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Protecting and improving the nation's health

National Dental Epidemiology Programme for England: oral health survey of five-year-old children 2015

A report on the prevalence and severity of dental decay

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Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_uk
Facebook: www.facebook.com/PublicHealthEngland

Prepared by: Dental Public Health Intelligence Team
For queries relating to this document, contact: DentalPHIntelligence@phe.gov.uk

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Executive summary

The summarised results in this report are from the third National Dental Epidemiology Programme for England, oral health survey of five-year-old children, 2015.[i] Estimates at national, regional, Public Health England (PHE) centre and upper and lower-tier local authority level are given for decay prevalence and severity. This data is the source for the dental indicator (proportion of children aged five who are free from obvious tooth decay) included in the Public Health Outcomes Framework.[1]

Overall, 75.2% of five-year-old children in England whose parents gave consent for participation in this survey had no experience of obvious dental decay. This is the third consecutive survey which has shown improvement in the proportion of children who are free of obvious decay. Among the 24.7% of children with some experience of obvious decay, the average number of teeth that were decayed, missing or filled was 3.4 (at age five, children normally have 20 primary teeth). The average number of decayed, missing or filled teeth in the whole sample (including the 75.2% who were decay free) was 0.8.

The results reveal wide variation at regional and local authority level for both prevalence and severity of dental decay. The areas with poorer oral health tend to be in the north and in the more deprived local authority areas.

Summary results can be found in Appendix 1 and Appendix 2 of this report. Full tables of results are available at www.nwph.net/dentalhealth.

The methods used in this survey were the same as those used in previous surveys during 2008[ii] and 2012[iii], therefore it is possible to make comparisons between these surveys. The results show a continued increase in the proportion of children with no obvious dental decay from 69.1% in 2008 and 72.1% in 2012 to 75.2% in 2015, equating to a change of six percentage points and an improvement of 8.8% since 2008. The average number of decayed, missing or filled teeth has fallen from 1.1 in 2008 and 0.9 in 2012 to 0.8 in 2015, a reduction in severity of 27.3% since 2008.

The requirement for positive consent for children to take part prevents comparison with the 1992 to 2006 series of surveys[iv]. During the 1992 to 2006 series there was little change in the prevalence or severity of decay, however, data from the 2008 to 2015 series show a reduction that requires further investigation to determine the possible

[i] These survey data were collected during the 2014-15 school year but are referred to here as 2015.
[ii] These survey data were collected during the 2007-08 school year but are referred to here as 2008.
[iii] These survey data were collected during the 2011-12 school year but are referred to here as 2012.
[iv] Department of Health guidance in 2007 required written parental consent be gained for children to be examined in the surveys. This replaced passive consent which had been used for the previous 20 years.

causes. Surveys in Wales and Scotland have shown similar trends over a similar period.[2,3]

Local authorities have had responsibility for improving health and reducing inequalities, including oral health, since April 2013.[4,5] This report provides benchmarking data that may be used in joint strategic needs assessments and oral health needs assessments to plan and commission oral health improvement interventions. Two national documents were published in June 2014 which aimed to support local authorities in these activities.[6,7]

Introduction

As part of Public Health England's Dental Public Health Epidemiology Programme (DPHEP), standard examinations of a random sample of five-year-old children were undertaken in the academic year 2014 to 2015. This was the third national dental survey of this age group to take place under positive consent for participation.[iv]

Since 1985, standardised and coordinated surveys of child dental health have been conducted across the United Kingdom (UK). These have produced robust, comparable information for use at regional and local government level and for varying health geographies. The first national survey of five-year-olds took place in 1992. PHE now has responsibility for coordinating these surveys in England as part of an annual programme. The PHE dental public health epidemiology team facilitated the survey and worked with the British Association for the Study of Community Dentistry (BASCD) who ensured standardisation of examiners. Each local authority commissioned local dental providers to undertake the fieldwork according to a national protocol.[8]

NHS and local authority commissioners and other health planners use the information produced from the surveys when conducting oral health needs assessments at a local level. These form an important component of the commissioning cycle when planning and evaluating local services and health improvement interventions. The data is also required to provide the dental indicator (proportion of children aged five who are free from obvious tooth decay)[1] for the Public Health Outcomes Framework, which is used to monitor health improvement and the reduction of health inequalities at national and local levels.

The survey reported here involved children from mainstream, state-funded schools. Information concerning the oral health of five- and twelve- year-old children attending special support schools was the focus of a previous PHE DPHEP survey and was reported in September 2015.[9]

Section 1. Method

The sampling frame for this survey was children attending mainstream schools who were aged five years at the time of the survey. It was undertaken during the 2014/15 school year. Data was collected by trained and calibrated examiners who were generally employed by NHS trusts providing community dental services. Pine et al.[10] described the methods whereby examiners should be trained and calibrated and these standards were applied, along with BASCD standards for sampling and clinical examination[11,12] as in previous surveys. A visual-only examination method was used and informed the standard severity index for teeth with experience of dental decay; missing teeth due to decay (mt), filled teeth due to decay (ft) and teeth with visually obvious decay into dentine, which was the threshold for recording the presence of decay and is indicated by the subscript '$_3$' (d_3t). This threshold is widely accepted in the literature as a standard but that it provides an underestimate of the true prevalence and severity of disease. The presence and absence of plaque and oral sepsis were also recorded.

The primary sampling unit was lower-tier local authorities. Samples were drawn for each local authority in England using the same methods and similar sampling intensities used in previous surveys and according to the survey protocol. [8] In some local authority areas larger samples were drawn at the request of commissioners to facilitate analysis at smaller geographical levels.

Sampled schools were contacted to seek co-operation and age-eligible children were identified. In larger schools random samples of children were taken. Requests for consent for sampled children were sent to parents and followed by a second request where no response was made to the first.

Data was collected using the Dental Survey Plus 2 computer program or using a tailor made data collection format in Microsoft Access. Electronic files of the raw, anonymised data were uploaded to a secure folder on a shared network drive by regional dental epidemiology coordinators (DECs). The DPH intelligence team collated, checked and cleaned the data then linked it using home postcodes so that lower super output areas and IMD scores could be assigned.

Population weighting[v] was used to calculate estimates of a range of measures of oral health for each local authority. The postcode of residence for each record was used to

[v] The sampling methodology used for this survey was school based and therefore not truly representative of the population of five-year-old children by Index of Multiple Deprivation (IMD) quintile. Thus, the sample was treated as a stratified random sample, that is, children were selected randomly from each IMD quintile but the sampling probability varied between IMD quintiles. For this reason, IMD-weighted estimates were produced to provide more robust estimates of overall prevalence.

assign a deprivation score which had been adjusted for 2015.[13] Deprivation scores were then used to allow weighting of the sample data to more closely match the actual distribution of deprivation quintiles[vi] in the source population.

Error bars indicate 95% confidence limits on charts in this report and in the tables available from www.nwph.net/dentalhealth

Data suppression was applied when there were insufficient children examined in a group to allow production of a reliable estimate.

Section 2. Results

Headline results are presented here along with an indication of the range of measures and some high-level illustrations. Full tables and charts of results at national, government region, lower- and upper-tier local authorities and for PHE centres are available from www.nwph.net/dentalhealth

Participation in the survey

In total, all 152 upper-tier local authorities took part in the survey covering 324 out of 326 lower-tier local authorities.

A small proportion of parents (4.5%) actively stated they did not want their children included in the survey, while 0.5% of children with consent declined to take part on the day. Absenteeism on the day of examination accounted for a loss of 3.8% of consented children. Simple non-response to the request was the most common reason for non-consent (28.9%), despite two requests and schools actively seeking returned forms.

From the drawn sample 63.1% of children were examined, this response varied from 57.4% in Yorkshire and The Humber to 72.5% in the South West. At lower-tier local authority level the response rate varied from 24.9% in Waveney to 94.5% in Purbeck.

Of the children with parental consent 111,500 clinical examinations were included in the final analysis, representing 95.7% of the main consented sample. This represented 16.5% of the population of this age cohort attending mainstream state schools.

The proportion of consented children who were examined varied at regional and lower-tier local authority level. Across the regions, response varied from 94.3% in the North

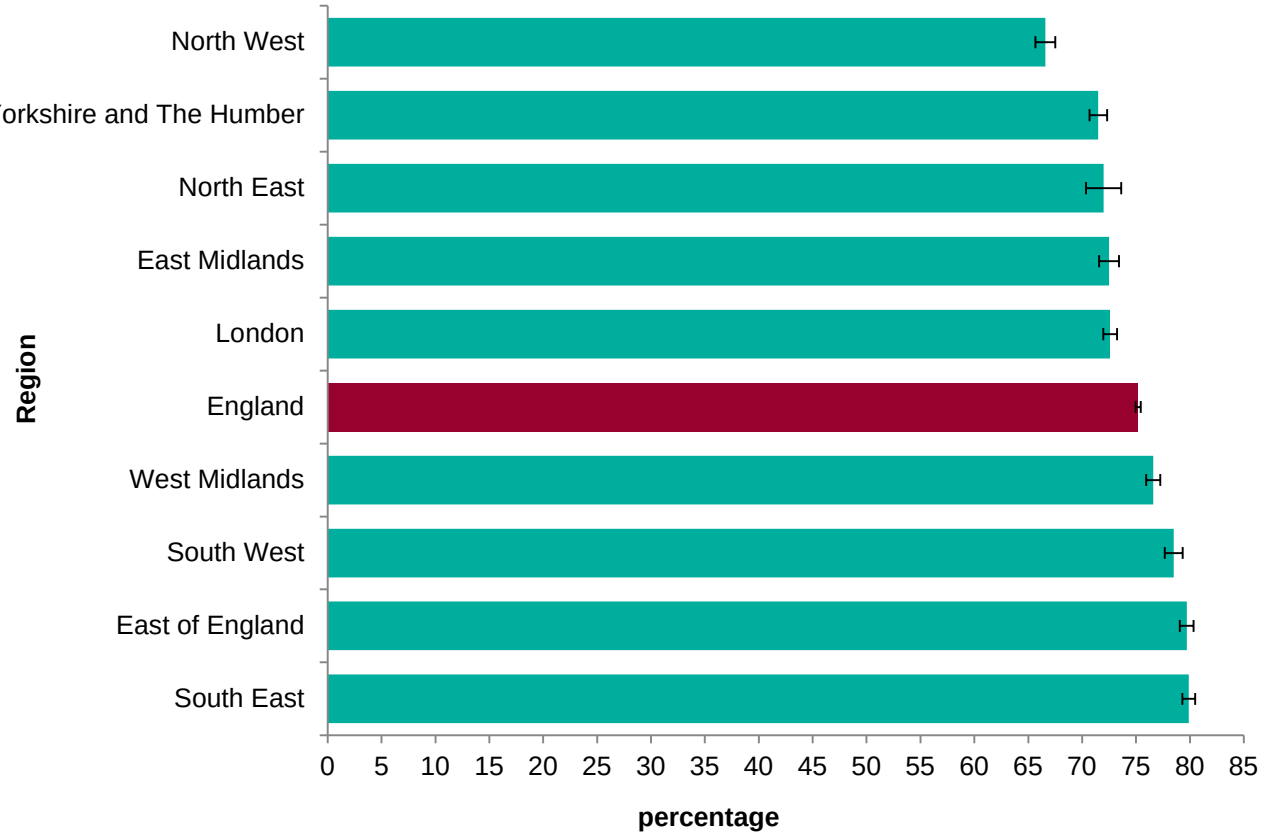
[vi] Deprivation quintiles divide populations into fifths according to distribution of IMD scores

East to 96.4% in the South East. At lower-tier local authority level response varied from 84.9% in Daventry to 99.5% in Plymouth.

Prevalence of dental decay at age five

The proportion of five-year-old children in England who were free from visually obvious dental decay was 75.2%. The remaining 24.7% had experience of dental decay with one or more teeth that were decayed to dentinal level, extracted or filled because of caries. When comparing the regions, the estimates of those with no obvious decay ranged from 66.6% in the North West to 79.9% in the South East (Figure 1).

Figure 1. Percentage of five-year-old children with no obvious decay experience ($d_3$mft = 0) in England by region, 2015.



