

EVERY CHILD

Child Measurement Programme 2018/19



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Introduction

This report summarises key findings of the Child Measurement Programme for Wales (CMP) for the school year 2018/19. Full results, including data tables, charts and maps are presented on the Child Measurement Programme website at: **Child Measurement Programme for Wales.**

Information about the history of the programme and how information is collected and analysed is also available on the website. The downloadable document “**The Child Measurement Programme for Wales: history, legislative framework and technical aspects**” gives information on measurement of body mass index, prevalence categories used in Wales and how statistical significance is assessed.

While 2018/19 was the 8th year in which the programme has run, the results from the first year are no longer included in analysis and discussion. This is because not all the CMP standards and guidance were in place when the first year measurements were taken.

The report and data relates to measurements taken of children attending reception class in a school in Wales, who also have a residential postcode in Wales. The children whose measurements are included must have their fifth birthday sometime during the school year. Parents/carers of the children are all given the opportunity to opt their children out of the measurement programme. Information on the numbers who choose to opt out are given in the data quality statement which appears on the website alongside the report.

Summary

A summary of the Child Measurement Programme results for the last seven years is given in Figure 1. Obesity prevalence has not changed significantly between 2017/18 and 2018/19. Neither is there any statistically significant difference across the years in prevalence of healthy weight or overweight.

However, there has been a small but statistically significant rise in obesity prevalence between 2012/13 and 2018/19. The drop in the proportion of children with a healthy weight is not statistically significant.

Figure 1 – summary of results at national level

Percentage of children aged 4 to 5 years who are underweight, healthy weight, overweight or obese, Child Measurement Programme for Wales, 2012/13 to 2018/19

Produced using CMP data (NWIS)

	Underweight	Healthy weight		Overweight		Obese
12/13	0.6	73.2	H	14.9	H	11.3
13/14	0.8	72.7	H	14.6	H	11.8
14/15	0.9	72.9	H	14.6	H	11.6
15/16	1.0	72.9	H	14.5	H	11.7
16/17	0.8	72.1	H	14.7	H	12.4
17/18	0.8	72.8	H	14.3	H	12.0
18/19	0.7	72.4	H	14.4	H	12.6

Results

Healthy weight

The majority of children (72.4%) measured in Wales for the Child Measurement Programme were of a healthy weight. Since the programme started there has been very little change in the prevalence of healthy weight at a national level. There is significant variation across health boards and local authorities, with the lowest prevalence in Cwm Taf Morgannwg UHB at 70.2%, and the highest in Cardiff and Vale UHB 76.7%.

The prevalence of healthy weight in girls (72.9%) in 2018/19 continued to be higher than in boys (71.8%) however the difference was not statistically significant. Prevalence of healthy weight varied by deprivation with more than three quarters of children (78.3%) living in the least deprived areas of Wales were a healthy weight, while only 69.1% of children living in the most deprived areas were of a healthy weight.

Underweight

The number of children in Wales categorised as underweight remained very small at 220 children or 0.7%. In some local authority areas there are fewer than five children in this category. There is a risk of identification of individuals where small numbers are involved, and so numbers may be suppressed at local authority level. For this reason prevalence of healthy weight and underweight are often combined. The highest prevalence of underweight across health boards in Wales was in Cardiff and Vale UHB at 1.4% or 70 children.

