

EVERY CHILD



The Child Measurement Programme for Wales 2015/16

Author

Linda Bailey: Consultant in Public Health
/ Health Intelligence

Data extraction

Louise Richards (NHS Wales Informatics
Service)

Data analysis

Mari Jones (Lead Analyst), Anna Childs,
Hugo Cosh, Gareth Davies, Holly Walsh,
Claire Withey.

Acknowledgements

Many thanks to the families and children
who participated in the programme and
to all the staff in Health Boards who have
supported the programme across Wales.

Thanks also to Ciarán Humphreys,
Dyfed Huws, Nathan Lester and Maggie
Grayson from the Public Health Wales
Health Intelligence Division for advice
and support during drafting of the report.

Publication details

Title:

Child Measurement Programme for Wales
2015/16

Publisher:

Public Health Wales NHS Trust

Date:

26th April 2017

ISBN 978-1-910768-47-1**For further information****please contact:**

childmeasurementprogramme
@wales.nhs.uk

Website:

[www.publichealthwales.org/
childmeasurement](http://www.publichealthwales.org/childmeasurement)

© 2017 Public Health Wales NHS Trust.

Material contained in this document may be reproduced under the terms of the Open Government Licence (OGL) www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ provided it is done so accurately and is not used in a misleading context.

Acknowledgement to Public Health Wales NHS Trust to be stated. Copyright in the typographical arrangement, design and layout belongs to Public Health Wales NHS Trust.

Contents

Charts, tables and maps	4
Introduction	5
Summary	5
Participation	6
Results	7
Healthy weight	7
Healthy weight or underweight	7
Obesity	8
Overweight or obese	9
Variation by deprivation	10
Variation by ethnicity	11
Comparison with England	12
Abbreviations	14
References	15



Charts, tables and maps

Figure 1 Percentage of children aged 4 to 5 years who are underweight, healthy weight, overweight or obese 2012/13 – 2015/16 Wales **5**

Table 1 Participation in the Child Measurement Programme for Wales since 2012/13 **6**

Figure 2 Percentage of children aged 4 to 5 years who are obese, Wales local authorities, Child Measurement Programme for Wales, 2015/16 **8**

Figure 3 Percentage of children aged 4 to 5 years who are overweight or obese, Wales local authorities, Child Measurement Programme for Wales, 2015/16 **9**

Figure 4 Percentage of children aged 4 to 5 years who are obese, most and least deprived fifth in Wales, Child Measurement Programme for Wales, 2015/16 **10**

Figure 5 Ethnicity data from the Child Measurement Programme for Wales, children aged 4 to 5 years, percentage, Wales, 2015/16 **11**

Figure 6 – Percentage of children aged 4 to 5 years who are obese, by ethnic group, Child Measurement Programme for Wales, 2013/14 – 2015/16 **12**

Figure 7 Percentage of children aged 4 to 5 years who are obese, Wales and England, Child Measurement Programme for Wales and the National Child Measurement Programme (England) 2015/16 **12**



Introduction

This report describes some of the key findings of the Child Measurement Programme for Wales (CMP). More detailed results, including tables, graphs and health board maps are presented online. They can be found on Child Measurement Programme web pages at www.publichealthwales.org/childmeasurement

An additional document detailing the history of the programme and how the programme operates is also available on the CMP web pages. That document also provides information on the prevalence categories, measurements, Body Mass Index (BMI), analysis and how statistical significance is assessed.

This presentation of information is different from the larger annual report which was produced in previous years.

Summary

At a national level there has been very little change in the prevalence of healthy weight, overweight or obesity over the last four years as can be seen from figure 1. Nearly three quarters of children measured were of a healthy weight.

