Healthy Weight (Children)

Summary points

In 2024/25, 22.0% (more than 1 in 5) of Reception (age 4–5) and 35.3% (more than 1 in 3) of year 6 (age 10–11) pupils in Bristol had excess weight (overweight or very overweight). The prevalence rate for reception year pupils in Bristol is significantly lower than the national average of 23.5%, while the prevalence rate for year 6 pupils in Bristol is lower than, but statistically similar to, the national average of 36.2%.

Underweight prevalence was 0.9% in Reception (statistically similar to the national average of 1.1%) and 1.2% in year 6, significantly lower than the national average of 1.6%.

Overview

Reducing childhood obesity is a national[1] and local[2] priority. The World Health Organization (2015) highlights that childhood obesity is linked to serious health risks, including early onset of diabetes and heart disease.

The UK Government's Childhood Obesity: A Plan for Action (2016)[3] reported that nearly one-third of children are overweight or obese, with younger generations becoming obese earlier and for longer. The burden is greatest among children from low-income families.

The National Child Measurement Programme (NCMP) records the height and weight of most Reception (age 4–5) and Year 6 (age 10–11) pupils. Based on age, gender, height, and weight, children are classified as underweight, healthy weight, overweight, or very overweight (obese). The data informs service planning and generates feedback for parents and carers.

To note, NCMP delivery was disrupted by the Covid-19 pandemic. See footnote 4 for an explanation on how this impacted data collection in Bristol from 2019 - 2022[4].

[1] Childhood obesity: a plan for action - GOV.UK (www.gov.uk)
[2] Health and wellbeing strategy (bristol.gov.uk)
[3] Childhood obesity: a plan for action - GOV.UK (www.gov.uk)
[4] **Impact of the Covid-19 pandemic on local measurement of childhood weight:** The 2019/20 NCMP in Bristol was cut short in March 2020 due to Covid-19. By then, 91.5% of Year 6 pupils had been measured, but only 36.2% of Reception pupils. As a result, full Year 6 statistics are available, but only citywide averages are reported for Reception, which should be interpreted with caution due to low coverage—especially for smaller areas or sub-groups. Where needed, 2018/19 data has been used for Reception.

In 2020/21, the NCMP was scaled down nationally, with only 10% of pupils measured to produce representative national estimates. This data is not suitable for local analysis. 2021/22 marked the first full year of NCMP measurements in Bristol since the pandemic began.

To support more robust analysis for smaller groups and areas (e.g. city wards), we typically use three-year pooled data. Pandemic-related disruption created gaps in these trend analyses, but with the addition of 2023/24 data, we've resumed pooled reporting for 2021/22–2023/24 for both Reception and Year 6.

Excess weight in 4-5 year olds (Reception, 2024/25)

In 2024/25, 22.0% of Reception (age 4–5) pupils in Bristol had excess weight—significantly higher than in 2023/24 (18.9%). Despite year-to-year fluctuations in this measure, Figure 1 shows an overall downward trend over the past 18 years.

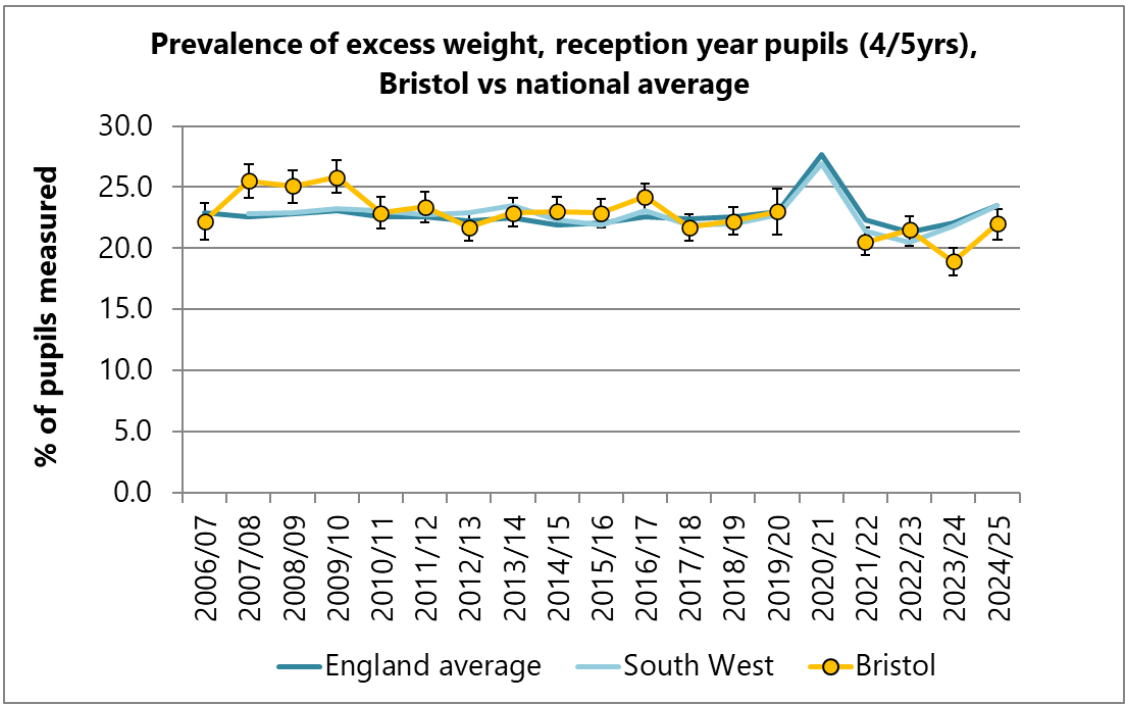


Figure 1: Prevalence of excess weight, reception year pupils (4/5yrs), Bristol vs regional & national averages, 2006/07 to 2024/25. Source – Office for Health Improvement & Disparities, collated by Public Health, Bristol City Council.

The prevalence of children measured as very overweight in Reception was 9.8% in 2024/25, significantly higher than the results in 2023/24 (8.0%) but statistically similar to the national average (10.5%).

Among the eight Core Cities, Bristol had the lowest prevalence of excess weight (overweight or very overweight) in Reception, significantly lower than 4 of the comparator group (Figure 2). Its prevalence of very overweight Reception aged pupils was also the lowest, significantly below all but one comparator.

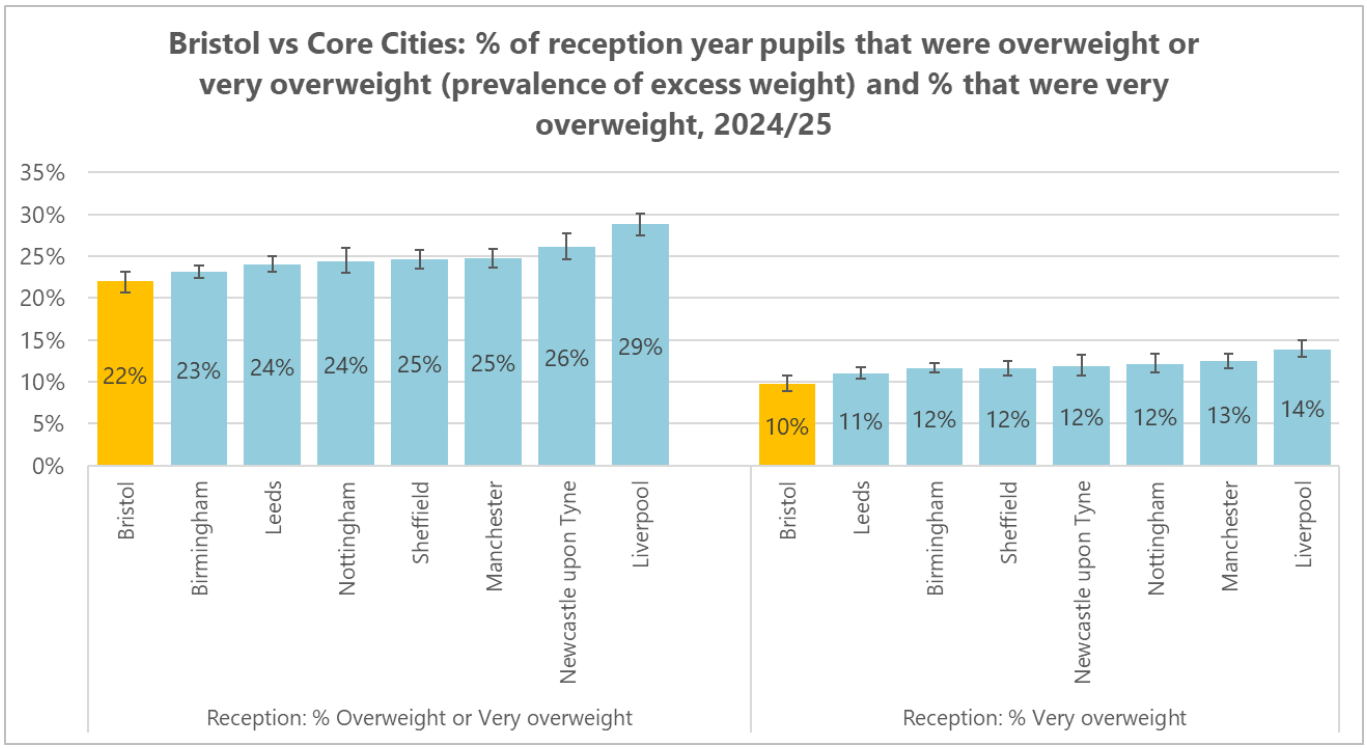


Figure 2: % of reception year pupils that were overweight or very overweight (prevalence of excess weight) and % that were very overweight (4/5yrs), Bristol vs Core City local authorities, 2024/25. Source – Office for Health Improvement & Disparities, collated by Public Health, Bristol City Council.

Equalities data – Sex and Excess Weight (Reception, 2024/25):
There appears to be little variation in the prevalence of excess weight in reception year pupils between boys and girls, either locally or nationally. In 2024/25, 21.9% of Reception-age girls in Bristol had excess weight, compared to 23.4% nationally. For boys, the rate was 21.9% in Bristol versus 23.6% nationally. There is no significant difference between boys and girls within Bristol or nationally, or between the Bristol and national averages for either boys or girls.