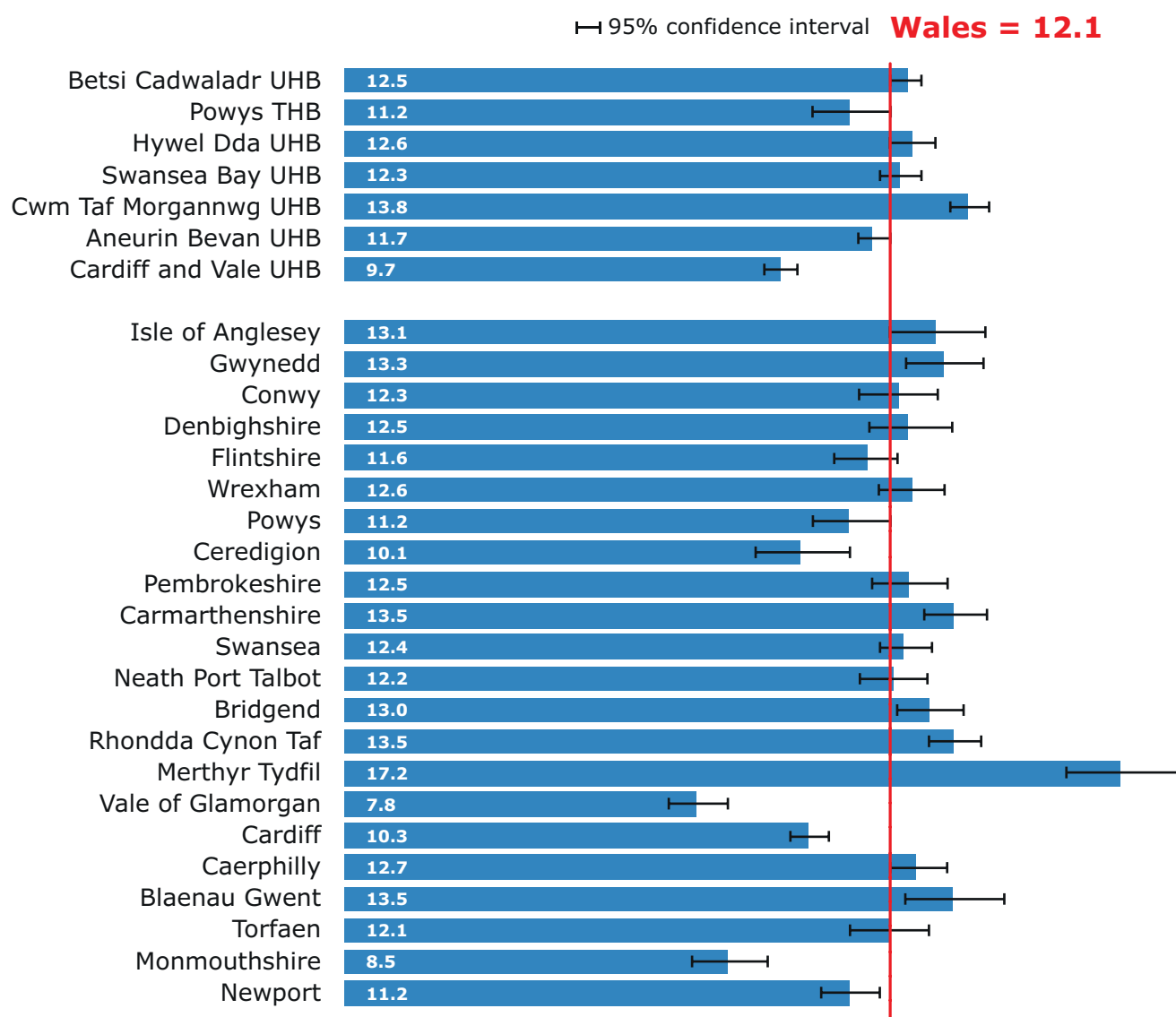
Obesity

12.6% of children in Wales were categorised as obese in 2018/19 compared to 12.0% in 2017/18. When data was combined across five years (2014/15 to 2018/19) obesity prevalence at health board level was statistically significantly higher than the Wales five year average of 12.1% in Cwm Taf Morgannwg UHB (13.8%) and lowest in Cardiff and Vale UHB (9.7%), and the difference is significant.