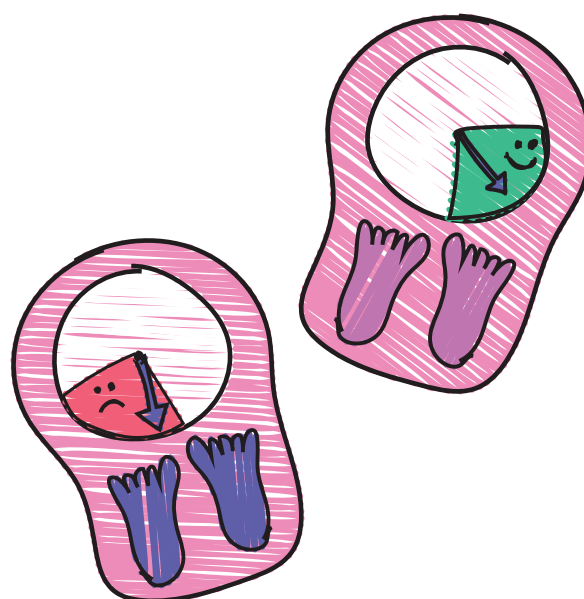


Figure 1 – Percentage of children aged 4 to 5 years who are underweight, healthy weight, overweight or obese 2012/13 – 2015/16 Wales.

	Underweight	Healthy weight		Overweight	Obese
12/13	0.6	73.2	H	14.9	11.3
13/14	0.8	72.7	H	14.6	11.8
14/15	0.9	72.9	H	14.5	11.6
15/16	1.0	72.9	H	14.5	11.7

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

Participation

93.3% of children eligible to participate in the programme this year were measured and their measurements included in the analysis. This is a slight percentage fall since last year. However a greater number of children than in any of the previous years took part. 171 children were opted out of the programme by their parents, just over double the

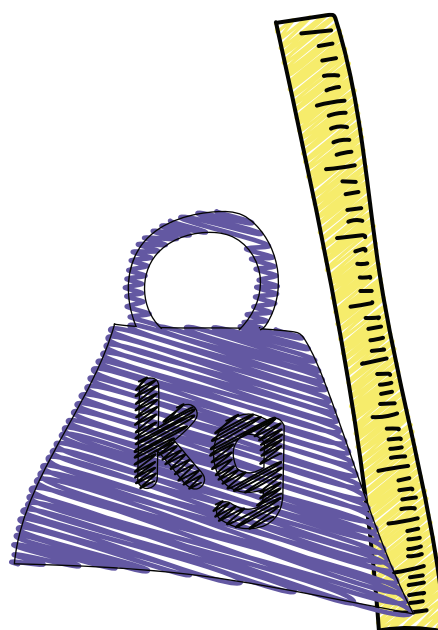
number (84) who were opted out last year. Cardiff and Vale University Health Board (UHB) had the largest number of children opted out – 80. Participation was slightly higher among children living in the least deprived quintile in Wales (94.1%) than in the most deprived quintile (92.2%). A slightly higher percentage of girls (93.9%) participated than boys (92.7%).

Table 1 – Participation in the Child Measurement Programme for Wales since 2012/13

	2012/13	2013/14	2014/15	2015/16
Children participating / eligible	29,238 / 34,679	30,669 / 33,794	32,889 / 34,815	33,327 / 35,721
Percentage	84.3%	90.8%	94.5%	93.3%

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

Every year a schools census is carried out by Welsh Government and in January 2016, 35,917 children were recorded as attending reception class in Wales. This is very close to the figure of 35,721 children recorded on the National Community Child Health Database (NCCHD) at the end of July 2016, suggesting that the number of children eligible for participation was close to the actual number of children known to be attending reception year.





Results

Healthy weight

72.9% of children measured in Wales were of a healthy weight. The prevalence of healthy weight in girls (73.7%) is higher than in boys (72.1%) and the difference is statistically significant at national level. At a local level, differences in healthy weight between boys and girls are not significant.

