

lechyd Cyhoeddus Cymru Public Health Wales

Public Health Wales Child Measurement Programme

-140 -

Report 2012/13

Author

Linda Bailey Consultant in Public Health / Health Intelligence

Data extraction Louise Richards (NHS Wales Informatics Service)

Data analysis Holly Walsh (Lead Analyst), Mari Jones, Leon May, Arthur Duncan-Jones, Rhys Powell, Ioan Francis

Acknowledgements

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

Thank you to Dr. Judith Greenacre, Dr. Ciaran Humphreys, Dr. Dyfed Huws, Dr. Teri Knight and Nathan Lester in the Public Health Wales Health Intelligence Division for advice during drafting of the report. Thank you also to the Child Measurement Programme staff – Ros Causey, Helen Crowther and Maggie Grayson.

Publication details

Title: Child Measurement Programme for Wales Report 2012/13 Publisher: Public Health Wales NHS Trust Date: July 2014 ISBN: 978-0-9928835-3-9

For further information please contact: Child Measurement Programme Tel: 02920 827630 Email: childmeasurementprogramme@wales.nhs.uk Website: www.publichealthwales.org/ childmeasurement

© 2014 Public Health Wales NHS Trust Material contained in this document may be reproduced without prior permission 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.

Foreword



Overweight and obesity is one of the main risks for shortened life expectancy in the adult population of Wales. Obesity is also a threat to child health. For example more children are being diagnosed at a younger age with type 2 diabetes due to obesity. As well as physical consequences it can cause significant emotional distress in children who are affected. The good news is that the majority of children measured in the Child Measurement Programme for Wales were of a healthy weight. And although it is too early in the life of the programme to identify any persistent trends, there has been a small fall in the prevalence of overweight and obesity in reception year children between 2011/12 and 2012/13.

While individual interventions have a part to play in supporting children to achieve a healthy weight, it is the multiple actions taken at a societal level that have the most impact. There has already been investment in Wales in measures designed to address the obesity challenge. These include the Active Travel Bill and Healthy Eating in Schools Measure as well as programmes such as Flying Start and Change4Life. The Child Measurement Programme should, in time, be able to identify if these measures are halting the rise in child obesity.

The Child Measurement Programme for Wales is an annual surveillance programme. As well as prevalence of overweight and obesity, the programme also identifies a small number of children who are underweight or not as tall as expected. Over time, as more information is gathered, it will reveal a picture of the trends in child growth and inform plans to address the issue.

We are very grateful to all the families in Wales who have allowed their children to be part of the programme and to the staff in the health boards who have supported the programme.

Hew Bry

Professor Peter Bradley Executive Director of Public Health Development Public Health Wales

Contents

Figu	res	3
Abb	reviations	4
1	Summary	5
	Key messages	5
2	Introduction	7
3	About the Programme	9
3.1	Aims	9
3.2	Child Measurement Programme Standards and Guidelines	9
3.3	History of the programme in Wales	9
3.4	Potential extension of the programme	10
3.5	Factors affecting the Child Measurement Programme in 2012/13	10
4	Results	11
4.1	Participation	11
4.2	Healthy weight	13
4.3	Overweight and obesity in children	16
4.4	Obesity	19
4.5	Underweight children	20
4.6	Comparison with 2011/12	20
4.7	Gender	22
4.8	Ethnicity	23
4.9	Low height	25
4.10	Comparisons with England	25

5	Methods	28
5.1	The measurement process	28
5.2	BMI in adults	28
5.3	Classifying a child's BMI	28
5.4	Which records are included?	29
5.5	Small number suppression	29
5.6	Confidence intervals and statistical significance	30
6	Conclusions	31
Арр	endix 1	33
	Sample centile charts	33
Арр	endix 2	35
	Recording of ethnicity	35
Арр	endix 3	36
	Reference tables	36
Арр	endix 4	41
	Distribution of height, weight and body mass index	41
Арр	endix 5	44
	Additional maps	44
Refe	erences	47

Figures

Child Measurement Programme Wales 2012/2013

Figure 1 Proportion of children aged 4 to 5 years participating Wales and local	11	Figure 12 Proportion of children aged 4 to 5 years who are obese by local authority	19
authorities Figure 2 Proportion of children aged 4	12	Figure 13 Proportion of children aged 4 to 5 years who are obese by health board	19
to 5 years participating in child measurement programme by health board		Figure 14 Proportion of children aged 4 to 5 years who are obese by deprivation	20
Figure 3 Proportion of children aged 4 to 5 years participating in child measurement	13	quintile	
programme by deprivation quintile		Figure 15 Children aged 4 to 5 years by weight category, comparison 2011/12 and	20
Figure 4 Map – proportion of children aged 4 to 5 years who are healthy weight,	14	2012/13 Figure 16 Proportion change in overweight	21
Wales	4 5	& obesity and obesity, between 2011/12	21
Figure 5 Proportion of children aged 4 to 5 years, who are a healthy weight or	15	and 2012/13 in most deprived and least deprived quintiles	
underweight, by local authority Figure 6 Proportion of children aged 4	15	Figure 17 Weight category amongst girls aged 4 to 5 years, percentage by local	22
to 5 years, who are a healthy weight or		authority	
underweight, by health board Figure 7 Proportion of children aged 4	16	Figure 18 Weight category amongst boys aged 4 to 5 years, percentage by local	23
to 5 years who are overweight or obese, by local authority		authority	2.4
Figure 8 Proportion of children aged 4	17	Figure 19 Ethnicity of children aged 4 to 5 years participating in programme	24
to 5 years who are overweight or obese, by health board		Figure 20 Proportion of children aged 4 to 5 years who are overweight or obese by	25
Figure 9 Proportion of children aged 4 to 5 years who are overweight or obese	17	ethnicity	
by deprivation quintile		Figure 21 Participation of children aged 4 to 5 years, Wales, England and English region	26 s
Figure 10 Proportion of girls aged 4 to 5 years who are overweight or obese by deprivation quintile	18	Figure 22 Proportion of children aged 4 to 5 years who are overweight or obese, Wales and English regions	26
Figure 11 Proportion of boys aged 4 to 5 years who are overweight or obese by deprivation quintile	18	Figure 23 Proportion of children, boys and girls aged 4 to 5 years who are overweight or obese, Wales and England	27

Abbreviations

BME	Black and Minority Ethnic
BMI	Body Mass Index
CDC	Center for Disease Control (USA)
CI	Confidence interval
CMP	Child Measurement Programme for Wales
COSI	Childhood Obesity Surveillance Initiative
IOTF	International Obesity Task Force
lsoa	Lower 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 Clinical Excellence
NWIS	NHS Wales Information Service
ONS	Office for National Statistics
UK 90	British 1990 Growth Reference (See section 5.3)
WHO	World Health Organization
WIMD	Welsh Index of Multiple Deprivation

Summary

This is the second report of the Child Measurement Programme for Wales. This report contains the findings of the programme of child measurements carried out during the academic year 2012/13 with children who were in the reception year (age four to five) age-group.

Key messages

- 29,238 (84.3%) of the 34,679 children eligible for inclusion in the programme had measurements taken in line with the Child Measurement Programme standards and guidance, and analysis of their measurements have therefore been included in this report. 51% of the children were boys and 49% were girls.
- Nearly three quarters of the children measured (73.2%) had a body mass index (BMI) classified as being a healthy weight.
- The prevalence of those overweight or obese in Wales in reception year (26%) was significantly higher than that for England (22%) and also significantly higher than the English region with the highest prevalence - the north-east, at 24%.
- Girls had a higher prevalence of healthy weight (73.9%) than boys (72.5%).
 However obesity prevalence in girls (11.4%) and boys (11.3%) was similar.
- 11.3% (3,316) of children measured were obese. Prevalence of obesity was highest in Merthyr Tydfil (16.4%), and more than double that of the local authority with the lowest prevalence – Monmouthshire (7.5%)
- There is a strong relationship between levels of obesity and deprivation – 29.4% of children living in the most deprived areas of Wales were overweight or obese, compared to 21.4% in the least deprived areas. For obesity alone, 13.6% of

children in the most deprived areas were obese, compared to 7.8% in the least deprived areas.

- While prevalence of obesity appears to have fallen from 12.5% in 2011/12 to 11.3% in 2012/13, these figures should be treated with caution until more information for future years becomes available. What is of concern is that if the information reflects a real fall in prevalence then the fall appears to be greater in the least deprived areas of Wales (from 9.4% to 7.8%) than the fall in the more deprived areas (from 14.3% to 13.6%), and the absolute gap between obesity prevalence between the most and least deprived areas has therefore increased from 4.9% in 2011/12 to 5.8% in 2012/13.
- This year is the first year that the Child Measurement Programme has looked at the ethnicity of children in relation to their BMI. The ethnicity of nearly 90% of children was available. The highest prevalence of overweight and obesity in reception year in Wales is seen in children of black origin (34.4%), and the lowest in children of Asian origin (23%). However the number of children with an ethnic origin other than white who were measured was comparatively small at 1,768 or 6% of the total number of children in the programme. 10% of the children measured did not have their ethnicity recorded or it was recorded as "not known".

6 Child Measurement Programme for Wales Report 2012/13

Introduction

This is the second report of the Child Measurement Programme for Wales and the first report carried out in line with standards and guidance agreed in 2012. It is also the first year that the data is published as official statistics. The report contains the results of the Child Measurement Programme which was carried out with children who were in the reception year age group (age four to five) during the academic year 2012 to 2013.

The first report, published in 2013, was described as a transitional report as not all the necessary standards, guidance, training or dedicated data collection systems were in place at the start of that school year. Information in this report is presented at a national, local authority and health board level. It is not possible to present information at a lower level (for example by school or school cluster) without running the risk of identifying individual children. Where the number of children in any category is less than five, the figures have not been included in the reference tables in Appendix 3. For prevalence of low height and underweight it has therefore been possible in most instances to present the information only at a national or health board level.

The report describes prevalence of:

- Healthy weight
- Overweight and obese
- Overweight but not obese
- Obese
- Underweight

in children born between 1st September 2007 and 31st August 2008, and both resident and attending school in Wales. The categories are based on the body mass index (BMI) of the children taking into account their age and gender at the time they were measured. Information is also given on low height. 95% confidence intervals (CI) have been calculated for the results and where comparisons are made and have been described as 'significant', this means that the 95% confidence limits for two related prevalence rates don't overlap. An explanation of confidence intervals as well as other explanations about methods used is given in Section 5 of this report.

The Child Measurement Programme is a surveillance programme. Results for an individual child are not routinely supplied to parents unless they request them. However staff involved in taking the measurements of children are expected and encouraged to take appropriate action should they identify concerns. The rationale for introducing a surveillance programme on such a large scale is to provide robust information on child growth in Wales, and on childhood obesity, which is an increasing problem across the world. Children who are underweight or of small height will also be identified through the programme, and action taken to address these issues.

Children who are obese are more likely to become obese adults and this likelihood increases with age, the degree of obesity and whether they have obese parents¹. Childhood obesity has adverse consequences for those children affected while they are still in childhood but also later on in life. The consequences may be directly related to their health but can also impact on their psychological, social and emotional development. As food related behaviour patterns are established early in a child's life, often before the age of five, it is important to identify and address issues with parents and carers when children are still young.

Prevalence of childhood obesity is an ongoing concern in Wales which has one of the highest prevalence rates in Europe². As well as increased likelihood of adult obesity and the associated higher risk of premature mortality, increased morbidity and disability in adulthood, children who are obese are reportedly being diagnosed at a much younger age with obesity related diseases such as type 2 diabetes. Adults who are obese are at greater risk of type 2 diabetes, hypertension, liver disease, heart disease and stroke, cancer, respiratory disease, osteoarthritis and female infertility³. The costs both to the NHS and to society of tackling obesity are considerable – a study commissioned by the Welsh Assembly in 2011 put the costs of obesity to the Welsh NHS at £73 million⁴.

About the Programme

3.1 Aims

The Child Measurement Programme was established as a surveillance programme, aimed at giving an accurate picture of the growth of children in Wales. The results may be used for surveillance, planning of health and preventative services, research, monitoring or evaluation purposes.

The programme is not a screening programme, however health professionals carrying out measurements who identify concerns about the growth of an individual child would be expected to respond to those concerns in line with locally agreed protocols and pathways. Results for an individual child are not routinely given to parents unless they request them, or the local health board decides to supply them.

In this second full year of the Child Measurement Programme, measurements have been carried out in line with the Standards⁵ and Guidelines⁶ which were agreed by the Child Measurement Programme Steering Group and Board in 2012. The Standards and Guidelines are designed to facilitate a standardised way that children are measured so that results are robust and comparable across Wales and over time.

3.2 Child Measurement Programme Standards and Guidelines

The Child Measurement Programme Standards and Guidelines are available on the internet here in English: http://www.wales.nhs.uk/ sitesplus/888/page/67795 And in Welsh: http://www.wales.nhs.uk/ sitesplus/888/tudalen/67941

The documents set out information for local health teams about how measurements should be carried out, and how the information about the measurements should be recorded. The information includes guidance on the correct weighing scales and stadiometers (equipment to measure height accurately). and use and maintenance of the equipment. There is also information about calculation and interpretation of BMI measures, staff training and local audit. This information is also available to staff and parents in the form of videos in both Welsh and English on the Public Health Wales internet site. There is a dedicated information collection module on the Community Child Health System.

Local health board teams are responsible for those elements of the programme that are delivered locally such as the weighing and measuring of children, entering information onto the computer system and provision of feedback to parents. They are also responsible for ensuring parents are given information about the programme and the opportunity to opt their children out of the programme. However the Child Measurement Programme Office requests assurance annually that local child health teams are adhering to the standards and guidance agreed.

3.3 History of the programme in Wales

The Child Measurement Programme in Wales was started in 2011/12 following publication of a feasibility study in 2009⁷.

The programme includes all children in reception year whose parents have not opted them out. The first report of the programme⁸ was published in July 2013, and was described as a "transitional year" to reflect that not all the standards and guidance were in place at the time the measurements began. These standards and guidance are now in place and the programme has been carried out in line with them.

The programme was established following Directions⁹ issued by the then Minister for Health and Social Services. These Directions came into force in August 2011. The programme is governed by the Welsh Government's Child Measurement Programme (Wales) Regulations¹⁰, and it is coordinated by Public Health Wales, supported by the NHS Wales Information Service (NWIS). The programme is delivered by the seven health boards in Wales, with Public Health Wales having responsibility for oversight, data-analysis and reporting.

To support the establishment of the Child Measurement Programme a Steering Group and Board were established in 2011. These two groups contained representation from health boards, Public Health Wales, education, Welsh Government, voluntary sector, and NHS Wales Informatics Service. Once the programme was in place and the first report published in July 2013 it was decided that the programme should be governed by one group and a new Child Measurement Advisory Group is being put in place to provide oversight of the programme.

3.4 Potential extension of the programme

The programme is currently carried out with children in the reception year age-group (age four to five). A pilot has been carried out measuring children in Year 4 in the Cwm Taf University Health Board, however no decision has been made yet about extending the programme to include Year 4 nationally.

Extending the programme to Year 4 rather than any other year group would allow comparisons to be drawn between Wales and other European countries who participate in the World Health Organisation's (WHO) European Childhood Obesity Surveillance Initiative (COSI). Choosing this age group will also mitigate against results being affected by children whose growth is impacted by puberty. Extending the programme to a second cohort of children will also allow for longitudinal comparisons, i.e. the same children will be measured at a four year interval.

In 2015 it is anticipated that the programme will also include some analysis of patterns of child growth by ONS area classification, i.e. examining whether there are different patterns of growth between children living in rural or urban areas.

3.5 Factors affecting the Child Measurement Programme in 2012/13

There are three main factors which may have affected the numbers of measurements included in the programme this year. These are the effect on health services of a measles outbreak in Wales in Spring 2013; the introduction of a new module for recording measurements for the programme on the National Community Child Health Database (CCH2000); and a specific issue local to measurements in Powys. Both of the first two factors are thought to have impacted upon the ability of staff in all the health boards to deliver elements of the programme in line with the standards and guidance and the participation rate appears to have fallen from 88.4% in 2011/12 to 84.3% this year. For a fuller explanation please see section 4.1. The actual number of children in both years who were measured is broadly similar.

It is difficult to establish whether a fall in participation rates significantly impacts on obesity prevalence figures. However work done in the National Child Measurement Programme for England¹¹ over a number of years suggests that while a change in participation rates can lead to a small underestimation of obesity prevalence for children in Year 6 in England (suggesting children with a higher BMI may be more likely to be opted out in that year group), it had a negligible impact upon the reception year figures in the English programme.

Results

4.1 Participation

There were 34,679 children in Wales deemed eligible for inclusion in the Child Measurement Programme in 2012/13 – that is that they were born between 1st September 2007 and 31st August 2008, and they were both resident and attending school in Wales. Of those children, 29,238 (84.3%) had not opted out and had had valid measurements taken which have been included in this analysis. Parents/carers are given the opportunity to opt their children out of the Child Measurement Programme and in 2012/13 a total of 286 children were opted out, and accurate measurements could not be carried out on a further 17 children. In 2011/12 497 children were opted out of the programme. There are several possible reasons why accurate measurements may not be obtained, including children being unable to stand unaided on the measuring equipment or children wearing plaster casts.

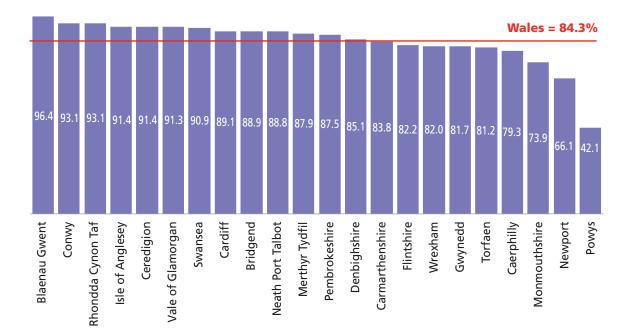


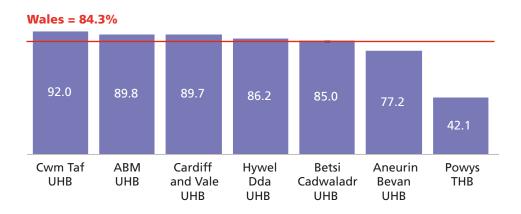
Figure 1 Proportion of children aged 4 to 5, Wales and local authorities, Child Measurement Programme for Wales 2012/2013

In the transition year of 2011/12 it was reported that there were 33,272 eligible children of whom 29,409 (88.4%) participated. So while a similar number of measurements are included for each of the years, the proportion of eligible children appears to be slightly lower this year at 84.3%. However as 2011/12 was a transition year and the first full year of the programme, there may have been some issues with calculating a rigorous denominator population for that year. The absence of the Child Measurement Programme module in 2011/12 on the National Community Child Health Database, combined with the lack of a national standard for school codes used within the database complicated the task of ensuring that all those (and only those) children in Welsh schools who were also resident in Wales were included.

A schools census is carried out every year in Wales. In January 2013, the schools census recorded that there were 35,756 children in reception year in Wales. However this figure includes children who are resident in England but attending school in Wales, and these children's measurements would not be included in the Child Measurement Programme. Both the timing of the school census and the inclusion in the school census of children resident in England could, in part, also explain the difference between the two figures.

There were problems in some geographical areas with participation. As is shown in Figure 1 there was a specific issue with participation in Powys. The school health team had carried out measurements with Year 1 (rather than reception year) children in the transition year. These were included last year because 2011/12 was a transition year. By 2012/13 the Standards and Guidance had been approved and information about them disseminated. These call for all measurements to be carried out in the correct school year, so the measurements obtained from Year 1 children in September 2013 in Powys are not included in this report. However the school health team in Powys will be provided with a short report detailing their full results including the Year 1 measurements. Work has been undertaken by the school health team in Powys to ensure that all measurements in future years will be taken with children in reception year.

Figure 2 Proportion of children aged 4 to 5, Wales and health boards, Child Measurement Programme for Wales 2012/2013



There was an issue with the introduction of a specific Child Measurement Programme module on the Community Child Health Database – it became apparent that not all the staff in the health boards responsible for entering measurements data were entering it on the Child Measurement Programme module. This has now been addressed and all staff reminded to use the correct module.

Staff from all the health boards reported that they had faced challenges meeting the requirements of the programme because of the increased workload caused by a measles outbreak. This outbreak started in April in Swansea but there were also smaller outbreaks elsewhere in Wales including in north Wales. The impact of the measles outbreak meant that:

- More children than usual were absent from schools on the days that measurements were being carried out.
- School health teams were engaged in carrying out "catch up" immunisation programmes, ensuring all children were protected against measles, resulting in lack of time to make repeat visits to schools to carry out the child measurements.
- The staff working on child health records were involved in ensuring that immunisation data was correct and running reports to identify unimmunised

children. This meant that they did not have enough time to run reports needed to identify gaps in the child measurement programme.

As can be seen from Figure 3 there is no discernible pattern in participation according to deprivation. About the same proportion (84.5%) of children from the most deprived areas in Wales participated in the programme as the Welsh average (84.3%).

4.2 Healthy weight

A full explanation of how children are classified according to their BMI is given in section 5. Briefly, children are classified as below:

- Underweight: BMI less than but not including the second centile
- Healthy weight: BMI second centile up to but not including the 85th centile
- Overweight but not obese: BMI 85th centile up to and not including 95th centile
- Obese: 95th centile and above

Slightly different thresholds are used by clinicians and more information about this is given in section 5 – 'Classifying a child's BMI'

The majority of children (73.2%) attending reception year and living in Wales are of a healthy weight. However prevalence of healthy weight varies across the country.



Middle

deprived

Next most

deprived

Figure 3 Proportion of children aged 4 to 5, Welsh Index of Multiple Deprivation participating in Child Measurement Programme for Wales 2012/2013

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

Next least

deprived

l east

deprived fifth

Most

deprived fifth

At a sub-national level, information on children of healthy weight is combined with information about children who are underweight when exact numbers are displayed. This is to avoid identification of individual children who are underweight as their numbers are very small at health board or local authority level. However it is possible to give information about prevalence (rather than actual numbers) and display the information on a map, as in Figure 4.