Figure 2 – obesity at health board and local authority level, five years

Percentage of children, aged 4 to 5 years who are obese, Wales, health boards and local authorities, Child Measurement Programme for Wales, 2014/15 – 2018/19

Produced by Public Health Wales Observatory using CMP data (NWIS)



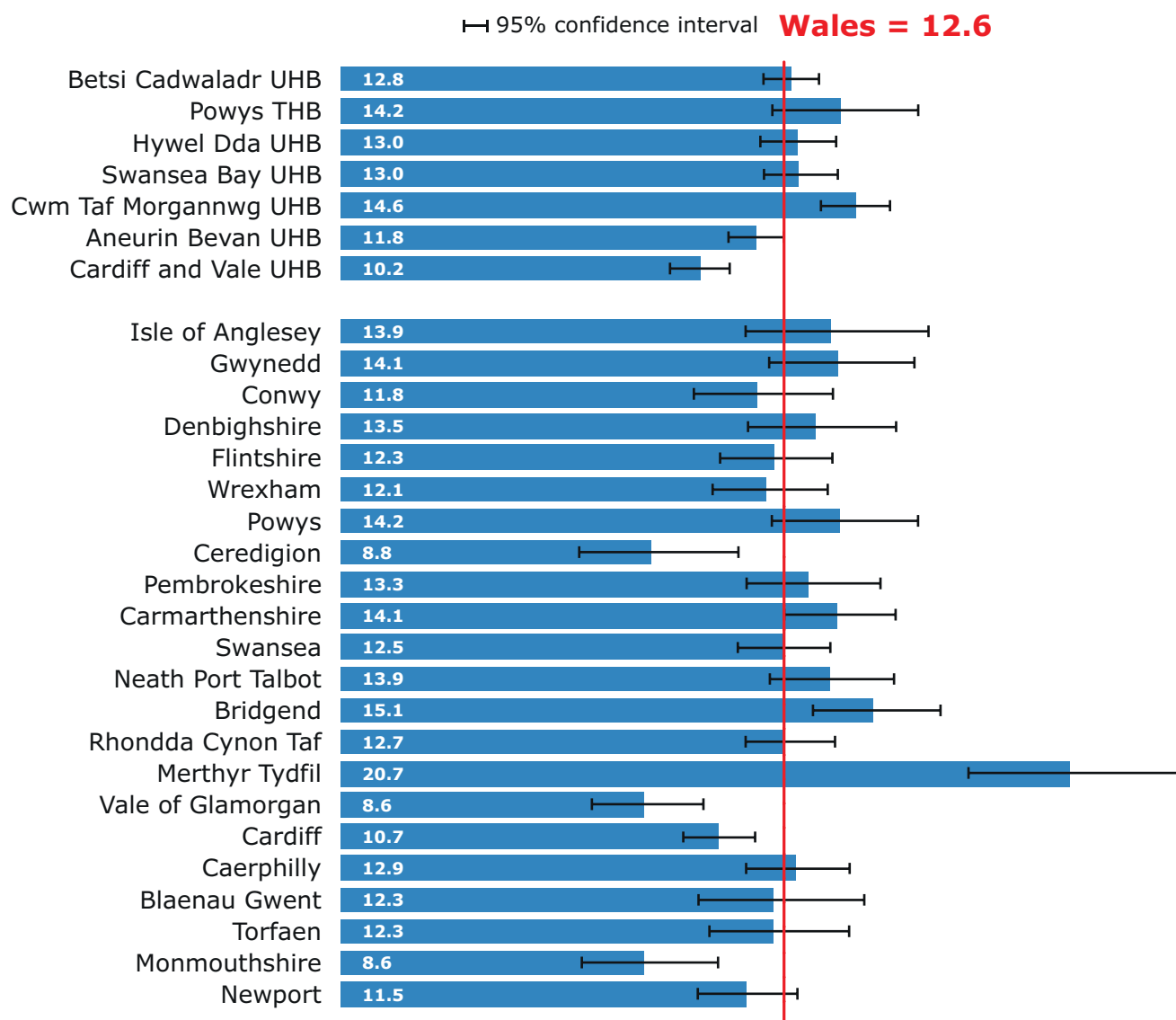
Please note: health board breakdowns use new boundaries (effective from 1st April 2019)

When combined over five years the percentage of children who are obese is statistically significantly higher than the Wales average of 12.1% in six local authorities: Merthyr Tydfil 17.2%, Carmarthenshire 13.5%, Rhondda Cynon Taf 13.5%, Blaenau Gwent

13.5%, Gwynedd 13.3% and Bridgend 13.0%. Whilst over the same five year period it is statistically significantly lower in five local authorities: Vale of Glamorgan 7.8%, Monmouthshire 8.5%, Ceredigion 10.1%, Cardiff 10.3% and Newport 11.2%.