Healthy weight or underweight

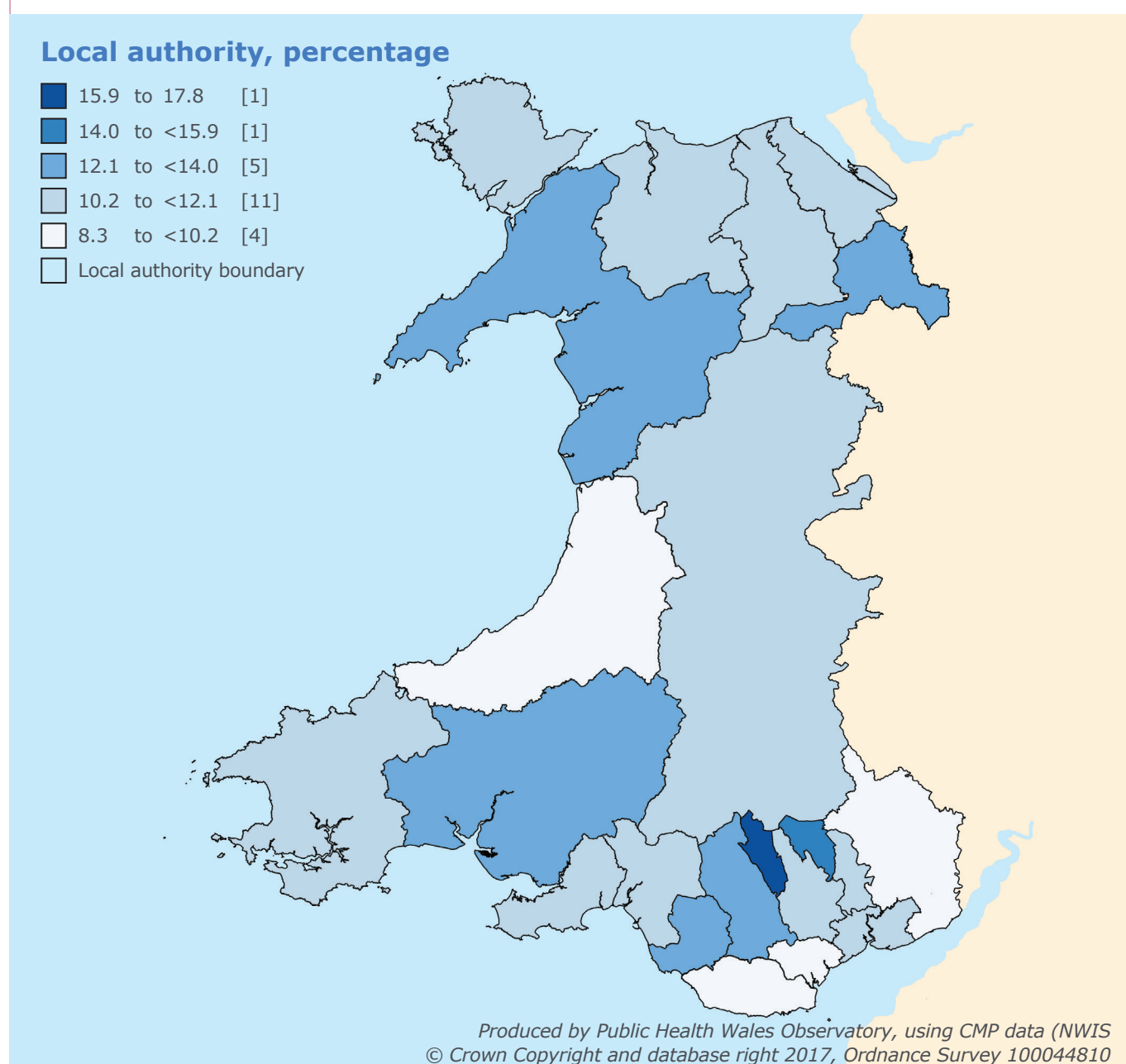
Because of the very small percentage (1%) of children who are underweight, healthy weight and underweight measurements are combined at some health board and local authority levels to avoid potential identification of individual children. Nationally 73.8% of children were either healthy weight or underweight. But there is substantial variation across Welsh local authorities – 80.8% of children in Vale of Glamorgan and 66.2% of children in Merthyr Tydfil were of a healthy weight or underweight.

Obesity

Obesity prevalence in this age group is highest in Merthyr Tydfil, where at 17.8% it is statistically significantly higher than the average for Wales (11.7%). Obesity prevalence is also statistically significantly higher than the Welsh average in Blaenau Gwent (15.0%),

Gwynedd (13.8%) and Rhondda Cynon Taf (13.8%). Conversely it is statistically significantly lower than average in three local authority areas – Vale of Glamorgan (8.3%), Monmouthshire (8.6%) and Cardiff (9.4%).