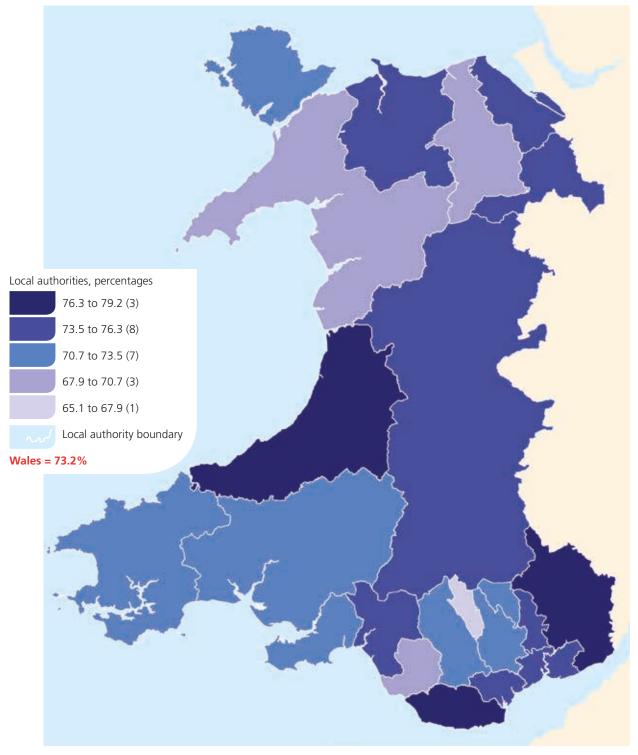


Figure 4⁺ Proportion of children aged 4 to 5 years who are healthy weight, 2012/13

Produced by Public Health Wales Observatory, using CMP data (NWIS) © Crown copyright and database right 2014. Ordnance Survey 1000044810

⁺ Exact values are used to determine the ranges, and hence membership, of groups within maps. However, in the legend those ranges are shown to one decimal place only. Therefore, whilst the top of one range appears to overlap with the bottom of the following range within the legend, each exact value could only fall within a single exact range and group

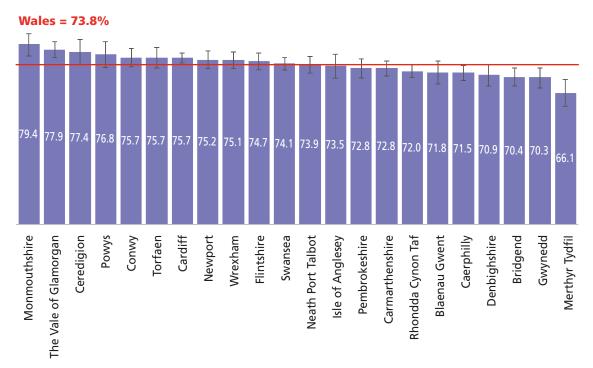
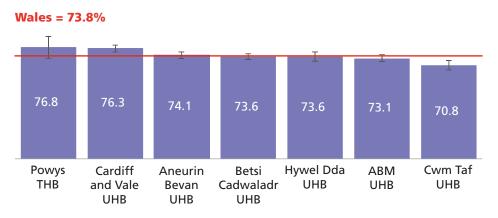


Figure 5 Proportion of children aged 4 to 5 years, who are a healthy weight or underweight, Child Measurement Programme, Wales and local authorities, 2012/13

Produced by Public Health Wales Observatory, using CMP data





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

Figures 5 and 6 show the information at local authority and health board level for children with a BMI classified as healthy weight or underweight.

As identified in section 4.1 participation or reception year children in Powys was lower than in other areas (42% of eligible children measured). The prevalence of children of healthy weight or underweight in Powys at health board level appears high in Figure 6, however this percentage is based on a small number of measurements and the confidence interval is wide. The prevalence in Powys could therefore be the same, similar or lower than that in any of the other health boards except Cwm Taf University Health Board.

4.3 Overweight and obesity in children

The majority of children (73.2%) in Wales who were measured are deemed to be of a healthy weight. However 26.2% of children measured in 2012/13 in Wales were either overweight or obese. This proportion varies by local authority (Figure 7), health board (Figure 8) and deprivations levels for the area where the children live (Figure 9). In more affluent local authorities the prevalence was generally lower. Monmouth had the lowest prevalence at 20.6%, however it reached almost 34% in the more deprived area of Merthyr Tydfil.

The cohorts of children measured in both Monmouthshire and Merthyr Tydfil were quite small, 652 children in each local authority, compared with 3,737 children in Cardiff, the area with the largest number of children participating. But even with a caveat around smaller numbers as can be seen from Figure 7, the confidence interval suggests that prevalence of overweight and obesity in children in Merthyr Tydfil was well above, and in Monmouthshire well below, the Welsh average. This still means that every area in Wales is experiencing appreciable levels of childhood overweight or obesity, with an even greater burden in more deprived areas The information in Figure 7 is also available in a map in Appendix 5.

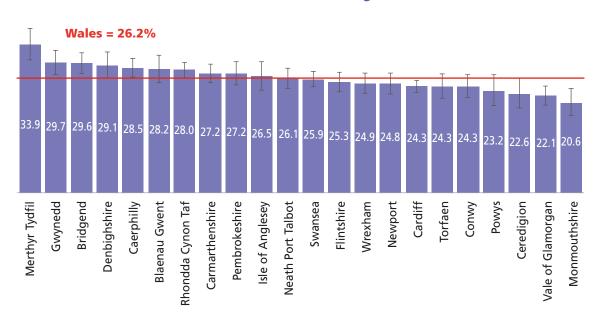
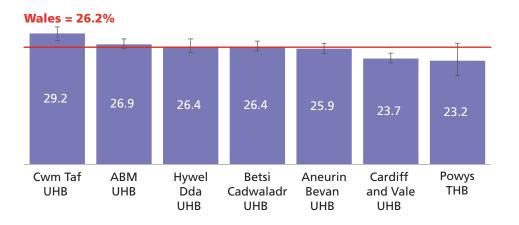


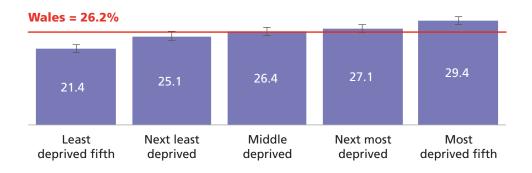
Figure 7 Proportion of children aged 4 to 5 years who are overweight or obese, Wales and local authorities, Child Measurement Programme for Wales, 2012/13

Figure 8 Proportion of children aged 4 to 5 years who are overweight or obese, Wales and health boards, Child Measurement Programme for Wales, 2012/13



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

Figure 9 Proportion of children aged 4 to 5 years who are overweight or obese, Welsh Index of Multiple Deprivation quintiles, Child Measurement Programme for Wales, 2012/13

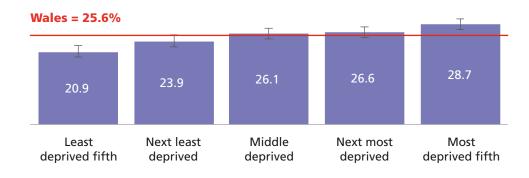


Produced by Public Health Wales Observatory, using CMP data (NWIS)

4.3.1 Overweight and obese children by deprivation level

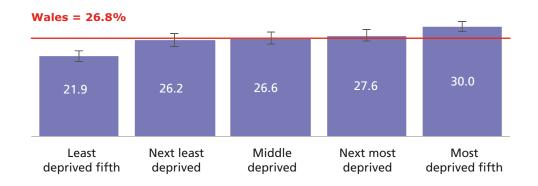
The prevalence of overweight and obesity in children in the reception year age group is given by health board and local authority of residence in the previous section. Both obesity prevalence and the prevalence of overweight are known to be higher in adults and children who live in more deprived areas, and figures 9, 10 and 11 give prevalence of 'overweight or obese' by deprivation quintile for all children and for girls and boys in Wales. Deprivation is assessed using the Welsh Index of Multiple Deprivation (WIMD). The WIMD is the official measure of relative deprivation for small areas in Wales. This index is constructed by using a range of indicators to assign a deprivation rank to each of the 1,896 lower super output areas (LSOA) in Wales. An LSOA is a geographical area which may vary in geographical size but each LSOA contains about 1500 people registered as living in that area. In 2011 only Ceredigion and Monmouthshire had no LSOAs in the most deprived 10% of LSOAs in Wales. Meanwhile the most deprived local authority was Merthyr Tydfil, with a quarter of its LSOAs in the most deprived 10% in Wales, followed by Blaenau Gwent (23.4%) and Rhondda Cynon Taff (17.8%)¹². However there are pockets of deprivation across Wales, with the most deprived LSOA being in Rhyl west.

Figure 10 Proportion of girls aged 4 to 5 years who are overweight or obese, Welsh Index of Multiple Deprivation quintiles, Child Measurement Programme for Wales, 2012/13



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

Figure 11 Proportion of boys aged 4 to 5 years who are overweight or obese, Welsh Index of Multiple Deprivation quintiles, Child Measurement Programme for Wales, 2012/13

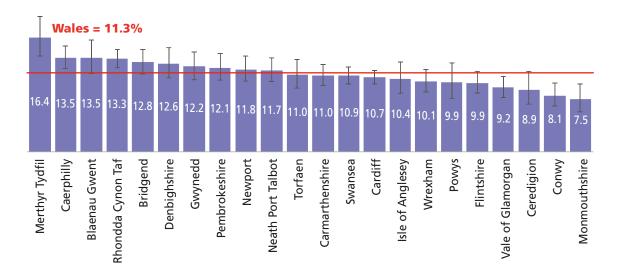


4.4 Obesity

11.3% of children in Wales had a BMI that was classified as obese. Again, prevalence varies by local authority (figure 12), health board (figure 13) and level of deprivation (figure 14).

Obesity levels are significantly higher than the national average in Merthyr Tydfil, Caerphilly and Rhondda Cynon Taf, and significantly lower in Monmouthshire, and also in Conwy and the Vale of Glamorgan.

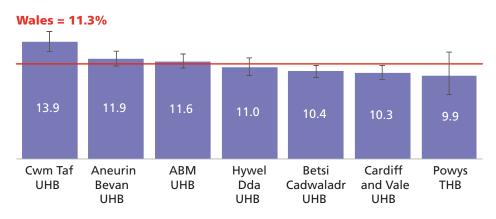
Figure 12 Proportion of children aged 4 to 5 years who are obese, Wales and local authorities, Child Measurement Programme for Wales, 2012/13



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

The information in Figure 12 is also available as a map in Appendix 5.

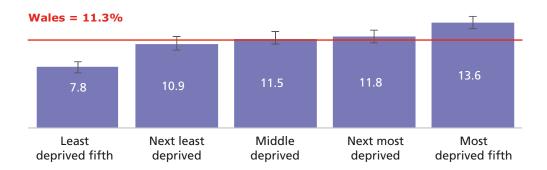
Figure 13 Proportion of children aged 4 to 5 years who are obese, Wales and health boards, Child Measurement Programme for Wales, 2012/13



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

As with the prevalence of overweight and obesity combined, obesity is associated with deprivation (figure 14). Obesity prevalence in children living in the most deprived areas in Wales is 13.6, compared to the Welsh average of 11.3%, and 7.8% in the least deprived areas. Obesity prevalence by deprivation quintile is very similar in boys and girls and the figures are available in Appendix 3.

Figure 14 Proportion of children aged 4 to 5 years who are obese, Welsh Index of Multiple Deprivation quintiles, Child Measurement Programme for Wales, 2012/13



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

4.5 Underweight children

Because of the small numbers involved, underweight and healthy weight categories have been combined when the information is presented at health board or local authority level. This is to avoid the potential identification of individual children who are deemed to be underweight. Prevalence of underweight children was 0.6% across Wales, but 0.7% in boys and 0.5% in girls, however this difference was not significant. The highest prevalence of underweight children was 1.5% in Cardiff and Vale University Health Board. It is not clear why this is but it is also the area with the largest black and minority ethnic (BME) population in Wales and it is possible that this could have impacted on this result. More information about variations by ethnic origin is given in section 4.8.

4.6 Comparison with 2011/12

There is now information available for the Child Measurement Programme for two consecutive years. (Figure 15). Caution should be used in drawing conclusions until data or more years becomes available.

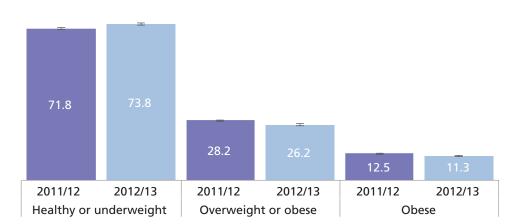
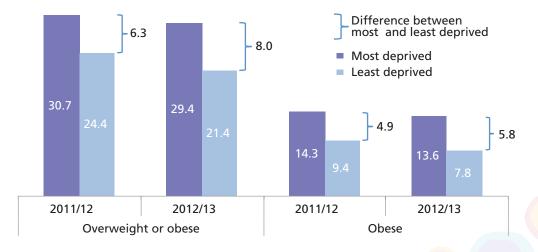


Figure 15 Children aged 4 to 5 years by weight category, Wales, Child Measurement Programme for Wales, comparison 2011/12 and 2012/13

However as already stated 26.2% of children measured in 2012/13 were overweight or obese. This is lower than the previous year (28.2% in 2011/12) and this does appear to be significant. However the apparent fall in prevalence should be treated with caution until data for future years become available. It is only when there is several years' worth of data that it would be possible to identify any consistent trends. There appears to have been a fall in overall prevalence of obesity and overweight and obesity in all deprivation groups. However of concern is that the absolute gap (Figure 16) in prevalence of obesity between the least and most deprived areas of Wales has increased by 0.9% (from 4.9% to 5.8%), and for those overweight or obese by 1.7% (from 6.3% to 8.0%). So prevalence of both obesity alone and 'overweight plus obesity' appears to have fallen faster in areas with least deprivation, and the latter appears to be statistically significant.





4.7 Gender

Although there appears to be a difference in prevalence of 'overweight or obesity' between boys and girls, with girls apparently having lower prevalence (25.6%) than boys (26.8%) this is not statistically significant at a national level.

Figures 17 and 18 show the difference between boys and girls in Wales by local

authority for healthy weight, overweight and obesity. Prevalence for all categories, at all levels (local authority, health board and deprivation quintile) for both boys and girls was broadly similar. The exception is that boys are significantly more likely than girls to fall in the category of 'overweight but not obese' however this is only significant at an all Wales level.

Figure 17 Weight category amongst girls aged 4 to 5 years, percentage by local authority, Child Measurment Programme for Wales, 2012/13

Monmouthshire 80		13	7
Powys	80	13	8
Vale of Glamorgan	78	12	10
Cardiff	77	13	10
Ceredigion	77	13	10
Conwy	76	15	9
Torfaen	76	13	11
Pembrokeshire	76	13	11
Newport	76	13	12
Wrexham	75	14	11
Neath Port Talbot	75	14	11
Flintshire	75	15	10
Swansea	74	15	11
Isle of Anglesey	74	16	10
Caerphilly	73	13	14
Gwynedd	73	15	13
Blaenau Gwent	73	14	13
Carmarthenshire	72	15	12
Bridgend	72	16	12
Rhondda Cynon Taf	71	16	13
Denbighshire	Denbighshire 71 15		14
Merthyr Tydfil	64	19	17
Healthy weight and underweight Overweight (but not obese)			

Monmouthshire	79	13	8
Ceredigion	78	14	8
Vale of Glamorgan	78	14	9
Torfaen	76	13	11
Conwy	75	18	7
Wrexham	75	16	9
Newport	75	14	12
Cardiff	75	14	11
Flintshire	74	16	10
Powys	74	14	12
Swansea	74	15	11
Carmarthenshire	73	17	9
Isle of Anglesey	73	16	11
Rhondda Cynon Taf	73	14	13
Neath Port Talbot	73	15	12
Blaenau Gwent	71	15	14
Denbighshire	71	18	12
Pembrokeshire	70	17	13
Caerphilly	70	17	13
Bridgend	69	17	13
Gwynedd	68	20	12
Merthyr Tydfil	68	16	16
	Healthy weight and underweight	it not oboco)	Obaca

Figure 18 Weight category amongst boys aged 4 to 5 years, percentage by local authority, Child Measurment Programme for Wales, 2012/13

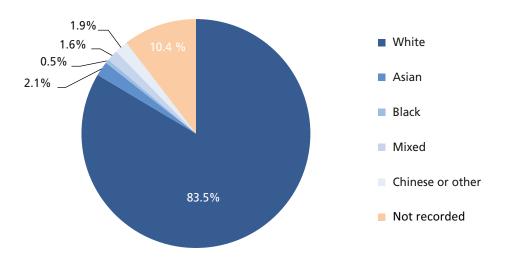
Healthy weight and underweight Overweight (but not obese) Obese

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

4.8 Ethnicity

This year analysis of child growth by ethnicity is available. These figures should be viewed with a certain amount of caution as ethnicity recording on the National Community Child Health Database (NCCHD) is not complete – the ethnicity of just over 10% of children in this age group was either not recorded or recorded as not known. The number of children with an ethnic origin other than white recorded was 1,768 (6%). A further issue is that just under half (49%) of the children had had their ethnicity recorded according to computer codes that were discontinued in 2002 (despite being born well after 2002). These old codes did not include a code for children of mixed race. Therefore it is not known how children of mixed race were categorised prior to 2002, although the expectation is that they would have been coded into the classification 'other'. There are separate codes for children of mixed race post-2002.

Figure 19 Ethnicity data from the Child Measurement Programme for Wales, children aged 4 to 5 years, 2012/13



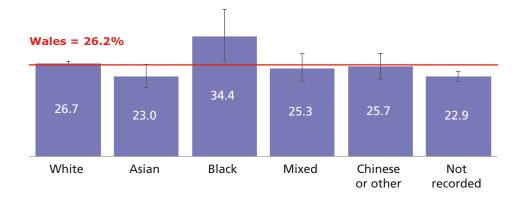
Produced by Public Health Wales Observatory, using CMP data (NWIS)

Because of the small numbers of children from an ethnic background other than white, even at an all Wales level, the 16 categories available have been condensed down to five broader categories (see Appendix 2), and a category for not known/not recorded is included. BMI by ethnicity has also only been classified in two categories – healthy or underweight, and obese or overweight. It is not possible to present information by ethnicity on children who are obese but not overweight or vice versa. Again this is because of the small number of children involved. In future years it will be possible to collate the information for several years at a time to present more detailed information. Children classified as white will include children born outside the UK, or born to parents from elsewhere e.g. Europe.

According to the 2011 Census¹³ four percent of the total population of Wales were from a Black or Minority Ethnic (BME) background. This was an increase from 2.1% in 2001. The majority of those from a BME background living in Wales were of Asian origin. The age profile of people from a BME background varies, with six percent being aged under 25, compared with 30% of the total population falling within this age group. Meanwhile six percent of the population living in Wales were born outside the UK, with the greater number (2.4%) being born in Europe followed by Asia (1.6%). Polish is the commonest single language in Wales after English or Welsh.

The majority of people living in Wales from a BME background live in the south east in either Cardiff or Newport. The number of children from a BME background who were eligible to participate in the Child Measurement Programme is small (1,768) so it is not permitted to give information on their BMI at a health board or local authority level, as this could result in identification of individual children. Figure 20 therefore shows the information at an all-Wales level. The highest prevalence of overweight and obesity in reception year in Wales is seen in children of black origin (34.4%) and the lowest in children of Asian origin (23.0%). However only the prevalence in children of black origin is significantly different from the prevalence for Wales (26.2%).





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

While the numbers are small, the higher proportion of children of black origin who are classified as obese or overweight (using the UK90 Growth Reference) is similar to information from elsewhere including England¹⁴. In 2012/13 29.9% of children described as Black or Black British in the reception year age group in England were classified as overweight or obese compared to the England average of 22%.

The links between childhood obesity and deprivation are well documented, and children from a black or minority ethnic background are more likely to live in the more deprived urban areas. However as discussed elsewhere in this report (Section 5.3 Classifying a Child's BMI) the growth charts used to calculate a child's BMI are based on a large sample size of children who are of white origin. Children of differing ethnicity may grow at different rates, and have different body fat distributions. In adolescents for example, there is limited information¹⁵ that for the same level of BMI, young people of African ethnicity carry less body fat than the general population.

4.9 Low height

137 (0.5%) of the children measured in Wales in 2012/13 were found to be of low height. That is, their height was below the 0.4th centile.

The UK National Screening Committee recommend¹⁶ that children with a height at

school entry of less than the 0.4th centile should be referred for assessment for short stature. Because the number of children of low height is small, it is not possible to give a breakdown by geographical area. However the prevalence of low height is similar across Wales. There were slightly more boys identified (57%) than girls (43%), however there were more measurements for boys than for girls in the programme and the difference is not statistically significant.

Further guidance will be issued to staff involved in the Child Measurement Programme during 2014 to remind them of the importance of identifying children with low height and appropriate referral pathways.

4.10 Comparisons with England

A national child measurement programme was commenced in England in 2006. This programme includes child measurements taken in reception year and Year 6. Responsibility for this programme transferred from the NHS to local authorities in England in April 2013. Prior to April 2013 responsibility for the programme was with the NHS, which at the time was split into strategic health authorities, so the measurements were presented at a strategic health authority level. This is useful for drawing comparisons with child growth in reception year in Wales, as strategic health authorities had a population size of between 2.5 million and 8 million, while the population of Wales is about 3,060,000. But this may be the last year in which results in England are available at this level as Strategic Health Authorities no longer exist.

The programme in England is now in its' seventh year, and participation has increased over those years from 80% in the second year 2006/7 to over 90% in all regions now. In the first year in England participation was about 48%.

Figure 22 gives the comparisons with regions in England. 26% of children who were measured in reception year in Wales were found to be overweight or obese. This is higher than any of the regions in England, where prevalence ranges from 20% in the South East region to 24% in the North East, with an average for England of 22%.

Figure 21 Proportion of children aged 4 to 5 participating in a Child Measurement Programme, Wales, England and English regions, 2012/13

South West	93
South East	91
London	94
East of England	95
West Midlands	96
East Midlands	93
Yorkshire and the Humber	94
North West	95
North East	96
England	94
Wales	84

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

Figure 22 Proportion of children aged 4 to 5 years who are overweight or obese, Wales, England and English regions, Child Measurement Programme for Wales and the National Child Measurement Programme (England), 2012/13

South West	23	H	
South East	20	⊢-I	
London	23	F	-1
East of England	21	⊢⊣	
West Midlands	23	H	ł
East Midlands	22	┝━┥	
Yorkshire and the Humber	22	⊢	
North West	23	H	
North East	24		
England	22	Н	
Wales	26		⊢ −−1

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

Figure 23 compares obesity prevalence by sex across England and Wales. Both girls and boys in Wales have significantly higher prevalence of obesity or overweight than children in England.

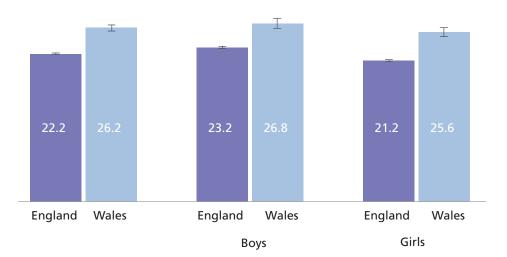


Figure 23 Proportion of children aged 4 to 5 years who are overweight or obese, Wales and England, Child Measurement Programme for Wales and the National Child Measurement Programme (England), 2012/13

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

Methods

All measurements were taken during the academic year 2012/13 in line with the Child Measurement Programme Standards and Guidance. Measurements of height and weight were recorded to the nearest 0.1 cm and 0.1 kg resepectively in order to establish an accurate BMI measurement.

(5).1 The measurement process

Most School Health teams have routinely weighed and measured children in reception year for many years. With the introduction of the Child Measurement Programme this is now being done in a standardised way, with all health professionals given additional training and equipment.

5.2 BMI in adults

Once someone has reached adulthood, the thresholds at which they are deemed to be of normal weight, under or overweight or obese remain the same. BMI is calculated by dividing a person's weight in kilograms by their height in metres squared (kg/m²). The BMI thresholds for adults are as follows:

- BMI of less than 18.5 is deemed underweight
- BMI of 18.5 and above, but less than 25 is deemed normal weight
- BMI of 25 and above, but less than 30 is deemed overweight
- BMI of 30 and above, but less than 40 is deemed obese
- BMI of 40 or more is deemed morbidly obese

5.3 Classifying a child's BMI

The classification of children's BMI differs from the classification of adult BMI as it changes as they mature. It also differs between boys and girls as the rates at which the different sexes grow differs.