Figure 3 – obesity at health board and local authority level, single year
Percentage of children, aged 4 to 5 years who are obese, Wales, health boards and local authorities, Child Measurement Programme for Wales, 2018/19

Produced by Public Health Wales Observatory using CMP data (NWIS)



Please note: health board breakdowns use new boundaries (effective from 1st April 2019)

By local authority area for the single year 2018/19, obesity prevalence was highest in Merthyr Tydfil at 20.7%. It was also statistically significantly higher than the Welsh average in Bridgend (15.1%). Obesity prevalence in the Vale of Glamorgan (8.6%), Monmouthshire

(8.6%) and Ceredigion (8.8%) was statistically significantly lower than the Welsh average and less than half that of Merthyr Tydfil (20.7%). Obesity in Cardiff (10.7%) was also statistically significantly lower than the Welsh average.

Deprivation

Prevalence of obesity was significantly higher than the Welsh average in the areas of greatest deprivation and significantly lower in the least deprived areas. The gap between obesity prevalence in the most and the least deprived areas has risen from 5.9% in

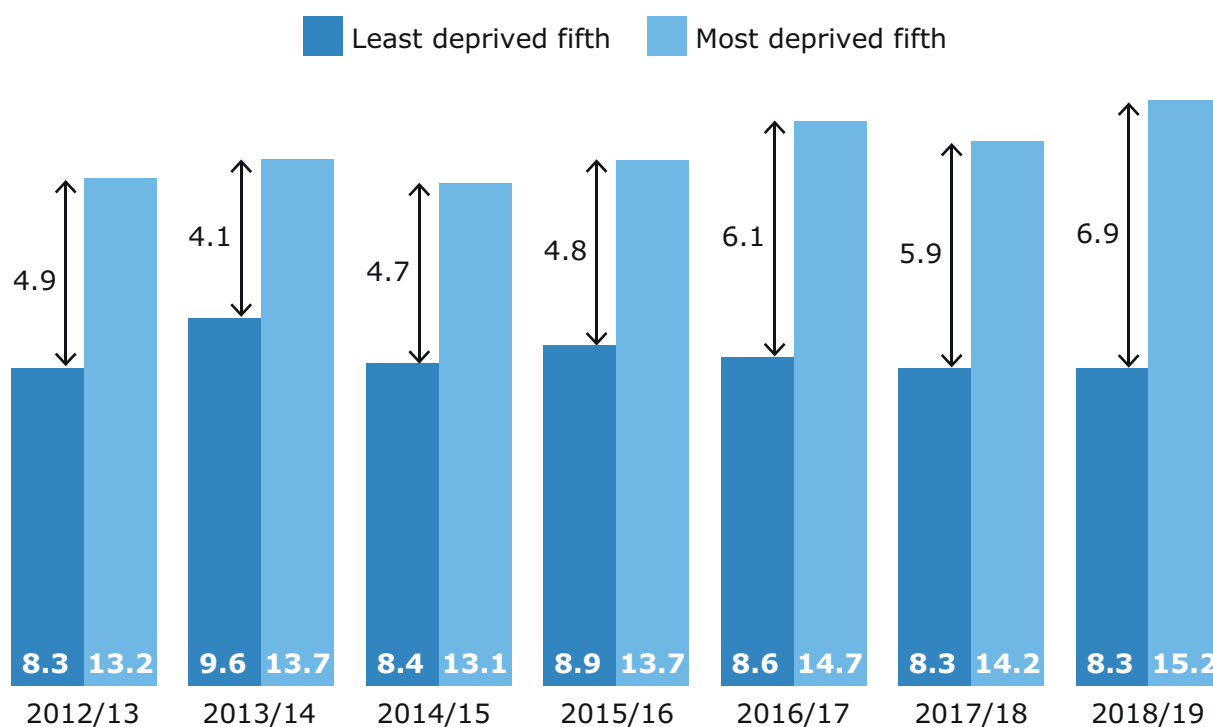
2017/18 to 6.9% in 2018/19. As can be seen from figure 5, this gap has been widening over the last five years as the proportion of children who are obese is rising in the most deprived areas and falling in the least deprived.

