

Isle of Wight National Child Measurement Programme (NCMP) 2016 to 2017

Isle of Wight Public Health

Summary:

The National Child Measurement Programme (NCMP) measures the height and weight of children in Reception and Year 6 annually. On the Isle of Wight:

- Over a fifth (20.7%) of Year 6 pupils are obese and nearly 1 in 10 (8.6%) of Reception aged children. A further 15% of Year 6 pupils are overweight and 13.4% of Reception;
- There is no statistically significant difference from the previous year's figures or in comparison to the national averages which see 9.6% of Reception and 20.0% of Year 6 as obese and a further 13.0% of Reception and 14.3% of Year 6 as overweight. Obesity in Year 6 is statistically significantly higher than the average for the South East region;
- Combined overweight and obesity prevalence for Year 6 is over a third (35.6%). This is not statistically significantly different to the previous year's figure or to the England average (34.2%) but is statistically significantly higher than the South East figure of 30.6%;
- Combined overweight and obesity prevalence for Reception is over a fifth (22.0%). This is also not statistically different to last year's figure or to the England average (22.6%) and in this case nor to the South East average of 21.4%;
- Obesity levels in both years are higher among boys with overweight levels higher in both years among girls (see Report for figures);
- Combined overweight and obesity prevalence was found to be higher among males than females in both Reception and Year 6 (see Report for figures);
- 5-year aggregated trend data shows that obesity prevalence for Year R is in line with the South East and England averages for both male and females and is following a decreasing trend. For Year 6, there is a slightly increasing trend which is also seen nationally and in the South East region. Prevalence for both males and females is in line with England but statistically significantly higher than the South East;
- 5-years data combined, partitioned by deprivation quintile shows that obesity prevalence increases with deprivation. In Reception 11.9% in the most deprived quintile were obese as compared to 6.3% in the least deprived quintile. This pattern is repeated with Year 6 with nearly a quarter (24.9%) obese in the most deprived quintile compared to 12.7% in the least. The two most deprived quintiles have prevalence above the England average (9.4% for Reception and 19.4% for Year 6):
- In comparison with our statistical neighbours the Isle of Wight has statistically significantly lower obesity prevalence (5 years combined data) than three of the comparator group for Reception aged children and one of the comparator group for Year 6 aged children. For Year 6 obesity prevalence is statistically significantly higher than five of the comparator group



Introduction:

The National Child Measurement Programme (NCMP) measures the height and weight of children in Reception and Year 6. Around one million school children are measured in England every year, providing a detailed picture of the prevalence of child obesity.

In England 2016 to 2017 prevalence of obesity has increased since 2015/16 for reception but remained similar in Year 6. For reception it increased from 9.3% to 9.6%. For year 6 it remained fairly stable at 20.0% in 2016/17 (compared to 19.8% in 2015/16 with no statistical significant change). Over a longer time period, obesity prevalence is lower for reception year compared to 2006/07, but it is higher for year 6 compared to 2009/10.

The World Health Organization (WHO) regards childhood obesity as one of the most serious global public health challenges for the 21st century. Obese children and adolescents are at an increased risk of developing various health problems such as asthma, type 2 diabetes, heart disease and certain types of cancer and are also more likely to become obese adults. In England, the health problems associated with being overweight or obese cost the NHS more than £5 billion every year. (See: https://www.noo.org.uk/NOO about obesity/child obesity, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/298297/cmo-report-2012.pdf and https://www.gov.uk/government/policies/reducing-obesity-and-improving-diet#background)

Isle of Wight National Child Measurement Programme (NCMP) Findings 2016 to 2017*:

	BMI Category											
	Underweight		Healthy weight		Overweight		Obese		Overweight and obese combined			
2016/17	Reception	Year 6	Reception	Year 6	Reception	Year 6	Reception	Year 6	Reception	Year 6	Participation	n rate %
Region	Prevalence	Prevalence	Prevalence	Prevalence	Prevalence	Prevalence	Prevalence	Prevalence	Prevalence	Prevalence	Reception	Year 6
ENGLAND	1.0	1.3	76.4	64.4	13.0	14.3	9.6	20.0	22.6	34.2	95.8	94.2
SOUTH EAST	0.8	1.3	77.9	68.2	12.9	13.7	8.5	16.9	21.4	30.6	95.8	94.0
Isle of Wight	0.9	1.2	77.1	63.2	13.4	15.0	8.6	20.7	22.0	35.6	93.1	92.4

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^{*} The NCMP published prevalence data use the British 1990 growth reference (UK90) for BMI and the 2nd, 85th and 95th centiles to define children as underweight, overweight or obese according to age and sex. It is important to note that the 85th and 95th centiles used in the NCMP are intended for population monitoring use only, and do not provide the number or percentage of individual children clinically defined as overweight or obese



Participation:

Local and national participation rates have remained relatively constant over the last few years for both Year R and Year 6 following a dip in 2011 to 2012. A high participation rate is important to ensure the findings are representative. On the Isle of Wight Year R participation rates were 93.1% (compared to 93.5% in 2015/16) and 92.4% for Year 6 (as compared to 92.1% in 2015/16). These figures are slightly below the England averages:

PARTICIPATION (% of children measured) **RECEPTION YEAR:** Isle of Wight compared with England ----England ----Isle of Wight 100% of eligible children 90% 80% 70% % 2011/12 2012/13 2013/14 2014/15 2015/16 2016/17 Year

YEAR 6: Isle of Wight compared with England **England** ----Isle of Wight 100% % of eligible children 90% 80% 70% 2011/12 2012/13 2013/14 2014/15 2015/16 2016/17 Year

PARTICIPATION (% of children measured)

Data Source: National Child Measurement

Prevalence:

Data Source: National Child Measurement

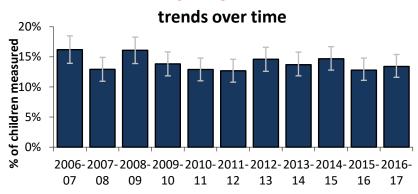
2016 to 2017 figures for the Isle of Wight show that 20.7% of Year 6 pupils were obese and a further 15.0% were overweight. For children in Reception 8.6% were obese with a further 13.4% classed as overweight. There is no statistically significant difference from the previous year's figures or in comparison to the national averages which see 9.6% of Reception and 20.0% of Year 6 as obese and a further 13.0% of Reception and 14.3% of Year 6 as overweight. Obesity in Year 6 is statistically significantly higher than the average for the South East region:

Over a fifth of Year 6 pupils are obese on the Isle of Wight and nearly 1 in 10 of Reception aged children (8.6%)



Isle of Wight Overweight Prevalence:

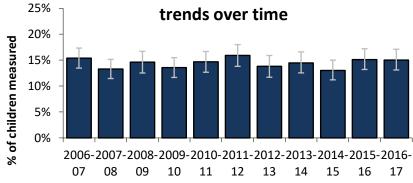
RECEPTION YEAR



Data Source: National Child Measurement Programme

Isle of Wight Overweight Prevalence:

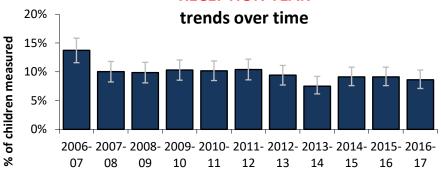




Data Source: National Child Measurement Programme

Isle of Wight Obesity Prevalence:

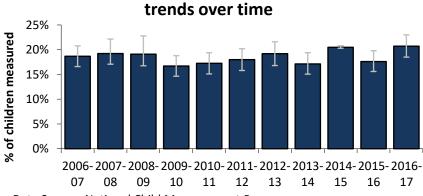
RECEPTION YEAR



Data Source: National Child Measurement Programme

Isle of Wight Obesity Prevalence:

YEAR 6

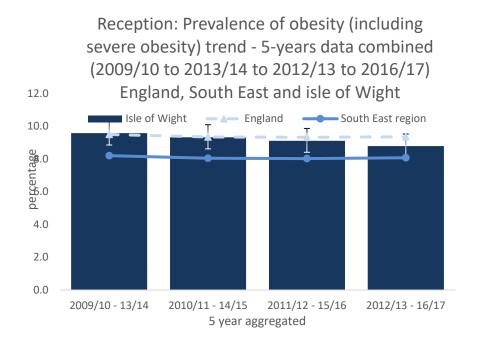


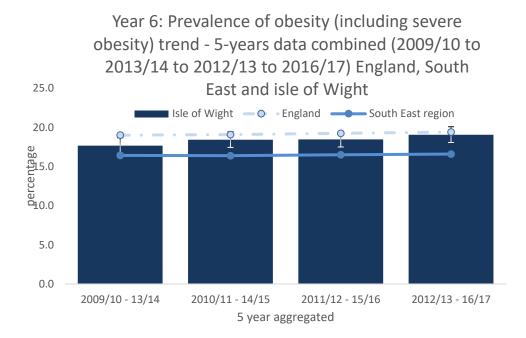
Data Source: National Child Measurement Programme

Regionally Obesity prevalence varies by local authority. For reception this ranged from 4.8% in Kingston-upon-Thames to 13.5% in Wolverhampton and for Year 6 the range was from 11.3% in Rutland, to 29.2% in Barking and Dagenham.



5-years combined data for obesity prevalence for reception is 8.8% on the Isle of Wight compared to 9.4% nationally and 8.1% for the South East region. For Year 6 its 19.0% locally compared to 19.4% nationally and 16.6% for the South East region. This is statistically significantly higher than the South East region for Year 6.





Combined overweight and obesity prevalence:

Isle of Wight:

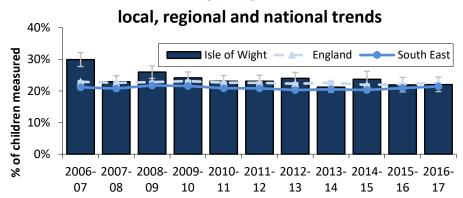
Combined overweight and obesity prevalence for Year 6 is at 35.6% which is not statistically significantly different to the previous year's figure or to the England average (34.2%) but is statistically significantly higher than the South East figure of 30.6%.

Combined overweight and obesity prevalence for Reception is at 22.0%. This is also not statistically different to last year's figure or to the England average (22.6%) and in this case nor to the South East average of 21.4%:



Obesity + Overweight Prevalence:

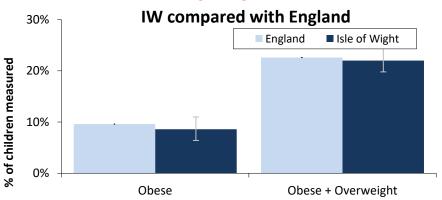
RECEPTION YEAR



Data Source: National Child Measurement Programme

Obesity & Overweight Prevalence 2016-17

RECEPTION YEAR:

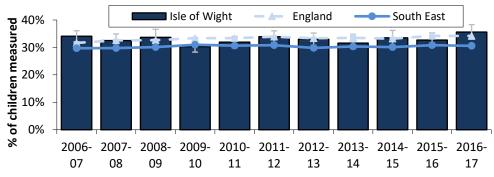


Data Source: National Child Measurement Programme

Obesity + Overweight Prevalence:

YEAR 6

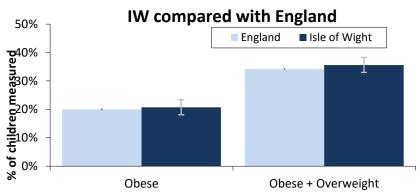
Local, regional and national trends



Data Source: National Child Measurement Programme

Obesity & Overweight Prevalence 2016-17

YEAR 6:



Data Source: National Child Measurement Programme

On the Isle of Wight over a third of Year 6 pupils and over a fifth of Reception pupils are either overweight or obese



Healthy Weight:

Locally 77.1% of pupils in Reception are classed as being of healthy weight. This is not statistically significantly different to the figure for last year (77.6%) or to current averages for England (76.4%) or the South East (77.9%). 63.2% of pupils in Year 6 are classed as being of healthy weight. Again, this is not statistically significantly different to last year's figure (65.3%) or to the current average for England (64.4%). However, the Island figure is statistically significantly lower (worse) than that for the South East (68.2%).