ICS Sub-localities and Excess Weight (Reception, 2024/25):
Among Bristol Reception pupils, excess weight prevalence was lowest in North & West (inner) at 17.2%, and highest in North & West (outer) at 25.4% (see Figure 3). The rate in North & West (inner) was significantly lower than in the Bristol East and North and West Bristol (outer) sub-locality areas.

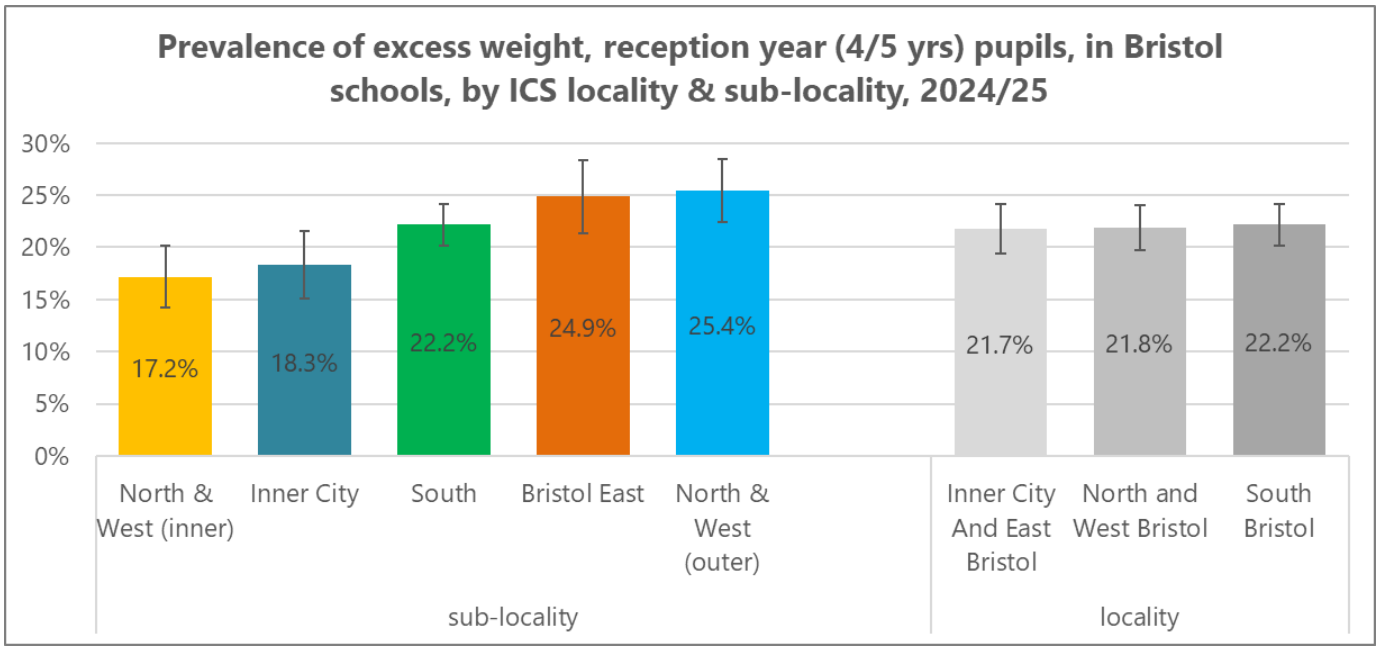


Figure 3: Local collation of NCMP data, Bristol City Council (Public Health)

Equalities data – Deprivation and Excess Weight (Reception, 2024/25):
Figure 4 highlights a strong link between area-level deprivation and excess weight among Reception pupils in Bristol. In 2024/25, prevalence was around 17% in the least deprived 20% of areas, compared to 27% in the most deprived 20%. This deprivation gradient helps explain much of the variation seen across ICS sub-localities and wards.

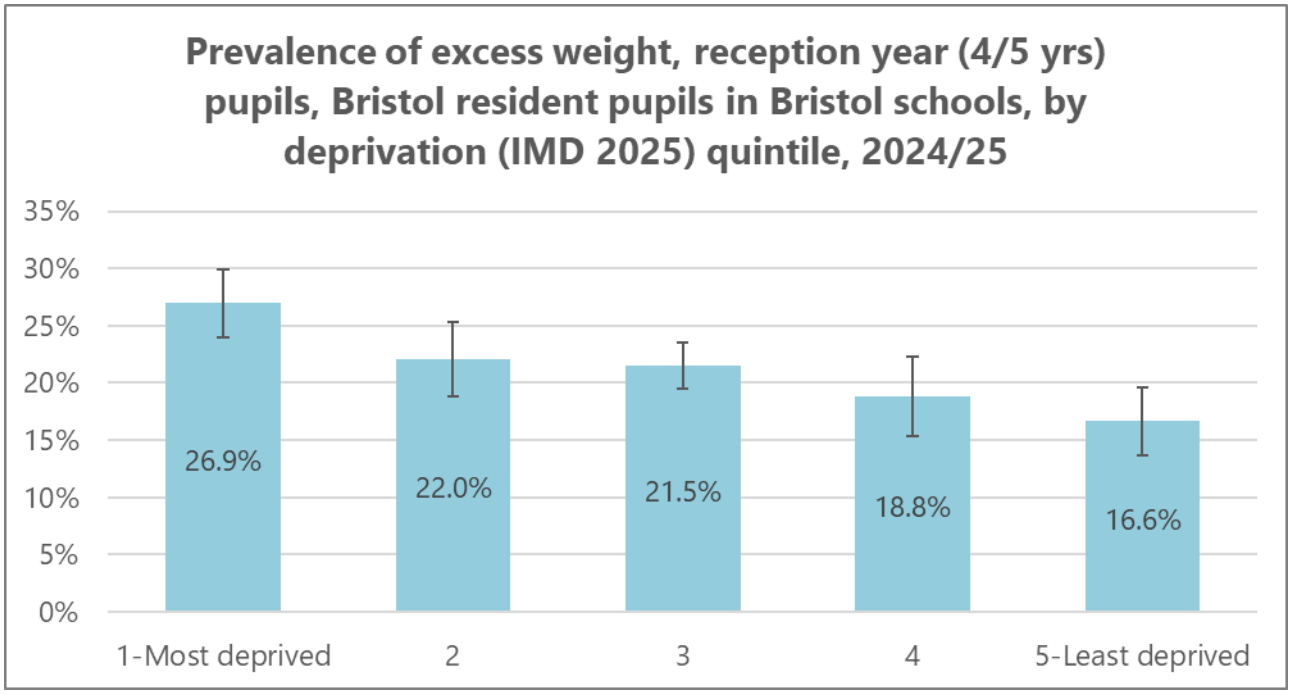


Figure 4: Local collation of NCMP data, Bristol City Council (Public Health)

Ward-Level data - Excess Weight (Year Reception, 2022/23 - 2024/25):
Based on 3-year pooled data from 2022/23 to 2024/25, the prevalence of excess weight among Reception pupils varies widely across Bristol's 34 wards, ranging from 11.8% in Clifton to 29.1% in Hartcliffe & Withywood.

The highest prevalence levels are found in wards located at the northern and southern extremes of the city. In contrast, wards across the east of Bristol generally show average to slightly above-average prevalence. Meanwhile, the lowest levels of excess weight are found in wards to the west, as well as in areas immediately north and south of the city centre (see Figure 5).

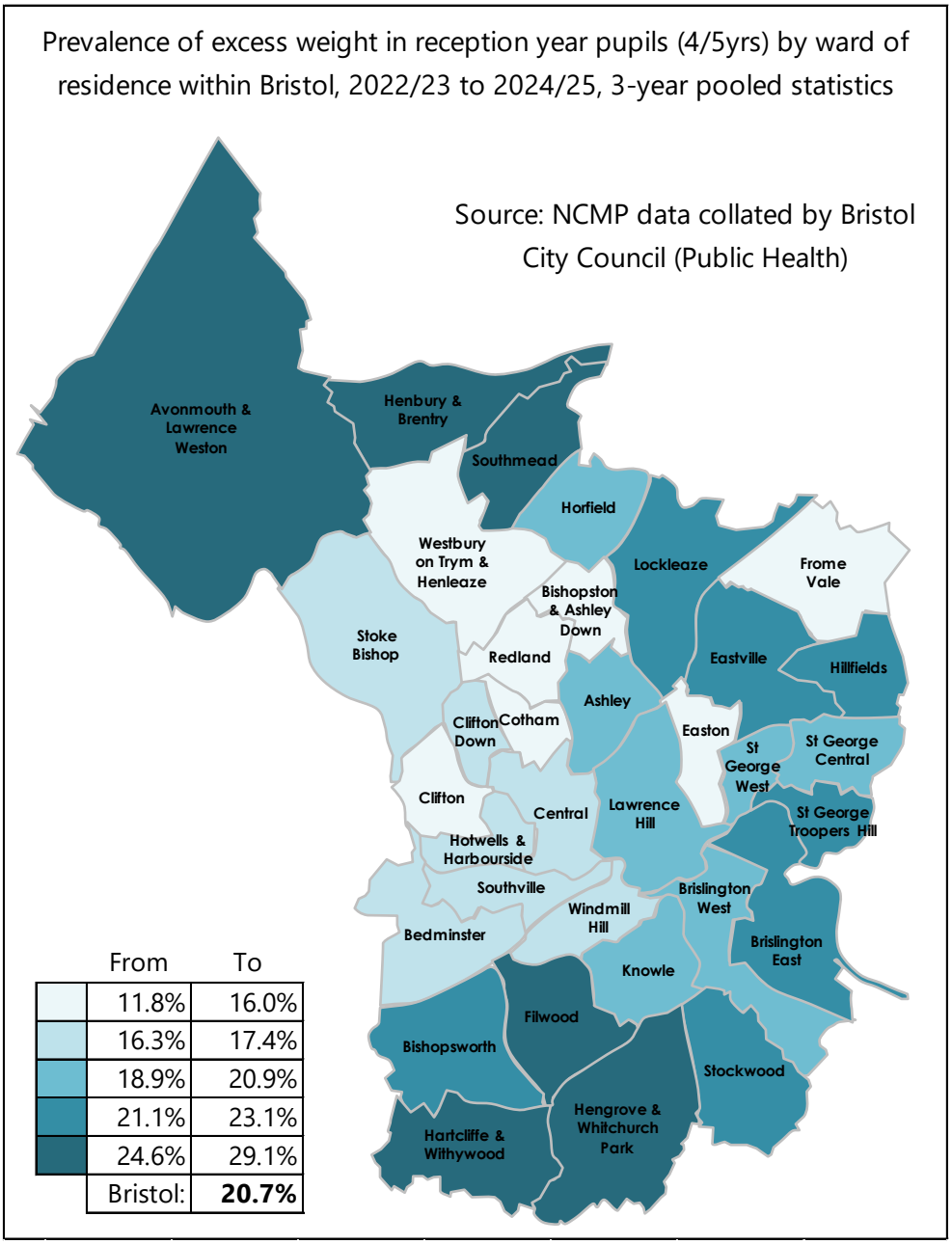


Figure 5: Prevalence of excess weight in reception year pupils by ward of residence, 2022/23-2024/25
Source: NCMP data collated by Bristol City Council (Public Health).