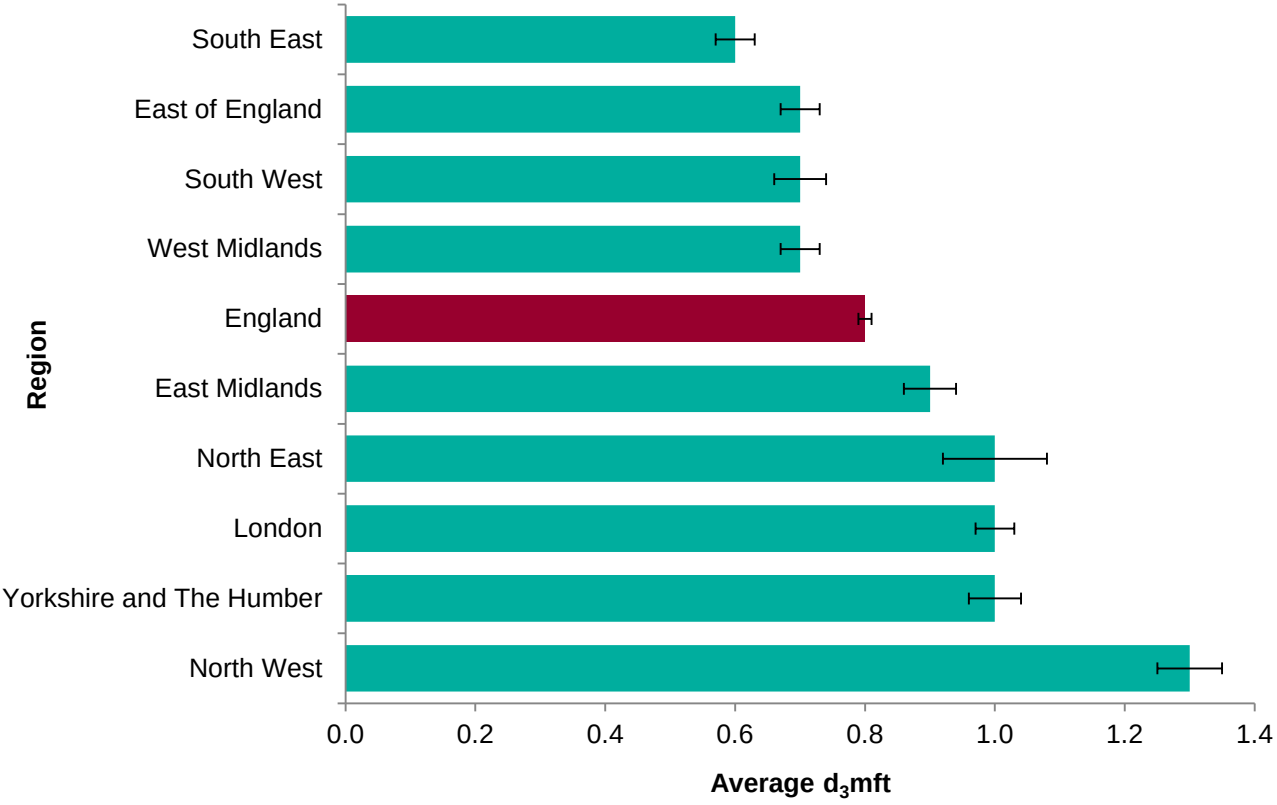
Error bars represent 95% confidence limits

At the upper-tier local authority level there were wider variations, ranging from Blackburn with Darwen where 43.9% had no obvious decay to South Gloucestershire where 85.9% were free of decay.

Severity of dental decay at age five

The average number of teeth affected by decay (decayed, missing or filled teeth – $d_3$mft) per child was 0.8. At the regional level this ranged from 0.6 in the South East to 1.3 in the North West (Figure 2).

Figure 2. Average number of dentinally decayed, missing and filled teeth ($d_3$mft) among five-year-old children in England by region, 2015.



Error bars represent 95% confidence limits

There was also wide variation in the $d_3$mft across upper-tier local authorities, ranging from 0.4 in nine local authorities to 2.5 in Oldham (Figure 3).

Variation was also evident at the lower-tier local authority level and the severity of decay was related to level of deprivation (Figure 4).

Figure 3. Average number of dentinally decayed, missing (due to decay) and filled teeth (d_3mft) among five-year-old children in England by upper-tier local authorities, 2015.

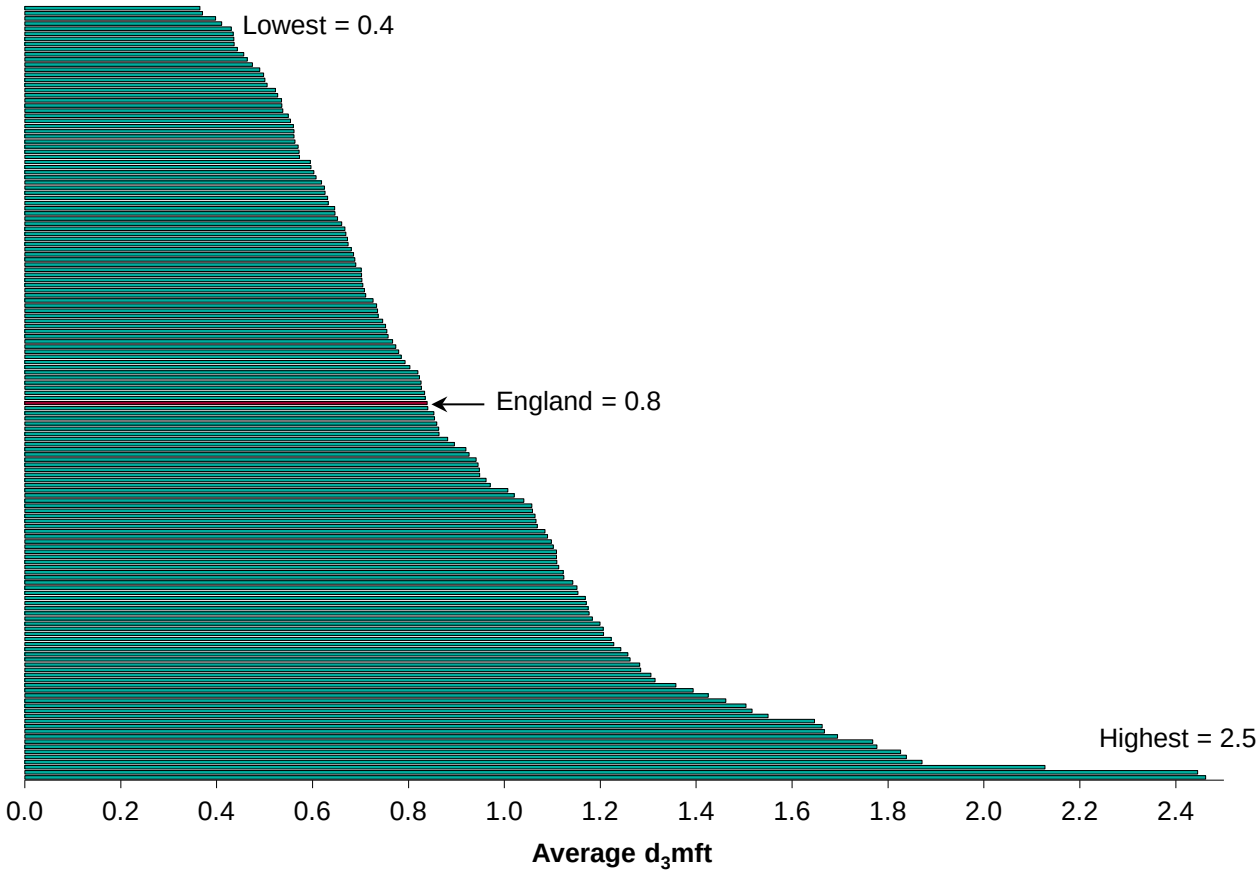
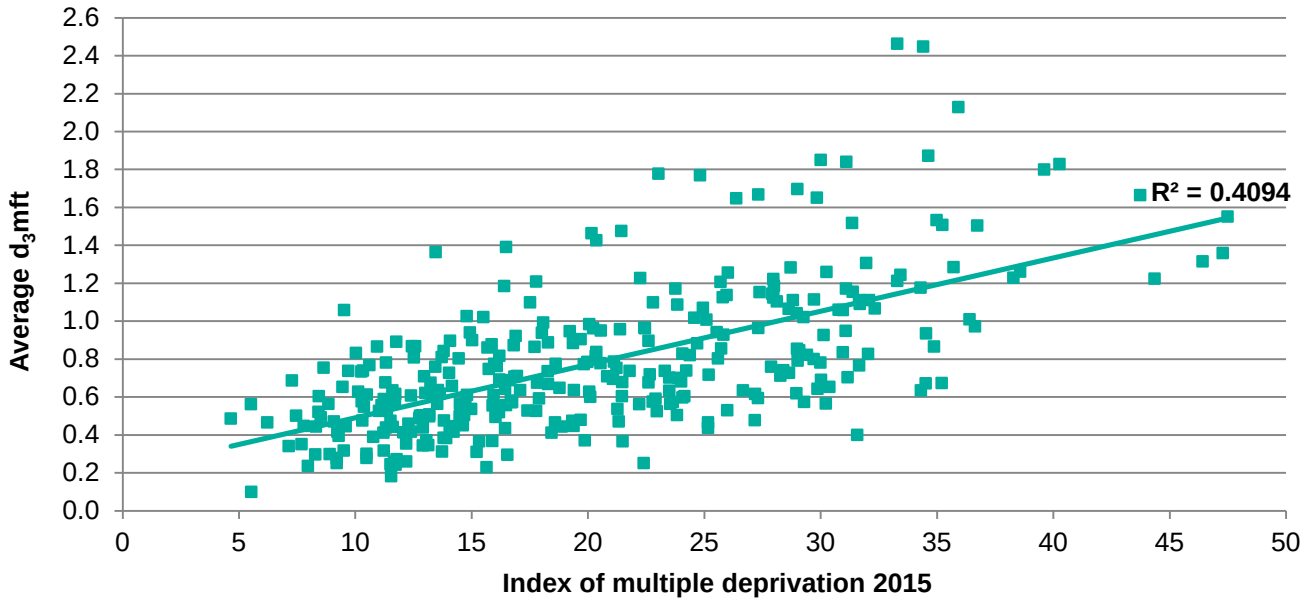
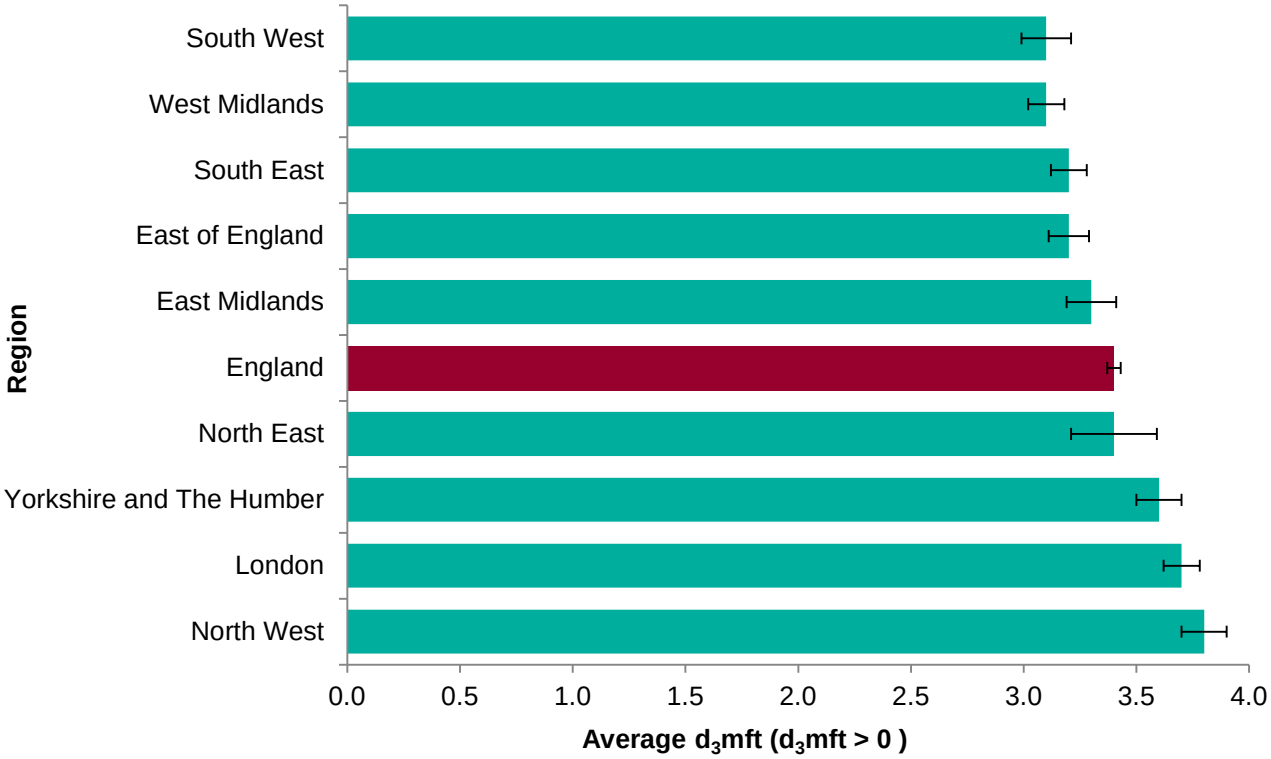


Figure 4. Correlation between number of dentinally decayed, missing (due to decay) and filled teeth (d_3mft) among five-year-old children and Index of Multiple Deprivation (IMD 2015) score. Lower-tier local authorities in England, 2015.



Looking at the severity of decay among only those children with decay experience, separately from children with no obvious decay, allows us to understand more about the extent of disease in these children. In 2015, 24.7% of the examined children had experienced decay. Among these children, the average number of decayed, missing (due to decay) or filled teeth was 3.4 (a child at this age normally has 20 primary teeth). Figure 5 shows the England average and variation across the regions.

Figure 5. Average number of dentinally decayed, missing (due to decay) and filled teeth ($d_3$mft) among five-year-old children with any decay experience ($d_3$mft>0). England by region, 2015.