In children the BMI is categorised using variable thresholds that alter depending on a child's age and sex. Each child's BMI is then assessed against a reference population or growth reference derived from the measurements of a large sample of children of the same age and sex. There are a number of different growth reference scales available, but for this programme UK90 was selected. The reference scale is divided into 100 units known as centiles (see Appendix 1 for a sample centile chart). Depending on where on this UK90 growth / centile chart each child is, they are assigned to one of the following categories in population studies:

- Underweight: less than but not including the second centile
- Healthy weight: second centile up to but not including the 85th centile
- Overweight but not obese: 85th centile up to and not including 95th centile
- Obese: 95th centile and above

There is no standard definition of morbid obesity in children in common use. Slightly different thresholds are used for clinical purposes rather than population surveillance purposes, i.e. NICE recommend interventions for children with a BMI on or above the 91st centile¹⁷ rather than the 85th centile which is the threshold for obesity in clinical settings.

Prevalence rates were calculated using age and sex-specific BMI centiles, using the British 1990 growth reference (UK90) from a method proposed by Cole et al¹⁸. The BMI was calculated using a method proposed by Keys et al¹⁹. The British 1990 growth reference (UK90) is also used in the National Child Measurement Programme for England. The measurements which informed UK90 were drawn from seven major studies of growth in the UK, and comprise measurements of over 30,000 children²⁰ and young people between 33 weeks of gestation and age 23 years. One criticism of this growth reference is that measurements of only a small number of children from ethnic minority backgrounds were available in the studies and these were not included, although there are known variations in growth patterns between children from different ethnic groups²¹.

Other growth references used internationally include those developed by the World Health Organization (WHO), Center for Disease Control in the USA (CDC) and the International Obesity Task Force (IOTF). Comparisons between obesity prevalence across populations should only be made if the same growth reference has been used, as they do differ. The National Obesity Observatory in England have published a useful guide²² which gives more information about each of the above growth references.

The distributions of height, weight and BMI are shown in Appendix 4. There is a symmetrical distribution for height and a skewed distribution for weight and BMI, and this follows the pattern shown in the Child Measurement Programme published in 2013.

5.4 Which records are included?

Records have been included in the Programme if they meet all of the following criteria:

• The location of residence can be determined.

- The child is resident in Wales.
- The school is located in Wales.
- They were born in the period September 2007 to August 2008.
- The child's sex is recorded.

Eligible records were included in the number measured, if they met all of the following criteria:

- The height measurement is recorded and is not an implausible measurement[‡].
- The weight measurement is recorded and is not an implausible measurement[‡].
- Consent has not been withdrawn.
- The measurement was collected during the academic year 2012/13.

(5).5 Small number suppression

When information is released in detail there is the risk that individuals could be identified even though their names, addresses or dates of birth have been removed. This risk is exacerbated if two or more sources of data are compared or the data is describing uncommon events. When the data is describing events or information that only applies to very few people in the information set, or to people living in a small geographical area, people's identities can be protected by adding in safeguards such as "small number suppression".

In this report, small numbers between 0 and 4 have been suppressed to avoid potential identification of individuals. In this report, this mainly relates to children who were underweight or of low height. Suppression of related data has also been performed where suppressed numbers could have been derived from totals.

In order to avoid potentially identifying individual children in local authority or health board areas, the information about children who are seen as underweight is combined with children seen as being of healthy weight.

⁺ In some cases it was apparent that human error had resulted in the wrong figures being entered into the wrong fields. Although it appeared as if the height and weight measurements had been switched there was no way to confirm this so the measurements were not included.

5.6 Confidence intervals and statistical significance

When looking at any information it is important to make an assessment of reliability of that information, and this is usually done in one of two ways:

- By calculating confidence intervals (Cls).
- By carrying out a test for statistical significance.

Confidence intervals are indications of the natural variation that would be expected around a rate and they should be considered when assessing or interpreting a rate. The size of the confidence interval is dependent on the number of events occurring and the size of the population from which the events came. Generally speaking, rates based on small numbers of events and small populations are likely to have wider confidence intervals. Conversely, rates based on large populations are likely to have narrower confidence intervals.

In this report, 95% CIs were calculated using a method proposed by Wilson et al as described by Altman et al²³ (2000). A simple explanation of the confidence interval is that we can be 95% confident that the true figure is within the range given for prevalence of overweight and obesity (for example) if all eligible children in Wales had been included in the programme.

A "statistically significant" finding suggests that the difference between two values might not be due to chance. In this publication, statistical significance is evaluated by the comparison of the 95% Cls of given values instead of carrying out a statistical test for significance. If Cls do not overlap then the value is considered to be statistically significantly different. Deeming a local value as statistically significant suggests that there is only 5% chance of it being different to the Wales average due to natural variation alone. The phrase 'similar to' is used within the report when values were not statistically significantly different.

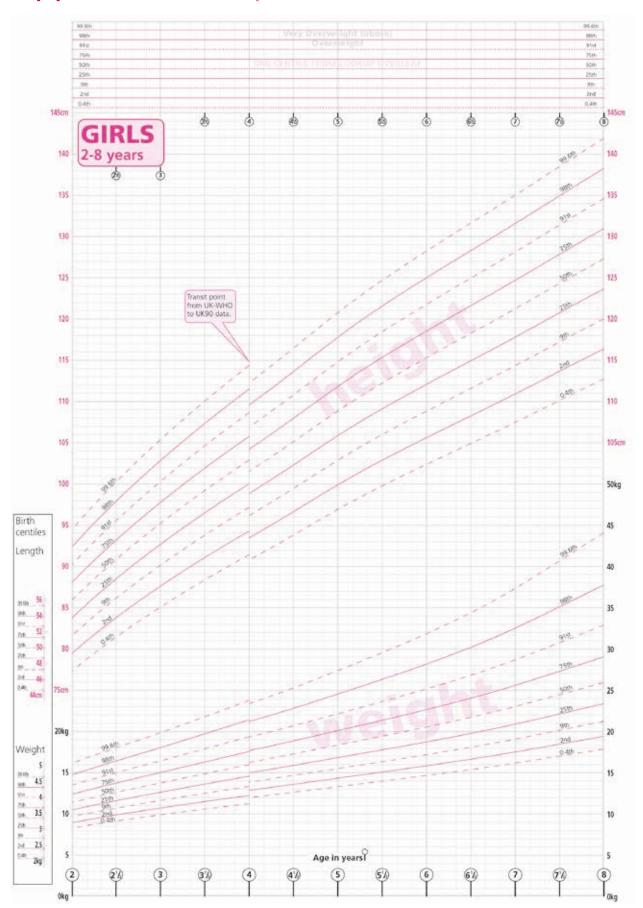
Conclusions

- This second report of the Child Measurement Programme for Wales adds to existing knowledge about child growth in children age four to five in Wales.
- Prevalence of obesity and overweight in this cohort of children appears to be higher than in any one of the regions in England.
- There has been an apparent fall in prevalence of overweight and obesity in children in this age group since the first report of the Programme. However more information is needed for future years to establish whether this is in fact a trend that will continue.
- This is the first year that some analysis of growth by ethnic origin of children in Wales, has been included and the results suggest that children of black ethnic origin are at higher risk of being overweight or obese than any other group including white origin. However the number of children of any ethnic origin other than white is small, and information for future years is needed before firm conclusions can be made.

- The information in this report may be useful to assist staff working in health boards and local authorities to target scarce resources towards enhancing and developing services aimed at combating obesity.
- It is hoped that the 2015 report on children measured in 2013/14 will include analysis looking at children living in urban or rural settings.

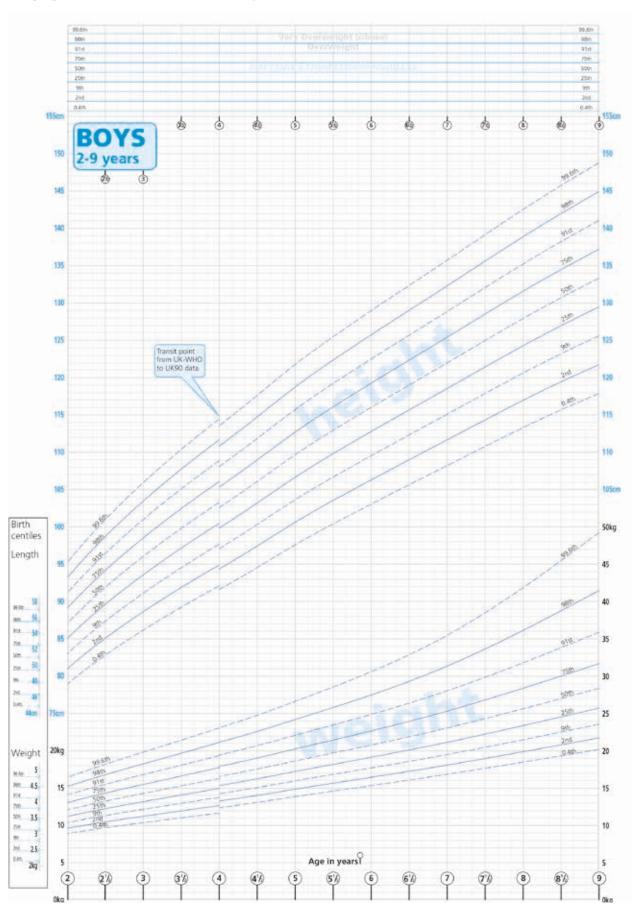
Appendices

32 Child Measurement Programme for Wales Report 2012/13



Appendix 1 Sample centile charts

©2012/13 Royal College of Paediatrics and Child Health. Reproduced with kind permission of the Royal College of Paediatrics and Child Health



Appendix 1 Sample centile charts

©2012/13 Royal College of Paediatrics and Child Health. Reproduced with kind permission of the Royal College of Paediatrics and Child Health

Appendix 2 Recording of ethnicity

The following codes had been used to record the ethnicity of children on the Child Health Database. Some of the codes used were supposed to have been discontinued by the NHS in 2002 and all children in this Child Measurement Programme were born well after 2002. However some children were still classified according to discontinued codes

Codes A-Z used post 31st March 2002.	Codes 0-9 used pre 31st March 2002.
A = White British	0 = Caucasian
B = White Irish	1 = White
C = Other White Background	2 = Black (Caribbean)
D = Mixed White & Black Caribbean	3 = Black (African)
E = Mixed White & Black African	4 = Black (Other)
F = Mixed White & Asian	5 = Indian
G = Any Other Mixed Background	6 = Pakistani
H = Indian (Asian or British)	7 = Bangladeshi
J = Pakistani (Asian or British)	8 = Chinese
K = Bangladeshi (Asian or British)	9 = Other ethnic group
L = Any Other Asian Background	
M = Caribbean (Black or Black British)	

- N = African(Black or Black British)
- P = Other (Black or Black British)
- R = Chinese
- S = Any Other Ethnic Group

The colour coding above reflects the five categories (previously four categories pre-2002) used in the Child Measurment Programme. The existing categories have been condensed to suppress small numbers. There were no codes in use before 2002 to describe children of mixed race.

Appendix 3 Reference Tables Participation in the Child Measurement Programme for Wales⁵, children aged 4 to 5 years, 2012/2013

Image: constant with the section of the se							ſ				Ĩ	-	
ptake Eligible italia Measured Measured Measured Wuptake Eligible italia Measured Measured Measured Number Measured Number	All Children			AII				soys			ס	Irls	
4.3 1/7.23 14.891 2.832 84.0 16.956 14.347 2.609 86.6 3.005 2.583 564 81.8 2.943 2.451 492 85.0 3.035 2.588 554 81.3 3.243 2.563 365 85.0 3.652 3.035 5.23 84.7 3.243 2.693 365 85.1 3.655 3.335 701 84.5 4.729 3.618 661 85.1 5.66 3.335 701 84.5 4.729 3.618 661 85.1 5.64 3.31 5.92 84.7 3.750 3.618 661 85.1 5.64 3.31 3.61 5.61 7.73 3.61 5.61 7.75 85.2 5.64 3.73 3.68 61 1.50 3.63 661 1.53 85.1 5.64 5.73 8.7 3.75 5.44 2.7 77 85.2		Eligible		Not Measured	% Uptake	Eligible	Measured	Not Measured	% Uptake	Eligible	Measured	Not Measured	% Uptake
86.6 3,005 2,583 422 86.0 2,868 2,505 363 85.0 3,302 2,538 554 81.8 2,943 2,451 492 85.0 3,805 2,506 533 323 2,868 550 84.7 3,244 2,093 475 85.0 3,855 3,323 592 84.7 3,750 3,518 661 85.1 3,66 516 130 922 395 358 37 81.7 566 516 130 799 566 460 56 82.1 567 84.7 3,750 3,202 548 37 82.1 566 516 813 719 91 70 91 82.1 568 84.7 3,750 3,202 548 37 82.1 566 431 671 671 67 67 82.1 568 400 573 568 <	Wales	34,679	29,238	5,441	84.3	17,723	14,891	2,832	84.0	16,956	14,347	2,609	84.6
82.5 3.102 2.538 564 81.8 2.943 2.451 492 83.0 3.382 2.666 520 83.1 3.244 2.769 475 83.0 3.386 5.3067 5.25 83.1 3.244 2.769 475 85.0 3.365 3.323 592 84.7 3.760 3.202 668 81.1 566 516 130 793 3.56 490 96 81.1 566 516 130 793 3.202 548 57 82.1 567 312 2.8 3.273 3.202 548 57 82.1 566 431 779 556 431 576 57 82.1 566 451 373 154 82.6 490 157 82.1 566 431 576 566 400 57 77 82.1 561 511 514 42.5	Least deprived fifth	5,873	5,088	785	86.6	3,005	2,583	422	86.0	2,868	2,505	363	87.3
85.0 3,388 2,868 52.0 84.7 3,244 2,769 475 84.5 4,536 3,335 701 84.5 4,279 3,004 618 84.5 4,556 3,335 701 84.5 4,279 3,004 618 85.1 3,865 3,323 592 84.7 3,750 3,202 548 81.1 566 531 3,232 28 3,375 3,518 661 661 82.1 566 531 3,49 94.0 581 536 45 82.1 566 531 3,49 83.5 514 447 67 82.1 566 531 3,49 83.5 514 447 57 82.1 564 2,79 83 87.0 536 349 82.1 564 306 565 77 84 77 82.1 564 563 566 1,56 77	Next least deprived	6,045	4,989	1,056	82.5	3,102	2,538	564	81.8	2,943	2,451	492	83.3
83.0 3,692 3,067 6.25 83.1 3,622 3,004 618 84.5 4,536 3,335 701 84.5 4,779 3,618 661 85.0 3,865 3,333 501 84.5 3,750 3,503 3,533 5,33 81.1 565 531 3,42 94.0 581 3,505 543 3,750 3,503 3,518 661 92.1 565 531 3,4 94,0 581 3,516 4,73 673 82.1 565 531 3,4 94,0 581 640 565 82.1 566 4,23 831 680 153 447 67 82.1 561 3,30 583 841 1691 150 82.1 564 333 301 573 831 630 153 83.2 564 333 301 533 303 532 349	Middle deprived	6,632	5,637	995	85.0	3,388	2,868	520	84.7	3,244	2,769	475	85.4