Equalities data – Ethnicity and Excess Weight (Reception, 2024/25):
Changes to the way the National Childhood Measurement Programme (NCMP) data was collected and recorded in Bristol during 2025 have enabled ethnicity data to be captured for a large proportion of pupils measured, for the first time in many years for Reception year children. As this analysis is based on a single year of data, it does not yet support highly robust comparisons between ethnic groups. However, the reliability of this analysis will improve as additional years of data are collected.

An ethnicity- and sex-based analysis for Reception year pupils in 2024/25 is presented here. However, due to the relatively large margins of error, any generalisation of these findings to the wider population should be treated as indicative at this stage.

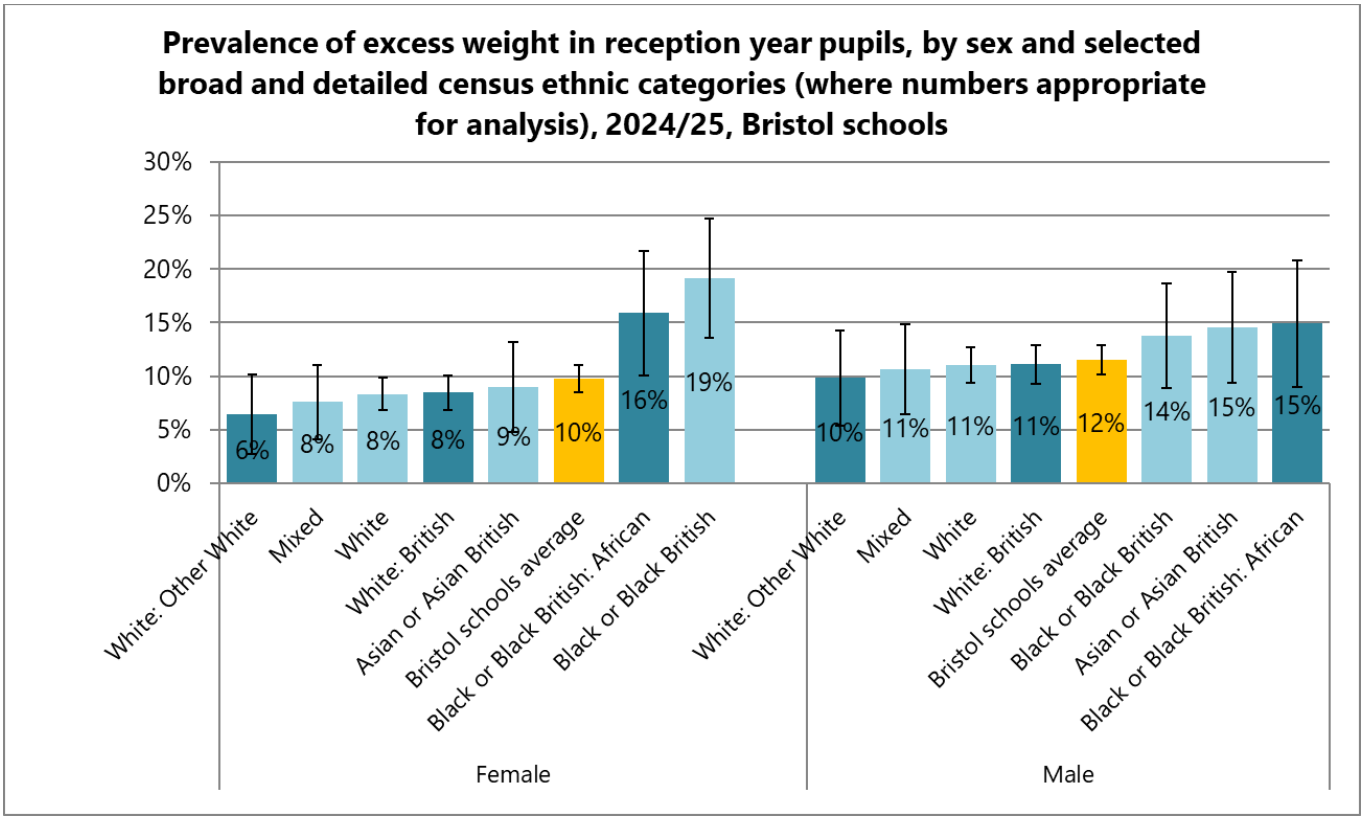


Figure 6: Local collation of NCMP data, Bristol City Council (Public Health)

Based on a single year of data, most of the variation shown in Figure 6 is not statistically significant. However, some patterns are evident, particularly among female Reception pupils. Black and Black British female pupils are more likely, on average, to be overweight or very overweight compared with the Bristol schools average (19% versus 10%). There is relatively little variation among female pupils from other ethnic backgrounds.

Among male Reception pupils, prevalence estimates range from 10% for those of 'White Other' ethnicity to 15% for those of Black African ethnicity. However, variation by ethnicity within the male cohort is not statistically significant.

It is also notable that, for most ethnic groups—aside from Black African and the broader Black or Black British categories—male pupils tend to have a higher prevalence of excess weight than

female pupils of the same ethnicity. However, these differences are also not statistically significant.

Underweight in 4-5 year olds (Year Reception, 2024/25):

In 2024/25, 0.9% of Reception pupils in Bristol were identified as underweight—statistically similar to both 2023/24 (1.1%) and the national average (1.1%). As shown in Figure 7, underweight prevalence in Bristol typically ranged from 0.5% to 1.0% between 2006/07 and 2019/20, except in the first year of measurement.

Since the pandemic-related interruption in 2020/21, prevalence has generally been slightly higher, at around 1%. While single-year estimates are subject to wide confidence intervals, the sustained increase over this period suggests a potential rise in underweight prevalence among this age group. However, with two consecutive years of decline, this may indicate the beginning of a post-pandemic recovery.

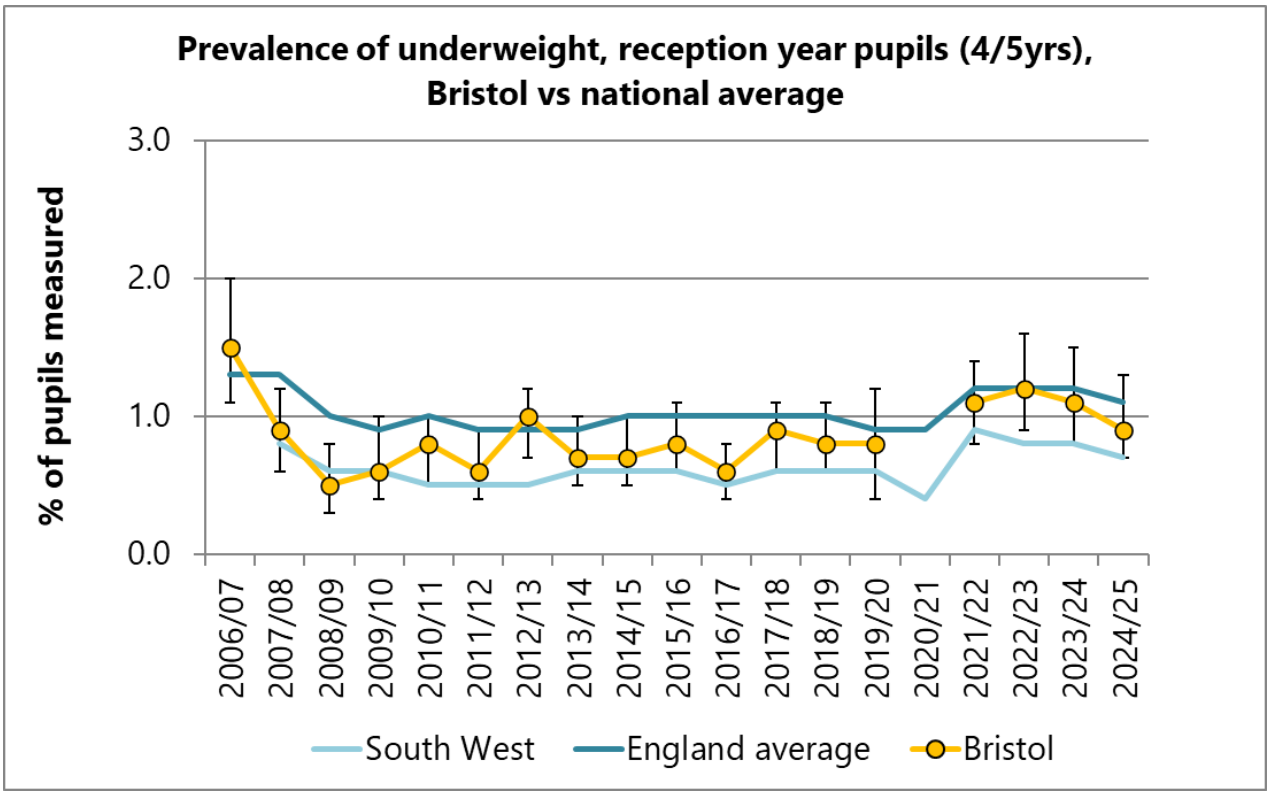


Figure 7: Prevalence of underweight, reception year pupils (4/5yrs), Bristol vs regional & national averages, 2006/07 to 2024/25. Source – Office for Health Improvement & Disparities, collated by Public Health, Bristol City Council.