Underweight

0.9% of Reception and 1.2% of Year 6 are classed as underweight locally. These figures are not statistically significantly different to previous year's figures (0.5% and 2.0% respectively) nor to the current England average (1.0% and 1.3% respectively) nor the South East figures of 0.8% and 1.3% respectively.

Gender:

Combined overweight and obesity prevalence was found to be higher among males than females in both Reception and Year 6:

Female	overweight and obese prevalence %
6	33.8
R	21.9
Male	
6	37.2
R	22.1

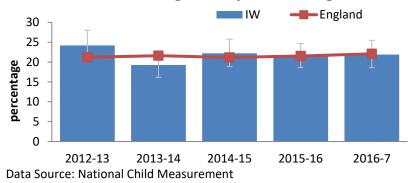
For males in Reception combined prevalence had slightly decreased (but not statistically significantly) from 22.4% to 22.1% and is now below the national average of 23.2% but not statistically significantly so. In contrast, the national average has statistically significantly increased on the previous year's figure. Combined prevalence for females in Reception is 21.9%, a slight increase on last year's figure (21.5%) but not statistically significant and below the England average (22.1%) but again, not statistically significantly. As with Year R males, the national picture has seen a statistically significant rise.



Combined overweight and obesity prevalence for females in Year 6 has seen an increase locally from 29.9% to 33.8% but the rise is not statistically significant. This is not statistically significantly different to the national average (32.4%). Combined prevalence for Year 6 males has also seen an increase (from 35.2% to 37.2%) but not statistically significantly so and is not statistically significantly different to England (36.0%) which has remained the same as the previous year.

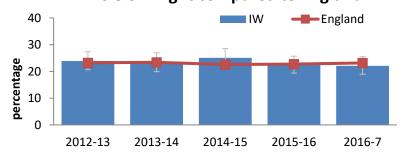
Obesity and Overweight prevalence: YEAR R Female

Isle of Wight compared to England



YEAR R Male

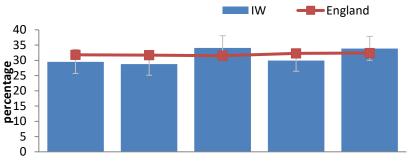
Isle of Wight compared to England



Data Source: National Child Measurement

Obesity and Overweight prevalence: YEAR 6 Female

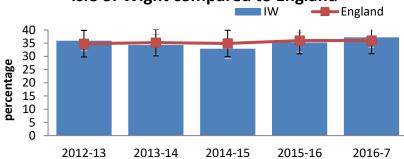
Isle of Wight compared to England



Obesity and Overweight prevalence:

YEAR 6 Male

Isle of Wight compared to England



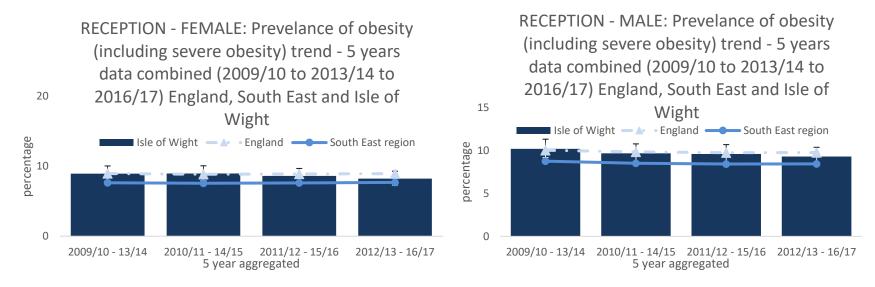
Data Source: National Child Measurement



Locally, obesity levels in both years are higher among boys with overweight levels higher in both years among girls. In Year R 7.9% of females are obese with 9.2% of males. In Year 6 18.4% of females are obese with 22.7% of males. In Year R 14.0% of females were overweight with 12.9% of males. For Year 6 15.5% of females were classed as overweight with 14.5% of males.