84.5 4,536 3,835 701 84.5 4,729 3,618 61 85.0 3,865 3,273 592 84,7 3,750 3,502 548 81.7 646 516 130 732 592 84,7 3,750 3,202 548 81.7 546 31 340 352 341 447 64 82.1 576 481 95 84,7 3,750 3,202 548 3,7 82.1 576 481 95 84,1 691 150 95 82.1 640 280 354 4,27 603 254 349 82.1 641 271 34 89.1 304 254 349 82.1 641 273 83.2 1,047 1,691 150 82.1 641 271 304 255 2545 253 254 82.1 640 272 83.2 <td>Next most deprived</td> <td>7,314</td> <td>6,071</td> <td>1,243</td> <td>83.0</td> <td>3,692</td> <td>3,067</td> <td>625</td> <td>83.1</td> <td>3,622</td> <td>3,004</td> <td>618</td> <td>82.9</td>	Next most deprived	7,314	6,071	1,243	83.0	3,692	3,067	625	83.1	3,622	3,004	618	82.9
85.0 3.865 3.273 592 84.7 3.750 3.202 548 91.4 366 312 28 32.73 592 395 558 37 91.4 360 332 28 92.2 395 558 37 56 91.1 565 531 141 536 53 548 37 82.1 564 531 154 87.6 640 155 640 155 82.2 640 577 81.8 841 691 150 87.2 640 577 87.0 553 254 349 87.5 640 577 88.1 374 157 157 87.5 640 577 88.4 289.4 289.4 276 77 88.8 813 719 88.4 289.4 289.4 276 77 88.8 800 570 566 33.0 580 <t< td=""><td>Most deprived fifth</td><td>8,815</td><td>7,453</td><td>1,362</td><td>84.5</td><td>4,536</td><td>3,835</td><td>701</td><td>84.5</td><td>4,279</td><td>3,618</td><td>661</td><td>84.6</td></t<>	Most deprived fifth	8,815	7,453	1,362	84.5	4,536	3,835	701	84.5	4,279	3,618	661	84.6
91.4 360 332 28 92.2 395 358 37 81.7 646 516 130 799 566 490 96 82.1 565 531 130 799 566 490 96 82.1 587 481 93 680 151 81.8 544 45 82.0 831 640 533 144 82.6 833 680 150 82.0 831 640 533 162 81.8 841 691 150 81.3 110 277 83 87.0 639 552 77 81.3 719 94 85.5 1,004 847 157 81.3 719 94 85.5 1,004 847 157 81.3 719 87.0 639 1,364 110 157 81.3 719 87.3 1,004 847 157 157	Betsi Cadwaladr UHB	7,615	6,475	1,140	85.0	3,865	3,273	592	84.7	3,750	3,202	548	85.4
81.7 646 516 130 739 586 490 96 33.1 565 531 34 940 581 536 45 85.1 576 481 95 533 514 447 67 82.1 587 733 154 82.5 514 447 67 82.2 887 680 151 81.8 841 691 150 82.2 131 277 34 85.5 1,947 169 349 87.0 564 280 379 680 355 1947 157 87.2 640 557 813 87.0 633 254 253 91.4 311 277 34 283 1,044 847 157 81.3 640 552 134 87.0 633 254 253 91.3 7123 1329 88.4 289.4 289.4 166 <td>Isle of Anglesey</td> <td>755</td> <td>069</td> <td>65</td> <td>91.4</td> <td>360</td> <td>332</td> <td>28</td> <td>92.2</td> <td>395</td> <td>358</td> <td>37</td> <td>90.6</td>	Isle of Anglesey	755	069	65	91.4	360	332	28	92.2	395	358	37	90.6
93.15655313494,05815364585.1576481958335144476782.288773315488169115082.188168015181.884169115082.283356015181.8841675782.49471.63927985.51.9471.69425387.56405773489.13042857787.56405778387.06395727787.564057783.110042357787.564057783.2100487.770387.564057783.283.473428587.564057783.2100487.770388.830102.66231889.42.8232.54527890.91,3771/23813989.477096637788.981371023983.61,3551,24511088.9813710389.677.389.6777389.12,14015371,3551,366484891.37,140190123983.61,57710589.17,140103189.91,3771,5567191.37,140103189.31,730	Gwynedd	1,232	1,006	226	81.7	646	516	130	79.9	586	490	96	83.6
85.1 57.6 481 95 83.5 51.4 447 67 82.2 887 733 154 82.6 833 680 153 82.2 887 733 154 82.6 833 680 153 82.1 918 1.639 279 88.5 1.947 1.694 253 86.2 1.918 1.639 279 85.5 1.947 1.694 253 87.5 640 557 34 89.1 3047 1654 253 87.5 640 557 83 1004 847 157 88.6 813 719 94 844 709 632 77 88.8 813 719 94 884 709 632 77 88.9 1.377 1.288 1.304 844 709 668 91 88.9 735 2.545 2.78 77 87 91 </td <td>Conwy</td> <td>1,146</td> <td>1,067</td> <td>79</td> <td>93.1</td> <td>565</td> <td>531</td> <td>34</td> <td>94.0</td> <td>581</td> <td>536</td> <td>45</td> <td>92.3</td>	Conwy	1,146	1,067	79	93.1	565	531	34	94.0	581	536	45	92.3
82.2 887 733 154 82.6 833 680 153 82.0 831 680 151 81.8 841 691 150 42.1 664 280 384 42.2 603 254 349 86.2 1,918 1,639 279 85.5 1,947 1,694 253 91.4 311 2.77 34 89.1 304 253 19 87.5 640 557 83 87.0 639 562 77 87.5 640 577 83 87.0 639 562 77 87.6 640 759 87.0 639 157 157 88.8 813 719 94 88.4 709 652 77 88.9 813 719 88.4 709 653 71 88.9 713 88.4 709 653 71 89.1 713 <td>Denbighshire</td> <td>1,090</td> <td>928</td> <td>162</td> <td>85.1</td> <td>576</td> <td>481</td> <td>95</td> <td>83.5</td> <td>514</td> <td>447</td> <td>67</td> <td>87.0</td>	Denbighshire	1,090	928	162	85.1	576	481	95	83.5	514	447	67	87.0
82.0 831 680 151 81.8 841 691 150 42.1 664 280 384 42.2 603 254 349 86.2 1,918 1,639 279 85.5 1,947 1,694 253 86.2 1,918 1,639 279 85.5 1,947 1,694 253 87.1 540 557 1,947 1,694 253 1 87.3 564 557 833 87.0 639 552 19< 87.3 566 370 2,692 318 87.0 552 17 88.3 3,010 2,692 318 83.4 709 633 2.545 2.78 88.4 1,377 1,238 839.4 2,832 2,845 2.78 77 88.9 2,913 713 839.4 779 1352 2,145 110 88.1 2,140 1,510 832 2,54	Flintshire	1,720	1,413	307	82.2	887	733	154	82.6	833	680	153	81.6
42.1 664 280 384 4.2.2 603 2.5.4 349 86.2 1,918 1,639 279 85.5 1,947 1,694 253 86.2 1,918 1,639 279 85.5 1,947 1,694 253 87.5 640 557 83 87.0 639 562 77 88.8 3,010 2,692 318 89.4 2,833 2,545 278 89.9 1,377 1,238 139 89.4 799 663 91 88.8 3,010 2,602 318 89.4 799 1,245 110 88.9 1,377 1,238 139 89.6 714 666 48 88.9 7140 1,901 239 88.6 2,764 110 88.9 7,140 1,901 239 2,753 2,545 2,166 91.3 7140 1,901 2,913 2,714 1666	Wrexham	1,672	1,371	301	82.0	831	680	151	81.8	841	691	150	82.2
86.2 1,918 1,639 279 85.5 1,947 1,694 253 91.4 311 277 34 89.1 30.4 285 19 87.5 640 557 83 87.0 639 562 77 83.5 967 805 162 83.2 1,004 847 157 83.8 3.010 2.692 318 89.4 2.823 2.545 278 88.9 3.010 2.692 318 89.4 709 633 71 88.8 813 719 94 88.4 709 633 71 88.9 813 719 94 88.4 709 668 91 88.9 88.6 776 88.4 709 668 91 71 88.7 762 88.6 714 1,994 736 218 91.3 785 2,945 2,945 2,845 2,85 2,66<	Powys THB	1,267	534	733	42.1	664	280	384	42.2	603	254	349	42.1
914 311 277 34 89.1 304 285 19 87.5 640 557 83 87.0 639 562 77 83.8 967 805 162 83.2 $1,004$ 847 157 83.8 $3,010$ $2,692$ 318 89.4 $2,823$ $2,545$ 278 90.9 $1,377$ $1,238$ 139 89.9 $1,355$ $1,245$ 110 88.8 813 719 94 88.4 779 663 77 88.9 813 719 89.6 774 574 110 88.9 772 $2,925$ $2,604$ 321 89.6 714 666 48 89.7 785 703 82 89.6 714 666 48 91.3 785 703 82 89.6 714 666 48 91.3 785 703 82 89.6 714 666 48 91.3 785 714 $1,901$ 239 89.6 714 666 48 91.1 $1,400$ $1,901$ 239 88.8 $2,054$ $1,836$ 218 91.3 785 $1,790$ $1,901$ 239 88.8 $2,054$ $1,97$ 91.3 91.4 91.6 92.8 $1,730$ $1,577$ 105 92.4 $1,790$ $1,790$ $1,99$ 92.8 $1,730$ $1,777$ 105 79.3 35.73	Hywel Dda UHB	3,865	3,333	532	86.2	1,918	1,639	279	85.5	1,947	1,694	253	87.0
87.5 640 557 83 87.0 639 562 77 83.8 967 805 162 83.2 $1,004$ 847 157 89.8 $3,010$ $2,692$ 318 89.4 $2,823$ $2,545$ 278 90.9 $1,377$ $1,238$ 139 89.9 $2,823$ $2,545$ 278 80.9 813 719 94 88.4 709 632 77 88.9 813 719 94 321 89.6 779 668 91 89.7 $2,925$ $2,604$ 321 89.6 714 666 48 91.3 785 703 82.9 89.6 714 666 48 91.3 785 703 88.8 $2,753$ 216 91.4 $1,400$ $1,312$ 88.8 $2,753$ $1,577$ 105	Ceredigion	615	562	53	91.4	311	277	34	89.1	304	285	19	93.8
83.8 967 805 162 83.2 1,004 847 157 89.8 3,010 2,692 318 89.4 2,823 2,545 278 80.8 3,010 2,692 318 89.4 2,823 2,545 278 80.9 1,377 1,238 139 89.4 709 632 77 88.8 813 719 924 88.4 709 632 77 88.9 88.0 775 89.6 779 89.6 714 666 48 89.1 2,914 1,901 239 89.6 714 168 2.13 89.1 2,140 1,312 89.6 714 666 48 91.3 7,140 1,312 88.8 2,054 1,836 2,18 93.1 1,400 1,312 88.8 2,054 1,836 2,18 93.1 1,400 1,312 88.8 2,054 1,836	Pembrokeshire	1,279	1,119	160	87.5	640	557	83	87.0	639	562	77	87.9
89.1 3,010 2,692 318 89.4 2,823 2,545 278 90.9 1,377 1,238 139 89.9 1,355 1,245 110 88.8 813 719 94 88.4 709 653 71 88.8 813 719 94 88.4 709 653 71 88.9 820 735 85.6 89.6 714 668 91 89.1 2,913 785 703 82.9 89.6 714 666 48 91.3 785 703 82.9 89.6 714 666 48 91.3 785 703 82.8 2,054 1,836 218 92.0 1,400 1,312 88.8 2,054 1,836 218 93.1 1,400 1,312 88.8 2,054 1,577 105 93.1 1,400 1,312 89.3 348 300 48	Carmarthenshire	1,971	1,652	319	83.8	967	805	162	83.2	1,004	847	157	84.4
90.9 1,377 1,238 139 89.9 1,355 1,245 110 88.8 813 719 94 88.4 709 632 77 88.9 820 735 85 89.6 759 668 91 88.9 820 2,925 2,604 321 89.0 2,768 2,502 266 91.3 785 703 82 89.6 714 666 48 89.1 2,140 1,901 239 88.8 2,054 1,836 218 91.3 785 703 82 89.6 714 666 48 92.0 1,400 1,312 88 2,054 1,836 218 93.1 1,400 1,312 88 93.7 1,382 1,277 105 93.1 1,400 1,312 88 93.7 1,382 1,277 105 93.1 1,400 1,312 89.3 348 <td>ABM UHB</td> <td>5,833</td> <td>5,237</td> <td>596</td> <td>89.8</td> <td>3,010</td> <td>2,692</td> <td>318</td> <td>89.4</td> <td>2,823</td> <td>2,545</td> <td>278</td> <td>90.2</td>	ABM UHB	5,833	5,237	596	89.8	3,010	2,692	318	89.4	2,823	2,545	278	90.2
88.8 813 719 94 88.4 709 632 77 88.9 820 735 85 89.6 759 668 91 88.7 2,925 2,604 321 89.6 714 666 48 91.3 785 703 82 89.6 714 666 48 91.3 785 703 82 89.6 714 666 48 91.3 785 703 82 89.6 714 666 48 91.1 2,140 1,901 239 88.8 2,054 1,836 218 92.0 1,794 1,644 130 92.8 1,730 1,577 153 93.1 1,400 1,312 88 93.7 1,382 1,277 105 87.9 394 353 348 300 48 300 48 70.3 1,140 896 244 77.2 3,335	Swansea	2,732	2,483	249	90.9	1,377	1,238	139	89.9	1,355	1,245	110	91.9
88.9 82.0 735 85.6 83.6 759 668 91 89.7 2.925 2.604 321 89.0 2.768 2.502 266 48 91.3 785 703 82 89.0 2.768 2.502 266 48 91.3 785 703 82 89.0 2.768 2.502 266 48 91.3 785 703 82 89.0 2.768 1,836 218 91.1 1,794 1,664 130 92.8 1,730 1,577 153 92.0 1,740 1,312 88 93.7 1,382 1,277 105 93.1 1,400 1,312 88 93.3 348 300 48 77.2 3,547 2,739 808 77.2 3,335 2,573 762 79.3 1,140 896 2,73 3,355 2,573 762 16 77.2 3,5	Neath Port Talbot	1,522	1,351	171	88.8	813	719	94	88.4	709	632	77	89.1
89.7 2,925 2,604 321 89.0 2,768 2,502 266 91.3 785 703 82 89.6 714 666 48 91.3 785 703 82 89.6 714 666 48 89.1 2,140 1,901 239 88.8 2,054 1,836 218 92.0 1,794 1,664 130 92.8 1,730 1,577 153 93.1 1,400 1,312 88 93.7 1,382 1,277 105 87.9 394 352 42 89.3 348 300 48 77.2 3,547 2,739 808 77.2 3,335 762 16 79.3 1,140 896 244 78.6 1,062 850 212 70.4 424 411 13 96.9 378 362 16 71.4 43 332 143 332	Bridgend	1,579	1,403	176	88.9	820	735	85	89.6	759	668	91	88.0
91.3 785 703 82 89.6 714 666 48 89.1 2,140 1,901 239 88.8 2,054 1,836 218 92.0 1,794 1,664 130 92.8 1,730 1,577 153 92.0 1,794 1,664 130 92.8 1,730 1,577 153 93.1 1,400 1,312 88 93.7 1,382 1,577 105 93.1 1,400 1,312 88 93.7 1,382 1,577 105 87.9 394 357 2,33 348 300 48 77.2 3,547 2,739 808 77.2 3,335 2,573 762 79.3 1,140 896 244 78.6 1,062 850 212 70.3 424 411 13 96.9 378 362 16 81.2 555 443 303 109 80.	Cardiff and Vale UHB	5,693	5,106	587	89.7	2,925	2,604	321	89.0	2,768	2,502	266	90.4
89.1 2,140 1,901 239 88.8 2,054 1,836 218 92.0 1,794 1,664 130 92.8 1,730 1,577 153 92.0 1,794 1,664 130 92.8 1,730 1,577 153 93.1 1,400 1,312 88 93.7 1,382 1,277 105 93.1 1,400 1,312 88 93.7 1,382 1,277 105 87.9 394 352 42 808 77.2 3,335 2,573 762 70.3 1,140 896 244 77.2 3,335 2,573 762 79.3 1,140 896 244 78.6 1,062 850 212 96.4 424 411 13 96.9 378 362 16 73.9 443 332 111 74.9 439 320 119 66.1 988 573 <th< td=""><td>The Vale of Glamorgan</td><td>1,499</td><td>1,369</td><td>130</td><td>91.3</td><td>785</td><td>703</td><td>82</td><td>89.6</td><td>714</td><td>666</td><td>48</td><td>93.3</td></th<>	The Vale of Glamorgan	1,499	1,369	130	91.3	785	703	82	89.6	714	666	48	93.3
92.0 1,794 1,664 130 92.8 1,730 1,577 153 93.1 1,400 1,312 88 93.7 1,382 1,277 105 93.1 1,400 1,312 88 93.7 1,382 1,277 105 87.9 394 352 42 88 93.7 1,382 1,05 77.2 3,547 2,739 808 77.2 3,335 2,573 762 79.3 1,140 896 244 78.6 1,062 850 212 96.4 424 411 13 96.9 378 362 16 81.2 552 443 109 80.3 508 418 90 73.9 443 332 111 74.9 439 320 119 66.1 988 657 331 66.5 948 623 119	Cardiff	4,194	3,737	457	89.1	2,140	1,901	239	88.8	2,054	1,836	218	89.4
93.1 1,400 1,312 88 93.7 1,382 1,277 105 87.9 394 352 42 89.3 348 300 48 77.2 3,547 2,739 808 77.2 3,335 2,573 762 70.3 1,140 896 244 78.6 1,062 850 212 96.4 424 411 13 96.9 378 362 16 81.2 552 443 109 80.3 508 418 90 73.9 443 332 111 74.9 439 320 119 66.1 988 657 331 66.5 948 623 325	Cwm Taf UHB	3,524	3,241	283	92.0	1,794	1,664	130	92.8	1,730	1,577	153	91.2
87.9 394 352 42 89.3 348 300 48 77.2 3,547 2,739 808 77.2 3,335 2,573 762 79.3 1,140 896 244 78.6 1,062 850 212 96.4 424 411 13 96.9 378 362 16 81.2 552 443 109 80.3 508 418 90 73.9 443 332 111 74.9 439 320 119 66.1 988 65.5 331 66.5 948 623 325	Rhondda Cynon Taf	2,782	2,589	193	93.1	1,400	1,312	88	93.7	1,382	1,277	105	92.4
77.2 3,547 2,739 808 77.2 3,335 2,573 762 79.3 1,140 896 244 78.6 1,062 850 212 96.4 424 411 13 96.9 378 362 16 81.2 552 443 109 80.3 508 418 90 73.9 443 332 111 74.9 439 320 119 66.1 988 657 331 66.5 948 623 320 119	Merthyr Tydfil	742	652	06	87.9	394	352	42	89.3	348	300	48	86.2
79.3 1,140 896 244 78.6 1,062 850 212 96.4 424 411 13 96.9 378 362 16 96.4 424 411 13 96.9 378 362 16 81.2 552 443 109 80.3 508 418 90 73.9 443 332 111 74.9 439 320 119 66.1 988 657 331 66.5 948 623 325	Aneurn Bevan UHB	6,882	5,312	1,570	27.2	3,547	2,739	808	77.2	3,335	2,573	762	2.77
96.4 424 411 13 96.9 378 362 16 81.2 552 443 109 80.3 508 418 90 73.9 443 332 111 74.9 439 320 119 66.1 988 657 331 66.5 948 623 325	Caerphilly	2,202	1,746	456	79.3	1,140	896	244	78.6	1,062	850	212	80.0
81.2 552 443 109 80.3 508 418 90 73.9 443 332 111 74.9 439 320 119 66.1 988 657 331 66.5 948 623 325	Blaenau Gwent	802	773	29	96.4	424	411	13	96.9	378	362	16	95.8
73.9 443 332 111 74.9 439 320 119 66.1 988 657 331 66.5 948 623 325	Torfaen	1,060	861	199	81.2	552	443	109	80.3	508	418	06	82.3
66.1 988 657 331 66.5 948 623 325	Monmouthshire	882	652	230	73.9	443	332	111	74.9	439	320	119	72.9
	Newport	1,936	1,280	656		988	657	331	66.5	948	623	325	65.7