In 2024/25, 0.9% of Reception pupils in Bristol were identified as underweight—typical for the Core Cities group and at the lower end of the range (0.7% in Liverpool to 2.1% in Nottingham). Bristol's rate was statistically similar to all Core Cities except Manchester, Birmingham and Nottingham where prevalence was significantly higher.

Equalities data – Gender and Underweight (Reception, 2024/25):
In 2024/25, 0.5% of Reception-age girls in Bristol were measured as underweight, compared to 0.7% nationally. For boys, the rate was 1.4% in Bristol versus 1.5% nationally. The difference between boys and girls in Bristol was statistically significant, which suggests a meaningfully increased risk of being underweight for reception year boys in this academic cohort in Bristol.

ICS Sub-localities and Underweight (Year Reception, 2022/23 – 2024/25)[5]:
Based on pooled data from 2022/23 to 2024/25, underweight prevalence among reception pupils was lowest in North & West (inner) at 0.7%, and highest in the Inner City at 2.0%. The rates for Inner City and Bristol East were significantly higher than all other sub-localities (Figure 8).

Combined, the Inner City and East locality had a prevalence of 1.9%—significantly higher and more than double that of North & West (0.7%) and South Bristol (0.9%).

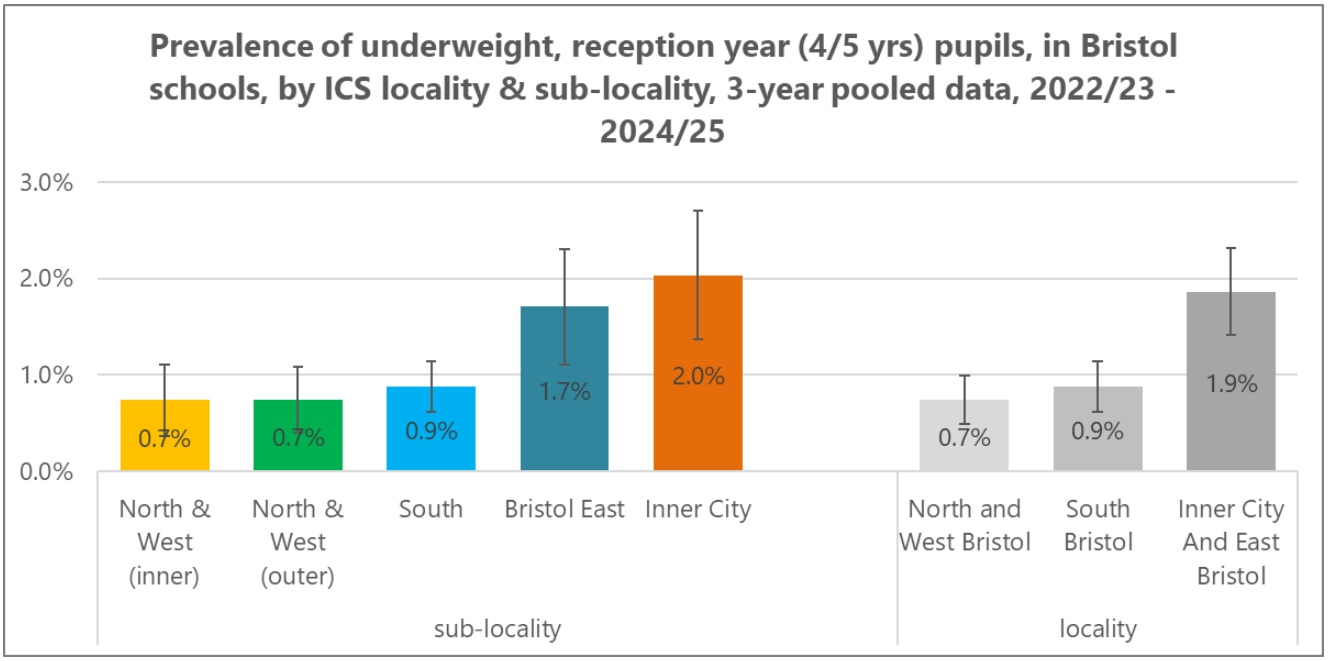


Figure 8: Local collation of NCMP data, Bristol City Council (Public Health)

Equalities data – Deprivation and Underweight (Year Reception, 2022/23 - 2024/25):

Figure 9 (overleaf) suggests the presence of a 'social gradient' in the risk of being underweight among Reception pupils in Bristol. Pupils living in the most deprived 40% of the city show the highest prevalence, with rates generally declining as affluence increases across the remaining quintiles. However, none of these differences are statistically significant, and the relationship with deprivation is not consistent across the full range. This indicates that, while deprivation may be a contributing factor, it is unlikely to be the sole explanation for variation across the city.

[5] To enable more meaningful comparisons across smaller areas or communities, underweight data is pooled over 3 years. The analyses by locality/ sub-locality/ deprivation quintile are based on pooled data from the latest 3 years. Even with pooling, ward-level figures remain too small for reliable comparison, making sub-localities the most detailed level for geographic analysis.

The relatively narrow range of underweight prevalence across deprivation quintiles—compared with variation observed at sub-locality level—suggests that other place-based factors may be equally or more important in influencing underweight risk.

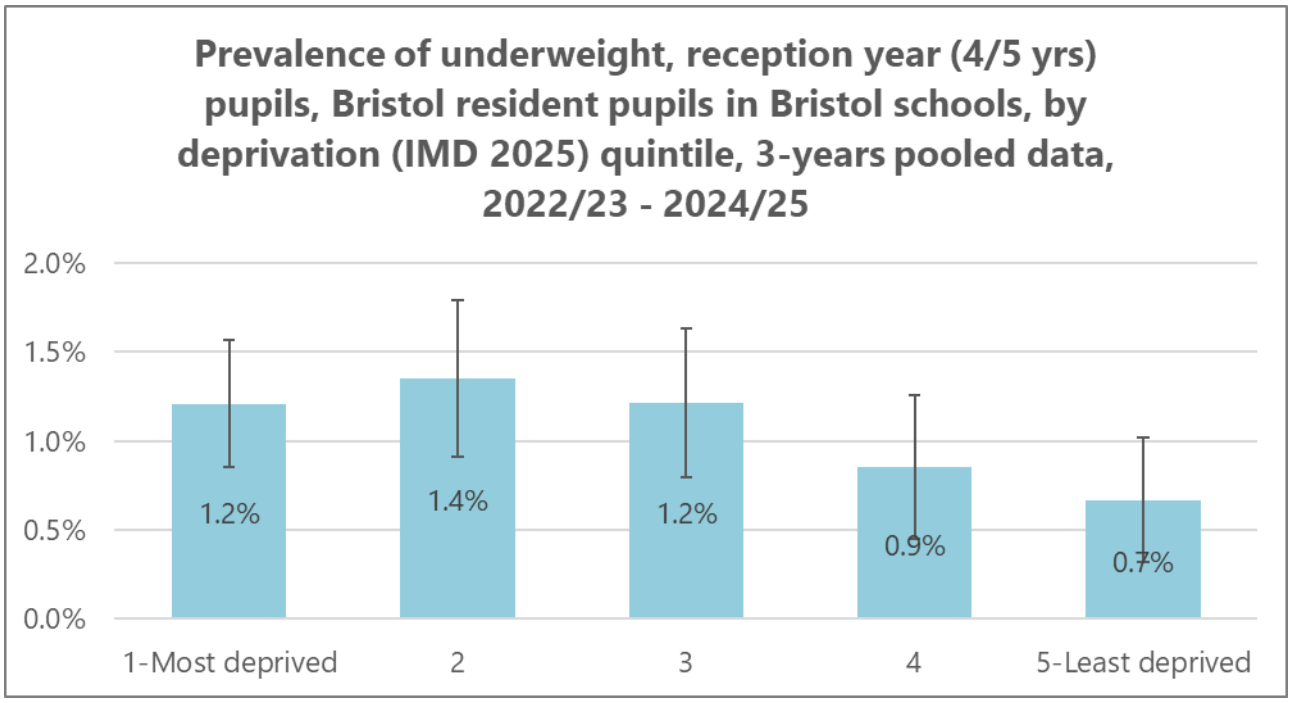


Figure 9: Local collation of NCMP data, Bristol City Council (Public Health)

Excess weight in 10–11-year-olds (Year 6, 2024/25):

In 2024/25, 35.3% of Year 6 pupils in Bristol had excess weight (overweight or very overweight), below but statistically similar to the national average of 36.2%. Of these, 20.8% were classified as very overweight, significantly lower than the national figure of 22.2%.

As shown in Figure 10 (overleaf), excess weight prevalence in Bristol rose until 2015/16, then fluctuated but generally declined until 2019/20. The Covid-19 pandemic led to a sharp national and regional increase in 2020/21, though local data was limited. Post-pandemic local rates have declined a little but have tended overall to remain a little higher than their pre-pandemic levels.