Percentages have increased for both males and females in Year 6 for obesity levels and reduced for both in Year R however, the change is not statistically significant. In terms of overweight percentages, these have increased for females in both years and for males in Year R but have reduced for boys in Year 6. No changes are statistically significantly different.

5-year aggregated trend data shows that Isle of Wight obesity prevalence for Year R is in line with the South East and England averages for both male and females and is following a decreasing trend.



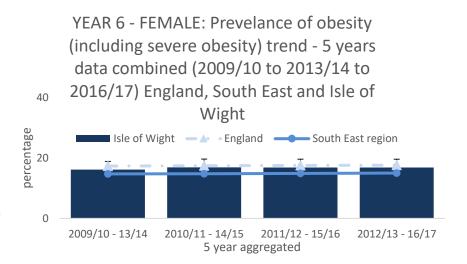
For Year 6, locally there is a slightly increasing trend which is also seen nationally and for the South East region. Prevalence for both males and females is in line with England but statistically significantly higher than the South East for the most recent data period.



YEAR 6 - MALE: Prevelance of obesity
(including severe obesity) trend - 5 years
data combined (2009/10 to 2013/14 to
2016/17) England, South East and Isle of
Wight

South East region

2009/10 - 13/14 2010/11 - 14/15 2011/12 - 15/16 2012/13 - 16/17
5 year aggregated



On the Isle of Wight slightly more females than males are of healthy weight with 71.1% of females classed as healthy weight (77.8% in Year R and 64.4% in Year 6) and 69.2% of males (76.5% in Year R and 62.0% in Year 6). When split by age group, females in both years have a higher healthy weight prevalence reflecting the higher obesity prevalence in Year 6 males and higher underweight prevalence in Year R males. Nationally, obesity prevalence was higher for boys than girls in both age groups (NHSDigital, 2016).

Locally, overall 1.0% of females and 1.1% of males are underweight. Both locally and nationally, Year 6 females form the largest underweight group (1.7% and 1.4% respectively). In Reception, both locally and nationally there is a higher prevalence of underweight boys than girls (1.4% and 1.2%respectively).

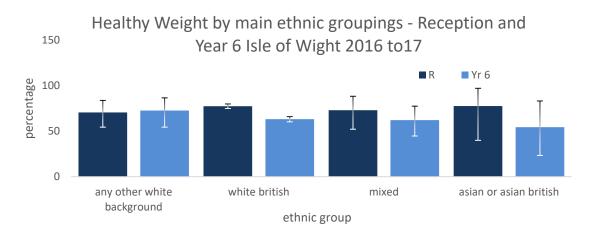
Ethnicity

Locally, 92.3% were British. Within this group 77.6% of Reception and 63.3% of Year 6 were classed as healthy weight. 15.0% of Year 6 and 13.3% of Reception were classed as overweight with 20.5% of Year 6 and 8.2% of Reception classed as obese. 1.2% of Year 6 were classed as underweight and 0.9% of Reception.

All other groups were very small numbers so groupings have been combined to allow for comparisons. As a result, the second largest group at 3.0% were 'any other white background (including Irish) of which 70.7% in Reception and 72.7% in Year 6 were classed as of healthy weight, 12.2 and 12.1% as overweight (Reception and Year 6 respectively) and 17.1% in Reception and 15.2% in Year 6 as obese. The third largest ethnic grouping was 'mixed' with 3.0% of Year 6 and 2.1% of Reception.