Figure 4 – obesity and deprivation

Percentage of children, aged 4 to 5 years, who are obese, most and least deprived fifth in Wales, Child Measurement Programme for Wales 2012/13 to 2018/19

Produced by Public Health Wales Observatory using CMP data (NWIS)

↕ 95% confidence interval





Deprivation is classified using the Welsh Index of Multiple Deprivation 2019. Each of the 1,909 Lower Super Output Areas (LSOAs) in Wales is assigned a deprivation rank 1 (most deprived) to 1,909 (least deprived). These scores are then assigned to quintiles from the most to the least deprived. For the CMP, each child's postcode of residence is assigned to an LSOA and the CMP results are analysed by deprivation quintile. The figures in this report will differ from previously published versions as previous versions were based on the 2014 Welsh Index of Multiple Deprivation. The figures have been recalculated to the 2019 version to allow direct comparison with all previous year's figures.

In 2018/19 15.2% of children living in the most deprived quintile were obese, and this is statistically significantly higher than obesity prevalence in the lowest three quintiles.

When data were combined across the five years 2014/15 to 2018/19, obesity prevalence in the most deprived quintile was 14.2% which is statistically significantly higher than in any of the other four quintiles. In the least deprived quintile it was 8.5% which is significantly lower than in the other four quintiles.

Proportionately more children live in the two most deprived quintiles than in the two least deprived quintiles. Not all individuals living in an area classified as deprived, are themselves living in deprived circumstances. Deprivation is more concentrated in some areas of Wales such as Merthyr Tydfil, but there are pockets throughout the country. In Monmouthshire there is only one LSOA area ranked within the most deprived quintile whereas in Newport there are 33.

Ethnicity

The number of children living in Wales in this age group with an ethnic origin other than white remained small in 2018/19. 5.4% of children who participated were recorded as having an ethnic origin other than white, while 71.0% were recorded as white.

Data recording on ethnicity on children's health records is poor – 23.5% of those participating were recorded as 'not known' which has increased since 2017/18 when this figure was 19.2%. Also, a proportion of the records are

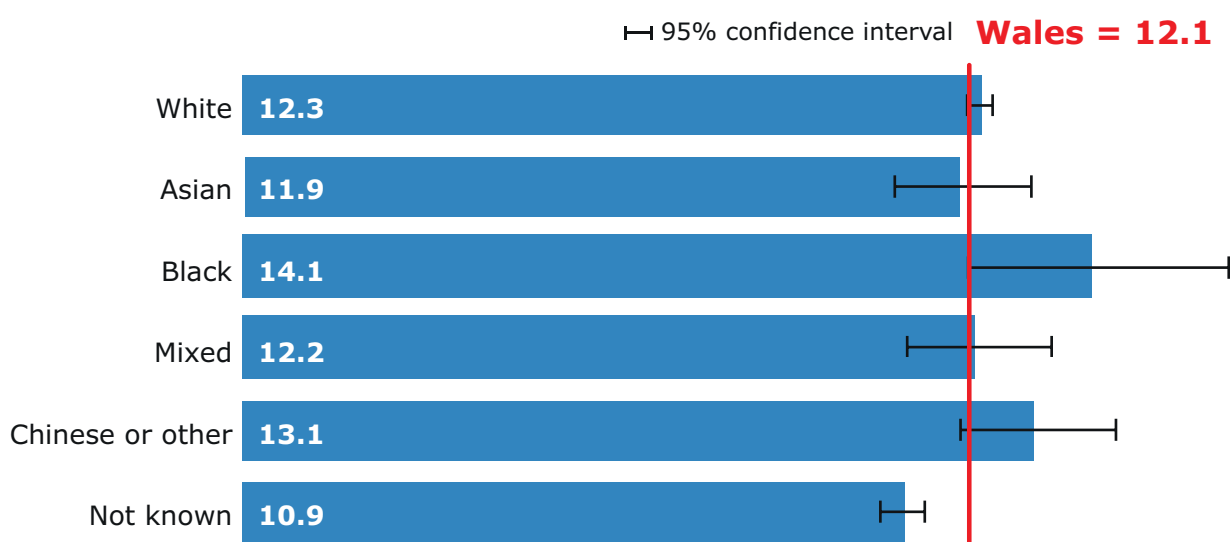
coded for ethnicity based on a system which has not been in use since 2002, which means that it is the mother's ethnicity that appears on the records, and not the child's.