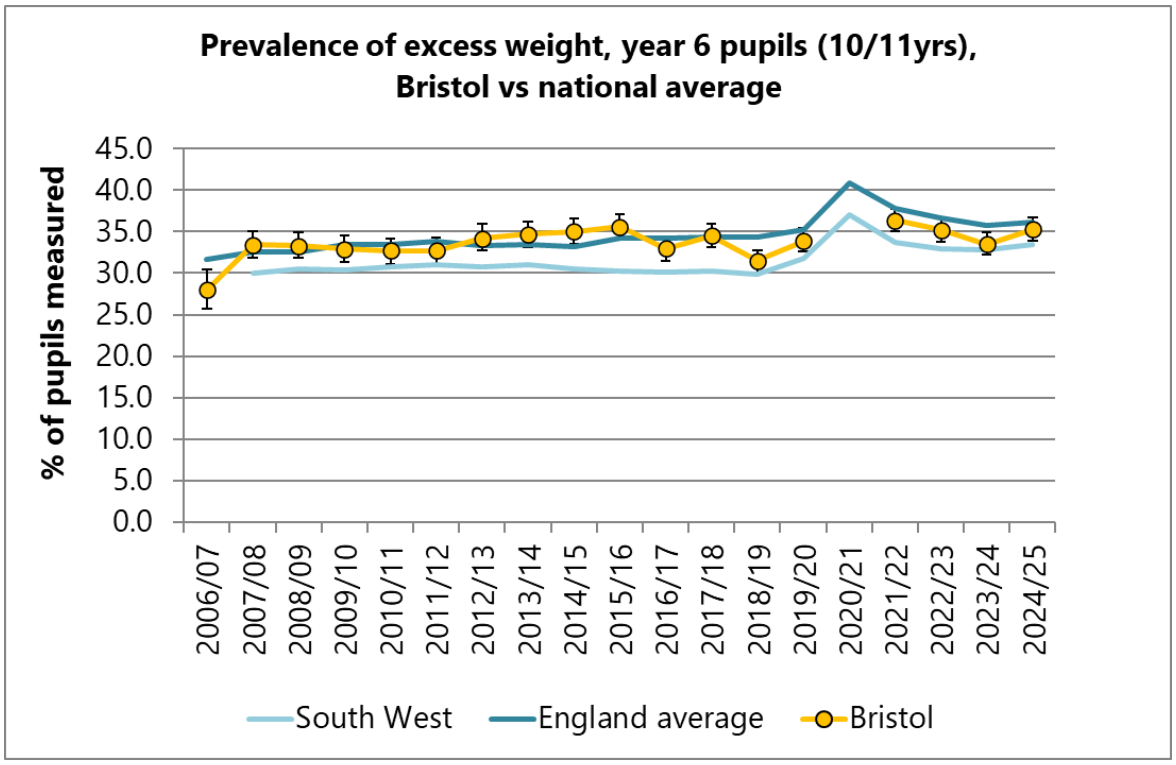


Figure 10: Prevalence of excess weight, year 6 pupils (10/11yrs), Bristol vs regional & national averages, 2006/07 to 2024/25. Source – Office for Health Improvement & Disparities, collated by Public Health, Bristol City Council.

In 2024/25, Bristol had the lowest Year 6 prevalence of excess weight (overweight and very overweight) or very overweight than of any of the eight Core Cities comparator group, by a statistically significant margin compared to all but 2 of the other local authorities (Leeds and Sheffield, Figure 11).

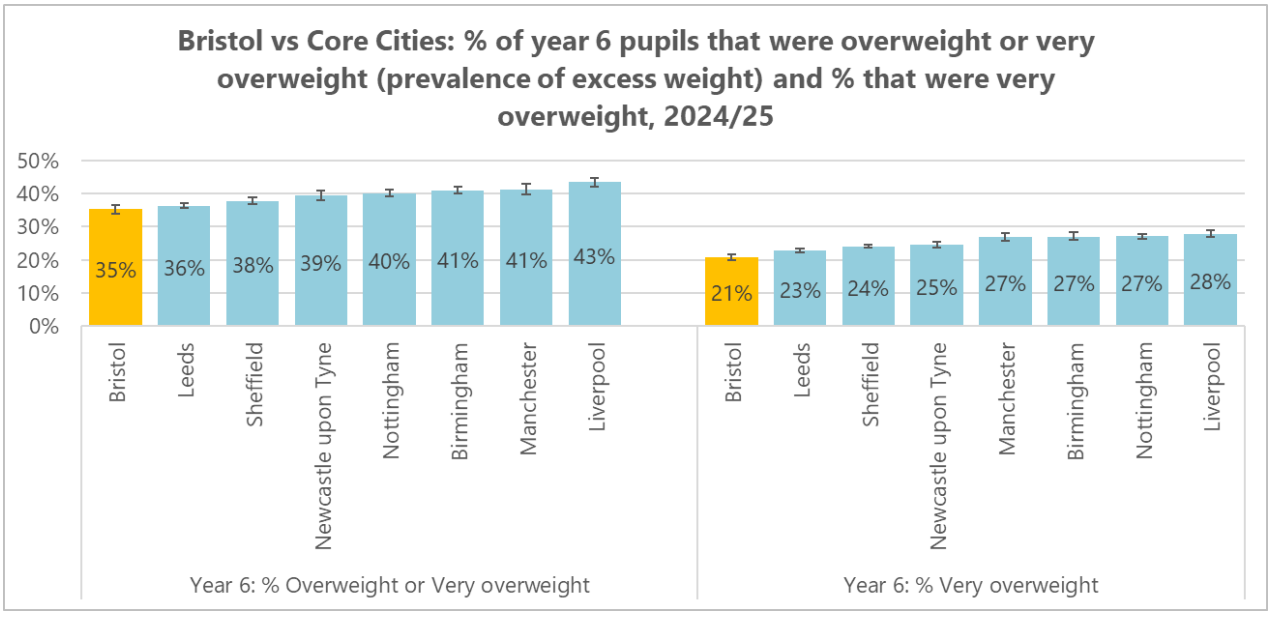


Figure 11: % of year 6 (10/11yrs) pupils classified as overweight or very overweight (prevalence of excess weight) and % classified as very overweight, Bristol vs Core City local authorities, 2024/25. Source – Office for Health Improvement & Disparities, collated by Public Health, Bristol City Council.

Equalities Data – Gender and Excess Weight (Year 6, 2024/25):
In Bristol, 32.3% of Year 6 girls and 37.8% of boys were classified as having excess weight in 2024/25, compared with national averages of 33.7% and 38.5%, respectively.

Although both girls and boys in Bristol were less likely to have excess weight than their national counterparts, these differences were not statistically significant. Within Bristol, however, the higher prevalence among boys compared with girls was statistically significant.

ICS Sub-localities and Excess Weight (Year 6, 2024/25):
In 2024/25, excess weight prevalence among Year 6 pupils ranged from 36% to 41% across all ICS sub-localities in Bristol—except North & West (inner), which had a significantly lower rate of 21% (Figure 12).

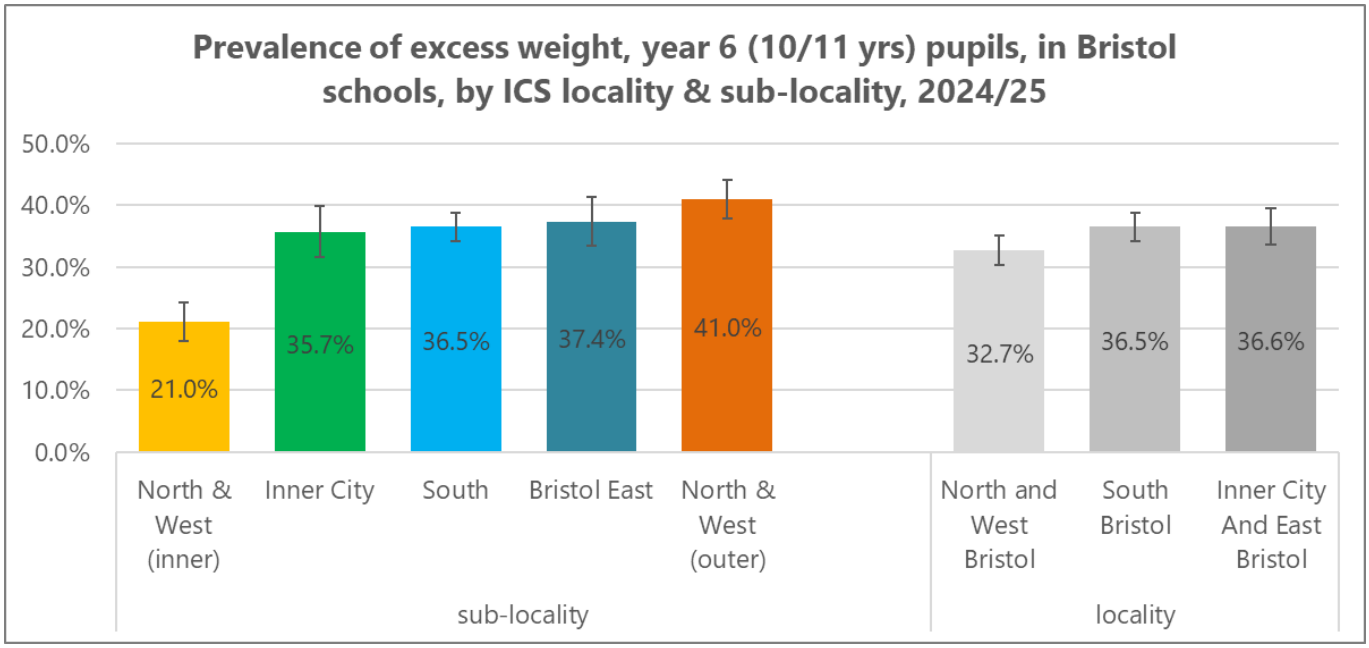


Figure 12: Local collation of NCMP data, Bristol City Council (Public Health)

Ward-Level Data – Excess Weight (Year 6, 2022/23–2024/25):
Based on three-year pooled data, the prevalence of excess weight among Year 6 pupils in Bristol ranges from 17.5% in Westbury-on-Trym and Henleaze to 44.1% in Hartcliffe and Withywood.

As in previous years, the highest prevalence levels are concentrated in some of the most deprived wards, particularly in the north, southwest, central, and eastern parts of the city. In contrast, more affluent wards to the northwest of the city centre tend to have the lowest prevalence (see Figure 13).