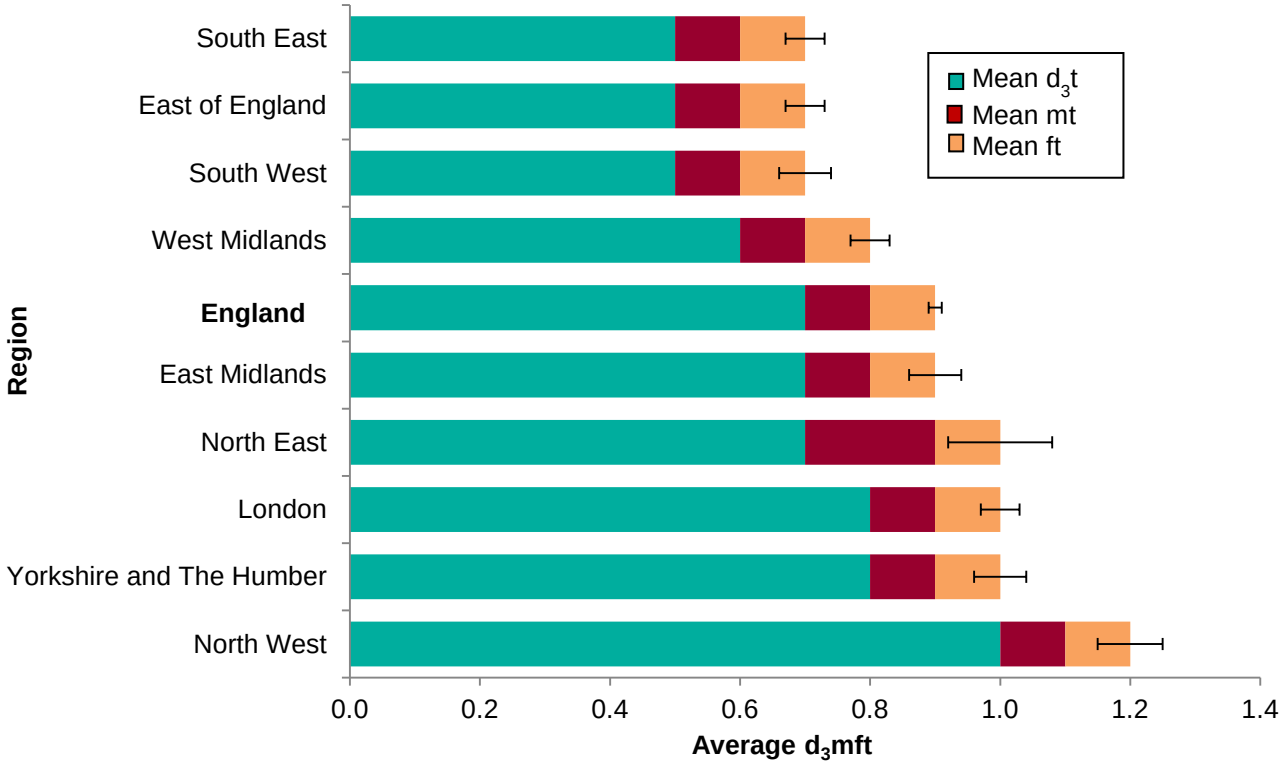
Error bars represent 95% confidence limits

At upper-tier local authority level there is clear variation of this measure with affected children in Wiltshire having 2.0 teeth affected on average, while those in Rochdale had 4.9 teeth affected.

The number of currently decayed teeth at age five

The major component of the $d_3$mft index in this age group is obvious, untreated dentinal decay (d_3t) (Figure 6). On average, five-year-old children in England had 0.7 teeth decayed into dentine. At the regional level the average number of currently decayed teeth ranged from 0.5 in the South East, South West and East of England to 1.0 in the North West with wide variation between upper tier local authorities, ranging from 0.2 in Brighton and Hove to 2.2 in Oldham.

Figure 6. Components of $d_3$mft among five-year-old children in England by region, 2015.



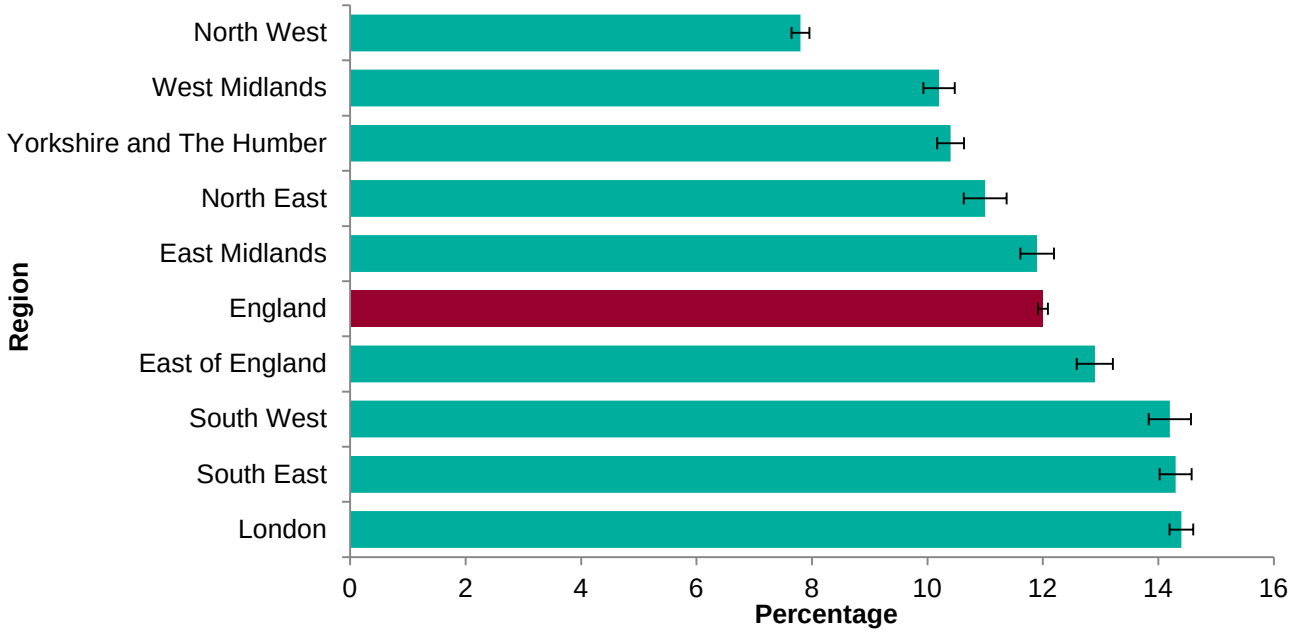
Error bars represent 95% confidence limits

The care index

The care index gives an indication of the restorative activity of dentists in each area. It is the percentage of teeth with decay experience that have been treated by filling (ft/$d_3$mft). Opinions differ regarding the appropriateness and benefit of filling decayed primary teeth and there is a lack of definitive evidence-based guidance on this. Care should be taken in making assumptions about the extent or the quality of clinical care available when using this index. Other intelligence such as levels of deprivation, disease prevalence and the provision of dental services should be taken into account when trying to interpret the implications of high or low scores.

The proportion of decayed teeth that were filled was 12.0% across England as a whole. This varied between regions from 7.8% in the North West to 14.4% in London (Figure 7), and between upper tier local authorities from 0.3% in Stoke-on-Trent to 24.7% in York. Within regions there was also considerable variation, for example, in Yorkshire and The Humber the index varied from 4.8% in Wakefield to 24.7% in York.

Figure 7. Care index among five-year-old children in England by region, 2015.

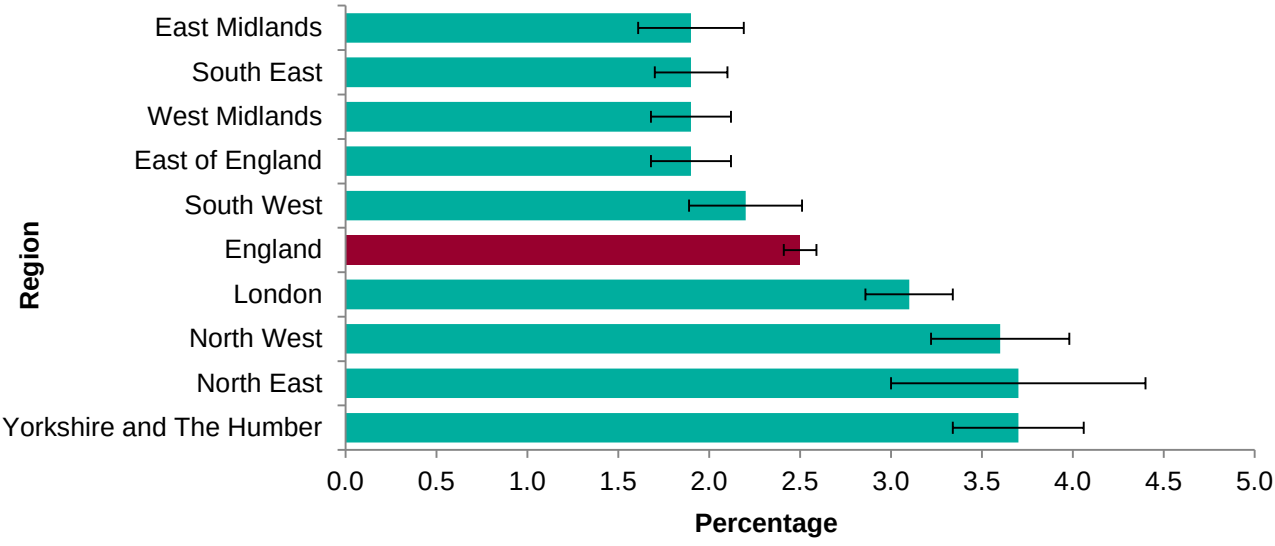


Error bars represent 95% confidence limits

Prevalence of children with extracted teeth (due to dental decay) at age five

Extraction of teeth in young children often involves admission to hospital and a general anaesthetic. This might have occurred at any age prior to the survey, from 18 months onwards. The proportion of five-year-old children with experience of extraction (those with an mt score of one or more) across England was 2.5%. At regional level this ranged from 1.9% to 3.7% (Figure 8). For local authorities this also varied from 0.3% in Solihull in the West Midlands to 7.9% in Middlesbrough in the North East.

Figure 8. Percentage of five-year-old children with one or more teeth extracted due to dental decay (mt > 0) in England by region, 2015.

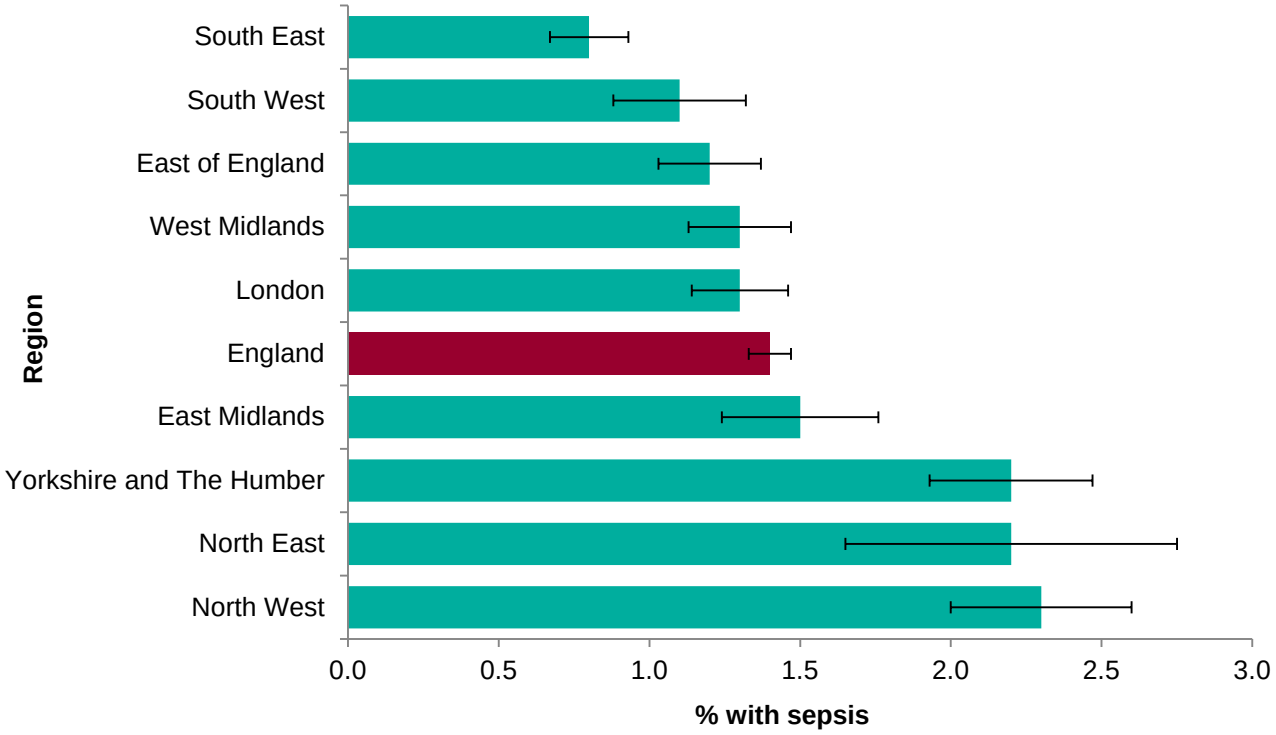


Error bars represent 95% confidence limits

Children with sepsis at the time of the examination

At the age of five-years, nearly all sepsis will be the result of the dental decay process rather than originating from gum problems. A small number of cases will be linked to traumatic injury of teeth, but no diagnosis is recorded during this survey. Sepsis was simply defined in the protocol as the presence of a dental abscess or sinus recorded by visual examination of the soft tissues. Sepsis was recorded for 1.4% of volunteers. As expected, the level was generally higher in those areas where there were higher levels of decay. For example, the highest levels occurred in the North West (2.3%) and the lowest in the South East (0.8%) (Figure 9).

Figure 9. Percentage of five-year-old children with evidence of sepsis in England by region, 2015.