§ Produced by Public Health Wales Observatory, using CMP data (NWIS), WIMD 2011 (WG)

Key data from the Child Measurement Programme for Wales^{**}, children aged 4 to 5 years, 2012/2013

Intentional Intentivational Convergint Intentivational Convergint																			
	All Children	Heal ur	thy we	eight or eight	Overw		or obese	ŋ	derwe	eight	Неа	lthy we	ight	Overv	/eight r	not obese		Obes	a
1.1577.18(3.13)(3.6)(1111)(3.6		c	%	(95% Cl) ¹	2	%	(95% CI) ¹	2		(95 % CI) ¹	c	%	(95% CI) ¹	2	%	(95% Cl) ¹	c	%	(95% CI) ¹
protectifie 3396 774 6784/31 691 136 132 132 132 132 132 132 132 133	Wales	21,579	73.8		7,659	26.2	(25.7,26.7)	179	0.6	(0.5,0.7)	21,400	73.2	(72.7,73.7)	4,343	14.9	(14.5,15.3)	3,316	11.3	(11.0,11.7)
The form we can be approximate the set of the se	Least deprived fifth	3,999	78.6		1,089	21.4	(20.3,22.6)	33	0.6	(0.5,0.9)	3,966	77.9	(76.8,79.1)	691	13.6	(12.7,14.5)	398	7.8	(7.1,8.6)
Openedici 419 710 710 710 724 712.732 850 143 751 752.4 712.732 850 143 751 753.4 713 751 753.4 713.9 753 753 751 753 751 753 751 753 <td>Next least deprived</td> <td>3,739</td> <td>74.9</td> <td></td> <td>1,250</td> <td>25.1</td> <td>(23.9,26.3)</td> <td>29</td> <td>0.6</td> <td>(0.4,0.8)</td> <td>3,710</td> <td>74.4</td> <td>(73.1,75.6)</td> <td>708</td> <td>14.2</td> <td>(13.3,15.2)</td> <td>542</td> <td>10.9</td> <td>(10.0,11.8)</td>	Next least deprived	3,739	74.9		1,250	25.1	(23.9,26.3)	29	0.6	(0.4,0.8)	3,710	74.4	(73.1,75.6)	708	14.2	(13.3,15.2)	542	10.9	(10.0,11.8)
chell 4.23 7.2<	Middle deprived	4,150	73.6		1,487	26.4	(25.2,27.5)	27	0.5	(0.3,0.7)	4,123	73.1	(72.0,74.3)	836	14.8	(13.9,15.8)	651	11.5	(10.7,12.4)
powelith 5.23 706 69.67/16 7.19 2.19 7.54 7.10 7.54 7.10 7.54 7.10 7.54 7.10 7.54 7.10 7.54 7.10 7.54 7.10 7.54 7.10 7.54 7.10 7.54 7.10 7.54 7.11 1.11	Next most deprived	4,428	72.9		1,643	27.1	(26.0,28.2)	35	0.6	(0.4,0.8)	4,393	72.4	(71.2,73.5)	929	15.3	(14.4,16.2)	714	11.8	(11.0,12.6)
dwelled (UI)4/36366/32326/22/34/31/102646/326/32/326/326/32/326/326/32/326/326/32/326/326/32/326/326/32/326/326/32/326/3	Most deprived fifth	5,263	70.6	-	2,190	29.4	(28.4, 30.4)	55	0.7	(0.6,1.0)	5,208	69.9	(68.8,70.9)	1,179	15.8	(15.0,16.7)	1,011	13.6	(12.8,14.4)
ngleey S07 735 70.1/46 183 265 23.43.90 7<	Betsi Cadwaladr UHB	4,765	73.6		1,710	26.4	~	24	0.4	(0.2,0.6)	4,741	73.2	(72.1,74.3)	1,034	16.0	(15.1,16.9)	676	10.4	(9.7,11.2)
d 707 703 $67, 73, 73, 73, 73, 73, 73, 73, 73, 73, 7$	Isle of Anglesey	507	73.5		183	26.5	Ŭ	,	ı		ı	I		111	16.1	(13.5,19.0)	72	10.4	(8.4,12.9)
interp interp< interp< interp< interp< interp< interp<	Gwynedd	707	70.3		299	29.7	(27.0,32.6)	ı	ı		'	I		176	17.5	(15.3,20.0)	123	12.2	(10.3,14.4)
shife 558 70 673-73 223 234 713 133 031,160 133 031,160 133 031,160 133 031,160 133 031,160 133 031,160 133 031	Conwy	808	75.7		259	24.3	~	,	ı		·	I		173	16.2	(14.1,18.5)	86	8.1	(6.6,9.8)
10.05 74.7 74.7 57.2 72.3 72.3 72.7	Denbighshire	658	70.9		270	29.1	\sim		ı	·	'	I		153	16.5	(14.2,19.0)	117	12.6	(10.6,14.9)
n 1029 751 72.773 342 249 22.773 342 249 22.776 204 149 1169 133 10.16 10.16 <td>Flintshire</td> <td>1,056</td> <td>74.7</td> <td>-</td> <td>357</td> <td>25.3</td> <td>~</td> <td>7</td> <td>0.5</td> <td>(0.2,1.0)</td> <td>1,049</td> <td>74.2</td> <td>(71.9,76.5)</td> <td>217</td> <td>15.4</td> <td>(13.6,17.3)</td> <td>140</td> <td>9.9</td> <td>(8.5,11.6)</td>	Flintshire	1,056	74.7	-	357	25.3	~	7	0.5	(0.2,1.0)	1,049	74.2	(71.9,76.5)	217	15.4	(13.6,17.3)	140	9.9	(8.5,11.6)
HB 410 768 73.0 73.0 73.0 73.0 73.0 73.1 73.0 73.1 73.	Wrexham	1,029	75.1		342	24.9	~	9	0.4	(0.2,1.0)	1,023	74.6	(72.2,76.8)	204	14.9	(13.1,16.9)	138	10.1	(8.6,11.8)
Dad UHB245273673673673573673574735716716<	Powys THB	410	76.8		124	23.2	(19.8,27.0)	Ŋ	0.9	(0.4,2.2)	405	75.8	(72.0,79.3)	71	13.3	(10.7,16.4)	53	9.9	(7.7,12.8)
on 435 77,4 (73,8,0.7) 127 226 (19,3,6.2.6.2) - - - - - 7 737 (11,1,6.8) 50 821 excline 815 72.8 (70,2.75.4) 304 27.2 (25,1,2.9.4) 7 0.4 (0.2.0) 1,195 72.3 (11,1,6.8) 50 153 (14,6.18.1) 181 17.1 henshine 1,202 72.8 (70,5.4) 304 27.2 (25,1.7.4) 29 60 11.0 1 1940 71.1 237 26 (23,2.3.2.8) 29 0.6 0.4 3.797 72.5 (13,1,7.3) 131 </td <td>Hywel Dda UHB</td> <td>2,452</td> <td>73.6</td> <td></td> <td>881</td> <td>26.4</td> <td>~</td> <td>13</td> <td>0.4</td> <td>(0.2,0.7)</td> <td>2,439</td> <td>73.2</td> <td>(71.6,74.7)</td> <td>515</td> <td>15.5</td> <td>(14.3,16.7)</td> <td>366</td> <td>11.0</td> <td>(10.0,12.1)</td>	Hywel Dda UHB	2,452	73.6		881	26.4	~	13	0.4	(0.2,0.7)	2,439	73.2	(71.6,74.7)	515	15.5	(14.3,16.7)	366	11.0	(10.0,12.1)
eshine8157.28(70.2/54)30427.2(24.6.28)111 <th< td=""><td>Ceredigion</td><td>435</td><td>77.4</td><td></td><td>127</td><td>22.6</td><td>~</td><td>ı</td><td>·</td><td>ı</td><td>ı</td><td>ı</td><td>ı</td><td>77</td><td>13.7</td><td>(11.1,16.8)</td><td>50</td><td>8.9</td><td>(6.8,11.5)</td></th<>	Ceredigion	435	77.4		127	22.6	~	ı	·	ı	ı	ı	ı	77	13.7	(11.1,16.8)	50	8.9	(6.8,11.5)
henchike $1,202$ $72,8$ $70.6,749$ 450 27.1 $251,12,94$ 7 0.4 $(0.20,9)$ $1,195$ 72.5 $(70.1,74,4)$ 269 $(5.4,16,3)$ 101 111 101 HS3326731 $(118,742)$ 1411 26.9 $232,823,22.9$ 26. $(0.40,8)$ 3.797 72.5 $(713,737)$ 802 15.3 $(44,16,3)$ 609 11.6 $1,840$ 741 $(72,375.8)$ 643 259 $(24,277,7)$ 21 0.8 $0.61,3)$ $1,849$ 72.5 $(15,74,6)$ 158 11.7 (0.9) 371 1840 741 $(72,375.8)$ 542 $(22,22,249)$ 57 $1,11$ 0.25 16.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 11.7 $(12,71,6,4)$ 158 $(12,71,6,4)$ 158 $(12,71,6,4)$ 158 $(12,71,6,4)$ 128 $(12,71,6,4)$ 128 $(12,71,6,4)$ 128 $(12,71,6,4)$ 128 $(12,71,6,4)$ 128 $(12,71,6,4)$ 128 $(12,71,6,4)$ 128 $(12,71,6,4)$ 128 $(12,71,6,4)$ 128 $(12,71,6,4)$ 128 $(12,71,7,6)$ $(12,71,7,6)$ $(12,71,7,6)$	Pembrokeshire	815	72.8		304	27.2	\sim	ı	ı	ı	ı	ı	,	169	15.1	(13.1,17.3)	135	12.1	(10.3,14.1)
HB $3,826$ 73.1 $(1,8,4/2)$ $1,411$ 26.9 $25,8,28,2$ 29 0.6 $(0,408)$ $3,797$ 72.5 $(13,373)$ 802 55.3 $(14,416.3)$ 609 11.6 3771 $1,840$ 741 $(72,3758)$ 643 25.9 $242,277$ 21 0.8 $0.64,33$ 73.3 $(71,5,76.0)$ 372 51.6 $(13,616.4)$ 271 10.9 3711 998 73.9 $(71,5,761)$ 353 261 $(23,9,285)$ 2.1 0.8 $(0.61,3)$ $1,819$ 73.3 $(71,5,76.0)$ 372 51.6 $(13,616.4)$ 271 10.9 3701 388 73.9 $(71,5,761)$ 373 $715,760$ 373 $715,760$ 373 $716,763$ 609 117.7 3001 206 $(27,12)$ 415 206 $(27,12)$ 415 206 $(24,10)$ $72,72$ $749,794$ 177 $129,613.49$ 271 10.7 3016 $77,9$ $732,724$ 232 $201,774$ 323 $221,222.7$ $420,723.7$ $720,726,739$ 508 13.6 $(12,1,49,128)$ 126 0.2 3016 $1,966$ $77,9$ $733,724$ 902 $271,72$ $749,794$ 177 $129,613.49$ 271 100 2820 $73,724$ 232 $220,224.9$ 271 002 $606,11.77$ $274,772$ $749,763$ 602 $13.6,764.763$ 102 $1011111111111111111111111111111111111$	Carmarthenshire	1,202	72.8	Ŭ	450	27.2	\sim	7	0.4	(0.2,0.9)	1,195	72.3	(70.1,74.4)	269	16.3	(14.6,18.1)	181	11.0	(9.5,12.6)
31,84074.1 $(7.3.758)$ 64325.9 $(2.2.2.7.7)$ 210.8 $(0.61.3)$ 1,81973.3 $(71.5,76.0)$ 37.215.0 $(13.6,16.4)$ 27.110.9371713717171717171717171717137171717171717171717171717171713717171717171717171717171717171375.175.175.175.175.175.175.174.175.174.172.1717171375.175.375.375.375.375.375.375.375.375.375.375.375.375.3375.175.175.175.175.175.277.277.274.0.75.375.375.475.475.475.4375.175.175.275.277.277.277.274.2.74.375.475.475.475.4375.175.275.375.2 <td>ABM UHB</td> <td>3,826</td> <td>73.1</td> <td></td> <td>1,411</td> <td>26.9</td> <td>~</td> <td>29</td> <td>0.6</td> <td>(0.4,0.8)</td> <td>3,797</td> <td>72.5</td> <td>(71.3,73.7)</td> <td>802</td> <td>15.3</td> <td>(14.4,16.3)</td> <td>609</td> <td>11.6</td> <td>(10.8,12.5)</td>	ABM UHB	3,826	73.1		1,411	26.9	~	29	0.6	(0.4,0.8)	3,797	72.5	(71.3,73.7)	802	15.3	(14.4,16.3)	609	11.6	(10.8,12.5)
ort Talbot9873.9 $(1.5,7.6.1)$ 35326.1 $(3.3.9,2.8.5)$ \cdot <td>Swansea</td> <td>1,840</td> <td>74.1</td> <td></td> <td>643</td> <td>25.9</td> <td>~</td> <td>21</td> <td>0.8</td> <td>(0.6,1.3)</td> <td>1,819</td> <td>73.3</td> <td>(71.5,75.0)</td> <td>372</td> <td>15.0</td> <td>(13.6,16.4)</td> <td>271</td> <td>10.9</td> <td>(9.7,12.2)</td>	Swansea	1,840	74.1		643	25.9	~	21	0.8	(0.6,1.3)	1,819	73.3	(71.5,75.0)	372	15.0	(13.6,16.4)	271	10.9	(9.7,12.2)
J98870.4(88.0.72.8)41529.6 $(7.2,32.0)$ \cdot	Neath Port Talbot	998	73.9		353	26.1	(23.9,28.5)		ı	ı	'	ı	ı	195	14.4	(12.7,16.4)	158	11.7	(10.1,13.5)
and Vale UHB3.89576.3 $(75.1,77.4)$ $1,211$ 23.7 $(22.6,24.9)$ 57 $1,1$ $(0.9,1.4)$ $3,838$ 75.2 $(74.0,76.3)$ 685 13.4 $(12.5,14.4)$ 526 10.3 $(0.61 diamorgan1,06677.9(75.6,80.0)30322.1(20.0,24.4)90.7(0.3,1.2)1,05777.2(74.9,79.4)17712.9(11.3,14.8)1269.22,82975.7(74.3,77.1)90824.3(22.0,224.4)90.7(0.3,1.2)1,05777.2(74.9,79.4)17712.911.3.4.81269.22,82975.7(74.3,77.1)90824.321.20.4,1.01,84971.4(73.0,75.8)50813.5(14.0,16.5)45213.310.73,20013672.060.2,72.490.4,20.02,27470.2(66.6,71.7)49417.5(14.0,16.5)45213.310.73,20013671.4(72.0,75.8)50871.4(73.0,75.8)50814.7(14.8,20.6)10716.43,20166162.72.492026.32.98150.60.41.01,84971.472.666.6,71.749217.714.714.714.714.714.412.611.91,0101,86471.4$	Bridgend	988	70.4	-	415	29.6	(27.2,32.0)	ı	ı		I	ı	ı	235	16.7	(14.9,18.8)	180	12.8	(11.2,14.7)
of Glamorgan1,06677.2(75,680.0)30322.1(200,24.4)90.7(0.3.1.2)1,05777.2(74,9.79.4)17712.9(113,14.8)1269.22,82975.7(74.3.77.1)90824.3(22.9.25.7)481.3(10,1.7)2,78174.4(730,75.8)50813.6(12,14.7)40010.7f UHB2,29570.8(69.2.72.4)94629.2(27.6.30.8)210.6(0.4,1.0)1,84971.4(730,75.8)50813.5(140,16.5)45213.3(10f UHB2,29570.8(69.2.72.4)94629.2(27.6.30.8)210.6(0.4,1.0)1,84971.4(730,75.8)50813.5(134,16.1)34513.3(10f UHB2,29570.8(69.2.72.4)94629.2(27.6.30.8)210.6(0.4,1.0)1,84971.4(730,75.8)50813.5(134,16.1)34513.3(1010.7f UHB2,93674.1(70.2,37.7)72.226.4.69622.133.9(30.4.37.6)74.2(69.6.7.7)49417.5(16.4,67.7)34513.3(16.4,67.7)f UHB3,93674.1(12.9,73.1)33026.226.4.90621.33026.4.69622.713.410.716.417.916.417.916.417.916.417.916.417.916.417.916.417.916.4<	Cardiff and Vale UHB	3,895	76.3		1,211	23.7	(22.6,24.9)	57	1.1	(0.9,1.4)	3,838	75.2	(74.0,76.3)	685	13.4	(12.5,14.4)	526	10.3	(9.5,11.2)
2,829 75.7 $(74.3,77.1)$ 908 24.3 $(22.9,25.7)$ 48 1.3 $(1.0,1.7)$ $2,781$ 74.4 $(73.0,75.8)$ 508 13.6 $(12.7,14.7)$ 400 10.7 fUHB $2,295$ 70.8 $(69.2,72.4)$ 946 29.2 $(276,30.8)$ 21 0.6 $(0.4,1.0)$ $1,849$ 71.4 494 15.2 $(14.0,16.5)$ 452 13.3 13.46 13.2 13.46 13.2 13.46 13.2 13.46 13.2 13.46 13.2 13.46 13.2 13.46 13.2 13.46 13.2 13.46 13.2 13.24 13.2 13.24 <th< td=""><td>The Vale of Glamorgan</td><td>1,066</td><td>77.9</td><td></td><td>303</td><td>22.1</td><td>(20.0,24.4)</td><td>6</td><td>0.7</td><td>(0.3,1.2)</td><td>1,057</td><td>77.2</td><td>(74.9,79.4)</td><td>177</td><td>12.9</td><td>(11.3,14.8)</td><td>126</td><td>9.2</td><td>(7.8,10.9)</td></th<>	The Vale of Glamorgan	1,066	77.9		303	22.1	(20.0,24.4)	6	0.7	(0.3,1.2)	1,057	77.2	(74.9,79.4)	177	12.9	(11.3,14.8)	126	9.2	(7.8,10.9)
f UHB $2,295$ 70.8 $(692,772.4)$ 946 22.7 $(27,5,30.8)$ 21 0.6 $(0.4,1.0)$ $2,274$ 70.2 $(68.6,71.7)$ 494 15.2 $(14,0,16.5)$ 452 13.3 13.3 a Cynon Taf $1,864$ 72.0 $(70.2,73.7)$ 725 28.0 $(26.3,29.8)$ 15 0.6 $(0.4,1.0)$ $1,849$ 71.4 $(69.6,73.1)$ 380 14.7 $(13.4,16.1)$ 345 13.3 13.3 a Cynon Taf 431 66.1 $(62.4,69.6)$ 221 33.9 $(24,2.0)$ 425 65.2 $(61.4,68.7)$ 114 17.5 $(14,0,16.9)$ 345 13.3 13.3 a Cynon Taf 431 66.1 $(72.2,753)$ $1,376$ 28.0 $26.3,29.8)$ 15 $0.4,1.0$ $1,849$ 71.4 $(69.6,73.1)$ 349 17.5 $(14,0,16.9)$ 345 13.3 a Cynon Taf 431 66.1 $(72.2,753)$ $1,376$ 28.0 $26.4,30.6)$ 9 $0.4,2.0)$ 425 65.2 $(61.4,68.7)$ 110 17.4 <	Cardiff	2,829	75.7		908	24.3	-	48	1.3	(1.0,1.7)	2,781	74.4	(73.0,75.8)	508	13.6	(12.5,14.7)	400	10.7	(9.8,11.7)
a Cynon Taf1,86472.0(70.2.73.7)72528.0(26.3.29.8)150.6 $(0.4,1.0)$ 1,84971.4 $(69.6,73.1)$ 38014.7 $(13.4,16.1)$ 34513.3Tydfil43166.1(62.4,69.6)22133.9 $(30.4,37.6)$ 60.9 $(0.4,2.0)$ 42565.2 $(61.4,68.7)$ 11417.5 $(13.4,16.1)$ 34513.3Bevan UHB3,93674.1 $(72.9,75.3)$ 1,37625.9 $(24.7,27.1)$ 300.6 $(0.4,0.8)$ 3,90673.5 $(72.3,74.7)$ 74214.0 $(13.1,149)$ 63411.9 $(6.4, 11.6)$ Bevan UHB3,93671.5 $(69.4,73.6)$ 49728.5 $(26.4,30.6)$ 90.6 $(0.4,0.8)$ 3,90673.5 $(72.3,74.7)$ 74214.0 $(13.1,149)$ 63411.9 $(6.4, 11.6)$ Bevan UHB3,93671.5 $(69.4,73.6)$ 49728.5 $(26.4,30.6)$ 90.5 $(0.3,1.0)$ $1,240$ 71.0 $(68.8,73.1)$ 240 $(13.1,149)$ 63411.9 $(7.2,67.8)$ 13.5 $(11.6,716.8)$ 23513.5 $(11.6,716.8)$ 23513.5 $(11.6,716.8)$ 23513.5 $(11.6,716.8)$ 23513.5 $(11.6,716.8)$ 23513.5 $(11.6,716.8)$ 23513.5 $(11.6,716.8)$ 23513.5 $(11.6,716.8)$ 23513.5 $(11.6,716.8)$ 23513.6 $(11.6,716.8)$ 23513.6 $(11.6,716.8)$ 24923.5 $(11.6,716.8)$	Cwm Taf UHB	2,295	70.8		946	29.2	-	21	0.6	(0.4,1.0)	2,274	70.2	(68.6,71.7)	494	15.2	(14.0,16.5)	452	13.9	(12.8,15.2)
Tydfil 431 66.1 $62.4,69.6$ 221 33.9 $30.4,37.6$ 6 $0.4,2.0$ 425 65.2 $61.4,68.7$ 114 17.5 $(14.8,20.6)$ 107 16.4 1 Bevan UHB $3,936$ 74.1 $(72.9,75.3)$ $1,376$ 25.9 $(24.7,27.1)$ 30 0.6 $(0.4,0.8)$ $3,906$ 73.5 $(72.3,74.7)$ 742 14.0 $(13.1,14.9)$ 634 11.9 16.4 $1/2$ $1,249$ 71.5 $(69.4,73.6)$ 497 28.5 $(26.4,30.6)$ 9 0.5 $(0.3,1.0)$ $1,240$ 71.0 $(68.8,73.1)$ 262 15.0 $(13.1,14.9)$ 634 11.9 6 $1/2$ 71.5 $(69.4,73.6)$ 29 22.5 $26.4,30.6)$ 9 0.5 $(0.3,1.0)$ $1,240$ 71.0 $68.8,73.1$ 222 13.4 10.4 13.5 1	Rhondda Cynon Taf	1,864	72.0		725	28.0	Ŭ	15	0.6	(0.4,1.0)	1,849	71.4	(69.6,73.1)	380	14.7	(13.4,16.1)	345	13.3	(12.1,14.7)
Ibevan UHB 3,936 74.1 (72.9,75.3) 1,376 25.9 (24.7,27.1) 30 0.6 (0.4,0.8) 3,906 73.5 (72.3,74.7) 742 14.0 (13.1,14.9) 634 11.9 (ly 1,249 71.5 (69.4,73.6) 497 28.5 (26.4,30.6) 9 0.5 (0.3,1.0) 1,240 71.0 (68.8,73.1) 262 15.0 (13.4,16.8) 235 13.5 (Gwent 555 71.8 (68.5,74.9) 218 28.2 (25.1,31.5) - - - 114 14.7 (12.4,17.4) 104 13.5 (13.6 11.0 (13.6 11.0 (13.4 104 13.5 (13.6 11.0 (13.4 104 13.5 (13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.	Merthyr Tydfil	431	66.1		221	33.9	Ŭ	9	0.9	(0.4,2.0)	425	65.2	(61.4,68.7)	114	17.5	(14.8,20.6)	107	16.4	(13.8,19.4)
I/2 I	Aneurin Bevan UHB	3,936	74.1		1,376	25.9	-	30	0.6	(0.4,0.8)	3,906	73.5	(72.3,74.7)	742	14.0	(13.1,14.9)	634	11.9	(11.1,12.8)
Gwent 555 71.8 (88.5,74.9) 218 28.2 (25.1,31.5) - - - - 114 14.7 (12.4,17.4) 104 13.5 652 75.7 72.8,78.5) 209 24.3 (21.5,27.2) - - - 114 13.2 (11.1,15.7) 95 11.0 uthshire 518 79.4 (76.2,82.4) 134 20.6 (17.6,23.8) - - - - 114 13.2 (11.1,15.7) 95 11.0 uthshire 518 79.4 (76.2,82.4) 134 20.6 (17.6,23.8) - - - - 85 13.0 (10.7,15.8) 49 7.5 t 962 75.2 (72.7,77.4) 318 24.8 (22.6,27.3) 11 0.9 0.5,1.5) 951 74.3 (71.8,76.6) 167 13.0 (11.3,15.0) 151 11.8	Caerphilly	1,249	71.5		497	28.5	Ŭ	6	0.5	(0.3,1.0)	1,240	71.0	(68.8,73.1)	262	15.0	(13.4,16.8)	235		(11.9,15.1)
652 75.7 (72.8,78.5) 209 24.3 (21.5,27.2) - - - - 114 13.2 (11.1,15.7) 95 11.0 uthshire 518 79.4 (76.2,82.4) 134 20.6 (17.6,23.8) - - - - 85 13.0 (10.7,15.8) 49 7.5 t 962 75.2 (72.7,77.4) 318 24.8 (22.6,27.3) 11 0.9 (0.5,1.5) 951 74.3 (71.8,76.6) 167 13.0 (11.3,15.0) 151 11.8	Blaenau Gwent	555	71.8		218	28.2		'	ı	ı	'	I	ı	114	14.7	(12.4,17.4)	104	13.5	(11.2,16.0)
518 79.4 (76.2,82.4) 134 20.6 (17.6,23.8) 85 13.0 (10.7,15.8) 49 7.5 962 75.2 (72.7,77.4) 318 24.8 (22.6,27.3) 11 0.9 (0.5,1.5) 951 74.3 (71.8,76.6) 167 13.0 (11.3,15.0) 151 11.8	Torfaen	652	75.7		209	24.3		ı	ı		I	I		114	13.2	(11.1,15.7)	95	11.0	(9.1,13.3)
962 75.2 (72.7,77.4) 318 24.8 (22.6,27.3) 11 0.9 (0.5,1.5) 951 74.3 (71.8,76.6) 167 13.0 (11.3,15.0) 151 11.8	Monmouthshire	518	79.4		134	20.6			ı		'	I		85	13.0	(10.7,15.8)	49		(5.7,9.8)
	Newport	962	75.2		318	24.8		11	0.9	(0.5,1.5)	951	74.3	(71.8,76.6)	167	13.0	(11.3,15.0)	151	11.8	(10.1,13.7)

Key data from the Child Measurement Programme for Wales⁺⁺, boys aged 4 to 5 years, 2012/2013