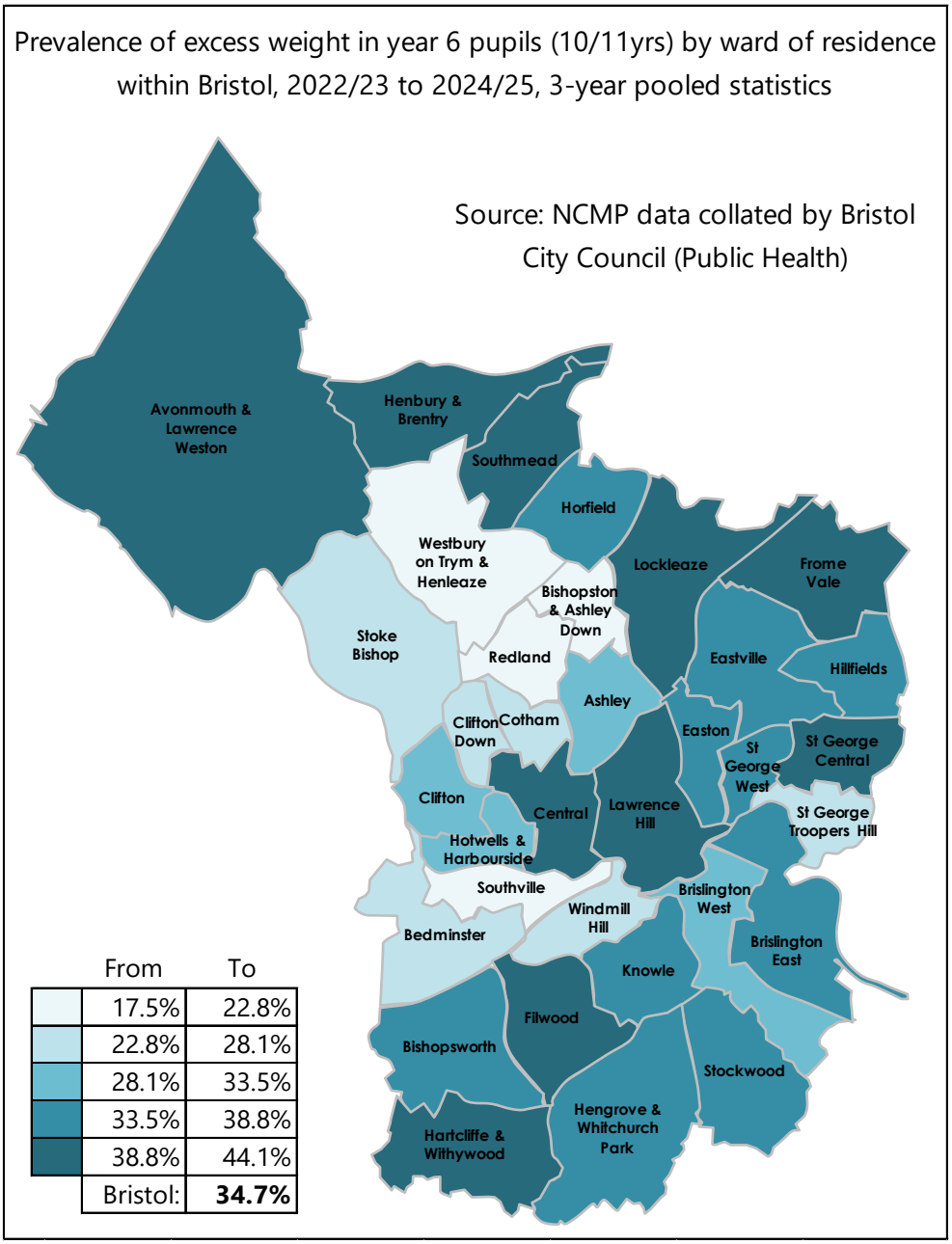


Figure 13: Prevalence of excess weight in year 6 pupils by ward of residence, 2022/23-2024/25
Source: NCMP data collated by Bristol City Council (Public Health)

Equalities Data – Deprivation and Excess Weight (Year 6, 2024/25):
As with reception pupils, there is a strong and consistent link between area-level deprivation and excess weight in year 6 pupils. In 2024/25, prevalence was around 20% in the least deprived 20% of areas, compared to more than double that in the most deprived 20%.

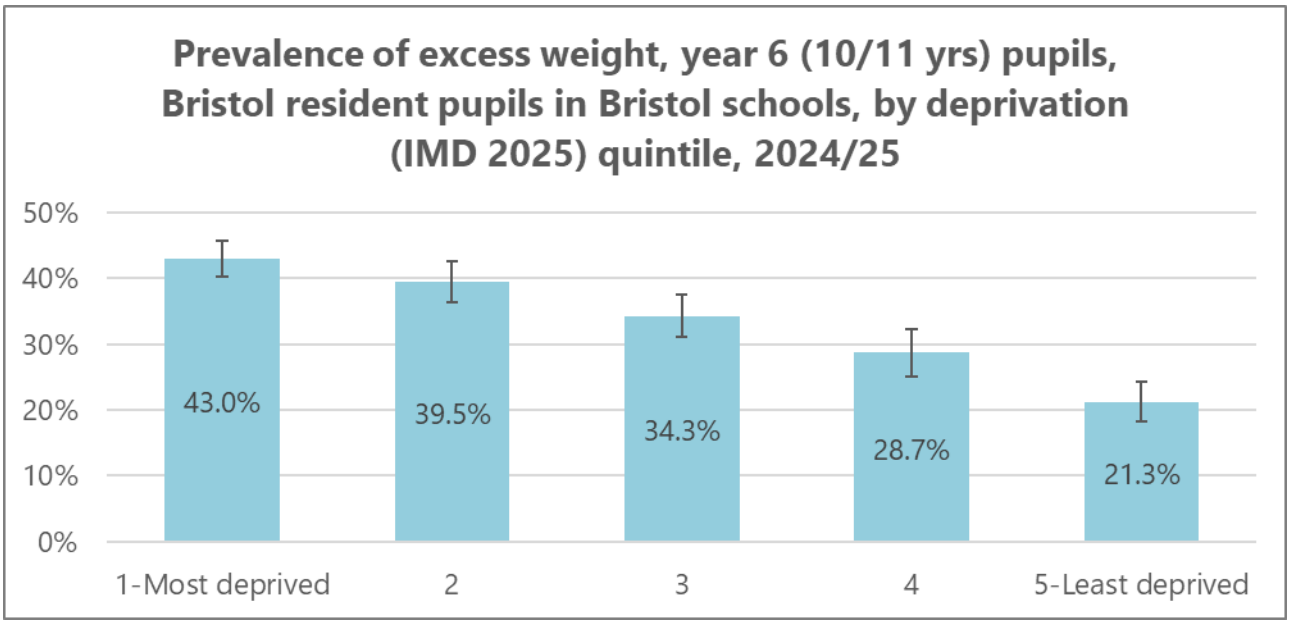


Figure 14: Local collation of NCMP data, Bristol City Council (Public Health)

Equalities Data – Ethnicity and Excess Weight (Year 6, 2022/23–2024/25):
Ethnicity data for Year 6 pupils are more complete than for Reception, allowing for more robust analysis when data are pooled across multiple years. Using data from 2022/23 to 2024/25, Figure 15 presents the prevalence of excess weight by gender and ethnicity, including both broad ethnic groups and selected more detailed categories.

Gender Differences:
For most of the ethnic groups included in the chart, the prevalence of excess weight in year 6 was higher for boys than girls, and this difference was statistically significant for:

- Asian and Asian British (broad category) pupils, 46% vs 32%
- Asian and Asian British (Indian) pupils, 50% vs 36%
- White (broad category) pupils, 34% vs 29%
- White (British) pupils, 33% vs 30%
- White (Other) pupils, 43% vs 27%

Girls:
Among girls, the following groups had significantly **higher** excess weight prevalence than the Bristol average for year 6 girls:

- Black and Black British (broad category) girls, 45% vs 32%
- Black and Black British (African) girls, 42% vs 32%
- Mixed (White and Black Caribbean) girls, 42% vs 32%

Boys:
Among boys, the following groups had significantly **higher** excess weight prevalence than the Bristol average for year 6 boys:

- Asian and Asian British (broad category) boys, 46% vs 37%
- Asian and Asian British (Indian) boys, 50% vs 37%
- Asian and Asian British (Pakistani) boys, 48% vs 37%
- Black and Black British (broad category) boys, 44% vs 37%
- Mixed (White and Black Caribbean) boys, 51% vs 37%
- White (other) boys, 43% vs 37%

Among boys, the following groups had significantly **lower** excess weight prevalence than the Bristol average for year 6 boys:

- White (broad category) boys, 34% vs 37%
- White (British) boys, 33% vs 37%

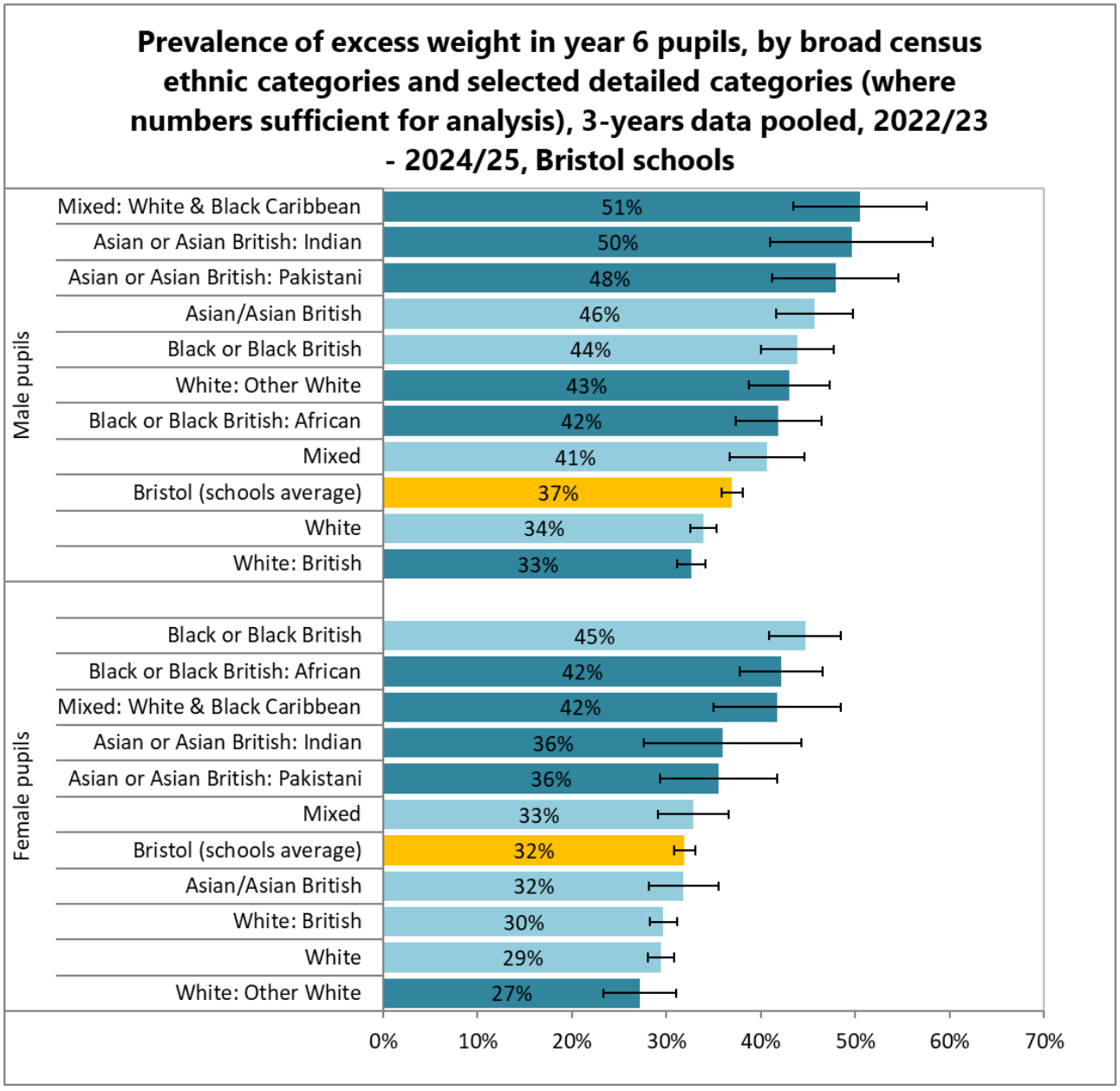


Figure 15: Local collation of NCMP data, Bristol City Council (Public Health)

Underweight in 10–11 Year Olds (Year 6, 2024-25):

In 2024/25, 1.2% of Bristol's Year 6 pupils were classified as underweight. This is statistically similar to the previous year's estimate (1.6%), but significantly lower than the national average (1.6%).

Between 2006/07 and 2017/18, underweight prevalence in Bristol remained close to 1%, with the exception of the first year of measurement. Since 2018/19, rates have ranged from 1.2% to 1.6%, with three comparatively high years immediately following the Covid-19 pandemic. However, the upward trend in Year 6 pupils appears to pre-date the pandemic, suggesting it may not be solely attributable to this period.

Despite wide confidence intervals and some year-to-year fluctuation, there is evidence of a longer-term shift in this indicator locally. A similar post-pandemic increase observed at national level, alongside comparable trends in Reception year pupils (see Figure 7), suggests that wider societal factors may be influencing these patterns.

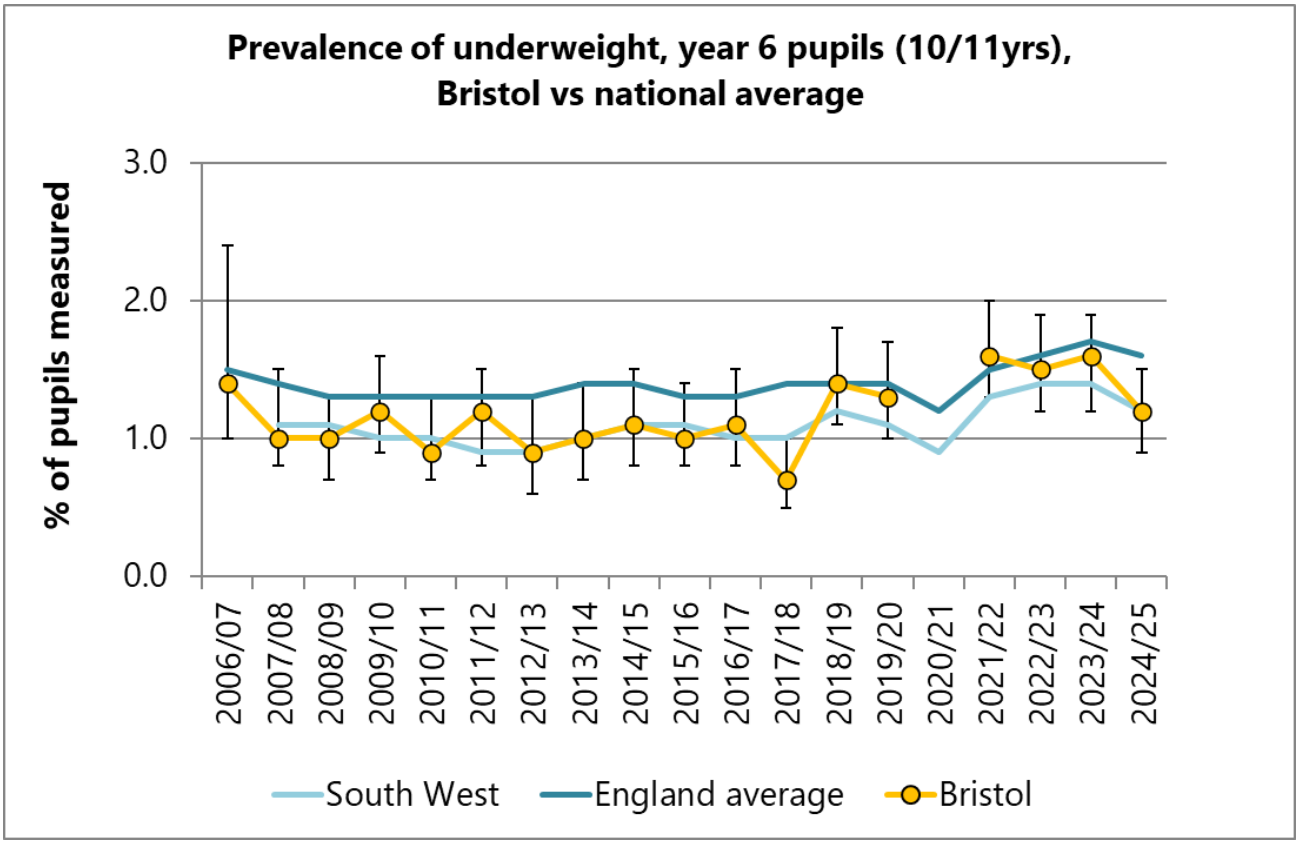


Figure 16: Prevalence of underweight, year 6 pupils (10/11yrs), Bristol vs regional & national averages, 2006/07 to 2024/25. Source – Office for Health Improvement & Disparities, collated by Public Health, Bristol City Council.

Core Cities Comparison - Underweight (Year 6, 2024/25):
In 2024/25, 1.2% of Year 6 pupils in Bristol were underweight—typical of the Core Cities group, where rates ranged from 1.1% in Liverpool to 2.5% in Birmingham. Bristol's rate was statistically similar to all Core Cities except Nottingham and Birmingham, which had significantly higher prevalence.

Equalities Data – Gender and Underweight (Year 6, 2024/25):
In 2024/25, 1.4% of Year 6 girls in Bristol were underweight, statistically similar to the national average of 1.7%. For boys, the Bristol rate was 1.0%, also similar to the national figure of 1.5%. The difference between boys and girls in Bristol was not statistically significant. However, wide confidence intervals for single-year estimates make it difficult to detect small differences.

ICS Sub-localities and Underweight (Year 6, 2022/23–2024/25):
Based on NCMP data for Bristol resident pupils attending Bristol schools, the proportion of 10 to 11-year-olds classified as underweight over the three-year period from 2022/23 to 2024/25 varies across sub-localities:

- North and West (outer) locality recorded the lowest prevalence at 1.1%.
- Bristol East and Inner City sub-localities had the highest prevalence at 2.0%.

At the slightly larger scale of localities, the Inner City and East locality reported a 2.0% prevalence, significantly higher than the rate in South Bristol (1.2%).

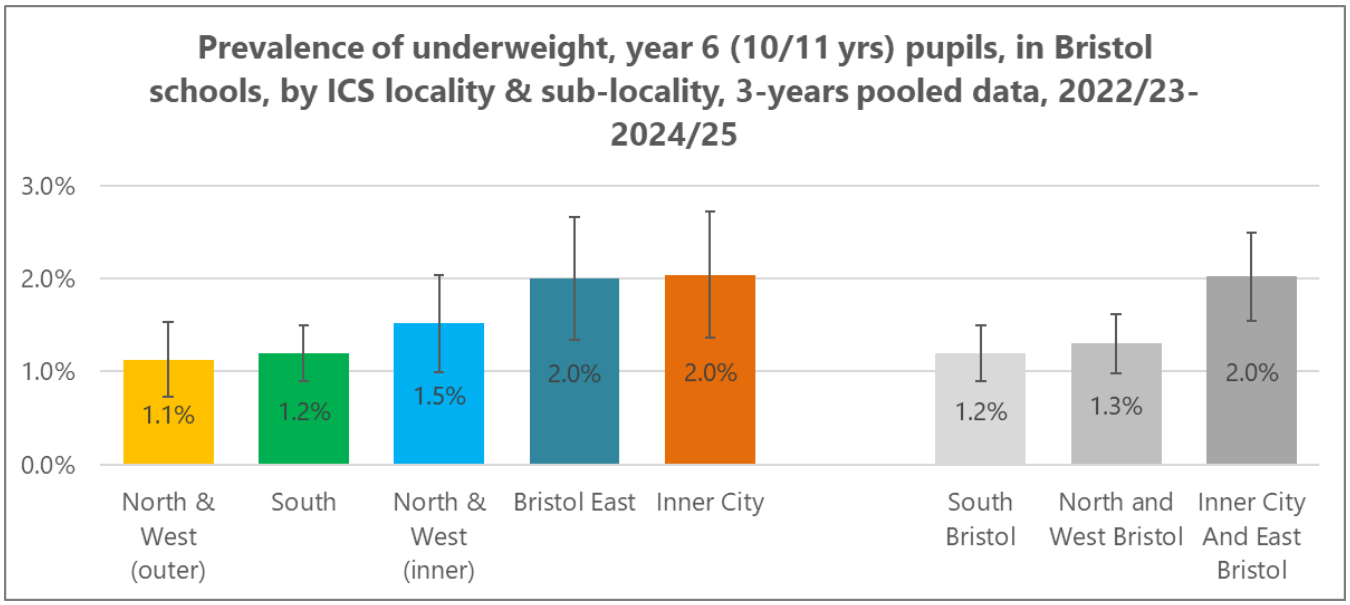


Figure 17: Local collation of NCMP data, Bristol City Council (Public Health)

Equalities Data – Deprivation and Underweight (Year 6, 2022/23 – 2024/25):
Figure 18 shows no clear or consistent association between area-level deprivation and the likelihood of Year 6 pupils being underweight. This contrasts with patterns observed for excess weight and for underweight prevalence in Reception year (see Figure 9), where higher levels of deprivation were generally associated with higher prevalence.