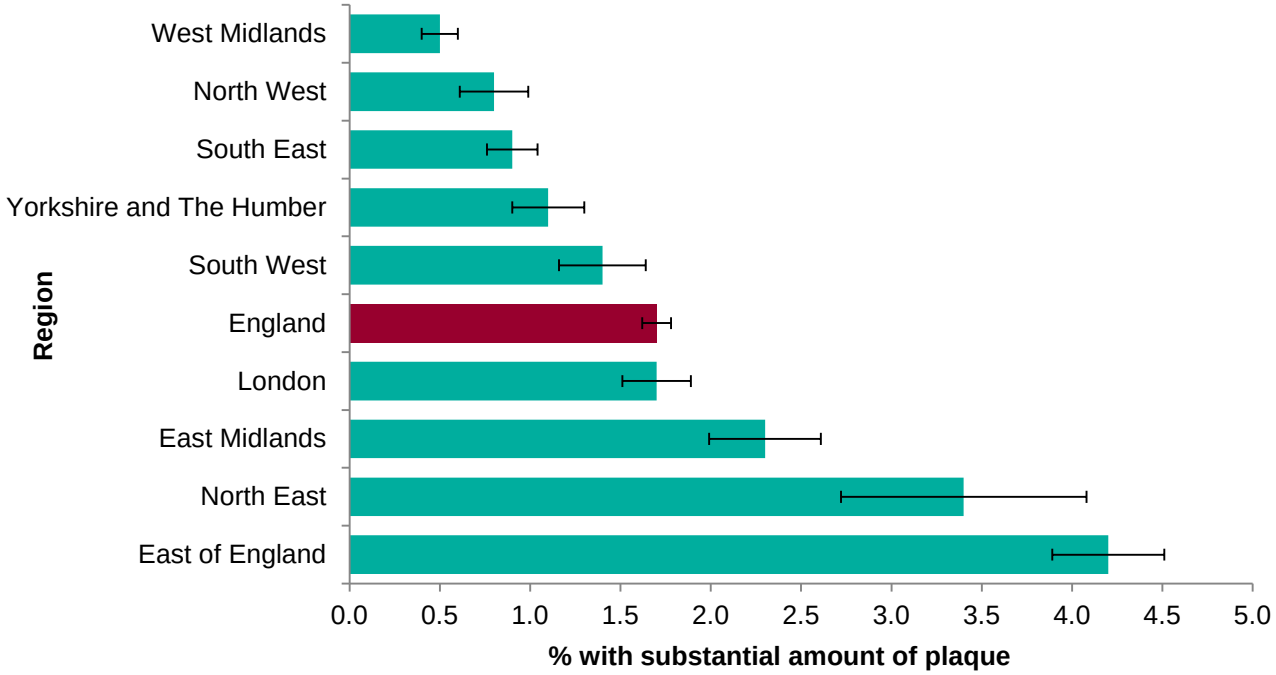


Error bars represent 95% confidence limits

Children with substantial amounts of plaque at the time of the examination

The presence of substantial amounts of plaque compared with ‘visible’ or no plaque provides a proxy measure of children who do not brush their teeth or brush them rarely. Such children cannot benefit from the protective effects of fluoride in toothpaste on dental decay. ‘Substantial amount of plaque’ was recorded for 1.7% of volunteers, ranging from 0.5% in the West Midlands to 4.2% in the East of England (Figure 10).

Figure 10: Percentage of five-year-old children with substantial amounts of plaque in England by region, 2015.



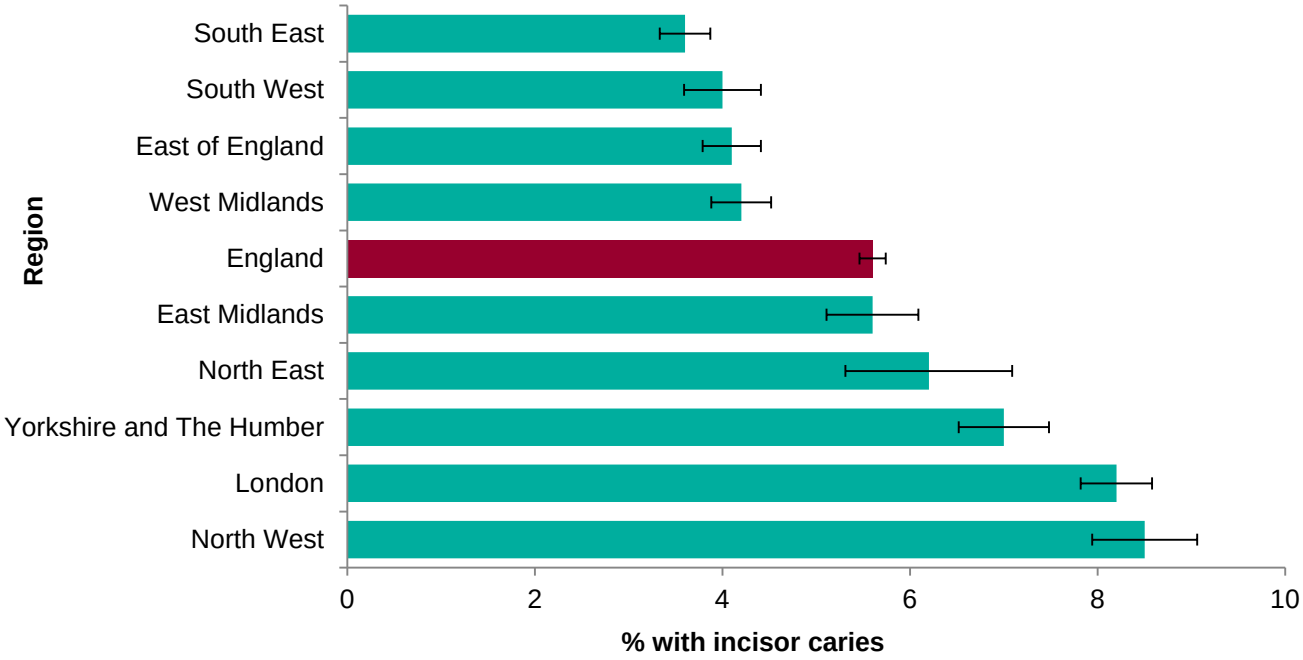
Error bars represent 95% confidence limits

Dental decay affecting incisors

For the first time the data from this survey of five-year-olds was used to assess which children had dental decay affecting one or more of their incisor (front) teeth. This measure is useful as it indicates where children have been affected by a particular type of caries. This is an aggressive form of decay that affects upper incisors and can be rapid and extensive in attack. It is associated with long term bottle use with sugar-sweetened drinks, especially when these are given overnight or for long periods of the day.

Overall the prevalence of incisor decay was 5.6% (Figure 11) and varied by region, ranging from 3.6% in the South East to 8.5% in the North West. Comparison at lower-tier local authority level shows far wider variation with a prevalence of 0.3% for Maldon and 20.8% in Oldham. Within some local authorities there is likely to be marked geographic variation as this type of decay is closely linked with specific health behaviours which are influenced by local cultural norms. Children with incisor decay are likely to have more teeth affected than is the case for general decay, so tackling this problem may lead to relatively higher benefits.

Figure 11. Percentage of five-year-old children with incisor caries in England by region, 2015.



Error bars represent 95% confidence limits

Comparisons by ethnic background

In previous surveys the recording of ethnic group has been optional for fieldwork teams and tended to be done in areas where there were smaller proportions of white British children. The collection of ethnicity data was made compulsory in the 2015 survey and has resulted in 97.0% of the volunteers being allocated an ethnicity code. The information source for this was from school records which used parents' reporting of family ethnic group when their child started at school. The ethnicity code set used for school census returns reflects categories used in the 2001 national population census, with additional categories for Travellers of Irish heritage, Sri Lankan other and pupils of Gypsy/Roma heritage.

Table 1 summarises four measures calculated for six specific ethnic codes and a group 'other' which drew together all those whose ethnic classification did not fit with the other six. Five-year-old children from Chinese and from Eastern European backgrounds had higher prevalence, severity and extent of dental decay than other ethnic groups.

The proportion of children with no obvious decay was significantly lower in the Chinese (48.7%) and Eastern European (52.4%) ethnic groups than for the remaining groups, which ranged from 55.4% to 78.6%. The mean $d_3$mft scores among the Chinese (2.5) and Eastern European (2.2) groups were more than three times higher than the white children and for black/black British children (both 0.7). Among those with any obvious decay experience the number of teeth affected in the Chinese and Eastern European groups was 5.0 and 4.7 respectively, significantly higher than for all other groups.

The proportion of children with dental decay affecting one or more incisor teeth was highest among Chinese (24.8%), Eastern European (15.1%) and 'other' (16.7%) ethnic groups. These proportions compare with 3.9% of the white children, 6.1% of black/black British and 12.5% of those from an Asian background.

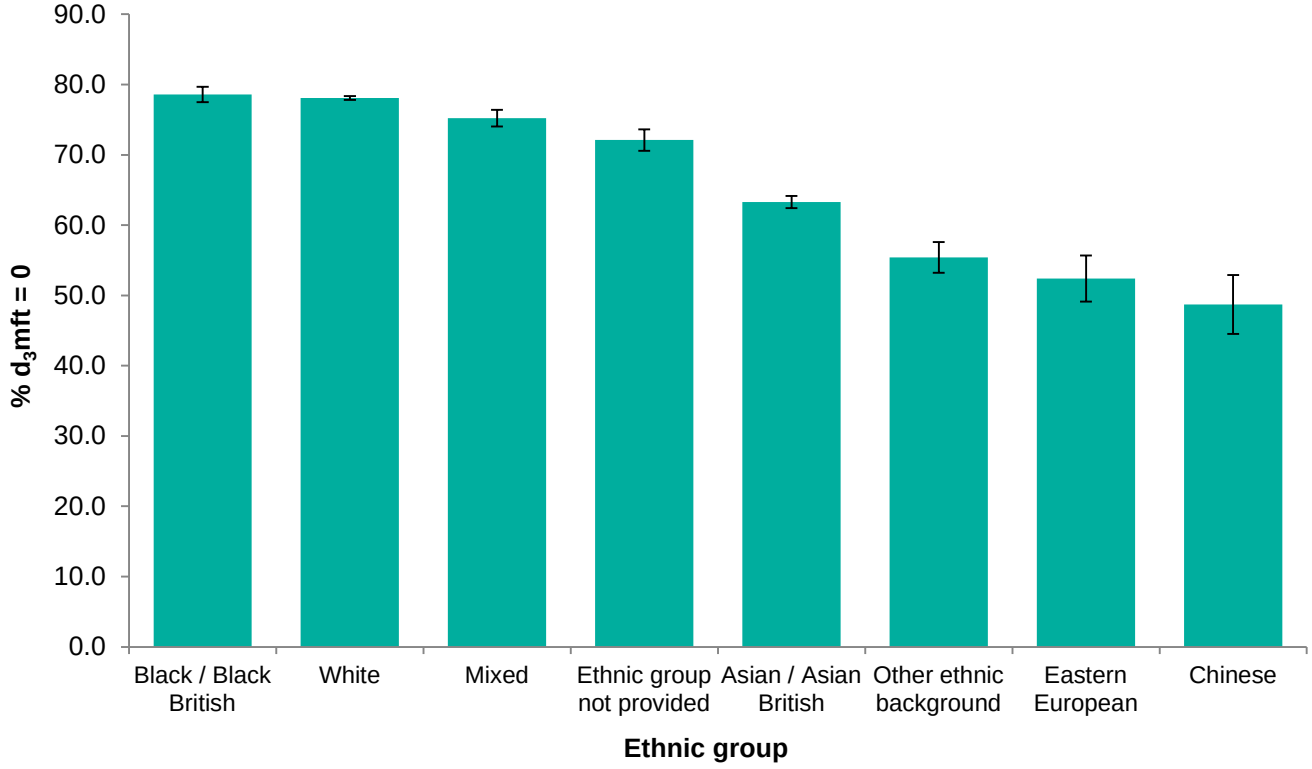
Further analysis of the data is required, including controlling for deprivation. Figures 12 and 13 show prevalence and severity scores for each ethnic group.

Table 1. Several measures of dental caries found in five-year-old children from different ethnic backgrounds.