Figure 2 – Percentage of children aged 4 to 5 years who are obese, Wales local authorities, Child Measurement Programme for Wales, 2015/16

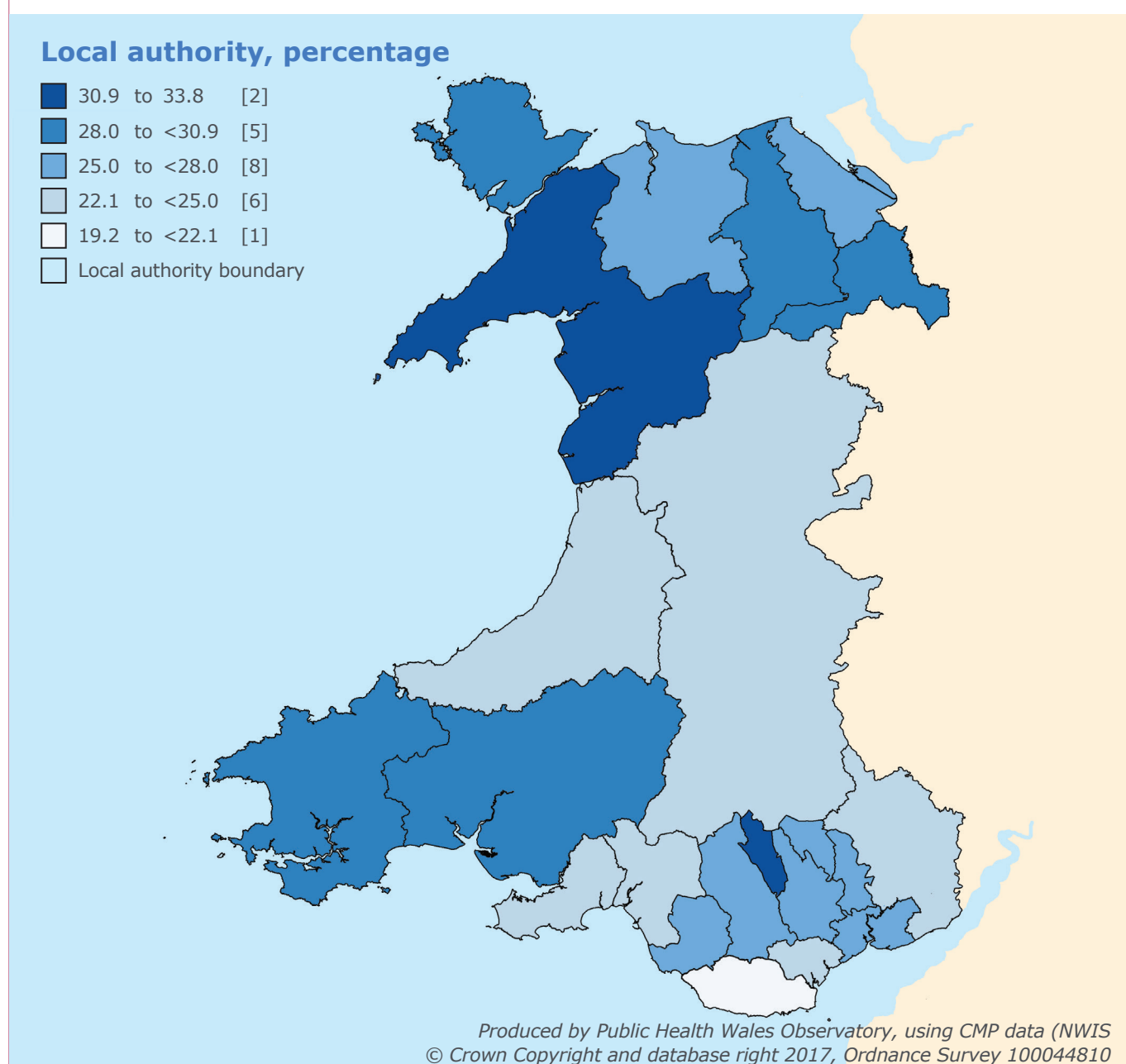


Overweight or obese

More than a quarter of children (26.2%) in Wales in reception year are classified as overweight or obese. There are two health boards where prevalence of overweight or obesity is statistically significantly higher than the Welsh average. These are Cwm Taf UHB

at 28.7% and Betsi Cadwaladr UHB at 28.6%. In Cardiff and Vale UHB prevalence is statistically significantly lower at 21.5%. The on-line charts and tables give more information about this, as well as about children who are overweight but not obese.