n k bsscq k	Boys	Healt un	althy weight underweight	Healthy weight or underweight	Overweight		or obese	Und	Underweight	ght	Неа	Healthy weight	ight	Overw	eight n	Overweight not obese		Obese	a)
Outboard 123 725 725 73		5	%	%	2	%	(95% CI) ¹	2		35% CI) ¹	c	%	(95% CI) ¹	2	%	(95% CI) ¹	5	%	(95% CI) ¹
protectifie 2.08 7.14 7.2.78 9.68 7.13 7.23	Wales	10,900	73.2	(72.5,73.9)	3,991	26.8	(26.1,27.5)			0.6,0.9)	10,792	72.5	(71.8,73.2)	2,310	15.5		1,681	11.3	(10.8,11.8)
ethologe 133 373 77.17.3 665 262 54.14.37.3 66 54.34.37.3 67.34.37.3 67.34.47.3 67.34.47.3 67.34.47.3 67.34.47.3 67.34.47.3 67.34.47.3 67.34.33.3 67.34.37.3.3 67.34.37.3 67.34.37.3.3	Least deprived fifth	2,018	78.1	(76.5,79.7)	565	21.9	(20.3,23.5)			0.5,1.2)	1,998	77.4	(75.7,78.9)	366	14.2	(12.9,15.6)	199	7.7	(6.7,8.8)
epiened 210 32 71 75 66 65 63 73 71 73 71 74 75 74 75 74 75 74 75 74 75 74 75 74 75 74 75 <	Next least deprived	1,873	73.8	(72.1,75.5)	665	26.2	(24.5,27.9)			0.5,1.2)	1,854	73.0	(71.3,74.7)	388	15.3	(13.9,16.7)	277	10.9	(9.8,12.2)
Circlepticed2.2227.242(76.3.7.4)(1.527.56(56.2.9.2)2.07.07.07.37.5	Middle deprived	2,104	73.4	(71.7,74.9)	764	26.6	(25.1,28.3)	11 (0.2,0.7)	2,093	73.0	(71.3,74.6)	442	15.4	(14.1,16.8)	322	11.2	(10.1,12.4)
powedittin 2.803 700 685.71.01 1.152 700 78.51.10 71.23	Next most deprived	2,222	72.4	(70.8,74.0)	845	27.6	(26.0,29.2)			0.4,1.0)	2,202	71.8	(70.2,73.4)	485	15.8	(14.6,17.1)	360	11.7	(10.6,12.9)
advalled UHS286727165.6.2.6.07165.6.2.6.07165.6.2.6.07165.7.6.0727275.9.16.9727275.9.16.97275adjecty23183073.168.3.7.7.786.3.7.7.7.786.3.7.7.7.7.7.786.3.	Most deprived fifth	2,683	70.0	(68.5,71.4)	1,152	30.0	(28.6,31.5)		-	0.7,1.4)	2,645	69.0	(67.5,70.4)	629	16.4	(15.3,17.6)	523	13.6	(12.6,14.8)
oplacey 243 723 (63.77) 89 268 (7.373) 89 268 (7.374) 89 268 (7.374) 89 268 (7.374) 89 268 (7.374) 89 268 (7.374) 89 268 (7.374) 89 268 (7.374) 89 751 (7.376) 39 751 (7.376) 39 751 (7.376) 39 751 (7.376) 39 751 768 76 <	Betsi Cadwaladr UHB	2,386	72.9	(71.4,74.4)	887	27.1	(25.6,28.6)			0.3,0.7)	2,372	72.5	(70.9,74.0)	563	17.2	(15.9,18.5)	324	9.9	(8.9,11.0)
Id 331 56 $(6,32,16)$ 165 32.0 $(2,4,17)$ 165 $(2,1,17)$ $(4,1,17)$	Isle of Anglesey	243	73.2	(68.2,77.7)	89	26.8	(22.3,31.8)	ı	,		ı	I		54	16.3	(12.7,20.6)	35	10.5	(7.7,14.3)
399551(71,73,76)132549 $21,43,73$ $24,71,73,76$ 132 $25,43,323$ 2 </th <td>Gwynedd</td> <td>351</td> <td>68.0</td> <td>(63.9,71.9)</td> <td>165</td> <td>32.0</td> <td>(28.1,36.1)</td> <td>ı</td> <td>·</td> <td></td> <td>ı</td> <td>I</td> <td></td> <td>104</td> <td>20.2</td> <td>(16.9,23.8)</td> <td>61</td> <td>11.8</td> <td>(9.3,14.9)</td>	Gwynedd	351	68.0	(63.9,71.9)	165	32.0	(28.1,36.1)	ı	·		ı	I		104	20.2	(16.9,23.8)	61	11.8	(9.3,14.9)
by by contained30070(66.5,7.40)14123325.4.3.4.3.511.51.51.71.4.2.1.3)551.71.4.2.1.3)551.7m5687.471.7.1.7.4.31.782.5.6.2.8.2.931121.71.60.1.3.6.1.91553.31.19m5687.47(7.1.37.43)1.782.5.6.2.8.291.72.5.72.0.3.111.71.60.1.3.6.1.912.31.19THB2087.437.337.27.0.37.127.0.47.137.37.47.1.71.60.1.4.8.33.31.18DauHB1.197.27.297.0.7.2.2.31.67.27.0.4.18.33.31.18DauHB1.197.27.297.297.277.297.37.37.37.37.3DauHB1.197.27.297.207.217.207.27.27.27.37.37.3DauHB1.197.27.207.207.27.207.27.37.37.37.37.37.37.3DauHB1.197.37.37.37.37.37.37.37.37.37.37.37.37.37.37.3DauHB1.197.3 <th< th=""><td>Conwy</td><td>399</td><td>75.1</td><td>(71.3,78.6)</td><td>132</td><td>24.9</td><td>(21.4,28.7)</td><td>ı</td><td>ŀ</td><td></td><td>'</td><td>I</td><td></td><td>93</td><td>17.5</td><td>(14.5,21.0)</td><td>39</td><td>7.3</td><td>(5.4,9.9)</td></th<>	Conwy	399	75.1	(71.3,78.6)	132	24.9	(21.4,28.7)	ı	ŀ		'	I		93	17.5	(14.5,21.0)	39	7.3	(5.4,9.9)
e54574471.1/7.4)18825672.6.2.8.3917160162(36,19.1)6231113THB5087471.3.7.3911225322.2.8.73133(13,17.3)113133(13,17.3)133(13,17.3)133(13,17.3)133(13,17.3)133(13,17.3)133(13,17.3)133(13,17.3)133(13,17.3)133(13,17.3)133(13,17.3)133(13,17.3)133(13,17.3)133 <td>Denbighshire</td> <td>340</td> <td>70.7</td> <td>(66.5,74.6)</td> <td>141</td> <td>29.3</td> <td>(25.4,33.5)</td> <td>ı</td> <td>ı</td> <td>·</td> <td>'</td> <td>ı</td> <td></td> <td>85</td> <td>17.7</td> <td>(14.5,21.3)</td> <td>56</td> <td>11.6</td> <td>(9.1,14.8)</td>	Denbighshire	340	70.7	(66.5,74.6)	141	29.3	(25.4,33.5)	ı	ı	·	'	ı		85	17.7	(14.5,21.3)	56	11.6	(9.1,14.8)
	Flintshire	545	74.4	(71.1,77.4)	188	25.6	(22.6,28.9)	ı		ı	'	ı	,	117	16.0	(13.5,18.8)	71	9.7	(7.8,12.0)
He208743(89.79.1)7225.7(20.31.7)1.52.07.1 <th7.1<< th=""><td>Wrexham</td><td>508</td><td>74.7</td><td>(71.3,77.8)</td><td>172</td><td>25.3</td><td>(22.2,28.7)</td><td>ı</td><td>ı</td><td></td><td>ı</td><td>ı</td><td></td><td>110</td><td>16.2</td><td>(13.6,19.1)</td><td>62</td><td>9.1</td><td>(7.2,11.5)</td></th7.1<<>	Wrexham	508	74.7	(71.3,77.8)	172	25.3	(22.2,28.7)	ı	ı		ı	ı		110	16.2	(13.6,19.1)	62	9.1	(7.2,11.5)
Dda UHB1,197.97.97.04.42.7.1($5.0,23.3$) c_1 $c_20.2$ $c_50.23.3$ $c_50.23.3$ $c_50.23.3$ $c_50.23.3$ $c_50.23.3$ $c_50.23.3$ $c_50.23.3$ $c_50.23.3$ $c_50.33.3$ $c_60.31.0$ $c_70.3$ $c_$	Powys THB	208	74.3	(68.9,79.1)	72	25.7	(20.9,31.1)	·	ı		·	I		39	13.9	(10.4,18.5)	33	11.8	(8.5,16.1)
ion 216 780 (72,782) 61 220 (17,272) 2 2 4 (10,11) 21 7 keshine 389 638 (55,373) 168 30.2 (55,431) 2 7 2 <th2< th=""> 2 2 <th2< th=""></th2<></th2<>	Hywel Dda UHB	1,195	72.9	(70.7,75.0)	444	27.1	(25.0,29.3)	ı	ı		ı	ı		275	16.8	(15.0,18.7)	169	10.3	(8.9,11.9)
keshire3869.8(65.9.73.5)16.830.2(55.3.41)1.391.73(14.3.206)77751213hhenshire59073370.1/6.2)21526.723.8.2.9.9)131.3917.3(14.8.200)769413 <td>Ceredigion</td> <td>216</td> <td>78.0</td> <td>(72.7,82.5)</td> <td>61</td> <td>22.0</td> <td>(17.5,27.3)</td> <td>ı</td> <td>,</td> <td>,</td> <td>ı</td> <td>ı</td> <td>ı</td> <td>40</td> <td>14.4</td> <td>(10.8,19.1)</td> <td>21</td> <td>7.6</td> <td>(5.0,11.3)</td>	Ceredigion	216	78.0	(72.7,82.5)	61	22.0	(17.5,27.3)	ı	,	,	ı	ı	ı	40	14.4	(10.8,19.1)	21	7.6	(5.0,11.3)
thenshife 590 73.3 (0.1,76.2) 215 (6.3.2.9.9) - - - 1	Pembrokeshire	389	69.8	(65.9,73.5)	168	30.2	(26.5,34.1)			ı	'	ı	ı	96	17.2	(14.3,20.6)	72	12.9	(10.4,16.0)
HB1,948724 $(70.6/340)$ 744725 $(60.2/34)$ 200.7 $(0.5,11)$ 1,92871.6 $(69.9/33)$ 4241.58 $(14.4/12)$ 320113a915739 $(14.4/53)$ 323261 $(237,286)$ 19152 $(13.3,173)$ 135109ort Tablot52372.7 $(69.4/59)$ 196 273 $(24,1306)$ 1191173 $(14.4,122)$ 320113ort Tablot51372.7 $(69.4/59)$ 196 273 $(24,1306)$ 15 $(24,340)$ 15 $(11,210)$ $1,227$ 109152 $(12,126)$ 98133and Vale UHB1,965755 $(73.8/730)$ 155229.26233815 $(11,210)$ $1,227$ 74.0 $(72.3/57)$ 36213314 (14) 745 $(73.8/730)$ 155229.26233815.5 $(11,120)$ $1,227$ 74.0 $(72.3/57)$ 36213314.4 (14) 745 $(73.8/730)$ 155229.26233815.5 $(11,120)$ $1,227$ 74.0 $(72.3/57)$ 2710.6 (14) 745 $(73.8/730)$ 35714.7 $(73.8/730)$ 35714.4 $(23.6/153)$ 2711.4 (14) 745 $(23.6/23)$ 14.10.8 $(24.9/29)$ 140.8 $(25.4/39)$ 17.617.4 (14) 13.8 $(23.6/13)$ <t< th=""><td>Carmarthenshire</td><td>590</td><td>73.3</td><td>(70.1,76.2)</td><td>215</td><td>26.7</td><td>(23.8,29.9)</td><td></td><td></td><td>ı</td><td>ı</td><td>'</td><td></td><td>139</td><td>17.3</td><td>(14.8,20.0)</td><td>76</td><td>9.4</td><td>(7.6,11.7)</td></t<>	Carmarthenshire	590	73.3	(70.1,76.2)	215	26.7	(23.8,29.9)			ı	ı	'		139	17.3	(14.8,20.0)	76	9.4	(7.6,11.7)
and915739 $(714,76.3)$ 323 561 $(337,286)$ $ 188$ 15.2 $(133,17.3)$ 135 100 ort Talbot523727 $(69,75.6)$ 196 273 $241,30.60$ $ 100$ 55.2 $(12,7,180)$ 87 121 oft Talbot523755 $(53,473.0)$ 265 30.6 $(27,434.0)$ $ 100$ 55.2 $(13,27,20.2)$ 98 133 and Vale UHB1,955755 $(73,771)$ 63924.5 $(23,92.5)$ 38 1.5 $(11,20)$ $1,927$ 740 $(72,757.7)$ 362 13.5 $(12,615.3)$ 277 10.6 and Vale UHB1,94718 $(93,753)$ 357 220.0 $(91,123.3)$ 1 1 0 1 <td< th=""><td>ABM UHB</td><td>1.948</td><td>72.4</td><td>(70.6.74.0)</td><td>744</td><td>27.6</td><td>(26.0.29.4)</td><td></td><td></td><td>0.5.1.1)</td><td>1.928</td><td>71.6</td><td>(69.9.73.3)</td><td>424</td><td>15.8</td><td>(14.4.17.2)</td><td>320</td><td>11.9</td><td>(10.7.13.2)</td></td<>	ABM UHB	1.948	72.4	(70.6.74.0)	744	27.6	(26.0.29.4)			0.5.1.1)	1.928	71.6	(69.9.73.3)	424	15.8	(14.4.17.2)	320	11.9	(10.7.13.2)
Ort Talbot52372.7(69.4.75.9)16627.3(24.1.30.6)7.17.17.2(12.7,18.0)871.2d51069.4(66.072.6)22530.6(7.4,34.0)77 <td>Swansea</td> <td>915</td> <td>73.9</td> <td>(71.4,76.3)</td> <td>323</td> <td>26.1</td> <td>(23.7,28.6)</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td>188</td> <td>15.2</td> <td>(13.3,17.3)</td> <td>135</td> <td>10.9</td> <td>(9.3,12.8)</td>	Swansea	915	73.9	(71.4,76.3)	323	26.1	(23.7,28.6)				-		-	188	15.2	(13.3,17.3)	135	10.9	(9.3,12.8)
d510694(66.0726)22530.6(77.4340)113621131313131313131313131331331333 </th <td>Neath Port Talbot</td> <td>523</td> <td>72.7</td> <td>(69.4,75.9)</td> <td>196</td> <td>27.3</td> <td>(24.1,30.6)</td> <td>,</td> <td>,</td> <td></td> <td>ı</td> <td>I</td> <td></td> <td>109</td> <td>15.2</td> <td>(12.7,18.0)</td> <td>87</td> <td>12.1</td> <td>(9.9,14.7)</td>	Neath Port Talbot	523	72.7	(69.4,75.9)	196	27.3	(24.1,30.6)	,	,		ı	I		109	15.2	(12.7,18.0)	87	12.1	(9.9,14.7)
and Vale UHB1.9657.5.(3.8,77.1)6.392.4.5(2.2,9.2.6.2)381.5(1.1,2.0)1,92774.0(72.3,75.7)36213.5(11.2,16.2)608.5e of Glamorgan5.4878.0(74,7,80.9)15522.0(19,1,25.3)22226831,41774.5(72.5,76.4)48425.5(236,13.9)22214,0(12.6,15.7)2171141,41774.5(72.5,76.4)48425.5(236,13.9)22214,012.6,15.7)2171141,41774.5(72.3,75.1)35723.2(19,1,25.3)222214,012.6,15.7)217114af UHB1,194718(695,73.9)47028.2(26,1,30.7)22214,012.6,15.7)217114af UHB1,19495572.8(70.3,75.1)327249,29.7)22214,012.6,15.7)217114af UHB1,19423667.873.2(24,92.97)222214,012.6,15.7)231139af UHB1,19423667.96088.770.968.770.968.770.968.770.970.970.970.970.970.970.970.970.970.970.970.970.970.970.970.970.97	Bridgend	510	69.4	(66.0,72.6)	225	30.6	(27.4,34.0)	·	ı	ı	ı	'	ı	127	17.3	(14.7,20.2)	98	13.3	(11.1,16.0)
e of Glamorgan 548 780 (74.7)809 155 22.0 (19.1,25.3) - - - - 95 13.5 (11.2,16.2) 60 85. 1,417 74.5 (72.5,76.4) 484 25.5 (23.6,27.5) - - - 0 14.0 (12.6,15.7) 217 11.4 af UHB 1,94 71.8 (69.5,73.9) 470 28.2 (26.1,30.5) 14 0.8 (05,1.4) 1,180 70.9 (68.7/73.0) 231 13.4 (13.6,15.7) 231 13.4 (13.6,15.7) 231 13.4 (13.6,15.7) 231 13.4 (13.6,15.7) 231 13.4 13.8 (12.6,15.7) 231 13.4 13.4 13.8 13.2 13.4 13.8 13.2 13.2 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.2 13.4 13.4 1	Cardiff and Vale UHB	1,965	75.5	(73.8,77.1)	639	24.5	(22.9,26.2)			1.1,2.0)	1,927	74.0	(72.3,75.7)	362	13.9	(12.6,15.3)	277	10.6	(9.5,11.9)
1,417 74.5 $(72.5,76.4)$ 484 25.5 $(23.6,27.5)$ $ 267$ 14.0 $(12.6,15.7)$ 217 11.4 af UHB $1,194$ 71.8 $(69.5,739)$ 470 28.2 $(26.1,30.5)$ 14 0.8 $(05,1.4)$ $1,180$ 70.9 $(68.7,730)$ 239 14.4 $(12.8,16.1)$ 231 13.9 a Cynon Taf 955 72.8 $(70.3,75.1)$ 357 27.2 $(24.929.7)$ $ 181$ 13.8 $(12.0,15.8)$ 176 13.4 Tydfil 239 67.9 $(68.7,72.6)$ 113 32.1 $(21.4,37.2)$ $ -$ <	The Vale of Glamorgan	548	78.0	(74.7,80.9)	155	22.0	(19.1,25.3)			ı	'	ı	ı	95	13.5	(11.2,16.2)	60	8.5	(6.7,10.8)
1,194 71.8 (695,739) 470 28.2 (26.1,30.5) 14 0.8 (0.5,1.4) 1,180 70.9 (68.7,73.0) 239 14.4 (12.8,16.1) 231 13.9 955 72.8 (70.3,75.1) 357 27.2 (24.9,29.7) - - - 181 13.8 (12.0,15.8) 176 13.4 239 67.9 (62.8,726) 113 32.1 (27.4,37.2) - - - 181 13.8 (12.0,15.8) 176 13.4 239 67.9 (62.8,726) 113 32.1 (27.4,37.2) - - - 58 16.5 (13.0,15.8) 176 13.4 230 73.2 (71.5,748) 732 26.8 (55.2,28.5) 11 0.4 (02,07) 1,993 72.8 (11.1,74.4) 408 14.9 (13.6,16.3) 11.9 625 69.8 (65.7,27) 271 30.2 27.333.33 - - - 153	Cardiff	1,417	74.5	(72.5,76.4)	484	25.5	(23.6,27.5)	ı	ī	·	I	ı		267	14.0	(12.6,15.7)	217	11.4	(10.1,12.9)
955 72.8 (70.3,75.1) 357 27.2 (24.9,29.7) - - - 181 13.8 (12.0,15.8) 176 13.4 239 67.9 (62.8,72.6) 113 32.1 (27.4,37.2) - - - - 58 16.5 (13.0,15.8) 176 13.4 239 67.9 (62.8,72.6) 113 32.1 (27.4,37.2) - - - 58 16.5 (13.0,10.9) 155 15.6 15.6 625 69.8 (66.7,72.7) 271 30.2 (27.3,333.3) - - - - 155 17.3 (15.0,19.9) 116 12.9 292 71.0 (66.5,72.7) 271 30.2 (27.3,333.5) - - - - 155 17.3 (15.0,19.9) 116 12.9 292 71.0 (66.5,72.7) 119 20.0 (24.8,33.5) - - - - 155 17.3 (15.0,	Cwm Taf UHB	1,194	71.8	(69.5,73.9)	470	28.2	(26.1,30.5)		-	0.5,1.4)	1,180	70.9	(68.7,73.0)	239	14.4	(12.8,16.1)	231	13.9	(12.3,15.6)
239 67.9 (62.8,72.6) 113 32.1 (27.4,37.2) - - - 5 16.5 (13.0,20.7) 55 15.6 UHB 2,004 73.2 (71.5,74.8) 735 26.8 (25.2,285.5) 11 0.4 (0.2,0.7) 1,993 72.8 (71.1,74.4) 408 14.9 (13.6,16.3) 327 11.9 625 69.8 (66.7,72.7) 271 30.2 (27.3,33.3) - - - - 155 17.3 (15.0,19.9) 116 12.9 6 2292 71.0 (66.5,75.2) 119 29.0 (24.8,33.5) - - - - - 155 17.3 (15.0,19.9) 116 12.9 6 13.6 13	Rhondda Cynon Taf	955	72.8	(70.3,75.1)	357	27.2	(24.9,29.7)	,	,	ı	ı	I		181	13.8	(12.0,15.8)	176	13.4	(11.7,15.4)
UHB 2,004 73.2 (71.5,74.8) 735 26.8 (55.2,28.5) 11 0.4 (02,0.7) 1,993 72.8 (71.1,74.4) 408 14.9 (13.6,16.3) 327 11.9 625 69.8 (66.7,72.7) 271 30.2 (27.3,33.3) - - - - 155 (15.0,19.9) 116 12.9 1 292 71.0 (66.5,75.2) 119 29.0 (248,33.5) - - - - 63 15.3 (12.2,19.1) 56 13.6 335 75.6 (71.4,79.4) 108 24.4 (20.6,28.6) - - - - 63 15.3 (10.5,16.8) 49 11.1 262 78.9 (74.2,83.0) 70 21.1 (17.0,25.8) - - - - - 49 11.1 262 74.6 (71.1,77.8) 167 25.4 (22.2,28.9) 6 0.4,2.0) 484 73.7	Merthyr Tydfil	239	67.9	(62.8,72.6)	113	32.1	(27.4,37.2)	ı	ī		I	ı		58	16.5	(13.0,20.7)	55	15.6	(12.2,19.8)
625 69.8 (66.7/7.2.7) 271 30.2 (27.3,33.3) - - - - 155 17.3 (15.0,19.9) 116 12.9 (292 71.0 (66.5,75.2) 119 29.0 (24.8,33.5) - - - - 63 15.3 (12.2,19.1) 56 13.6 (335 75.6 (71.4,79.4) 108 24.4 (20.6,28.6) - - - 59 13.3 (10.5,16.8) 49 11.1 262 78.9 (74.2,83.0) 70 21.1 (17.0,258) - - - - 42 12.7 (9.5,16.7) 28 8.4 490 74.6 (71.1,77.8) 167 25.4 (22.2,289) 6 0.9 (0.4,2.0) 484 73.7 (70.2,76.9) 89 13.5 (11.1,16.4) 78 11.9	Aneurin Bevan UHB	2,004	73.2	(71.5,74.8)	735	26.8	(25.2,28.5)	11 0	-	0.2,0.7)	1,993	72.8	(71.1,74.4)	408	14.9	(13.6,16.3)	327	11.9	(10.8,13.2)
292 71.0 (66.5,75.2) 119 29.0 (24.8,33.5) - - - - 63 15.3 (12.2,19.1) 56 13.6 (335 75.6 (71.4,79.4) 108 24.4 (20.6,28.6) - - - - 59 13.3 (10.5,16.8) 49 11.1 262 78.9 (74.2,83.0) 70 21.1 (17.0,25.8) - - - - 42 12.7 (9.5,16.7) 28 8.4 490 74.6 (71.1,77.8) 167 25.4 (22.2,28.9) 6 0.9 (0.4,2.0) 484 73.7 (70.2,76.9) 89 13.5 (11.1,16.4) 78 11.9	Caerphilly	625	69.8	(66.7,72.7)	271	30.2	(27.3,33.3)	ı	,	,	ı	I		155	17.3	(15.0,19.9)	116	12.9	(10.9,15.3)
335 75.6 (71.4,79.4) 108 24.4 (20.6,28.6) - - - - 59 13.3 (10.5,16.8) 49 11.1 262 78.9 (74.2,83.0) 70 21.1 (17.0,25.8) - - - 42 12.7 (9.5,16.7) 28 8.4 490 74.6 (71.1,77.8) 167 25.4 (22.2,28.9) 6 0.9 (0.4,2.0) 484 73.7 (70.2,76.9) 89 13.5 (11.1,16.4) 78 11.9	Blaenau Gwent	292	71.0	(66.5,75.2)	119	29.0	(24.8,33.5)		,	,	'	ı		63	15.3	(12.2,19.1)	56	13.6	(10.6,17.3)
262 78.9 (74.2,83.0) 70 21.1 (17.0,25.8) 42 12.7 (9.5,16.7) 28 8.4 490 74.6 (71.1,77.8) 167 25.4 (22.2,28.9) 6 0.9 (0.4,2.0) 484 73.7 (70.2,76.9) 89 13.5 (11.1,16.4) 78 11.9	Torfaen	335	75.6		108	24.4	(20.6,28.6)	·	,	ı	'	ı	ı	59	13.3	(10.5,16.8)	49	11.1	(8.5,14.3)
490 74.6 (71.1,77.8) 167 25.4 (22.2,28.9) 6 0.9 (0.4,2.0) 484 73.7 (70.2,76.9) 89 13.5 (11.1,16.4) 78 11.9	Monmouthshire	262	78.9		70	21.1	(17.0,25.8)	ı	ı	·	ı	I		42	12.7	(9.5,16.7)	28	8.4	(5.9,11.9)
	Newport	490	74.6		167	25.4	(22.2,28.9)			0.4,2.0)	484	73.7	(70.2,76.9)	89	13.5	(11.1,16.4)	78	11.9	(9.6,14.6)

Key data from the Child Measurement Programme for Wales, girls $^{\Diamond}$ aged 4 to 5 years, 2012/2013