Ethnic group	Sample size (n)	Proportion of children with no obvious caries experience	Mean $d_3$mft	Mean $d_3$mft of those with caries experience	Proportion with incisor decay of whole sample
White	82,162	78.1 (77.77 - 78.34)	0.7 (0.68 - 0.70)	3.1 (3.11 - 3.19)	3.9 (3.75 - 4.01)
Mixed	5,164	75.2 (74.04 - 76.39)	0.8 (0.75 - 0.86)	3.3 (3.14 - 3.42)	5.8 (5.17 - 6.45)
Asian/Asian British	12,011	63.3 (62.45 - 64.17)	1.5 (1.41 - 1.50)	4.0 (3.91 - 4.09)	12.5 (11.95 - 13.13)
Black/black British	5,380	78.6 (77.51 - 79.70)	0.7 (0.65 - 0.74)	3.3 (3.14 - 3.43)	6.1 (5.42 - 6.70)
Chinese	544	48.7 (44.51 – 52.91)	2.5 (2.24 – 2.86)	5.0 (4.56 – 5.43)	24.8 (21.19 – 28.45)
Eastern European	895	52.4 (49.13 - 55.67)	2.2 (1.99 - 2.42)	4.7 (4.35 – 4.98)	15.1 (12.74 - 17.43)
Other ethnic background	2,015	55.4 (53.21 – 57.56)	1.9 (1.74 – 1.99)	4.2 (4.01 - 4.41)	16.7 (15.05 – 18.30)
Not provided	3,329	72.1 (70.54 - 73.59)	1.0 (0.89 - 1.03)	3.4 (3.27 - 3.63)	6.5 (5.71 - 7.39)
Total	111,500	75.2 (74.95 - 75.45)	0.8 (0.83 - 0.85)	3.4 (3.37 - 3.43)	5.6 (5.46 – 5.73)

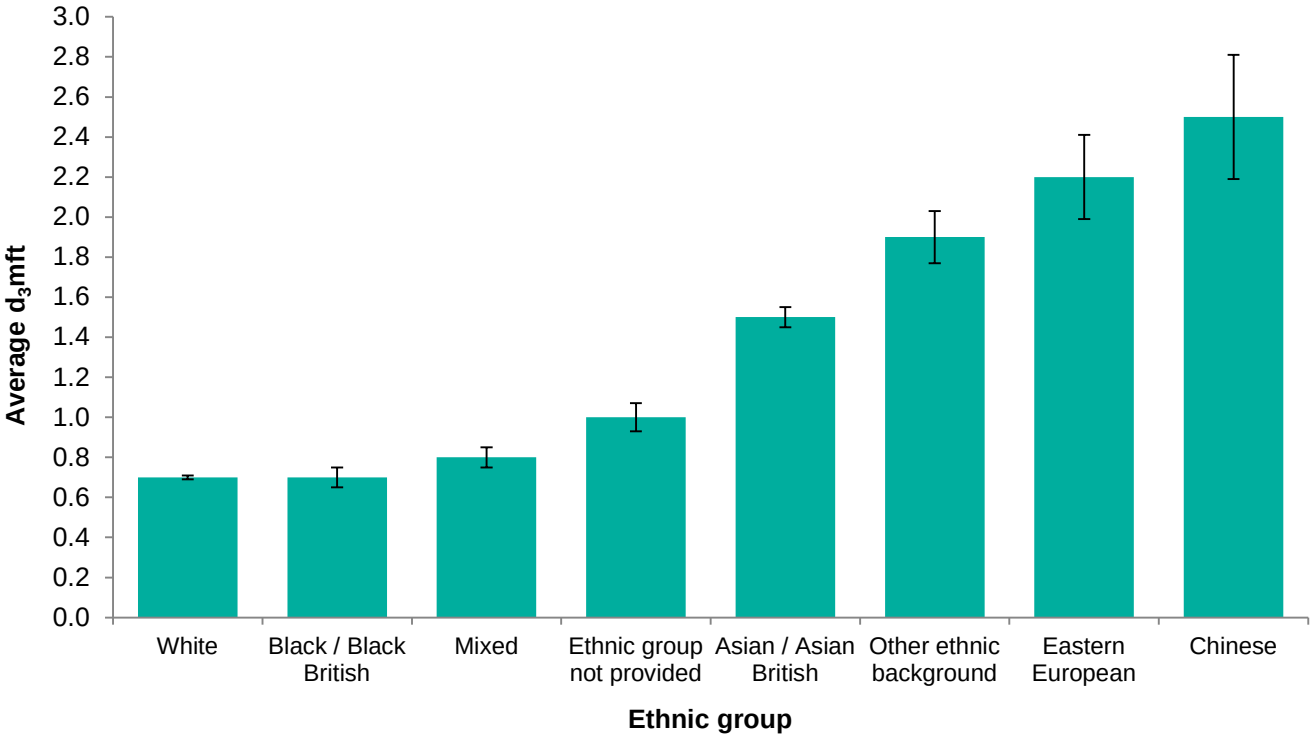
95% lower and upper confidence limits are shown in brackets

Figure 12. Percentage of five-year-old children with no obvious decay experience ($d_3$mft = 0) in England by ethnic group, 2015.



Error bars represent 95% confidence limits

Figure 13. Average number of dentinally decayed, missing (due to decay) and filled teeth ($d_3$mft) among five-year-old children in England by ethnic group, 2015.



Error bars represent 95% confidence limits

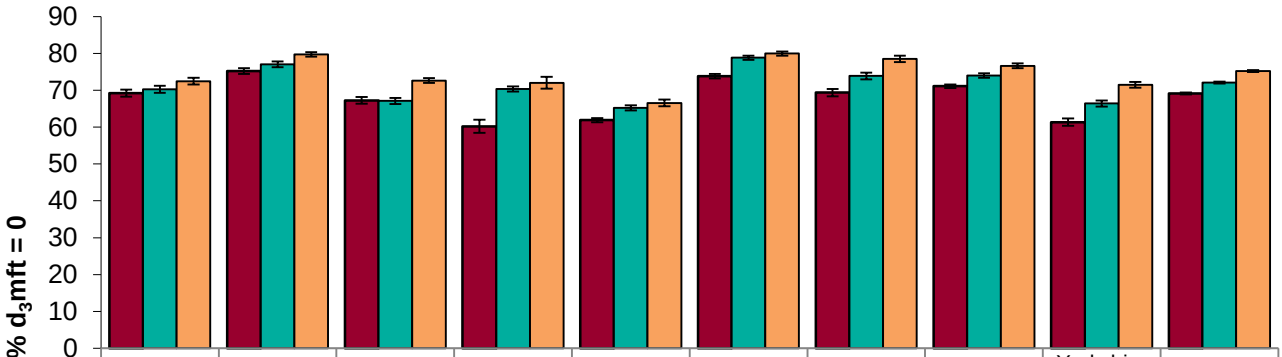
Comparisons with other surveys over time

In the first period of these national surveys, from 1992 to 2006, parents were given the choice to opt out of the surveys and if they did not do so, children were automatically included (known as negative consent). This method changed in 2008 when parents were required to give written, positive consent for their child to be included in the surveys, that is they must 'opt in'. This change introduced a response bias which is unquantifiable and means that direct comparison cannot be made between surveys in 2008, 2012 and 2015 with those conducted between 1992 and 2006.[19]

The same methods regarding consent and application of weighting were used in the 2008 and 2012 surveys and the one reported here. Direct comparison of the results of these surveys is therefore valid. Similar response rates were found in all three: 66.8% in 2008, 65.2% in 2012 and 66.5% in 2015. It is likely that non-response bias applies in all three surveys and reference should be made to the response levels when making comparisons, particularly when the sample sizes are small and response levels are low.

Comparing results across the three surveys from 2008 to 2015[14,15] reveals a clear trend of significant improvement in decay levels, with reductions in the estimates of both the severity and prevalence of dental decay across the years. The proportion of children in England with no experience of obvious decay increased from 69.1% in 2008 to 72.1% in 2012 and 75.2% in 2015 (Figure 14). This represents an increase of six percentage points and a percentage change of 8.8% since 2008. An improvement was reported for all regions and this was significant for most. Figure 15 shows a reduction in mean $d_3$mft from 1.1 in 2008 to 0.9 in 2012 to 0.8 in 2015, an overall reduction of 27.3% since 2008. The reduction in severity was recorded for all regions, some significantly so, but not in all local authorities.

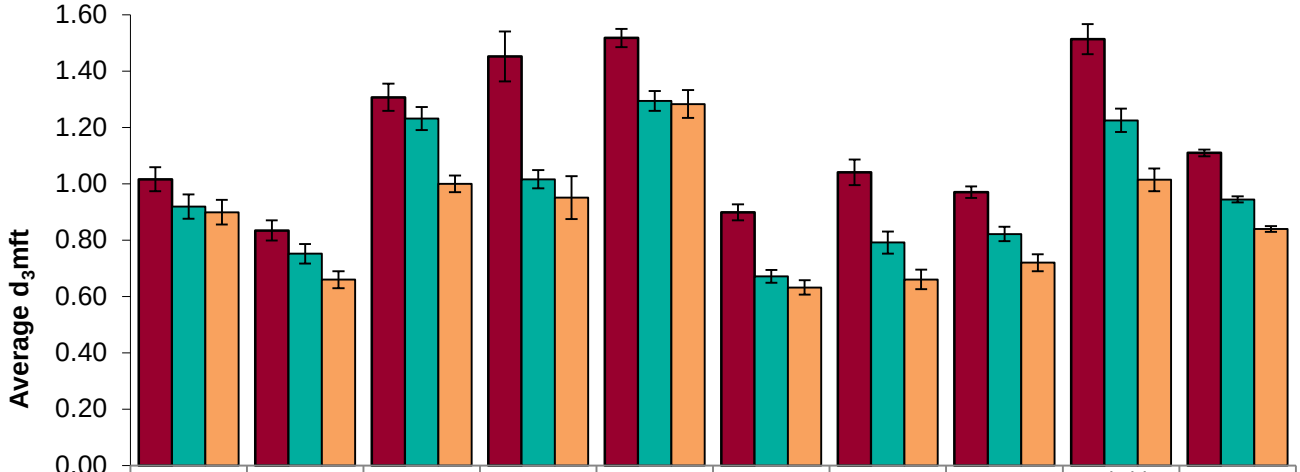
Figure 14. Percentage of five-year-old children with no decay experience in England by region, 2008, 2012 and 2015.



	East Midlands	East of England	London	North East	North West	South East	South West	West Midlands	Yorkshire and the Humber	**England**
2008	69.2	75.2	67.3	60.2	61.9	73.8	69.4	71.1	61.3	69.1
2012	70.2	77.0	67.1	70.3	65.2	78.8	73.9	74.0	66.4	72.1
2015	72.5	79.7	72.6	72.0	66.6	79.9	78.5	76.6	71.5	75.2

Error bars represent 95% confidence limits

Figure 15. Average number of dentinally decayed, missing (due to decay) and filled teeth ($d_3$mft) among five-year-old children in England by region, 2008, 2012 and 2015.



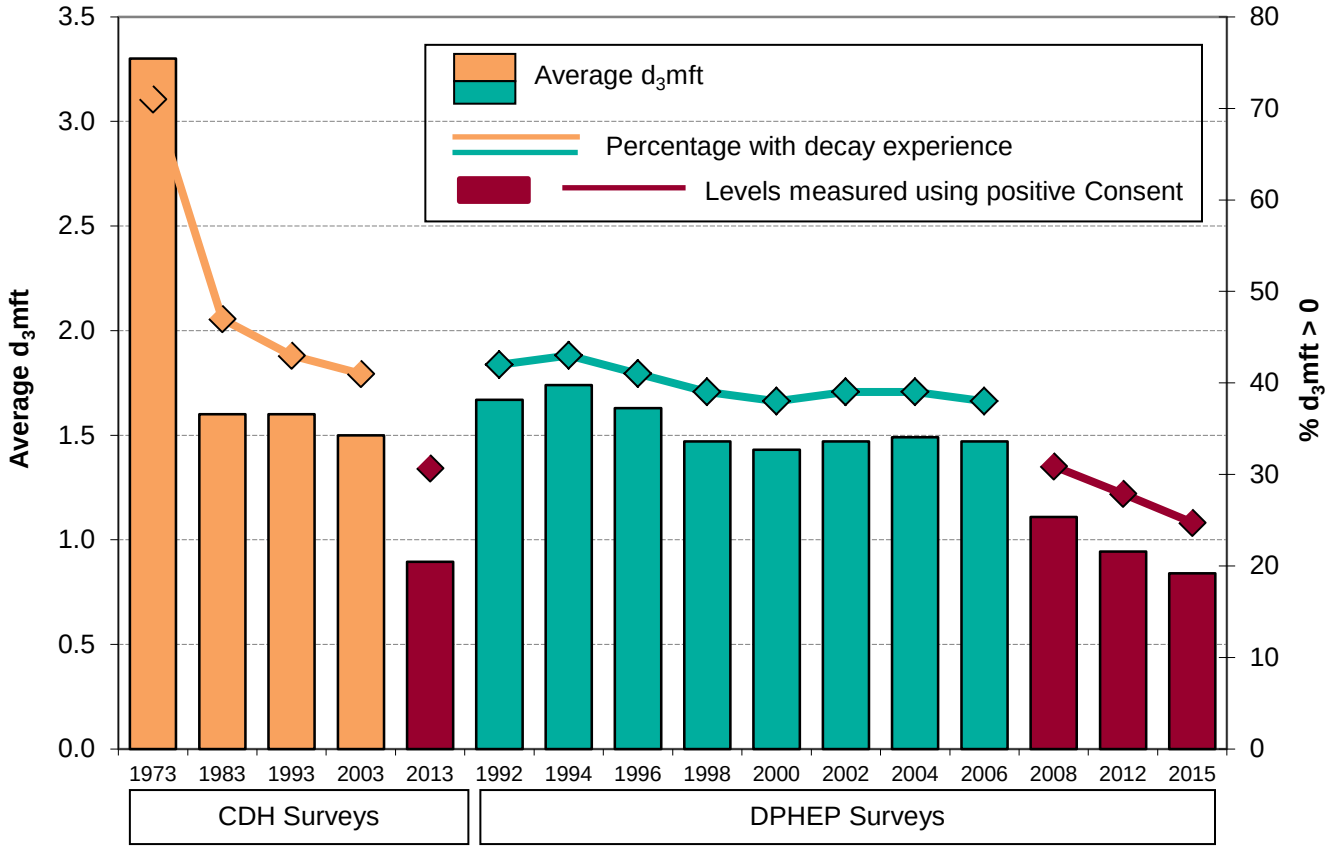
	East Midlands	East of England	London	North East	North West	South East	South West	West Midlands	Yorkshire and the Humber	**England**
2008	1.0	0.8	1.3	1.5	1.5	0.9	1.0	1.0	1.5	1.1
2012	0.9	0.8	1.2	1.0	1.3	0.7	0.8	0.8	1.2	0.9
2015	0.9	0.7	1.0	1.0	1.3	0.6	0.7	0.7	1.0	0.8

Error bars represent 95% confidence limits

A change of this magnitude is statistically significant and warrants close inspection to determine the most likely causes.

While the absolute levels of decay are not comparable across the full timeline of these surveys (for the reasons highlighted above), the general trends still give an indication of what has been happening over time. Figure 16 shows there was little change in either the prevalence or severity of dental decay in this population between 1998 and 2006. Because of the methodology change introduced for the 2008 survey, it is not possible to determine if any of the change between 2006 and 2008 was due to an actual change in disease levels. However, the surveys carried out using positive consent show a significant reduction in prevalence and severity between 2008 and 2015, as described above. The chart shows the series of child dental health surveys commissioned by the Health and Social Care Information Centre, which used a slightly different method but also introduced positive consent for the 2013 survey. The same pattern of stability between 1980 and 2003 is seen, followed by a marked reduction in the 2013 survey.[20]

Figure 16. Results of dental surveys of five-year-olds in England from National Child Dental Health surveys and PHE Dental Public Health Epidemiology Programme surveys, 1973 to 2015.