While data are available for the single year 2018/19 it is more robust to combine the data across five years because of the small numbers. When examined over a 5 year period there are no statistically significant differences in the prevalence of obesity between ethnic groups.

Figure 5 – ethnicity and obesity

Percentage of children aged 4 to 5 years who are obese by ethnic group, Child Measurement Programme for Wales, 2014/15 - 2018/19

Produced by Public Health Wales Observatory, using CMP data (NWIS)



Comparison

Prevalence of obesity (figure 6) and also 'overweight and obese' (figure 7) was statistically significantly higher in Wales than in England or any of the English regions. The percentage of children who

were obese was higher in Wales than in Scotland. However, as confidence intervals are not publicly provided for Scotland, it is not possible to say whether the difference is statistically significant or not.

Figure 6 – UK comparison of obesity

Percentage of children in Reception year or Primary 1, who are obese, Wales, Scotland, England and English regions, Child Measurement Programme for Wales, Child Health Systems Programme School System (Scotland) and National Child Measurement Programme (England) 2018/19

Produced by Public Health Wales Observatory using CMP data (NWIS), CHSP (ISD Scotland), NCMP data (HSCIC)

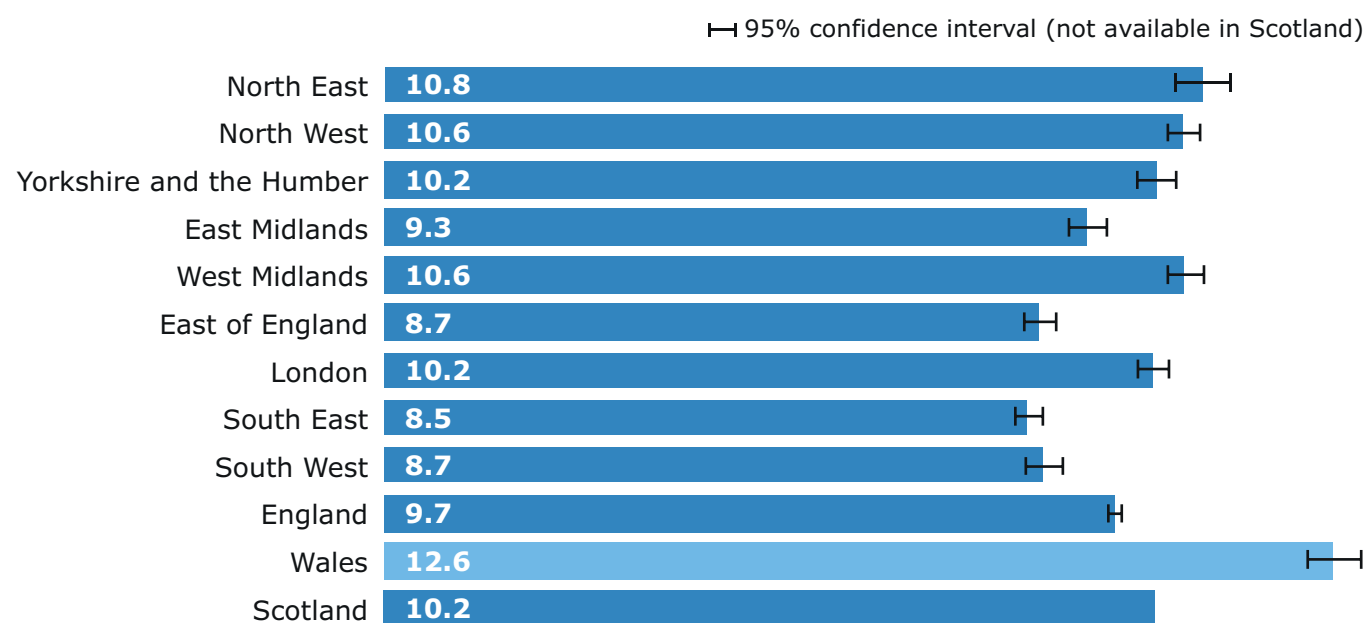
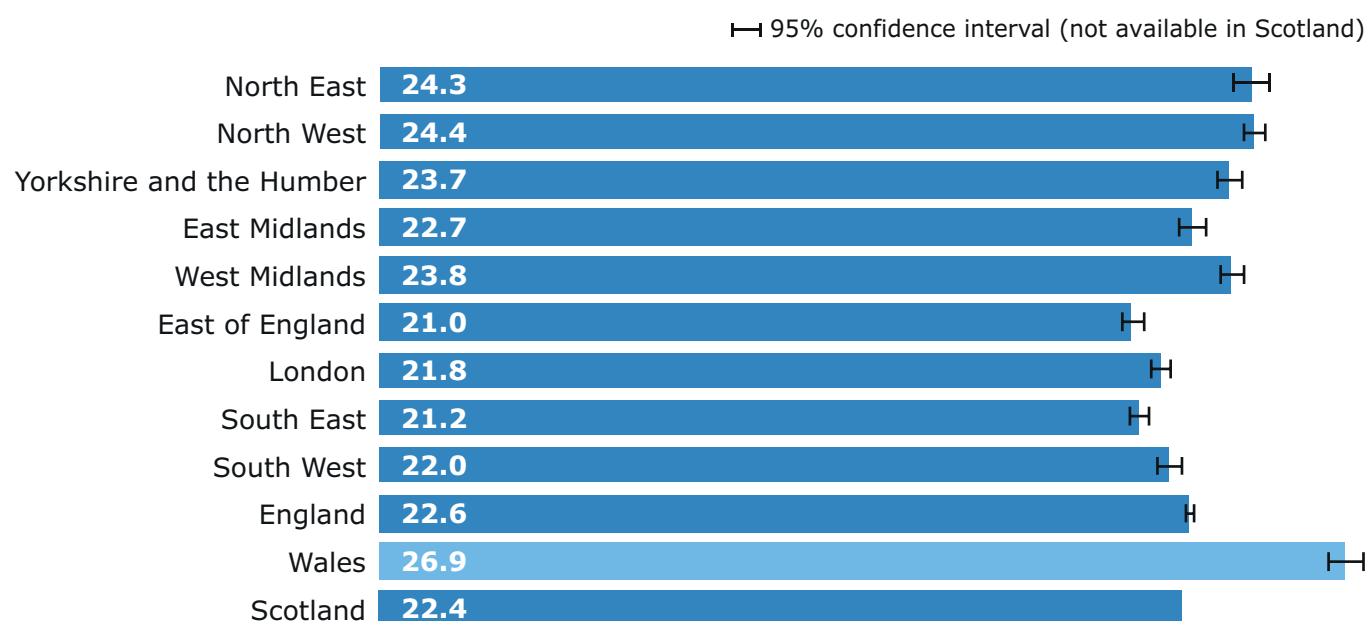


Figure 7 – UK comparison of obesity and overweight

Percentage of children in Reception year or Primary 1, who are overweight or obese, Wales, Scotland, England and English regions, Child Measurement Programme for Wales, Child Health Systems Programme School System (Scotland) and National Child Measurement Programme (England) 2018/19

Produced by Public Health Wales Observatory using CMP data (NWIS), CHSP (ISD Scotland), NCMP data (HSCIC)



We have provided a comparison with the results of the National Child Measurement Programme in England, where all children are also weighed and measured in Reception Year, and the same growth reference (UK90) are used, making comparison possible. The number of children who participate in the National Child Measurement Programme in all of the English regions was higher than the population measured in Wales, with the exception of the North East.