(55% C)/ n % (95% C)/ n (24.9,26.3) 71 0.5 (0.4,0.6) 1,968 (19.4,22.6) 10 0.4 (0.3,0.9) 1,968 (24.5,27.8) 16 0.6 (0.4,0.9) 2,030 (24.5,27.8) 16 0.6 (0.4,0.9) 2,030 (24.5,27.8) 17 0.5 (0.3,0.8) 2,191 (27.2,302) 17 0.5 (0.3,0.8) 2,191 (24.5,278) 16 0.6 (0.4,0.9) 2,030 (24.5,273) 17 0.5 (0.3,0.8) 2,191 (25.2,322) 10 0.3 (0.2,0.6) 2,030 (21.6,28.4) - - - - (21.6,28.4) - - - - (16.0,25.9) - - - - (21.8,28.2) - - - - (16.0,25.9) - - - - (21.6,28.4) <td< th=""><th>% (95% Cl)¹ n 25.6 (24.9,26.3) 71 25.6 (24.9,26.3) 71 20.9 (19.4,22.6) 13 20.9 (19.4,22.6) 13 26.1 (24.5,27.8) 16 26.1 (24.5,27.8) 16 26.3 (27.2,30.2) 17 25.7 (24.2,27.2) 10 26.3 (27.3, 6.31.5) - 27.3 (23.6,31.5) - 28.7 (27.2,30.2) 10 26.3 (23.6,31.5) - 28.3 (23.6,31.5) - 28.9 (21.8,28.2) - 28.9 (21.8,28.2) - 28.9 (21.8,28.2) - 24.6 (21.6,25.9) - 20.5 (16.0,25.9) - 21.2 (28.28.4) - 23.2 (18.6,28.4) - 24.4 (21.6,25.9) - <tr td=""> - 2</tr></th><th></th><th>% (95% Cl)¹ 73.9 (73.2,74.7) 78.6 (76.9,80.1) 75.7 (74.0,77.4) 73.3 (71.6,74.9) 73.3 (71.6,74.9) 70.8 (69.3,72.3) 70.8 (69.3,72.3) 70.8 (72.4,75.5) 70 (72.4,75.5) 70 (72.4,75.5)</th><th>n 325 325 320 320 444 471 55 7 72 72 100 100 100 100 100 100 32 32 1</th><th></th><th>1,635 1999 1999 1999 197 265 37 47 61 61 76 69 69 20 29 29</th><th>% 99 7.9 6 7.9 6 7.9 6 11.1.9 10.8 11.1.9 11.9 11.1.8 11.1 11.1.3 7.9 11.1.3 7.9 11.1.3 7.9 11.1.3 7.9 11.1.3 7.9 8.8 6 8.8 6 11.1.0 8 11.1.0 8 7.9 5 7.9 5 7.9 5 7.9 5 7.1.1.0 7.1.1.0</th><th>(95% Cl)¹ (10.9,11.9) (6.9,9.1) (9.6,12.1) (10.7,13.1) (10.7,13.0) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,112.6) (10.0,12.1) (10.8,17.1) (8.9,13.6) (8.9,13.6) (10.2,13.2) (10.2,13.2)</th></td<>	% (95% Cl) ¹ n 25.6 (24.9,26.3) 71 25.6 (24.9,26.3) 71 20 .9 (19.4,22.6) 13 20.9 (19.4,22.6) 13 26.1 (24.5,27.8) 16 26.1 (24.5,27.8) 16 26.3 (27.2,30.2) 17 25.7 (24.2,27.2) 10 26.3 (27.3, 6.31.5) - 27.3 (23.6,31.5) - 28.7 (27.2,30.2) 10 26.3 (23.6,31.5) - 28.3 (23.6,31.5) - 28.9 (21.8,28.2) - 28.9 (21.8,28.2) - 28.9 (21.8,28.2) - 24.6 (21.6,25.9) - 20.5 (16.0,25.9) - 21.2 (28.28.4) - 23.2 (18.6,28.4) - 24.4 (21.6,25.9) - <tr td=""> - 2</tr>		% (95% Cl) ¹ 73.9 (73.2,74.7) 78.6 (76.9,80.1) 75.7 (74.0,77.4) 73.3 (71.6,74.9) 73.3 (71.6,74.9) 70.8 (69.3,72.3) 70.8 (69.3,72.3) 70.8 (72.4,75.5) 70 (72.4,75.5) 70 (72.4,75.5)	n 325 325 320 320 444 471 55 7 72 72 100 100 100 100 100 100 32 32 1		1,635 1999 1999 1999 197 265 37 47 61 61 76 69 69 20 29 29	% 99 7.9 6 7.9 6 7.9 6 11.1.9 10.8 11.1.9 11.9 11.1.8 11.1 11.1.3 7.9 11.1.3 7.9 11.1.3 7.9 11.1.3 7.9 11.1.3 7.9 8.8 6 8.8 6 11.1.0 8 11.1.0 8 7.9 5 7.9 5 7.9 5 7.9 5 7.1.1.0 7.1.1.0	(95% Cl) ¹ (10.9,11.9) (6.9,9.1) (9.6,12.1) (10.7,13.1) (10.7,13.0) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,14.6) (12.4,112.6) (10.0,12.1) (10.8,17.1) (8.9,13.6) (8.9,13.6) (10.2,13.2) (10.2,13.2)
10.673 7.4 (73.7751) 3.668 2.5 $(24.92.56)$ 7.1 0.5 (0.406) 10.608 prived fitth 1.981 7.41 (73.7751) 3.668 2.54 2.09 $(1.92.77)$ 1.968 prived fitth 1.986 7.61 $(7.47.80.6)$ 7.33 2.53 2.32 <th2.32< t<="" th=""><th>25.6 (24.9,26.3) 71 20.9 (19.4,22.6) 13 20.9 (19.4,22.6) 10 26.1 (24.5,27.8) 16 26.1 (24.5,27.8) 16 26.1 (24.5,27.8) 16 26.2 (25.0,28.2) 17 26.3 (27.2,30.2) 10 26.3 (24.2,27.2) 10 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 28.9 (24.9,33.2) - 24.9 (21.5,27.9) - 24.9 (21.5,27.9) - 24.9 (21.5,27.9) - 24.6 (21.5,27.9) - 24.7 (21.5,27.9) - 24.8 (23.8,27.9) - 25.8 (23.8,27.9) - 25.17 (24.5,28.0) 9 27.17 (24.8,30.9) - 27.17 (24.8,30.9) -</th><th>-</th><th></th><th></th><th></th><th></th><th></th><th>.9,11.9) .9,9.1) .7,13.1) .7,13.0) .4,14.6) .0,12.1) .0,12.1) .0,12.9) .0,15.9) .0,15.9) .0,15.9) .1,12.6) .1,12.6) .1,12.6) .1,12.6) .2,11.8) .2,11.8) .2,11.8)</th></th2.32<>	25.6 (24.9,26.3) 71 20.9 (19.4,22.6) 13 20.9 (19.4,22.6) 10 26.1 (24.5,27.8) 16 26.1 (24.5,27.8) 16 26.1 (24.5,27.8) 16 26.2 (25.0,28.2) 17 26.3 (27.2,30.2) 10 26.3 (24.2,27.2) 10 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 28.9 (24.9,33.2) - 24.9 (21.5,27.9) - 24.9 (21.5,27.9) - 24.9 (21.5,27.9) - 24.6 (21.5,27.9) - 24.7 (21.5,27.9) - 24.8 (23.8,27.9) - 25.8 (23.8,27.9) - 25.17 (24.5,28.0) 9 27.17 (24.8,30.9) - 27.17 (24.8,30.9) -	-						.9,11.9) .9,9.1) .7,13.1) .7,13.0) .4,14.6) .0,12.1) .0,12.1) .0,12.9) .0,15.9) .0,15.9) .0,15.9) .1,12.6) .1,12.6) .1,12.6) .1,12.6) .2,11.8) .2,11.8) .2,11.8)
prived fifth 1,981 79.1 (77.4.80.6) 524 209 (19.4.27.6) 13 0.5 (0.3.0.9) 1968 stideprived 1,866 75.1 (7.4.77.8) 585 23.9 (2.2.5.7.5) 123 26.1 7.4.477.8) 585 23.9 (2.3.0.8) 1,968 prived fifth 2.580 713 (8.3.7.55) 723 25.7 24.2.7.23 16 0.4 0.20.05 2.593 advaladr UHS 2.379 73.3 (7.3.5.9) 1.038 28.7 24.27.22 17 0.5 (0.3.0.8) 2.563 advaladr UHS 2.379 74.3 (8.8.7.6.4) 114 27.3 28.3 2.3.2.0.3 2.563 advaladr UHS 2.379 76.3 (7.1.8.7.8.3) 10.3 2.3.69 2.3.69 advaladr UHS 75.4 (7.1.8.7.8.3) 10.3 2.4.2 2.7.3 2.6.3 2.3.69 2.6.3 advaladr UHS 75.4 (7.1.8.7.8.3) 10.3 2.3.6 1.0	20.9 (19,4,22.6) 13 25.3 (22.2,25.6) 10 26.1 (24.5,27.8) 16 26.1 (24.5,27.8) 16 26.6 (25.0,28.2) 17 28.7 (24.2,27.2) 10 26.3 (24.2,27.2) 10 26.3 (24.2,27.2) 10 27.3 (24.2,27.2) 10 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 28.9 (24.9,33.2) - 24.9 (21.5,27.9) - 24.9 (21.5,27.9) - 24.9 (21.5,27.9) - 24.9 (21.5,27.9) - 24.16 (21.5,27.9) - 24.2 (21.5,27.9) - 25.8 (23.8,27.9) - 25.17 (24.8,30.9) - 27.17 (24.8,30.9) - 27.17 (24.8,30.9) - 27.17 (24.8,30.9) - 27					199 265 329 354 37 47 61 76 62 20 20 29		.9,9,1) 6,12,1) 7,13,1) 7,113,0) 6,13,9) 6,13,9) 6,13,9) 6,13,9) 6,13,9) 7,11,5) 7,11,5) 7,11,5) 7,11,5) 9,13,6) 9,13,6) 9,13,6)
st deprived 1,866 76,1 74,477.8) 585 239 22.225.6) 10 0,4 0,2.071 1,856 deprived 2,046 739 722,575.5) 733 261 245,5738 16 0.0409 2,0308 2,191 prived fitth 2,506 734 71.8,550 733 25.7 24,272.2 17 0.6 0.4099 2,033 advaladr UHB 2,379 73 72.8,579.0 823 25.7 24.2,722 17 0.0 3 266 25.03.115 17 0.0 3.0 2.069 2.090 2.05 advaladr UHB 2,37 68.576.0 174 2237 23.23.2115 17 0.2 2.05 10 0.3 0.20.05 2.553 advaladr UHB 2,51 711.68.8,576.0 124 233 233.63.15 1.0 0.4 0.2.0.7 1.856 m 511 711.18.82.0 127 233.63.15 1.2 1.2 1.2 1.2	23.9 (22.2,25.6) 10 26.1 (24.5,27.8) 16 26.6 (25.0,28.2) 15 28.7 (27.2,30.2) 17 28.7 (27.2,30.2) 17 28.3 (22.0,31.1) - 26.3 (22.0,31.1) - 25.7 (24.2,27.2) 10 26.3 (22.0,31.1) - 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 28.9 (24.9,33.2) - 28.9 (21.8,28.2) - 24.9 (21.8,28.2) - 24.6 (21.5,27.9) - 24.6 (21.5,27.9) - 24.5 (16.0,25.9) - 25.6 (16.0,25.9) - 25.1 (23.8,27.9) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) -					265 329 354 47 61 76 62 20 20 29 79 76		6,12.1) (7,13.1) (7,13.0) (4,14.6) (6,13.9) (6,13.9) (6,13.9) (0,15.9) (0,15.9) (0,15.9) (1,12.6) (1,12.6) (1,12.6) (1,12.6) (2,11.8) (2,11.8)
deprived 2.046 739 $72.275.5$ 723 26.1 $24.52.73$ 16 0.6 $0.4.09$ 2.030 <th< td=""><th>26.1 (24.5,27.8) 16 26.6 (75.0,28.2) 15 28.7 (27.2,30.2) 17 28.7 (27.2,30.2) 17 25.7 (24.2,27.2) 10 25.7 (24.2,27.2) 10 26.3 (20.31.1) - 27.3 (23.6,31.5) - 28.9 (24.9)33.2) - 28.9 (21.8,28.2) - 24.6 (21.8,28.2) - 24.6 (21.6,025.9) - 20.5 (16.0,25.9) - 20.5 (16.0,25.9) - 21.2 (23.8,27.9) - 225.8 (23.8,27.9) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 27.77 (24.8,30.9) - 26.2 (24.5,28.0) 9 26.7 (23.4,5,28.0) 9</th><td></td><td></td><td></td><td></td><td>329 354 488 47 61 76 69 76 69 20 29 20</td><td></td><td>.7,13.1) .7,13.0) .4,14.6) .0,12.1) 6,13.9) 6,13.9) 7,11.5) 7,11.5) 7,11.5) 7,11.5) 7,11.5) 7,11.5) 2,11.8) 9,13.6) 9,13.6)</td></th<>	26.1 (24.5,27.8) 16 26.6 (75.0,28.2) 15 28.7 (27.2,30.2) 17 28.7 (27.2,30.2) 17 25.7 (24.2,27.2) 10 25.7 (24.2,27.2) 10 26.3 (20.31.1) - 27.3 (23.6,31.5) - 28.9 (24.9)33.2) - 28.9 (21.8,28.2) - 24.6 (21.8,28.2) - 24.6 (21.6,025.9) - 20.5 (16.0,25.9) - 20.5 (16.0,25.9) - 21.2 (23.8,27.9) - 225.8 (23.8,27.9) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 27.77 (24.8,30.9) - 26.2 (24.5,28.0) 9 26.7 (23.4,5,28.0) 9					329 354 488 47 61 76 69 76 69 20 29 20		.7,13.1) .7,13.0) .4,14.6) .0,12.1) 6,13.9) 6,13.9) 7,11.5) 7,11.5) 7,11.5) 7,11.5) 7,11.5) 7,11.5) 2,11.8) 9,13.6) 9,13.6)
si deprived 2.206 7.34 ($71.875.0$) 7.98 2.66 C 55.0.8.2 1 0.5 0.30.08 2.191 prived fittin 2.580 713 ($69.87.50$) 1.038 28.7 ($27.3.02.2$) 1 0.3 0.5.0308 2.56 0.30.08 2.56 0.30 0.3 2.56 0.30 0.3 2.56 0.30 0.3 2.56 0.30.08 2.56 0.30.08 2.56	26.6 (25.0,28.2) 15 28.7 (27.2,30.2) 17 25.7 (24.2,27.2) 10 26.3 (22.0,31.1) - 26.3 (22.0,31.1) - 27.3 (23.5,31.5) - 28.9 (24.9,33.2) - 28.9 (24.9,33.2) - 28.9 (21.5,27.9) - 24.6 (21.5,27.9) - 24.6 (21.5,27.9) - 24.6 (21.5,27.9) - 24.7 (20.8,27.9) - 25.8 (23.3,27.9) - 25.4 (16.0,25.9) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) - 27.7 (24.5,28.0) 9					354 488 37 47 61 76 69 76 20 20 29 79		.7,13.0) .4,14.6) .0,12.1) 6,13.9) (0,15.9) .0,15.9) .8,17.1) 1,12.6) 9,13.6) 9,13.6) 2,11.8)
prived fifth $2,580$ 71.3 $(6.8,7/2.8)$ $1,038$ 28.7 $(2.7,2,0.2)$ 17 05 $(0.3,0.8)$ $2,563$ advaladr UHB 2.379 7.43 $(7.8,7/8.8)$ 82.3 25.7 $(2.2,2,0.2)$ 10 0.3 $(0.2,0.6)$ $2,563$ advaladr UHB 2.376 72.3 $(8.8,7/8.4)$ 134 27.3 $(2.8,57/8.4)$ 134 27.3 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,57/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.9,52/8.7)$ 127 $(0.8,77/8.7)$ 127 $(0.8,77/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,52/8.7)$ 127 $(2.8,72/8.7)$ 127 $(2.8,72/8.7)$ 127 $(2.8,72/8.7)$ 127 $(2.8,72/8.7)$ 127 <t< td=""><th>28.7 (27.2,30.2) 17 25.7 (24.2,77.2) 10 26.3 (22.0,31.1) - 26.3 (22.0,31.1) - 27.3 (23.6,31.5) - 28.9 (24.9,33.2) - 28.9 (24.9,33.2) - 28.9 (21.8,28.2) - 24.6 (21.5,27.9) - 24.6 (21.5,27.9) - 24.5 (16.0,25.9) - 25.8 (23.8,27.9) - 25.4 (18.6,28.4) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) -</th><td></td><td></td><td></td><td></td><td>488 352 37 61 61 76 69 76 20 29 29</td><td></td><td>.4,14.6) .0,12.1) 6,13.9) 7,11.5) 7,11.5) .8,17.1) 1,12.6) 9,13.6) 9,13.6)</td></t<>	28.7 (27.2,30.2) 17 25.7 (24.2,77.2) 10 26.3 (22.0,31.1) - 26.3 (22.0,31.1) - 27.3 (23.6,31.5) - 28.9 (24.9,33.2) - 28.9 (24.9,33.2) - 28.9 (21.8,28.2) - 24.6 (21.5,27.9) - 24.6 (21.5,27.9) - 24.5 (16.0,25.9) - 25.8 (23.8,27.9) - 25.4 (18.6,28.4) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) -					488 352 37 61 61 76 69 76 20 29 29		.4,14.6) .0,12.1) 6,13.9) 7,11.5) 7,11.5) .8,17.1) 1,12.6) 9,13.6) 9,13.6)
advalater 2.379 7.3 7.2 </td <th>25.7 (24.2,27.2) 10 26.3 (22.0,31.1) - 26.3 (22.0,31.1) - 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 28.9 (24.9,33.2) - 24.9 (21.8,28.2) - 24.6 (21.5,27.9) - 24.6 (21.5,27.9) - 24.5 (16.0,25.9) - 20.5 (16.0,25.9) - 20.5 (16.0,25.9) - 21.3 23.8,27.9) - 25.8 (23.8,27.9) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) - 27.7 (24.5,28.0) 9 26.2 (24.5,28.0) 9</th> <td></td> <td></td> <td></td> <td></td> <td>352 37 62 62 63 76 69 20 29 79</td> <td></td> <td>.0,12.1) 6,13.9) 7,11.5) 7,11.5) 8,17.1) 1,12.6) 9,13.6) 9,13.6) 2,11.8)</td>	25.7 (24.2,27.2) 10 26.3 (22.0,31.1) - 26.3 (22.0,31.1) - 27.3 (23.6,31.5) - 27.3 (23.6,31.5) - 28.9 (24.9,33.2) - 24.9 (21.8,28.2) - 24.6 (21.5,27.9) - 24.6 (21.5,27.9) - 24.5 (16.0,25.9) - 20.5 (16.0,25.9) - 20.5 (16.0,25.9) - 21.3 23.8,27.9) - 25.8 (23.8,27.9) - 27.7 (24.8,30.9) - 27.7 (24.8,30.9) - 27.7 (24.5,28.0) 9 26.2 (24.5,28.0) 9					352 37 62 62 63 76 69 20 29 79		.0,12.1) 6,13.9) 7,11.5) 7,11.5) 8,17.1) 1,12.6) 9,13.6) 9,13.6) 2,11.8)
undlesey 264 737 (68.978.0) 94 26.3 72.0.311.1 -	26.3 (22.0,31.1) - 27.3 (23.6,31.5) - 23.7 (20.3,27.5) - 28.9 (24.9,33.2) - 24.6 (21.5,27.9) - 24.6 (21.5,27.9) - 20.5 (16.0,25.9) - 20.5 (18.6,28.4) - 23.2 (18.6,28.4) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) 9 27.7 (23.4,52.80) 9					37 62 61 76 69 76 20 29 79	0 0 0	6,13.9) 7,11.5) 7,11.5) 8,17.1) 1,12.6) 9,13.6) 9,13.6)
Id35672.7(68.576.4)13427.3(23.6,31.5) 400 76.372.579.7)12723.7(20.3.27.5)shine31871.1(68.875.1)12928.9(24.9.33.2.2)m52175.4(71.878.2)112928.9(24.9.33.2.2)m52175.4(72.178.5)17024.6(21.5.279)m52175.274.2(71.187.8)17024.6(21.5.279)m20273.6(71.187.8)13024.5(21.5.279)	27.3 (23.6,31.5) - 23.7 20.3,27.5) - 28.9 (24.9,33.2) - 28.9 (24.9,33.2) - 24.9 (21.8,28.2) - 24.6 (21.5,27.9) - 20.5 (16.0,25.9) - 25.8 (23.8,27.9) - 23.2 (18.6,28.4) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 26.2 (24.5,28.0) 9 26.3 (24.5,28.0) 9					62 61 76 76 76 20 29 29	0 0 0	.0,15.9) 7,11.5) .8,17.1) 1,12.6) 9,13.6) 2,11.8) .2,13.2)
400 76.3 7(2.579.7) 127 23.7 (20.3.275) - <th< td=""><th> 23.7 (20.3,27.5) 28.9 (24.9,33.2) 24.9 (21.8,28.2) 24.6 (21.5,27.9) 24.6 (21.5,27.9) 20.5 (16.0,25.9) 20.5 (16.6,28.4) 25.8 (23.8,27.9) 25.8 (23.8,27.9) 25.4 (20.8,27.9) 27.7 (24.8,30.9) 26.2 (24.5,28.0) 9 </th><td></td><td></td><td></td><td></td><td>47 61 76 20 29</td><td>0 0</td><td>7,11.5) .8,17.1) .1,12.6) 9,13.6) 2,11.8) .2,13.2)</td></th<>	 23.7 (20.3,27.5) 28.9 (24.9,33.2) 24.9 (21.8,28.2) 24.6 (21.5,27.9) 24.6 (21.5,27.9) 20.5 (16.0,25.9) 20.5 (16.6,28.4) 25.8 (23.8,27.9) 25.8 (23.8,27.9) 25.4 (20.8,27.9) 27.7 (24.8,30.9) 26.2 (24.5,28.0) 9 					47 61 76 20 29	0 0	7,11.5) .8,17.1) .1,12.6) 9,13.6) 2,11.8) .2,13.2)
318 71.1 (66.8.75.1) 129 28.9 (24.9.33.2) - <	 28.9 (24.9,33.2) 24.9 (21.8,28.2) 24.6 (21.5,27.9) 24.6 (21.5,27.9) 20.5 (16.0,25.9) 20.5 (16.6,28.4) 25.8 (23.8,27.9) 23.2 (18.6,28.4) 23.2 (18.6,28.4) 24.2 (20.8,27.9) 27.7 (24.8,30.9) 26.2 (24.5,28.0) 9 		 			61 69 76 20 29	0	.8,17.1) 1,12.6) 9,13.6) 2,11.8) .2,13.2)
511 75.1 $(718,78.2)$ 160 24.6 $(218,22.2)$ $ -$ 521 75.4 $(71,78.5)$ 170 24.6 $(215,27.9)$ $ -$ 202 79.5 $(41,84.0)$ 52 20.5 $(160,25.9)$ $ -$ 210 78.8 $(71,72.2)$ 437 55.8 $(23,327.9)$ $ 219$ 78.8 $(71,792.2)$ 136 24.2 $(20,327.9)$ $ 426$ 75.8 $(71,792.2)$ 136 24.2 $(20,327.9)$ $ -$	24.9 (21.8,28.2) - 24.6 (21.5,27.9) - 20.5 (16.0,25.9) - 25.8 (23.8,27.9) - 23.2 (18.6,28.4) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 27.7 (24.5,28.0) 9		· · · · · · ·			69 76 20 29		1,12.6) 9,13.6) 2,11.8) .2,13.2)
521 754 (72.1/76.5) 170 24.6 (21.5.27.9) . </td <th>24.6 (21.5,27.9) - 20.5 (16.0,25.9) - 20.5 (16.0,25.9) - 25.8 (23.8,27.9) - 23.2 (18.6,28.4) - 24.2 (20.8,27.9) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 26.2 (24.5,28.0) 9</th> <td></td> <td> . .</td> <td></td> <td></td> <td>76 20 197 29</td> <td></td> <td>9,13.6) 2,11.8) .2,13.2)</td>	24.6 (21.5,27.9) - 20.5 (16.0,25.9) - 20.5 (16.0,25.9) - 25.8 (23.8,27.9) - 23.2 (18.6,28.4) - 24.2 (20.8,27.9) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 26.2 (24.5,28.0) 9		 . .			76 20 197 29		9,13.6) 2,11.8) .2,13.2)
202 79.5 $(74.1, 84.0)$ 52 20.5 $(16.0, 25.9)$ - -	20.5 (16.0,25.9) - 25.8 (23.8,27.9) - 23.2 (18.6,28.4) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 27.7 (24.5,28.0) 9					20 197 29		2,11.8) .2,13.2)
I 1,257 742 $(72,1/562)$ 437 258 $(23,2,7)$ $(23,2,2)$ $(18,6,28,4)$ (2) <	25.8 (23.8,27.9) - 23.3,2 (18.6,28.4) - 23.2 (18.6,28.4) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 27.7 (24.5,28.0) 9					197 29		.2,13.2)
	23.2 (18.6,28.4) - 24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 26.2 (24.5,28.0) 9		1 1			29		
426 75.8 $(72.1,792)$ 136 24.2 $(20.8,27.9)$ $ -$ <	24.2 (20.8,27.9) - 27.7 (24.8,30.9) - 26.2 (24.5,28.0) 9							(7.2,14.2)
e 612 72.3 (69.1,75.2) 235 27.7 (24.8,30.9) - </td <th>27.7 (24.8,30.9) - 26.2 (24.5,28.0) 9 26.7 (73.4.28.2)</th> <td></td> <td></td> <td>73 1</td> <td>13.0 (10.5,16.0)</td> <td>63</td> <td>11.2 (8.</td> <td>(8.9,14.1)</td>	27.7 (24.8,30.9) - 26.2 (24.5,28.0) 9 26.7 (73.4.28.2)			73 1	13.0 (10.5,16.0)	63	11.2 (8.	(8.9,14.1)
1,878 73.8 (72.0,75.5) 667 26.2 (24.5,28.0) 9 0.4 (02,0.7) 1,869 925 74.3 (71.8,76.6) 320 25.7 (23.4,28.2) -	26.2 (24.5,28.0) 9			130 1	15.3 (13.1,17.9)	105	12.4 (10	(10.3,14.8)
925 74.3 71.8,766) 320 25.7 (23.4,28.2) - <th< th=""><th>7 7 7</th><th></th><th>73.4 (71.7,75.1)</th><th>378 1</th><th>14.9 (13.5,16.3)</th><th>289</th><th>11.4 (10</th><th>(10.2,12.6)</th></th<>	7 7 7		73.4 (71.7,75.1)	378 1	14.9 (13.5,16.3)	289	11.4 (10	(10.2,12.6)
at 475 75.2 (71.6,784) 157 24.8 (21.6,28.4) - <	1.07			184 1	14.8 (12.9,16.9)	136	10.9 (9.	(9.3,12.8)
478 71.6 $(68.0,74.8)$ 190 28.4 $(25.2,32.0)$ \cdot	24.8			86 1	13.6 (11.2,16.5)	71	11.2 (9.	(9.0,13.9)
	28.4	1	I	108 1	16.2 (13.6,19.2)	82	12.3 (10	(10.0,15.0)
morgan 518 77.8 (74.5,80.8) 148 22.2 (19.2,25.5.) -	22.9 (21.3,24.5) 19		76.4 (74.7,78.0)	323 1	12.9 (11.7,14.3)	249	10.0 (8.	(8.8,11.2)
	22.2			82 1	12.3 (10.0,15.0)	99	9.9 (7.	(7.9,12.4)
1,101 69.8 (67.5,72.0) 476 30.2 (28.0,32.5) 7 0.4 (0.2,0.9) 1,094 1 Taf 909 71.2 (68.6,73.6) 368 28.8 (26.4,31.4) - <th>23.1</th> <td></td> <td></td> <td>241 1</td> <td>13.1 (11.7,14.7)</td> <td>183</td> <td>10.0 (8.</td> <td>(8.7,11.4)</td>	23.1			241 1	13.1 (11.7,14.7)	183	10.0 (8.	(8.7,11.4)
Taf 909 71.2 (68.6,73.6) 368 28.8 (26.4,31.4) -	30.2 (28.0,32.5) 7		69.4 (67.1,71.6)	255 1	16.2 (14.4,18.1)	221	14.0 (12	(12.4,15.8)
192 64.0 (58.4,69.2) 108 36.0 (30.8,41.6) -	28.8			199 1	15.6 (13.7,17.7)	169	13.2 (11	(11.5,15.2)
IUHB 1,932 75.1 (73.4,76.7) 641 24.9 (23.3,26.6) 19 0.7 (0.5,1.2) 1,913 624 73.4 (70.3,76.3) 226 26.6 (23.7,29.7) - <th>36.0</th> <td>1</td> <td>1</td> <td>56 1</td> <td>18.7 (14.7,23.5)</td> <td>52</td> <td>17.3 (13</td> <td>(13.5,22.0)</td>	36.0	1	1	56 1	18.7 (14.7,23.5)	52	17.3 (13	(13.5,22.0)
624 73.4 (70.3,76.3) 226 26.6 1 263 72.7 (67.8,77.0) 99 27.3 1	24.9 (23.3,26.6) 19		74.3 (72.6,76.0)	334 1	13.0 (11.7,14.3)	307	11.9 (10	(10.7,13.2)
263 72.7 (67.8,77.0) 99 27.3	26.6			107 1	12.6 (10.5,15.0)	119	14.0 (11	(11.8,16.5)
	27.3			51 1	14.1 (10.9,18.1)	48	13.3 (10	(10.1,17.1)
Torfaen 317 75.8 (71.5,79.7) 101 24.2 (20.3,28.5)	24.2			55 1	13.2 (10.3,16.7)	46	11.0 (8.	(8.4,14.4)
Monmouthshire 256 80.0 (75.3,84.0) 64 20.0 (16.0,24.7)	20.0			43 1	13.4 (10.1,17.6)	21	6.6 (4	(4.3,9.8)
Newport 472 75.8 (72.2,79.0) 151 24.2 (21.0,27.8) 5 0.8 (0.3,1.9) 467 75	24.2 (21.0,27.8) 5		75.0 (71.4,78.2)	78 1	12.5 (10.1,15.4)	73	11.7 (9.	(9.4,14.5)