In Year 6, underweight prevalence appears to vary little across deprivation quintiles, with no statistically significant differences or consistent trend. This suggests that deprivation may not be a strong predictor of underweight status at this age, in contrast to its association with excess weight among the same age group.

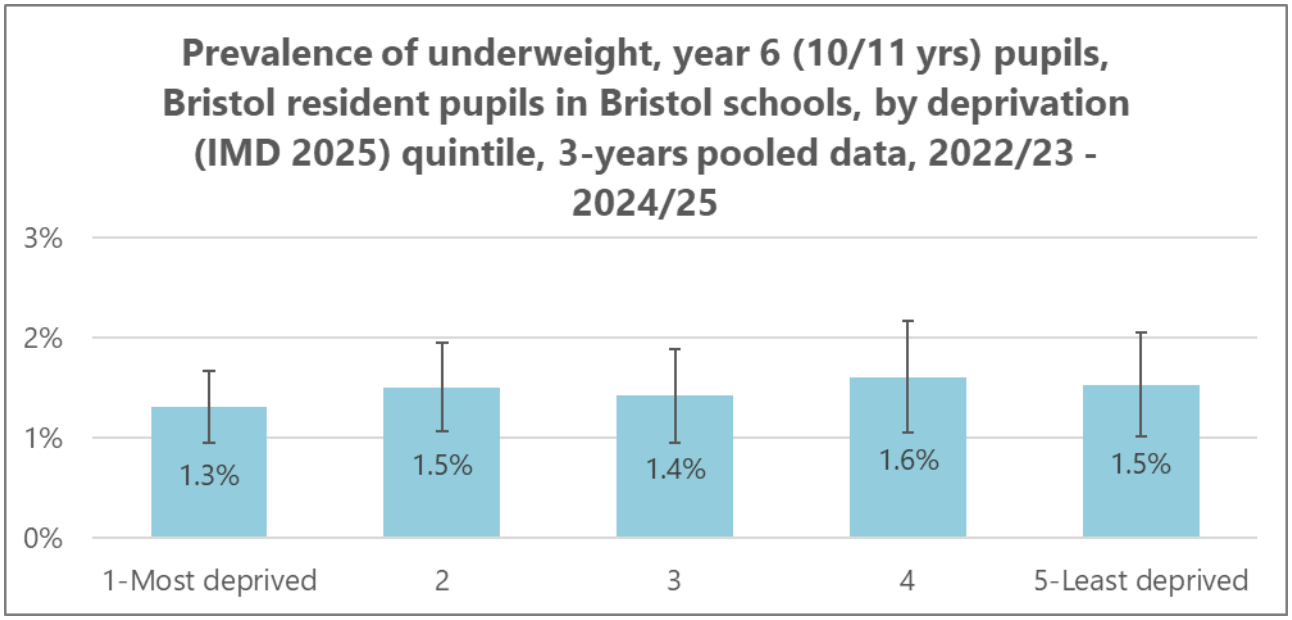


Figure 18: Local collation of NCMP data, Bristol City Council (Public Health)

More variation in the prevalence of underweight is observed by geography, ethnicity and sex (see Figures 17 and 19) than deprivation alone, indicating that, particularly in Year 6, other factors may play a greater role than deprivation.

Equalities data – Ethnicity and Underweight (Year 6, 2021/22-2024/25):
Due to relatively small numbers, multiple years of data have been combined to enable more meaningful analysis of underweight prevalence by ethnicity. However, confidence intervals remain wide, and only the largest differences are apparent at the level of broad ethnic groups. Despite this, Figure 19 (overleaf) indicates some statistically significant variation by ethnicity and sex.

For both female and male pupils, underweight prevalence is notably higher among those of Asian or Asian British ethnicity. In both cases, rates are significantly above the Bristol average (4.5% vs 1.8% for female pupils, and 2.9% vs 1.2% for male pupils). There is relatively little variation across the other broad ethnic groups.

Although underweight prevalence is significantly higher among female pupils than male pupils overall in Year 6, there are no statistically significant differences between females and males within any of the broad ethnic groups analysed here.

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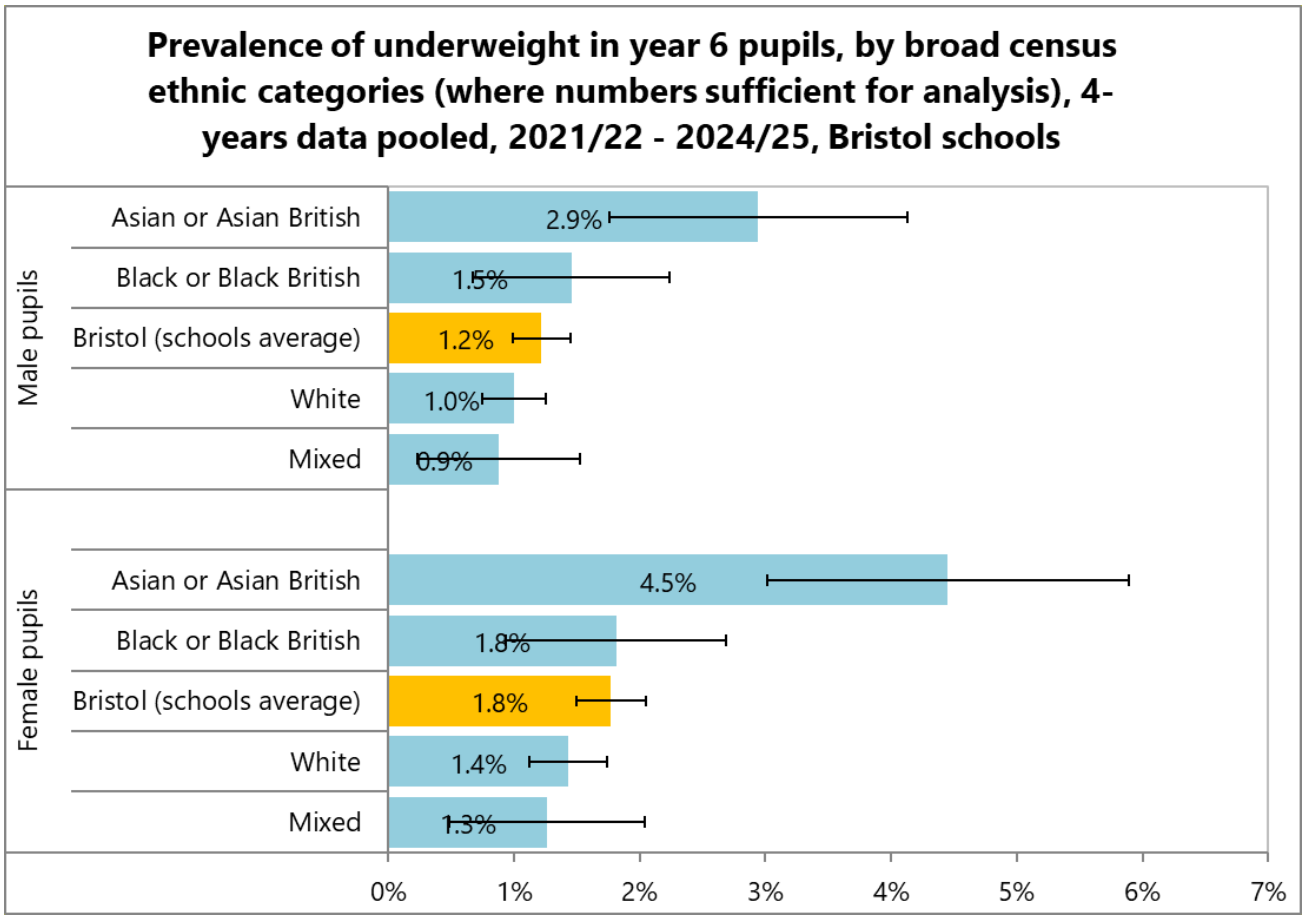


Figure 19: Local collation of NCMP data, Bristol City Council (Public Health)

Further data / links:

1) Bristol Joint Local Health and Wellbeing Strategy 2020 – 2025. Available here: Health and wellbeing strategy (bristol.gov.uk)
2) Childhood obesity: a plan for action. Department of Health and Social Care, Prime Minister's Office, 10 Downing Street, HM Treasury, and Cabinet Office. Available here: https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action
3) National Child Measurement Programme (Office for Health Improvement & Disparities); England, 2024/25 school year. Data tables available here: https://www.gov.uk/government/statistics/national-child-measurement-programme-ncmp-annual-report-academic-year-2024-to-2025-england
4) Obesity Profile (Office for Health Improvement & Disparities – Fingertips tool). Available here: Obesity Profile - OHID (phe.org.uk)

Date updated: May 2026 **Next update due:** January 2027