Of this group 73.1% in Reception and 62.2% in Year 6 were classed as of healthy weight. 15.4% in Reception and 8.1% in Year 6 were classed as overweight with 11.5% of Reception and 27.0% of Year 6 as obese. Comparisons for other weight classifications are difficult locally due to small numbers in all other ethnic groups. Of note in all the main groups is the reduction of healthy weight from Year R to Year 6 except for 'any other white background' which sees an increase. No difference is statistically significant except for in 'white British' as larger numbers allow for more robust comparisons:



Nationally obesity prevalence was highest for Black category in both Reception and Year 6. It was lowest for Chinese children in reception and White and Chinese in Year 6. The Asian category had the highest prevalence of underweight children in both Reception and Year 6 (NHSDigital, 2017).

Geography:

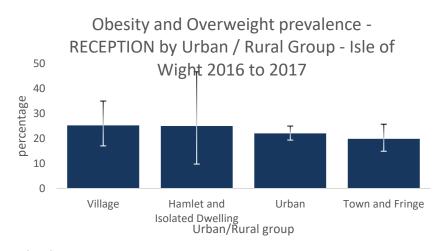
Nationally, obesity prevalence was highest in the North East, West Midlands and London. It was lowest in the East of England, South East and South West with London having the highest prevalence of underweight children in reception (NHSDigital, 2017).

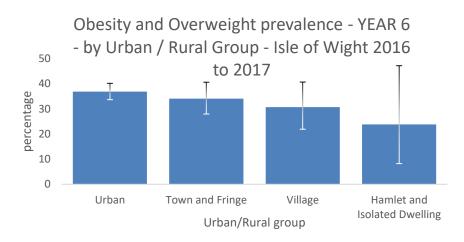
Urban/Rural split

Nationally, obesity prevalence in urban areas was highest in both age groups – 9.9% in Reception and 20.9% in Year 6 with underweight prevalence also highest in urban areas (NHSDigital, 2017).



Locally, combined obesity and overweight prevalence in Reception sees 'Village' and 'Hamlet and isolated dwelling' as areas with the highest prevalence, albeit not statistically significantly so. Interestingly, in contrast for Year 6 'urban' and 'town and fringe' have the highest levels of combined overweight and obesity prevalence (again not statistically significantly so). It is interesting to note that percentage for rural areas are higher amongst the younger cohort perhaps reflecting a reservation in letting young people play outside in isolated areas whereas for the older cohort the prevalence is higher in urban areas possibly reflecting less opportunities to access the outdoors for exercise:





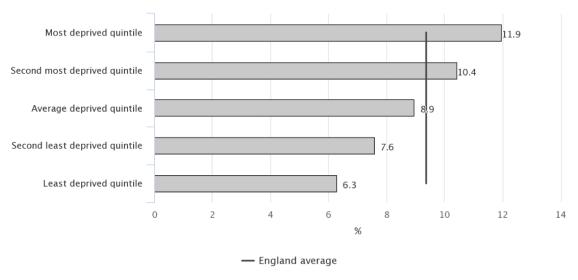
By Deprivation:

Nationally, child obesity prevalence shows a close association with socioeconomic deprivation. Obesity prevalence for children living in the most deprived areas in both age groups was more than double that of those living in the least deprived areas. This gap has increased over time. Obesity prevalence for Reception aged children ranged from 12.7% in the most deprived areas to 5.8% in the least deprived. For Year 6, 26.3% of children living in the most deprived areas were obese compared to 11.4% in the least deprived. Combined overweight and obesity prevalence ranged from 40.9% in the most deprived areas to 24.2% in the least deprived areas (NHSDigital, 2017).

