resulted in school closures and other public health measures. More data is needed to know whether this is a long-term increase or whether prevalence will return to pre-pandemic levels.



# Percentage point (pp) change in prevalence of obesity and severe obesity between 2019/20 and 2020/21 in Reception by region



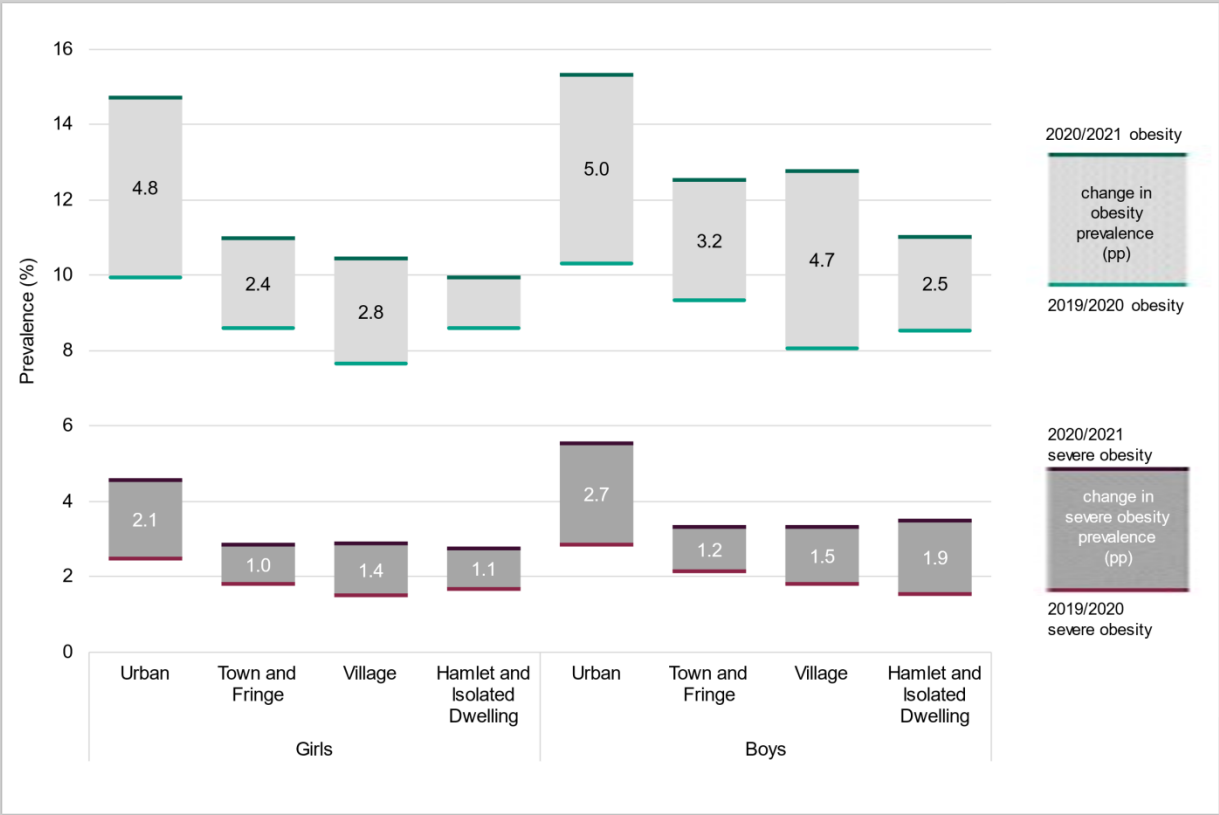
# Percentage point (pp) change in prevalence of obesity and severe obesity between 2019/20 and 2020/21 in Year 6 by region