Figure 3 – Percentage of children aged 4 to 5 years who are overweight or obese, Wales local authorities, Child Measurement Programme for Wales, 2015/16



Variation by deprivation

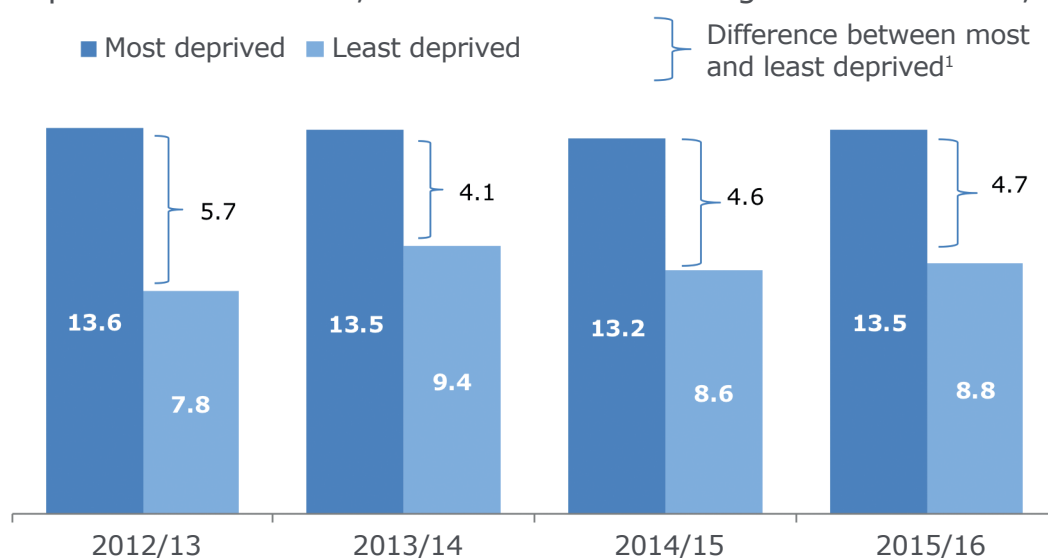
Each year child measurements are analysed by deprivation. The child's postcode or residence is classified according to the deprivation quintile. However it is important to remember that not everyone living in an area classified as deprived is living in deprived circumstances, and conversely not everyone living in an area in the least deprived quintile is living in affluent circumstances.

So although there is one local authority (Monmouthshire) with no areas ranked in the most deprived 20% (fifth) of areas in Wales, there will be families experiencing

high levels of material deprivation living there. Deprivation is more concentrated in some areas such as Merthyr Tydfil, where more than a fifth (22.2%) of the Lower Super Output Areas (LSOAs) were in the most deprived 10% of LSOAs in Wales in 2014.

For the analysis we compare prevalence of the weight categories across deprivation fifths. As can be seen from Figure 4, obesity prevalence is significantly higher in the most deprived quintiles than in the least deprived quintiles, and there has been little change in the gap between obesity prevalence in the most and least deprived quintiles during the last year.

Figure 4 – Percentage of children aged 4 to 5 years who are obese, most and least deprived fifth in Wales, Child Measurement Programme for Wales, 2015/16