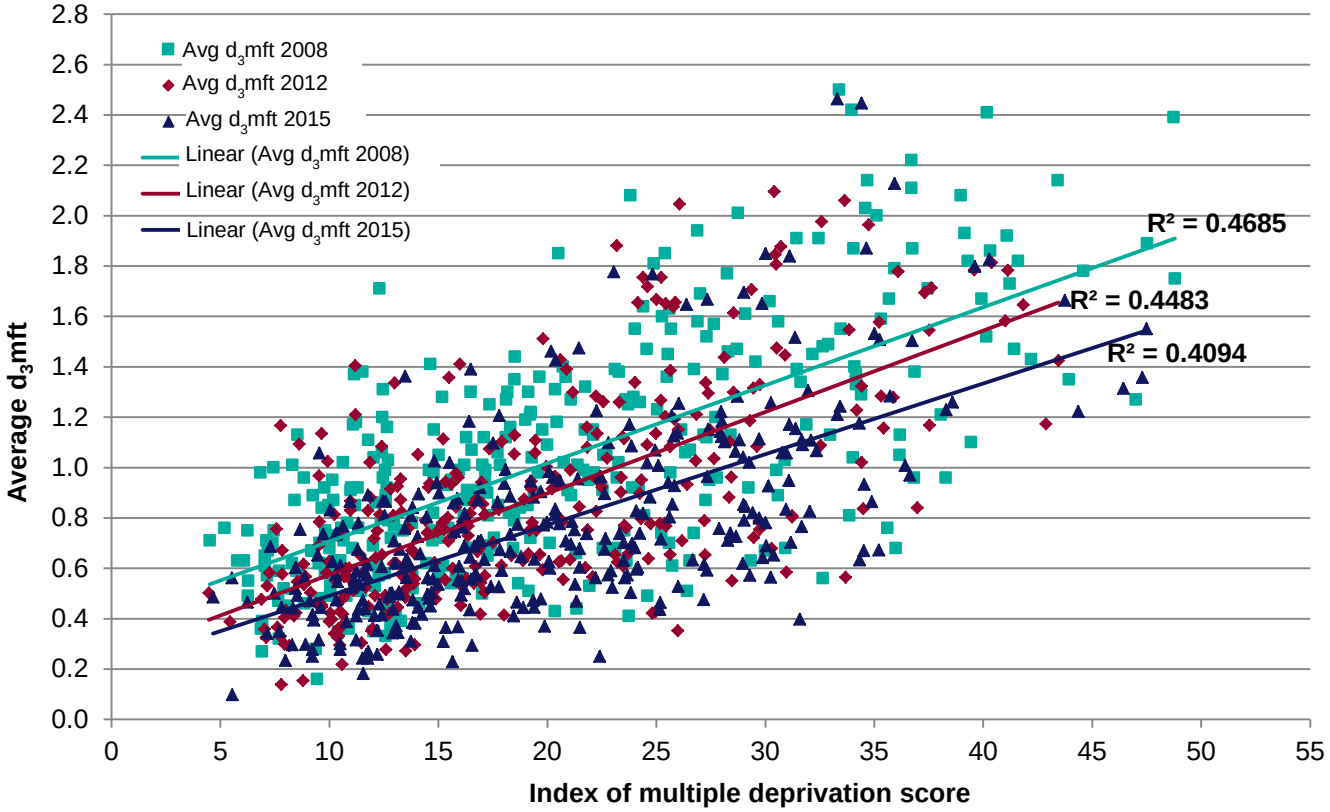


Comparison of inequalities over time

Over many years and in most dental epidemiological surveys in the UK the relationship between deprivation and dental decay levels has been illustrated. Decay levels are higher in local authorities where deprivation scores are higher. Figure 4 shows the strength of the correlation between the estimates of mean decay severity ($d_3$mft) and Index of Multiple Deprivation (IMD 2015) scores for lower-tier local authorities in England.

The same correlations have been carried out for the results from the 2008, 2012 and current survey and are shown in Figure 17. The slope of the lines for each survey and the correlation coefficients appear to remain similar over time. This suggests that while dental decay levels are reducing, the inequalities gap remains the same.

Figure 17. Correlation between numbers of dentinally decayed, missing (due to decay) and filled teeth ($d_3$mft) among five-year-old children and Index of Multiple Deprivation score. Lower-tier local authorities in England, 2008 (IMD 2007), 2012 (IMD 2010) and 2015 (IMD 2015).



Section 3. Implications of results

Variations in health

It is clear that wide variations in the levels of dental decay experienced by five-year-old children living in different parts of the country and in different life circumstances still exist. Frequent exposure of teeth to free sugars, most commonly through eating and drinking sugary snacks and drinks, is the cause of decay.[16] Free sugars are also contributory factors to other issues of public health concern in children, for example, childhood obesity and development of Type II diabetes later in life. There is a clear correlation at lower-tier local authority level between the index of multiple deprivation and decay levels. A similar pattern is also seen in the National Child Measurement Programme,[17] with the highest levels of unhealthy weight tending to be found in the most deprived areas. It is not surprising that both surveys show a common association as the factors that lead to dental decay and obesity are similar, however, the nature of the relationship between dental decay levels and childhood obesity has not yet been clearly established.[18] It should also be noted that deprivation alone cannot explain the variations in the dental survey data and factors such as location and ethnicity also have considerable effect over and above that for deprivation.

Changes in levels of dental decay over time

The use of standardised BASCD criteria and a prescribed training and calibration process ensures the ability to look at trend data over time. This is the third survey to be carried out following some methodological changes, including the requirement to seek positive, written consent, introduced from 2007 and it provides a third data point which confirms a trend for lower levels of decay in this age group.

An increase of 9% in the proportion of children with no obvious decay between 2008 and 2015 is matched by a 20% decrease in the proportion that had any experience of obvious decay. During the same time period the mean severity has reduced by 28% from 1.11 $d_3$mft to 0.8 $d_3$mft. This notable improvement in decay levels has followed several decades of stability following the marked improvements related to the introduction of fluoridated toothpaste in the 1970s.[21] Similar trends have been noted from the 1980s to 2015 in Scotland [2] and Wales.[3]

Now that a clear trend has been observed, further detailed analysis is required to determine the impact of a range of possible factors, such as:

- the magnitude of the change in dental decay levels is similar to that found in trials that distributed toothpaste at 1,450ppm fluoride to children up to five-years-old, displacing the use of traditionally low-fluoride children's toothpaste.[22] Following recommendations in the 2007 report *Delivering better oral health; an evidence based toolkit for prevention*[23] several toothpaste manufacturers re-formulated their children's brands. Fluoride levels were increased from very low levels, such as 250ppm or 440ppm, up to at least 1,000ppm. Only a few small brands stayed at levels less likely to prevent decay. It is possible that this increased use of higher concentration fluoride toothpaste has had the effect of controlling the development of decay and causing a real reduction in measured disease levels. More recent editions of the toolkit have supported this recommendation and tracked the reduction in the number of brands with low fluoride levels[23]

- the increasing focus on prevention in general dental practice may also have had an influence. Evidence from the Health and Social Care Information Centre (HSCIC) shows an almost seven-fold increase in dentists' prescriptions for fluoride-based products between 2007 and 2014,[24] and a continuing increase in the application of fluoride varnish for children[25]

- wide dissemination of the messages about twice daily brushing and spitting out after brushing instead of rinsing may well have reached sufficiently large proportions of the population to have had an effect. Simply adopting these behaviours, along with higher concentration fluoride toothpaste could have been sufficient to reduce caries levels in five-year-olds

- in limited parts of the country, oral health improvement programmes have been established during the lifetime of these five-year-old children. If these have had sufficient intensity, coverage, penetration and length of time to run it is possible that these interventions may have had an impact on the dental health of the recipient populations. The National Institute for Health and Clinical Excellence (NICE) is currently evaluating the evidence

Other possible factors may also explain this apparent reduction and no clear conclusion should be drawn until these have been investigated.

Putting this information to use

Data from this survey will be used to produce the dental indicator (4.2 tooth decay in children aged five) in the Public Health Outcomes Framework (PHOF).[1] In previous reports the prevalence of children with experience of decay has been shown but for this survey a change has been made to report the proportion of children who are free of obvious decay and this aligns with the PHOF indicator.

Locally these data are used as important contributions to Joint Strategic Needs Assessments. This is because improvements in dental decay levels can give early indication of the success, or otherwise, of interventions aimed at very young children such as those designed to improve parenting, children's weight or overall health or diet. Such interventions may need many years to pass before the impact can be measured. Dental decay levels can be used as early proxy measures of the impact of programmes focussed on weaning and feeding practices or improving parenting skills.

Reliable data on dental decay levels can assist with planning and commissioning dental health improvement programmes, which are the responsibility of local authorities. These should be commissioned following strategic planning, taking into account the measured health needs of the population. Guidance is available from PHE[6] and NICE[7] about commissioning oral health improvement programmes and there is good evidence that, in addition to place-based generic health improvement activities, which will address some of the common risk factors for dental decay, strategies to increase the exposure to fluoride are effective.

Use of the data at a lower level than local authority boundaries can help to show where inequalities lie within a local authority and therefore where targeted interventions are required. The introduction of a measure showing children with incisor caries will indicate where interventions are required to tackle this specific problem which is related to long term use of a baby bottle and sugared drinks.

For the first time, data is available to indicate which ethnic groups are at higher risk of decay. The country level estimates can be used locally to inform planners about

tailoring interventions for specific groups in the population according to their cultural needs.

Local authorities may seek dental public health advice from PHE with regard to commissioning additional surveys using this method. This would allow them to evaluate their interventions and to investigate specific population groups.

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Section 5. Summarised tables

The complete sets of tables with detailed results are available from:
www.nwph.net/dentalhealth

Appendix 1. Dental Public Health Epidemiology Programme for England, Oral Health Survey of five-year-old children 2015, upper tier local authority (LA)

Public Health England

Part LA did not partake in survey

Region	Upper Tier LA Code	Upper Tier LA Name	% of sample examined	Weighted Measures						95% Confidence Intervals					
				Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries	Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries
Country	**E92000001**	**England**	**63.1**	**0.8**	**0.7**	**75.2**	**24.7**	**3.4**	**5.6**	**0.01**	**0.01**	**0.25**	**0.25**	**0.03**	**0.14**
East Midlands	E06000015	Derby	60.1	1.3	1.0	72.4	27.6	4.7	4.6	0.33	0.29	5.21	5.21	0.82	2.42
	E10000007	Derbyshire	59.7	0.7	0.5	77.8	22.2	3.1	3.4	0.09	0.07	2.13	2.13	0.27	0.95
	E06000016	Leicester	51.6	1.9	1.5	55.0	45.0	4.2	14.2	0.22	0.19	3.41	3.41	0.37	2.43
	E10000018	Leicestershire	69.4	0.8	0.7	71.6	28.4	2.8	5.3	0.09	0.08	2.26	2.26	0.22	1.13
	E10000019	Lincolnshire	74.7	0.7	0.6	76.5	23.5	3.0	3.9	0.09	0.08	2.05	2.05	0.27	0.95
	E10000021	Northamptonshire	57.0	0.8	0.7	72.9	27.1	3.1	3.9	0.11	0.10	2.50	2.50	0.28	1.13
	E06000018	Nottingham	64.0	1.2	1.0	64.4	35.6	3.4	9.5	0.23	0.21	4.66	4.66	0.47	2.87
	E10000024	Nottinghamshire	66.9	0.6	0.5	79.0	21.0	2.9	4.4	0.08	0.07	2.11	2.11	0.28	1.06
	E06000017	Rutland	81.9	0.7	0.7	71.2	28.8	2.6	6.3	0.23	0.21	6.08	6.08	0.58	3.28
East of England	E06000055	Bedford	80.6	0.9	0.7	73.1	26.9	3.5	6.1	0.14	0.12	2.89	2.89	0.35	1.58
	E10000003	Cambridgeshire	67.0	0.5	0.4	83.1	16.9	3.3	4.3	0.08	0.07	1.96	1.96	0.33	1.07
	E06000056	Central Bedfordshire	78.6	0.5	0.4	81.9	18.1	2.8	3.1	0.08	0.07	2.09	2.09	0.30	0.96
	E10000012	Essex	61.4	0.5	0.4	83.9	16.0	3.1	2.9	0.05	0.04	1.18	1.18	0.21	0.55
	E10000015	Hertfordshire	75.9	0.6	0.5	79.8	20.2	2.9	3.5	0.05	0.04	1.19	1.19	0.16	0.55
	E06000032	Luton	77.7	1.7	1.2	57.4	42.6	4.0	14.7	0.29	0.24	5.10	5.10	0.49	3.64
	E10000020	Norfolk	51.2	0.7	0.6	81.7	18.3	3.8	2.7	0.09	0.08	1.94	1.94	0.31	0.83
	E06000031	Peterborough	72.9	1.1	0.9	70.0	30.0	3.8	8.1	0.27	0.24	5.40	5.40	0.57	3.38
	E06000033	Southend-on-Sea	56.1	0.6	0.5	82.3	17.4	3.3	3.3	0.18	0.16	4.21	4.19	0.66	1.99
	E10000029	Suffolk	53.1	0.7	0.5	79.1	20.8	3.2	4.8	0.08	0.07	1.91	1.91	0.26	1.01
	E06000034	Thurrock	73.0	0.6	0.5	80.5	19.5	3.1	2.8	0.19	0.18	4.81	4.81	0.64	1.97
London	E09000002	Barking and Dagenham	42.1	1.3	1.0	68.6	31.4	4.1	9.9	0.28	0.24	5.30	5.30	0.56	3.38
	E09000003	Barnet	70.0	1.2	1.0	68.0	31.6	3.8	7.9	0.26	0.21	5.04	5.03	0.57	2.97
	E09000004	Bexley	72.9	0.4	0.4	82.8	17.0	2.7	1.6	0.13	0.12	3.71	3.70	0.47	1.24
	E09000005	Brent	66.6	1.3	1.0	69.2	30.8	4.2	12.1	0.22	0.19	4.18	4.18	0.47	2.99
	E09000006	Bromley	86.5	0.4	0.4	84.0	16.0	2.7	5.1	0.15	0.14	4.19	4.19	0.64	2.54
	E09000007	Camden	59.7	0.9	0.5	76.5	23.5	3.6	6.0	0.20	0.15	4.10	4.10	0.55	2.22
	E09000008	Croydon	65.4	0.9	0.5	73.7	26.3	3.2	7.5	0.18	0.13	4.33	4.33	0.42	2.57
	E09000009	Ealing	51.6	1.8	1.5	60.3	39.0	4.6	13.4	0.23	0.20	3.70	3.69	0.37	2.56
	E09000010	Enfield	67.0	1.2	1.0	66.1	33.9	3.4	11.6	0.18	0.17	3.94	3.94	0.37	2.69
	E09000011	Greenwich	60.6	0.8	0.6	76.1	23.9	3.2	4.3	0.20	0.17	4.71	4.71	0.57	2.14
	E09000012	Hackney (including City of London)	50.5	1.0	0.7	73.4	27.0	3.6	9.3	0.12	0.10	2.41	2.41	0.31	1.57
	E09000013	Hammersmith and Fulham	64.2	0.7	0.5	73.7	26.3	2.7	8.5	0.20	0.17	6.32	6.32	0.44	4.07
	E09000014	Haringey	68.8	1.2	0.9	69.7	30.3	3.9	10.2	0.21	0.18	3.74	3.74	0.48	2.57
	E09000015	Harrow	64.3	1.4	1.0	65.5	34.2	4.1	14.3	0.25	0.21	4.71	4.70	0.49	3.51
	E09000016	Havering	49.4	0.7	0.6	80.0	20.0	3.3	3.7	0.24	0.22	5.06	5.06	0.90	2.34
	E09000017	Hillingdon	69.9	1.5	1.2	62.2	37.8	3.9	16.7	0.26	0.24	4.75	4.75	0.50	3.72
	E09000018	Hounslow	68.6	1.1	0.8	69.4	30.5	3.6	5.2	0.14	0.12	3.02	3.02	0.31	1.46