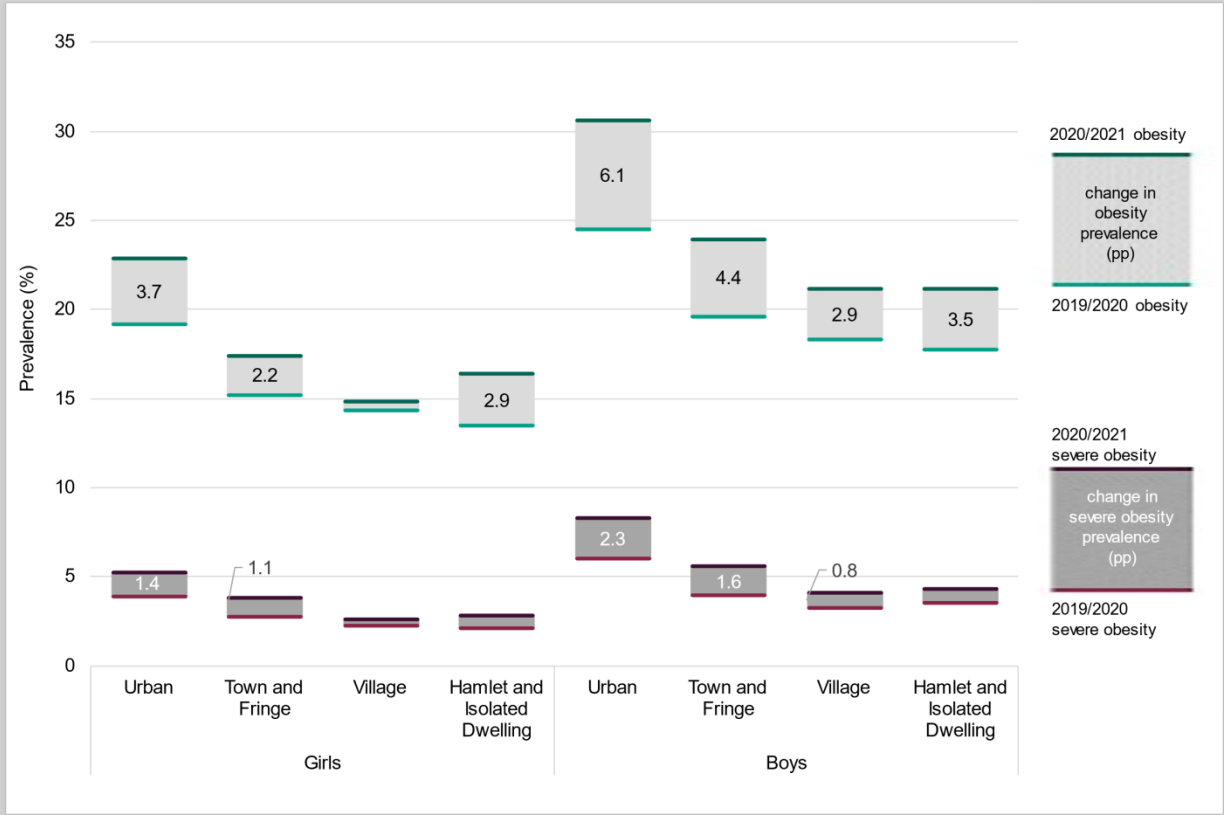
Note: Percentage point change values are not shown in the charts when the change is not significant.

# Percentage point (pp) change in prevalence of obesity and severe obesity between 2019/20 and 2020/21 by rural/urban category

Reception



Year 6



Note: Percentage point change values are not shown in the charts when the change is not significant.

# Other useful links

## NHS Digital NCMP reports

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

## OHID PowerPoint slide set on the 2020/21 NCMP

<https://www.gov.uk/government/publications/child-obesity-patterns-and-trends>

## OHID Obesity Profile on Fingertips

<https://fingertips.phe.org.uk/profile/national-child-measurement-programme>

## NCMP Operational Guidance

<https://www.gov.uk/government/publications/national-child-measurement-programme-operational-guidance>