¹Figures may not sum due to rounding

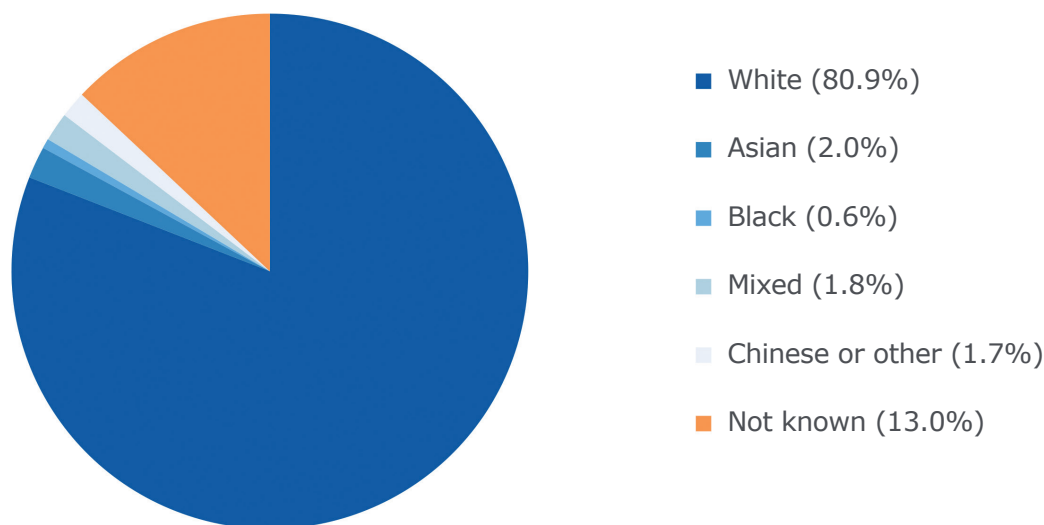
Produced by Public Health Wales Observatory using CMP data (NWIS) and WMID 2014 (WG)

Variation by ethnicity

Of the 33,327 measurements recorded for the CMP, just over 6% (2,026) were for children who were of an ethnic origin other than white. 13% of children had their ethnicity recorded as not known.



Figure 5 – Ethnicity data from the Child Measurement Programme for Wales, children aged 4 to 5 years, percentages, 2015/16

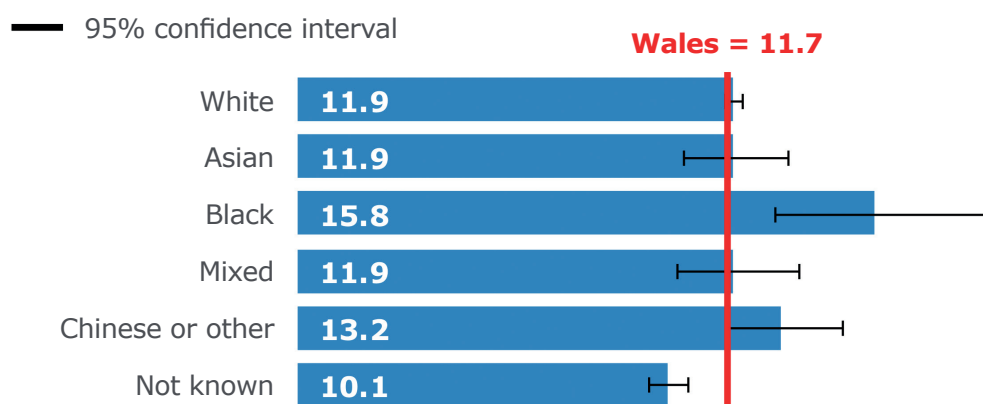


Produced by Public Health Wales Observatory using CMP data (NWIS)

When broken down into prevalence categories, the numbers are very small, and it is difficult to assess if any of the differences in results (when analysed by ethnicity) are significant. For this reason the results for three years are aggregated as well as being provided for the single year. As can be seen from figure 6, when data is aggregated, obesity prevalence in children of black ethnicity is significantly higher than the Welsh average, and higher than any of the other ethnic groups. The aggregated data also shows that children of Asian ethnicity are significantly more likely (at 78.9%) than white children (at 73.3%) to be of a healthy weight or underweight.



Figure 6 – Percentage of children aged 4 to 5 years who are obese, by ethnic group, Child Measurement Programme for Wales, 2013/14 – 2015/16



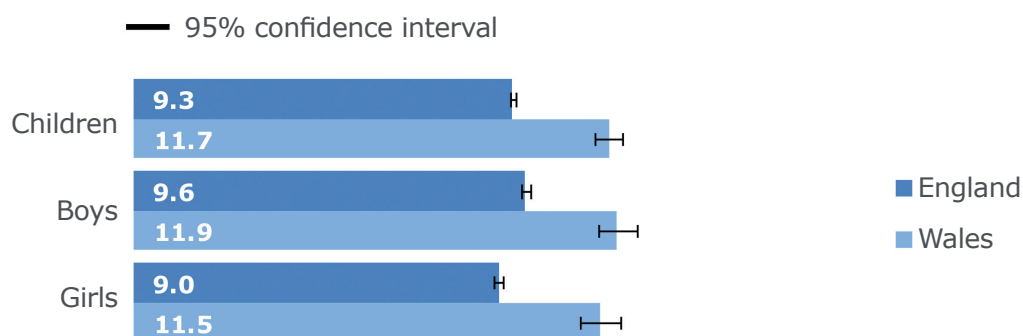
Produced by Public Health Wales Observatory using CMP data (NWIS)