Appendix 1. Dental Public Health Epidemiology Programme for England, Oral Health Survey of five-year-old children 2015, upper tier local authority (LA)

Public Health England

Part LA did not partake in survey

Region	Upper Tier LA Code	Upper Tier LA Name	% of sample examined	Weighted Measures						95% Confidence Intervals					
				Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries	Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries
London	E09000019	Islington	57.5	0.9	0.5	75.6	24.4	3.5	6.7	0.16	0.11	3.45	3.45	0.45	2.01
	E09000020	Kensington and Chelsea	53.1	1.1	0.8	66.6	33.4	3.3	12.2	0.28	0.25	6.11	6.11	0.60	4.34
	E09000021	Kingston upon Thames	76.0	0.8	0.6	77.1	22.9	3.4	3.2	0.20	0.17	4.41	4.41	0.61	1.85
	E09000022	Lambeth	47.5	0.8	0.6	77.9	22.1	3.7	5.7	0.16	0.13	3.15	3.15	0.47	1.77
	E09000023	Lewisham	63.2	0.6	0.4	76.7	23.3	2.4	4.6	0.16	0.10	4.33	4.33	0.31	2.30
	E09000024	Merton	70.3	0.9	0.6	73.9	26.1	3.5	6.7	0.22	0.17	4.26	4.26	0.63	2.40
	E09000025	Newham	63.7	1.2	1.0	70.7	28.3	4.5	8.7	0.09	0.08	1.59	1.57	0.20	0.98
	E09000026	Redbridge	53.3	1.0	0.7	76.3	23.7	4.1	9.1	0.21	0.18	4.19	4.19	0.58	2.77
	E09000027	Richmond upon Thames	69.3	0.5	0.3	81.0	19.0	2.5	1.9	0.13	0.10	3.91	3.91	0.47	1.34
	E09000028	Southwark	45.8	0.6	0.4	81.2	18.8	3.3	4.5	0.15	0.10	3.43	3.43	0.50	1.84
	E09000029	Sutton	69.0	0.6	0.4	81.0	19.0	3.0	5.1	0.12	0.11	2.94	2.94	0.45	1.72
	E09000030	Tower Hamlets	59.9	1.3	1.0	64.5	35.5	3.6	12.3	0.11	0.09	2.29	2.29	0.21	1.56
	E09000031	Waltham Forest	61.3	1.1	0.8	70.2	29.8	3.5	8.5	0.22	0.19	4.51	4.51	0.50	2.76
	E09000032	Wandsworth	64.3	0.8	0.6	76.8	23.2	3.6	7.9	0.19	0.16	4.04	4.04	0.55	2.55
	E09000033	Westminster	65.4	1.2	0.8	64.9	35.1	3.3	13.5	0.15	0.13	3.25	3.25	0.31	2.34
North East	E06000047	County Durham	67.3	1.1	0.9	64.9	35.1	3.0	8.4	0.25	0.22	6.13	6.13	0.46	3.65
	E06000005	Darlington	59.6	1.2	0.9	64.6	35.4	3.4	9.5	0.30	0.26	5.99	5.99	0.64	3.66
	E08000037	Gateshead	61.3	0.7	0.5	76.2	23.8	2.7	3.3	0.21	0.17	6.02	6.02	0.59	2.38
	E06000001	Hartlepool	51.8	0.4	0.3	84.6	15.4	2.6	3.1	0.16	0.11	4.76	4.76	0.68	2.32
	E06000002	Middlesbrough	50.9	1.7	1.1	61.2	38.8	4.3	10.0	0.34	0.28	5.55	5.55	0.61	3.54
	E08000021	Newcastle upon Tyne	44.4	0.7	0.5	77.5	22.5	3.2	4.8	0.26	0.21	5.84	5.84	0.87	3.06
	E08000022	North Tyneside	68.0	0.5	0.4	81.7	18.3	2.9	3.2	0.17	0.15	5.02	5.02	0.51	2.36
	E06000057	Northumberland	65.9	0.7	0.5	74.3	25.7	2.9	3.9	0.18	0.14	4.90	4.90	0.45	2.24
	E06000003	Redcar and Cleveland	54.4	1.1	0.7	72.9	27.1	4.1	8.0	0.33	0.24	5.75	5.75	0.84	3.64
	E08000023	South Tyneside	58.7	0.7	0.5	74.0	26.0	2.7	1.5	0.22	0.18	6.02	6.02	0.55	1.65
	E06000004	Stockton-on-Tees	55.6	0.9	0.6	74.7	25.3	3.7	6.2	0.26	0.19	5.08	5.08	0.73	2.68
	E08000024	Sunderland	67.6	1.5	1.2	59.9	40.1	3.8	11.5	0.35	0.32	6.14	6.14	0.59	4.16
North West	E06000008	Blackburn with Darwen	70.0	2.4	2.1	43.9	55.7	4.4	13.5	0.42	0.38	6.08	6.09	0.56	4.32
	E06000009	Blackpool	60.3	1.8	1.4	57.5	42.5	4.3	11.8	0.43	0.36	7.28	7.28	0.68	4.87
	E08000001	Bolton	68.7	1.7	1.2	59.5	40.5	4.1	13.7	0.34	0.26	6.03	6.03	0.56	4.36
	E08000002	Bury	59.7	0.9	0.7	73.3	26.7	3.4	3.6	0.25	0.22	5.70	5.70	0.60	2.34
	E06000049	Cheshire East	72.9	0.8	0.6	79.1	20.9	3.7	4.1	0.27	0.23	4.87	4.87	0.97	2.56
	E06000050	Cheshire West and Chester	66.3	0.7	0.6	79.7	20.3	3.3	2.1	0.26	0.24	5.78	5.78	0.87	2.28
	E10000006	Cumbria	72.1	1.2	1.0	67.8	32.2	3.6	7.7	0.10	0.09	2.13	2.13	0.22	1.22
	E06000006	Halton	59.4	0.9	0.8	73.3	26.2	3.6	5.7	0.31	0.27	6.25	6.22	0.78	3.41
	E08000011	Knowsley	45.4	1.2	0.8	67.5	32.5	3.8	6.8	0.27	0.20	5.04	5.04	0.59	2.79
	E10000017	Lancashire	77.9	1.2	1.0	68.0	31.9	3.7	7.2	0.09	0.08	1.76	1.76	0.19	1.01
	E08000012	Liverpool	41.3	1.4	0.9	68.2	31.8	4.3	8.3	0.27	0.23	4.90	4.90	0.56	2.68
	E08000003	Manchester	62.1	1.3	1.1	67.3	32.7	4.0	12.8	0.28	0.24	5.24	5.24	0.56	3.72

Appendix 1. Dental Public Health Epidemiology Programme for England, Oral Health Survey of five-year-old children 2015, upper tier local authority (LA)

Public Health England

Part LA did not partake in survey

Region	Upper Tier LA Code	Upper Tier LA Name	% of sample examined	Weighted Measures						95% Confidence Intervals					
				Mean d_3mft	Mean d_3t	% d_3mft = 0	% d_3mft > 0	Mean d_3mft (% d_3mft > 0)	% with incisor caries	Mean d_3mft	Mean d_3t	% d_3mft = 0	% d_3mft > 0	Mean d_3mft (% d_3mft > 0)	% with incisor caries
North West	E08000004	Oldham	63.1	2.5	2.2	49.1	50.9	4.8	20.8	0.44	0.42	6.29	6.29	0.63	5.23
	E08000005	Rochdale	86.5	2.1	1.8	56.5	43.5	4.9	16.6	0.34	0.32	5.19	5.19	0.54	3.95
	E08000006	Salford	57.8	1.8	1.7	49.0	51.0	3.6	10.9	0.30	0.28	5.25	5.25	0.46	3.37
	E08000014	Sefton	53.0	0.6	0.5	77.3	22.7	2.8	4.7	0.16	0.13	4.47	4.47	0.44	2.31
	E08000013	St. Helens	46.7	1.1	0.8	70.3	29.7	3.7	7.5	0.36	0.30	7.08	7.08	0.85	4.37
	E08000007	Stockport	64.1	0.8	0.6	78.3	21.7	3.5	5.4	0.25	0.22	5.15	5.15	0.80	2.92
	E08000008	Tameside	64.2	1.2	1.0	68.6	31.4	3.7	8.8	0.24	0.22	4.94	4.94	0.52	2.61
	E08000009	Trafford	82.5	0.9	0.8	73.6	26.4	3.3	6.9	0.20	0.19	4.41	4.41	0.55	2.58
	E06000007	Warrington	47.0	0.9	0.8	75.5	24.5	3.5	2.8	0.51	0.47	8.01	8.01	1.57	3.47
	E08000010	Wigan	57.9	1.1	0.9	67.5	32.5	3.5	5.5	0.27	0.22	5.64	5.64	0.56	2.81
	E08000015	Wirral	57.1	1.2	0.8	67.1	32.9	3.5	7.2	0.30	0.25	6.55	6.55	0.61	3.51
South East	E06000036	Bracknell Forest	63.5	0.8	0.6	77.9	22.1	3.5	5.6	0.24	0.23	4.91	4.91	0.80	2.76
	E06000043	Brighton and Hove	54.1	0.4	0.2	82.4	16.2	2.3	1.3	0.17	0.10	5.83	5.22	0.67	1.51
	E10000002	Buckinghamshire	73.8	0.7	0.6	76.5	23.4	3.0	3.3	0.11	0.10	2.47	2.47	0.34	1.09
	E10000011	East Sussex	57.7	0.5	0.4	79.7	20.3	2.5	3.4	0.13	0.10	3.75	3.75	0.41	1.68
	E10000014	Hampshire	51.2	0.5	0.3	85.0	15.0	3.0	2.5	0.06	0.05	1.46	1.46	0.26	0.64
	E06000046	Isle of Wight	75.4	0.8	0.6	73.6	26.4	3.1	3.1	0.17	0.14	3.88	3.88	0.45	1.52
	E10000016	Kent	69.4	0.5	0.4	83.4	16.2	3.3	1.9	0.06	0.05	1.31	1.30	0.22	0.49
	E06000035	Medway	68.5	0.7	0.6	81.3	18.4	3.7	3.1	0.22	0.19	4.43	4.38	0.66	1.97
	E06000042	Milton Keynes	61.1	0.6	0.5	78.3	21.5	3.0	4.7	0.07	0.06	1.69	1.68	0.22	0.88
	E10000025	Oxfordshire	69.6	0.8	0.6	77.3	22.7	3.3	4.8	0.10	0.08	2.19	2.19	0.27	1.15
	E06000044	Portsmouth	78.3	0.6	0.3	81.9	18.1	3.2	2.3	0.10	0.08	2.54	2.54	0.37	1.02
	E06000038	Reading	67.1	0.9	0.7	71.9	28.1	3.4	7.5	0.23	0.18	5.03	5.03	0.55	3.01
	E06000039	Slough	65.5	1.8	1.5	58.7	41.3	4.3	11.2	0.32	0.29	5.57	5.57	0.51	3.55
	E06000045	Southampton	81.5	1.3	0.9	66.3	33.7	3.7	7.2	0.13	0.11	2.69	2.69	0.27	1.49
	E10000030	Surrey (No data for Tandridge LA)	51.4	0.5	0.4	81.3	18.7	2.9	3.1	0.08	0.07	2.11	2.11	0.32	0.94
	E06000037	West Berkshire	63.2	0.7	0.6	76.9	23.1	3.2	3.3	0.29	0.24	6.03	6.03	0.86	3.10
	E10000032	West Sussex (No data for Adur LA)	61.0	0.4	0.4	82.0	17.5	2.6	3.7	0.15	0.13	3.27	3.24	0.63	1.67
	E06000040	Windsor and Maidenhead	67.5	0.6	0.5	81.5	18.5	3.4	5.5	0.21	0.20	4.66	4.66	0.75	2.80
	E06000041	Wokingham	65.3	0.6	0.4	85.2	14.8	3.8	4.6	0.25	0.20	4.45	4.45	1.21	2.64
South West	E06000022	Bath and North East Somerset	65.7	0.4	0.3	85.0	15.0	2.5	3.5	0.16	0.12	4.47	4.47	0.71	2.25
	E06000028	Bournemouth	81.0	0.9	0.6	71.8	28.2	3.3	4.7	0.23	0.18	5.33	5.33	0.56	2.45
	E06000023	Bristol, City of	59.9	1.1	0.7	71.1	28.9	3.9	6.1	0.28	0.23	5.39	5.39	0.67	2.97
	E06000052	Cornwall (including Isles of Scilly)	70.7	0.7	0.5	78.3	21.7	3.2	5.1	0.13	0.11	2.95	2.95	0.38	1.61
	E10000008	Devon	80.0	0.6	0.4	80.4	19.6	2.9	4.0	0.06	0.05	1.62	1.62	0.20	0.80
	E10000009	Dorset	76.3	0.6	0.5	75.2	24.8	2.5	3.6	0.11	0.09	3.36	3.36	0.28	1.48
	E10000013	Gloucestershire	71.7	0.7	0.5	79.9	20.1	3.4	4.3	0.10	0.08	2.11	2.11	0.31	1.10
	E06000024	North Somerset	62.7	0.6	0.4	81.9	18.1	3.1	2.0	0.19	0.17	4.74	4.74	0.66	1.55
	E06000026	Plymouth	48.3	0.4	0.4	84.7	15.3	2.8	1.8	0.14	0.13	3.74	3.74	0.57	1.36