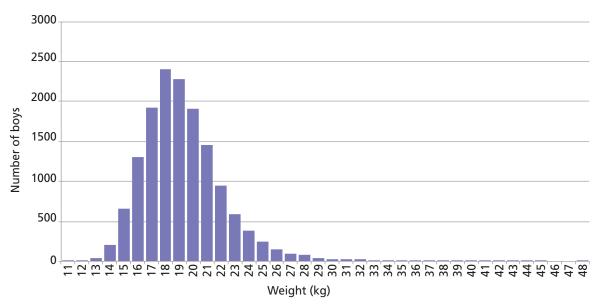
m
2
12/2
12
20
rs,
yea
Ы
to
4
aged
na
ē
0
Ч
es,
a
≥
for
ē
L L L
gran
ogl
Pro
nt
nel
len
sul
ea
Σ
hild
S
the
Ξ
ē
35 f
Ita
da
ht
eig
Í

2	Maacurad	-	-		-							
		2	Low height		Measured	Fo	Low height		Measured	_	Low height	ght
	z	2	%	(95% CI) ¹	z	5	%	(95% CI) ¹	z	5	%	(95% CI) ¹
Wales	29,238	137	0.5	(0.4,0.6)	14,891	78	0.5	(0.4,0.7)	14,347	59	0.4	(0.3,0.5)
Least deprived fifth	5,088	16	0.3	(0.2,0.5)	2,583	10	0.4	(0.2,0.7)	2,505	9	0.2	(0.1,0.5)
Next least deprived	4,989	21	0.4	(0.3,0.6)	2,538	13	0.5	(0.3,0.9)	2,451	00	0.3	(0.2,0.6)
Middle deprived	5,637	25	0.4	(0.3,0.7)	2,868	13	0.5	(0.3,0.8)	2,769	12	0.4	(0.2,0.8)
Next most deprived	6,071	23	0.4	(0.3,0.6)	3,067	11	0.4	(0.2,0.6)	3,004	12	0.4	(0.2,0.7)
Most deprived fifth	7,453	52	0.7	(0.5,0.9)	3,835	31	0.8	(0.6,1.1)	3,618	21	0.6	(0.4,0.9)
Betsi Cadwaladr UHB	6,475	32	0.5	(0.4,0.7)	3,273	15	0.5	(0.3,0.8)	3,202	17	0.5	(0.3,0.8)
Isle of Anglesey	069	ı	'	,	332	ı	I	ı	358	'		•
Gwynedd	1,006	ı	'	,	516	ı	I	ı	490	'		•
Conwy	1,067	ı	'		531	ı	ı	·	536	'	·	'
Denbighshire	928	10	1.1	(0.6,2.0)	481	,	ı		447	'		'
Flintshire	1,413	9	0.4	(0.2,0.9)	733	ı	I	ı	680	'		,
Wrexham	1,371	9	0.4	(0.2,1.0)	680	'		ı	691	'	•	•
Powys THB	534	ı			280	ı	'	ı	254	ı	·	
Hywel Dda UHB	3,333	21	0.6	(0.4,1.0)	1,639	16	1.0	(0.6,1.6)	1,694	Ŋ	0.3	(0.1,0.7)
Ceredigion	562	I	I		277	I	I	ı	285	ı	-	•
Pembrokeshire	1,119	ı	'	,	557	ı	I	·	562	'		•
Carmarthenshire	1,652	12	0.7	(0.4,1.3)	805	·	ı	I	847	I		
ABM UHB	5,237	'		,	2,692			ı	2,545	'		
Swansea	2,483	5	0.2	(0.1,0.5)	1,238	'	I	ı	1,245	'		•
Neath Port Talbot	1,351	9	0.4	(0.2,1.0)	719	ı	I	ı	632	ı	·	•
Bridgend	1,403		ı		735	'		ı	668	'		•
Cardiff and Vale UHB	5,106	24	0.5	(0.3,0.7)	2,604	15	0.6	(0.3,0.9)	2,502	6	0.4	(0.2,0.7)
The Vale of Glamorgan	1,369	ı	'	,	703	ı	ı	ı	666	'	-	'
Cardiff	3,737	·	ı	,	1,901	ı	1	ı	1,836	ı		'
Cwm Taf UHB	3,241	21	0.6	(0.4,1.0)	1,664	14	0.8	(0.5,1.4)	1,577	7	0.4	(0.2,0.9)
Rhondda Cynon Taf	2,589	16	0.6	(0.4,1.0)	1,312	'	I	ı	1,277	'		
Merthyr Tydfil	652	IJ	0.8	(0.3,1.8)	352	'	·	ı	300	ı		•
Aneurin Bevan UHB	5,312	23	0.4	(0.3,0.6)	2,739	13	0.5	(0.3,0.8)	2,573	10	0.4	(0.2,0.7)
Caerphilly	1,746	10	0.6	(0.3,1.1)	896	ß	0.6	(0.2,1.3)	850	ŋ	0.6	(0.3,1.4)
Blaenau Gwent	773	I	I		411	I	I	ı	362	ı		, ,
Torfaen	861	I	I		443	I	I	ı	418	ı		, ,
Monmouthshire	652	I	ı		332	ı	I	ı	320	'		,
Newport	1,280	7	0.5	(0.3,1.1)	657		·		623			•

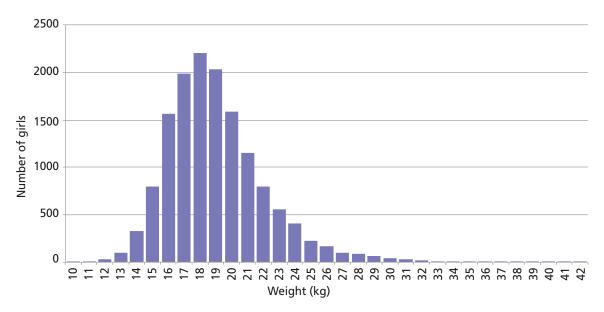
Appendix 4 Distribution of height, weight and body mass index

Distribution of weight and BMI in both boys and girls in the Child Measurement Programme is skewed to the right. Distribution of height shows a symmetrical pattern in boys and girls.

Weight distribution (kg) in boys aged 4 to 5 years, Child Measurement Programme, 2012/13

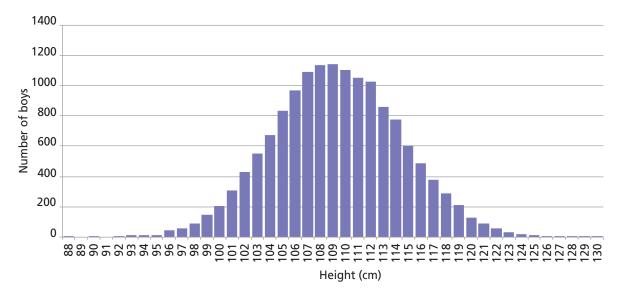


Produced by Public Health Wales Observatory, using CMP data (NWIS)



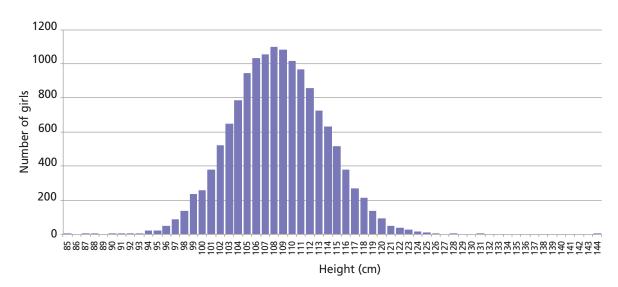
Weight distribution (kg) in girls aged 4 to 5 years, Child Measurement Programme, 2012/13

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



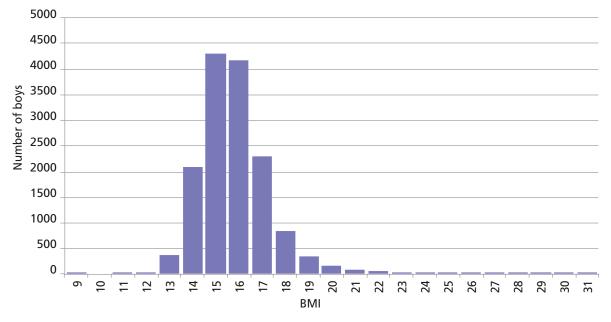
Height distribution (cm) in boys aged 4 to 5 years, Child Measurement Programme, 2012/13

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



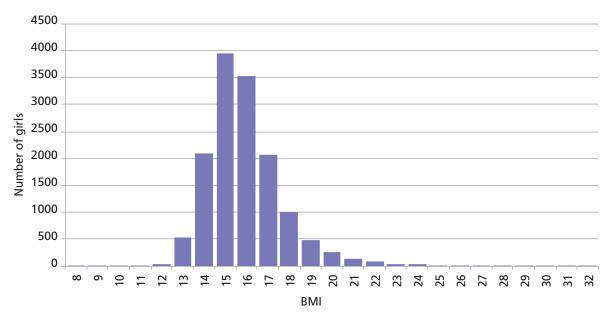
Height distribution (cm) in girls aged 4 to 5 years, Child Measurement Programme, 2012/13

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



Body mass index (BMI) distribution in boys aged 4 to 5 years, Child Measurement Programme, 2012/13

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

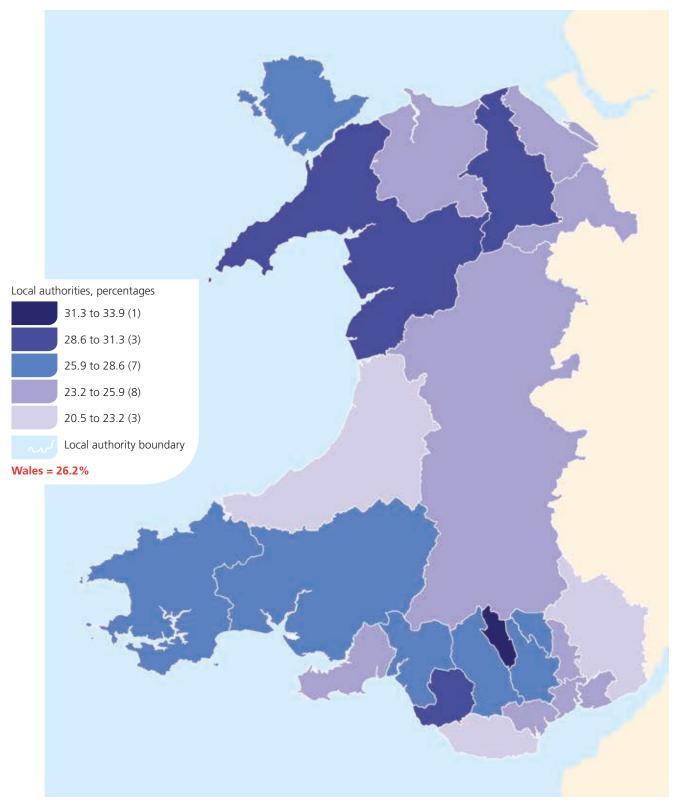


Body mass index (BMI) distribution in girls aged 4 to 5 years, Child Measurement Programme, 2012/13

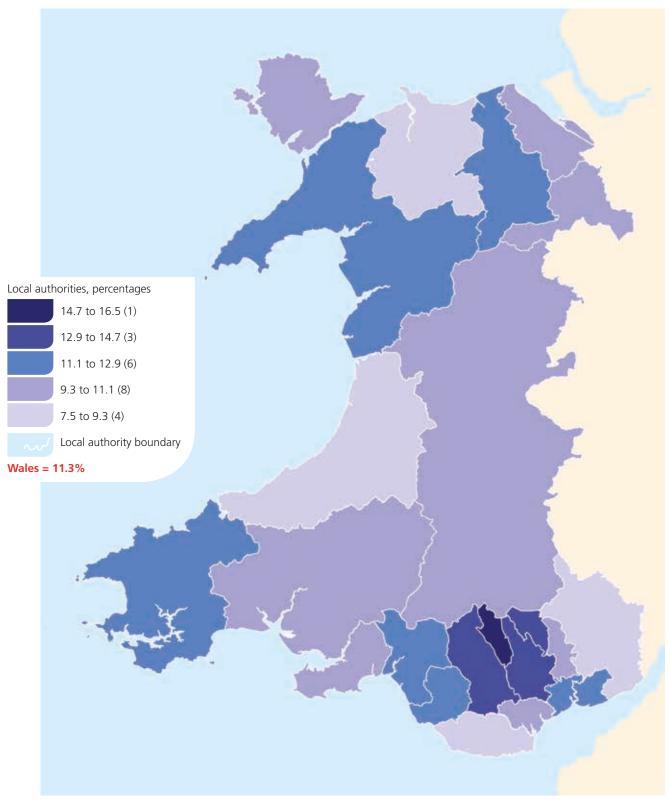
Produced by Public Health Wales Observatory, using CMP data (NWIS)

Appendix 5 Additional maps

Proportion of children aged 4 to 5 years who are overweight or obese, 2012/13



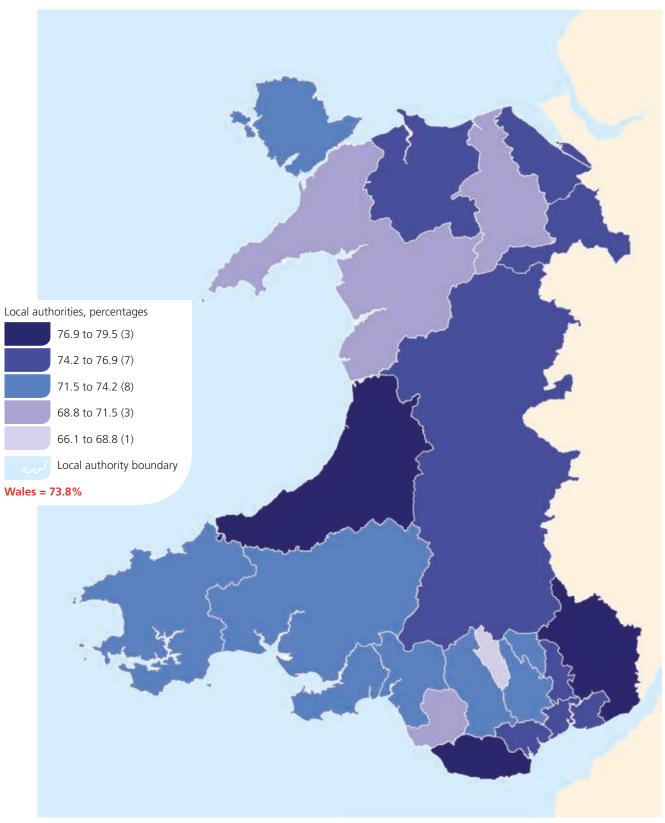
Produced by Public Health Wales Observatory, using CMP data (NWIS) © Crown copyright and database right 2014. Ordnance Survey 1000044810



Proportion of children aged 4 to 5 years who are obese, 2012/13

Produced by Public Health Wales Observatory, using CMP data (NWIS) © Crown copyright and database right 2014. Ordnance Survey 1000044810

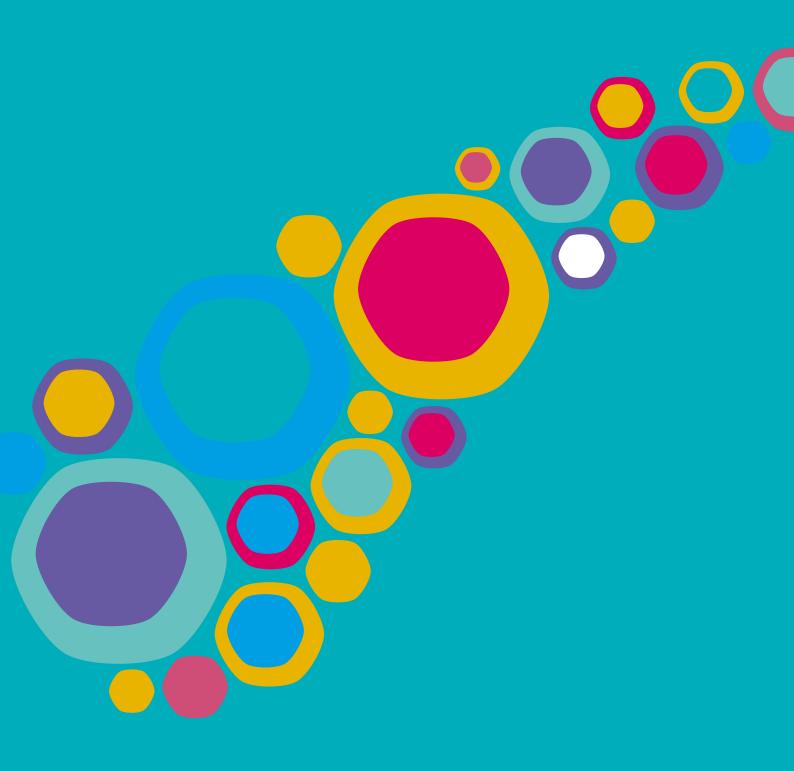
Proportion of children aged 4 to 5 years who are underweight or a healthy weight, 2012/13



Produced by Public Health Wales Observatory, using CMP data (NWIS) © Crown copyright and database right 2014. Ordnance Survey 1000044810

References

- 1 Hall, D., Williams, J., Elliman, D. (2009) "The Child Surveillance Handbook" Oxford: Radcliffe Publishing
- 2 World Health Organisation / ENHIS (December 2009) "Prevalence Of Overweight And Obesity In Children And Adolescents, Fact Sheet 2.3" Code: RPG2_Hous_E2
- 3 Butland B et al (2007) "Foresight Tackling Obesities: Future Choices Project report" London Government Office for Science.
- 4 http://wales.gov.uk/newsroom/healthandsocialcare/2011/110331obesity/?lang=en accessed 6th June 2014
- 5 Public Health Wales (2012) "Standards For Implementing The Child Measurement Programme For Wales" available at: http://www2.nphs.wales.nhs.uk:8080/ChildMeasurementDocs. nsf/5633c1d141208e8880256f2a004937d1/86918aa37f5ddb7780257b9c0051ed19/\$FILE/CMP%20Standards%20 2012_13%20V1%20Final%20English%20.pdf accessed 24th April 2014
- 6 Public Health Wales (2012) "Guidelines Template For Implementing Child Measurement Programme For Wales" available at http://www2.nphs.wales.nhs.uk:8080/ChildMeasurementDocs.nsf/5633c1d141208e8880256f2a004937d1/ e78beb5c13d4bdbd80257b9c00588df9/\$FILE/CMP%20Guidelines%20Template%202012_13%20v1%20%20Final%20 311012%20.pdf accessed 24th April 2014
- 7 Public Health Observatory for Wales (2009) "*Measuring childhood heights and weights in Wales*" National Public Health Service for Wales & Wales Centre for Health.
- 8 Public Health Wales (2013) "Child Measurement Programme for Wales: Report 2011/12" Public Health Wales NHS Trust
- 9 Welsh Government (2011) "Directions to Local Health Boards in Wales and Public Health Wales National Health Service Trust (2011 No. 14)" available at http://wales.gov.uk/legislation/subordinate/nonsi/nhswales/2011/4927618/?lang=en [accessed 24th April 2014].
- 10 Welsh Government (2011) "The Child Measurement Programme (Wales) Regulations (2011 No. 985 W.142)" available at http://www.legislation.gov.uk/wsi/2011/985/contents/made [accessed 24th April 2014]
- 11 Health and Social Care Information Centre (2013) "National Child Measurement Programme: England, 2012/13 school year" HSCIC London.
- 12 Statistics for Wales (2011)" Welsh Index of Multiple Deprivation 2011 summary report" Welsh Government, Cardiff.
- 13 Statistics for Wales (February 2014) "2011 Census data characteristics of households in Wales" Cardiff.
- 14 Gatineau M, Mathrani S. (2011) "Obesity and Ethnicity" Oxford: National Obesity Observatory
- 15 Harding S, Teyhan A, Maynard MJ, Cruickshank JK. (2008) "*Ethnic differences in overweight and obesity in early adolescence in the MRC DASH study: the role of adolescent and parental lifestyle*". International Journal of Epidemiology 37(1):162–72.
- 16 UK National Screening Committee (2006) "UK National Policy on Growth Screening in Children" at http://www.screening.nhs.uk/growth accessed 24th April 2014
- 17 National Institute for Health and Clinical Excellence (2006) "Clinical guideline 43 Guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children" NICE London, page 38
- 18 Cole, T., Freeman, J.V., and Preece M.A. (1995) "Body mass index reference curves for the UK, 1990" Archive of Diseases in Childhood 73: 25-9.
- 19 Keys, A. et al (1972) "Indices of relative weight and obesity" Journal of Chronic Diseases, 25:329-343.
- 20 Freeman, J.V., Cole, T.J., Chinn, S. et al (1995) "Cross sectional stature and weight reference curves for the UK, 1990" Archives of Disease in Childhood 1995; 73: 17-24
- 21 Cole, T.J., Bellizzi, M.C., Flegal, K.M. and Dietz, W.H. (2000) "Establishing a standard definition for child overweight and obesity worldwide: international survey" BMJ 2000;320:1240
- 22 Dinsdale H., Ridler, C. and Ells, L. (2011) "A simple guide to classifying body mass index in children" Oxford, National Obesity Observatory.
- 23 Altman D.G., Machin, D., Bryant, T.N., Gardner, M.,J. (eds) (2000) "Statistics with Confidence, 2nd edition" London, BMJ Books.





lechyd Cyhoeddus Cymru Public Health Wales