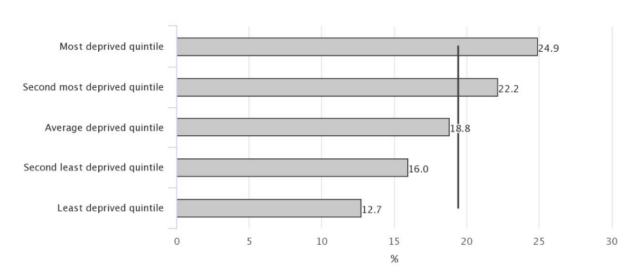
For the Isle of Wight 5-years data combined, partitioned by deprivation quintile shows that obesity prevalence increases with deprivation. In Reception 11.9% in the most deprived quintile were obese as compared to 6.3% in the least deprived quintile. This pattern is repeated with Year 6 with nearly a quarter (24.9%) obese in the most deprived quintile compared to 12.7% in the least. The two most deprived quintiles have prevalence above the England average (9.4% for Reception and 19.4% for Year 6):



Reception: Prevalence of obesity (including severe obesity), 5-years data combined - England, 2012/13 - 16/17 - Data partitioned by LSOA11 deprivation quintiles in England (IMD2015)

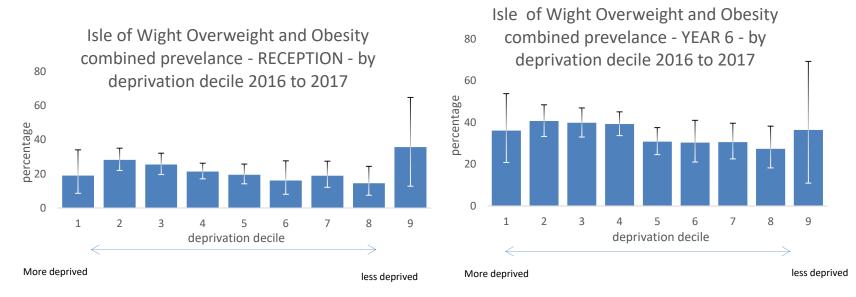


Year 6: Prevalence of obesity (including severe obesity), 5-years data combined - England, 2012/13 - 16/17 - Data partitioned by LSOA11 deprivation quintiles in England (IMD2015)





On the Isle of Wight, the trend is similar with Reception and Year 6 where overweight and obesity prevalence in the most deprived deciles is slightly higher than that in the least deprived deciles but due to small numbers the relationship is less evident with no statistically significant difference:

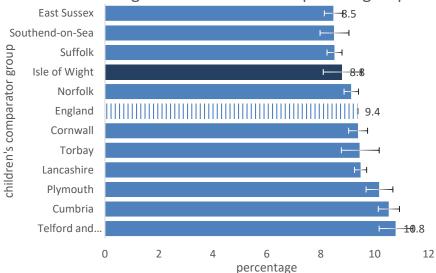


Comparison with children's comparator group:

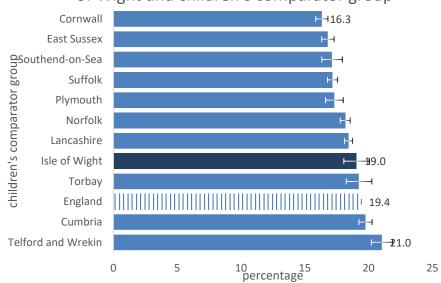
In comparison with our statistical neighbours the Isle of Wight has statistically significantly lower obesity prevalence (5 years combined data) than three of the comparator group for Reception aged children and one of the comparator group for Year 6 aged children. For Year 6 obesity prevalence is statistically significantly higher than five of the comparator group:



Obesity prevelance - 5 years combined data - 2012/13 to 2016/17 - RECEPTION - England, Isle of Wight and children's comparator group



Obesity prevelance - 5 years combined data - 2012/13 to 2016/17 - YEAR 6 - England, Isle of Wight and children's comparator group



References:

https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2016-17-school-year https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/298297/cmo-report-2012.pdf

http://digital.nhs.uk/pubs/ncmpeng1617

https://www.gov.uk/government/policies/reducing-obesity-and-improving-diet#background

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/624226/PHE_NCMP_analysis_guidance_2015_to_2016.pdf