Comparison with England

The only other UK country with a measurement programme which includes all children in this age group is England. They also use the same growth reference scale (UK90) so robust comparisons can be made between results from England and Wales.

Prevalence of obesity is significantly higher in both boys and girls in Wales (Figure 7) than in England. Prevalence of overweight or obesity is also significantly higher in Wales at 26.2% than in England (22.1%). It is also higher in Wales than in any single English region: the English region with highest prevalence is the North East at 24.6%, while nationally prevalence in children in Wales is 26.2%.

Figure 7 - Percentage of children aged 4 to 5 years who are obese, Wales and England, Child Measurement Programme for Wales and the National Child Measurement Programme (England) 2015/16



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

Last year the National Child Measurement Programme (NCMP) in England undertook tracking of measurements between reception and year 6 for the first time, and the results were published in 2017. For the study they categorised children as obese or severely obese in reception year, and the majority of these children were still in these two categories six years later. Meanwhile of those categorised as overweight but not obese, one third attained a healthy weight, a third remained overweight, and a third were obese or severely obese by Year 6. The work done by the NCMP also suggested that “Children from the most deprived neighbourhoods may be less likely than their more affluent counterparts to return to a healthy weight status in Year 6.”

Similar tracking was previously carried out in Wales² (published 2015). The results showed that in this age group in Wales the majority of children who were obese were still (82.5%) obese when measured four years later. Meanwhile those who were overweight but not obese were more likely to attain a healthy weight by Year 4 (47.3%) than remain in the overweight category (18.6%) or be classified as obese (34.1%).

Policy context

As discussed in previous reports from the Child Measurement Programme the causes of obesity and overweight are complex and multi-faceted. Any solutions will need to be the same. It is important to have robust measurements to assess patterns and trends, as well as assessing success in addressing the issue. The results of the CMP are used by local authorities and health boards to inform service design. They are also used to inform measures in national outcomes indicators including the Public Health Outcomes Framework, the NHS Outcomes Framework and the Early Years Outcomes Framework.

This year the CMP Official Statistics release is taking place at the same time as the launch of the first phase of a new Public Health Wales drive to improve the health of children in the Early Years. ‘Every Child’ will bring together a range of programmes relating to health and wellbeing in the early years and will build on the existing ‘10 Steps to a Healthy Weight’ Programme to prevent childhood obesity.

For more information about the measurements, please go to our website at:

www.publichealthwales.org/childmeasurement

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

www.everychildwales.co.uk

Abbreviations

BME	Black and minority ethnic
BMI	Body mass index
CMP	Child Measurement Programme for Wales
LSOA	Lower super output area
MSOA	Middle Super output area
NCCHD	National Community Child Health Database
NCMP	National Child Measurement Programme (England)
NHS	National Health Service
NICE	National Institute of Health and Care Excellence
NWIS	NHS Wales Informatics Service
ONS	Office for National Statistics
UHB	University Health Board
UK90	Growth reference system used in the CMP
WHO	World Health Organisation
WIMD	Welsh index of multiple deprivation

References

- ¹ Public Health England (2017) "Changes in the weight status of children between the first and final years of primary school: a longitudinal analysis of data from the National Child Measurement Programme in four local authorities in England between 2006/07 and 2014/15"
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/599259/weight_changes_in_primary_school_children_analysis.pdf (accessed March 2017).
- ² Public Health Wales (2015) "Report of Year 4 Child Measurement Programme Pilot 2012/13"
<http://www.wales.nhs.uk/sitesplus/888/page/67768>



The Child Measurement Programme for Wales
2015/16

www.publichealthwales.org/childmeasurement