The age range of children included in the Scottish national measurement programme is greater than in England and Wales. Children start school later and are measured in Primary 1 in Scotland. The child's age at measurement ranges between 4.5 to 6.25 years. However as BMI centiles are calculated using the exact age of the child, the impact is reduced.

Participation

Table 1 shows participation rates for 2012/13 to 2018/19. Participation has been, on average, stable in the four years since the highest level of participation in 2014/15. As the data table has

been revised following an update of the excluded schools list and will differ slightly from the numbers reported in previous reports.

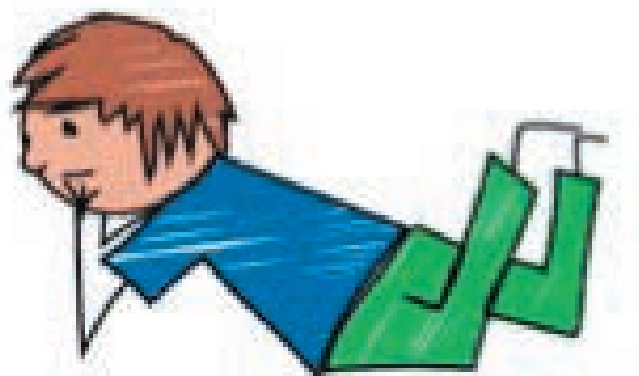
Table 1 – participation in the Child Measurement Programme for Wales, 2012/13 - 2018/19*

	Eligible	Measured	% Participation
2012/13	34,671	29,259	84.4
2013/14	33,800	30,693	90.8
2014/15	34,756	32,859	94.5
2015/16	35,692	33,337	93.4
2016/17	35,507	33,159	93.4
2017/18	34,316	32,166	93.7
2018/19	34,009	31,756	93.4

Produced by Public Health Wales Observatory using CMP data (NWIS)

*participation rates for 2012/13 to 2017/18 have been revised following an update of the excluded schools list. These figures may therefore differ slightly from the historic participation rates presented in other reports.

An annual census¹ of all the pupils in schools in Wales is carried out by Welsh Government in January. In January 2019, this census showed that there were 33,845 children attending reception year in Wales. There will be a small difference in the numbers between the CMP and PLASC because eligibility for inclusion in the CMP is calculated in July of the school year. In addition some children from England attend school in Wales and these will not be included in the numbers eligible for the Child Measurement Programme.



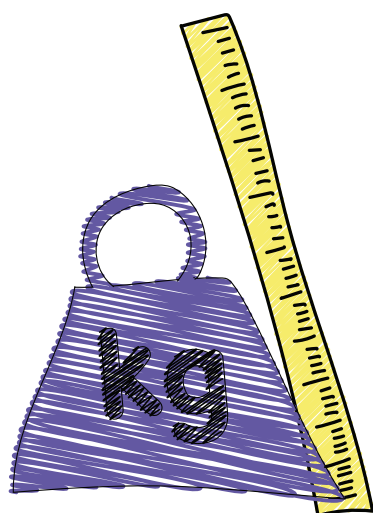
More information

This report provides a brief summary of the analysis of the child measurements taken for the Child Measurement Programme. More comprehensive information displayed as charts and tables can be found on our website at **Child Measurement Programme NHS Wales**.

For more information about tackling childhood obesity please go to the Public Health Wales Health Improvement website at:

www.everychildwales.co.uk and follow the link to the “10 steps to a healthy weight” information.

1 Welsh Government Pupil Level Annual School Census: January 2020 (published 27/04/2020) (PLASC) <https://statswales.gov.wales/Catalogue/Education-and-Skills/Schools-and-Teachers/Schools-Census/Pupil-Level-Annual-School-Census/Pupils>



Abbreviations

BMI	Body mass index
CMP	Child Measurement Programme for Wales
LSOA	Lower super output area
NCCHD	National Community Child Health Database
NCMP	National Child Measurement Programme (England)
NHS	National Health Service
NWIS	NHS Wales Informatics Service
PLASC	Pupil Level Annual School Census
THB	Teaching Health Board
UHB	University Health Board
UK90	Growth reference system used in the CMP
WHO	World Health Organisation
WIMD	Welsh index of multiple deprivation

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