Appendix 1. Dental Public Health Epidemiology Programme for England, Oral Health Survey of five-year-old children 2015, upper tier local authority (LA)

Public Health England

Part LA did not partake in survey

Region	Upper Tier LA Code	Upper Tier LA Name	% of sample examined	Weighted Measures						95% Confidence Intervals					
				Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries	Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries
South West	E06000029	Poole	89.4	0.7	0.5	78.7	21.3	3.5	4.9	0.18	0.15	3.82	3.82	0.58	2.11
	E10000027	Somerset	67.1	0.7	0.6	76.9	23.1	3.1	4.0	0.10	0.08	2.47	2.47	0.31	1.17
	E06000025	South Gloucestershire	73.5	0.4	0.3	85.9	14.1	2.9	0.7	0.15	0.11	4.18	4.18	0.69	0.95
	E06000030	Swindon	67.8	0.8	0.7	72.1	27.9	2.8	5.7	0.22	0.20	5.64	5.64	0.55	2.87
	E06000027	Torbay	74.5	0.8	0.6	73.2	26.8	3.1	4.3	0.22	0.17	5.22	5.22	0.57	2.24
	E06000054	Wiltshire	66.9	0.4	0.3	78.2	21.8	2.0	3.3	0.17	0.13	6.08	6.08	0.58	2.70
West Midlands	E08000025	Birmingham	53.9	0.8	0.5	71.3	28.7	2.9	3.7	0.21	0.14	4.90	4.90	0.52	2.13
	E08000026	Coventry	79.7	1.0	0.9	71.6	28.4	3.7	11.1	0.28	0.26	5.31	5.31	0.71	3.77
	E08000027	Dudley	59.1	0.5	0.4	81.5	18.5	2.5	2.3	0.06	0.06	1.88	1.88	0.24	0.74
	E06000019	Herefordshire, County of	79.1	1.4	1.2	58.7	41.3	3.5	6.5	0.27	0.24	5.66	5.66	0.44	2.74
	E08000028	Sandwell	62.4	0.7	0.5	76.6	23.4	2.9	4.1	0.06	0.05	1.64	1.64	0.18	0.77
	E06000051	Shropshire	54.4	0.8	0.7	78.5	21.5	3.7	5.7	0.34	0.30	6.42	6.42	1.07	4.03
	E08000029	Solihull	71.6	0.6	0.5	82.9	17.1	3.3	2.5	0.22	0.21	4.70	4.70	0.88	1.86
	E10000028	Staffordshire	63.6	0.5	0.4	82.2	17.8	2.8	1.1	0.07	0.06	1.87	1.87	0.25	0.52
	E06000021	Stoke-on-Trent	69.9	1.2	1.0	70.7	29.3	4.1	5.2	0.29	0.25	5.37	5.37	0.63	2.66
	E06000020	Telford and Wrekin	47.8	0.9	0.7	77.0	23.0	3.8	8.3	0.37	0.31	6.55	6.55	1.07	4.57
	E08000030	Walsall	64.3	0.7	0.5	74.8	25.2	2.7	4.1	0.07	0.06	2.06	2.06	0.20	0.94
	E10000031	Warwickshire	72.7	0.8	0.7	73.7	26.3	3.1	4.2	0.11	0.10	2.48	2.48	0.31	1.13
	E08000031	Wolverhampton	64.4	1.0	0.9	72.2	27.8	3.6	7.0	0.09	0.09	1.90	1.90	0.23	1.09
	E10000034	Worcestershire	59.5	0.6	0.5	79.0	21.0	3.1	3.9	0.06	0.05	1.36	1.36	0.19	0.66
Yorkshire and the Humber	E08000016	Barnsley	60.4	1.1	0.8	69.8	30.2	3.5	7.3	0.11	0.08	2.19	2.19	0.24	1.26
	E08000032	Bradford	48.4	1.5	1.0	62.5	37.3	4.0	9.3	0.16	0.12	2.85	2.85	0.30	1.76
	E08000033	Calderdale	73.2	1.1	0.8	70.7	29.3	3.7	5.6	0.26	0.20	5.10	5.10	0.60	2.70
	E08000017	Doncaster	59.5	1.1	0.7	69.0	31.0	3.6	7.8	0.29	0.22	5.84	5.84	0.67	3.41
	E06000011	East Riding of Yorkshire	72.4	0.6	0.5	76.9	23.1	2.6	4.2	0.18	0.15	5.85	5.85	0.45	2.74
	E06000010	Kingston upon Hull, City of	65.5	1.6	1.2	62.2	37.8	4.1	12.7	0.31	0.28	5.93	5.93	0.54	4.02
	E08000034	Kirklees	62.7	1.1	0.9	71.1	28.9	3.7	7.0	0.26	0.23	5.17	5.17	0.60	3.03
	E08000035	Leeds	51.6	1.1	0.9	68.6	31.4	3.5	10.3	0.13	0.11	2.59	2.59	0.28	1.75
	E06000012	North East Lincolnshire	56.8	1.1	0.9	70.1	29.9	3.6	7.1	0.14	0.12	2.85	2.85	0.32	1.64
	E06000013	North Lincolnshire	49.5	0.5	0.4	81.9	18.1	2.9	2.2	0.10	0.08	2.54	2.54	0.38	1.00
	E10000023	North Yorkshire	65.9	0.6	0.5	79.3	20.7	3.0	3.1	0.08	0.07	1.90	1.90	0.26	0.84
	E08000018	Rotherham	58.9	1.0	0.7	71.1	28.9	3.5	8.1	0.10	0.08	2.07	2.07	0.22	1.27
	E08000019	Sheffield	68.0	1.1	0.8	68.6	31.4	3.5	6.3	0.23	0.20	4.35	4.35	0.54	2.39
	E08000036	Wakefield	29.1	1.6	1.3	63.5	36.5	4.5	12.6	0.44	0.36	6.87	6.87	0.85	4.87
	E06000014	York	57.5	0.5	0.4	83.6	16.4	3.3	4.7	0.23	0.19	4.92	4.92	0.93	2.92

Appendix 1. Dental Public Health Epidemiology Programme for England, Oral Health Survey of five-year-old children 2015, upper tier local authority (LA)

Public Health England

Part LA did not partake in survey

Region	Upper Tier LA Code	Upper Tier LA Name	% of sample examined	Weighted Measures						95% Confidence Intervals					
				Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries	Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries
Region	E12000004	East Midlands	64.1	0.9	0.7	72.5	27.5	3.3	5.6	0.04	0.04	0.93	0.93	0.11	0.49
	E12000006	East of England	65.5	0.7	0.5	79.7	20.2	3.2	4.1	0.03	0.02	0.63	0.63	0.09	0.31
	E12000007	London	61.1	1.0	0.8	72.6	27.2	3.7	8.2	0.03	0.03	0.63	0.63	0.08	0.38
	E12000001	North East	58.0	1.0	0.7	72.0	28.0	3.4	6.2	0.08	0.06	1.63	1.63	0.19	0.89
	E12000002	North West	65.1	1.3	1.0	66.6	33.4	3.8	8.5	0.05	0.04	0.92	0.92	0.10	0.56
	E12000008	South East	63.0	0.6	0.5	79.9	20.0	3.2	3.6	0.03	0.02	0.59	0.59	0.08	0.27
	E12000009	South West	72.5	0.7	0.5	78.5	21.5	3.1	4.0	0.04	0.03	0.84	0.84	0.11	0.41
	E12000005	West Midlands	62.5	0.7	0.6	76.6	23.4	3.1	4.2	0.03	0.02	0.65	0.65	0.08	0.32
	E12000003	Yorkshire and The Humber	57.4	1.0	0.8	71.5	28.5	3.6	7.0	0.04	0.03	0.81	0.81	0.10	0.48
Country	**E92000001**	**England**	**63.1**	**0.8**	**0.7**	**75.2**	**24.7**	**3.4**	**5.6**	**0.01**	**0.01**	**0.25**	**0.25**	**0.03**	**0.14**

Appendix 2. Dental Public Health Epidemiology Programme for England, Oral Health Survey of five-year-old children 2015, lower tier local authority (LA)

Public Health England

LA did not partake in survey
Number examined too small (<30) for robust estimate
Based on fewer than 30 volunteers

Region	Lower Tier LA Code	Lower Tier LA Name	% of sample examined (* unavailable)	Weighted Measures: Mean d_3mft	Mean d_3t	% d_3mft = 0	% d_3mft > 0	Mean d_3mft (% d_3mft > 0)	% with incisor caries	95% Confidence Intervals: Mean d_3mft	Mean d_3t	% d_3mft = 0	% d_3mft > 0	Mean d_3mft (% d_3mft > 0)	% with incisor caries
Country	**E92000001**	**England**	**63.1**	**0.8**	**0.7**	**75.2**	**24.7**	**3.4**	**5.6**	**0.01**	**0.01**	**0.25**	**0.25**	**0.03**	**0.14**
East Midlands	E07000032	Amber Valley	52.4	0.8	0.7	74.2	25.8	3.2	5.4	0.28	0.27	6.52	6.52	0.77	3.21
	E07000170	Ashfield	53.9	0.6	0.5	76.8	23.2	2.8	5.2	0.23	0.18	6.34	6.34	0.62	3.34
	E07000171	Bassetlaw	68.6	0.5	0.4	80.4	19.6	2.6	4.6	0.21	0.17	5.51	5.51	0.67	2.96
	E07000129	Blaby	74.0	1.1	0.9	67.1	32.9	3.2	6.6	0.27	0.24	5.36	5.36	0.63	2.87
	E07000033	Bolsover	63.3	1.0	0.6	66.4	33.6	3.0	6.6	0.33	0.23	7.35	7.35	0.67	3.90
	E07000136	Boston	73.8	1.3	1.0	67.7	32.3	3.9	6.9	0.30	0.26	5.84	5.84	0.61	3.25
	E07000172	Broxtowe	69.3	0.5	0.5	77.3	22.7	2.2	1.7	0.21	0.21	6.23	6.23	0.70	1.97
	E07000130	Charnwood	55.1	0.9	0.8	67.2	32.8	2.9	5.4	0.24	0.20	6.54	6.54	0.48	3.04
	E07000034	Chesterfield	57.1	1.0	0.7	76.2	23.8	4.0	5.3	0.31	0.27	6.01	6.01	0.87	3.19
	E07000150	Corby	46.0	1.0	0.9	67.0	33.0	3.1	4.7	0.29	0.27	7.85	7.85	0.48	3.62
	E07000151	Daventry	49.8	0.8	0.7	70.0	30.0	2.5	1.7	0.25	0.21	7.19	7.19	0.57	1.83
	E06000015	Derby	60.1	1.3	1.0	72.4	27.6	4.7	4.6	0.33	0.29	5.21	5.21	0.82	2.42
	E07000035	Derbyshire Dales	79.7	0.3	0.2	90.5	9.5	2.8	0.5	0.15	0.11	4.68	4.68	0.66	0.94
	E07000137	East Lindsey	77.1	0.6	0.5	79.8	20.2	3.0	3.7	0.23	0.21	5.46	5.46	0.75	2.59
	E07000152	East Northamptonshire	64.0	0.8	0.6	75.8	24.2	3.1	3.6	0.26	0.21	5.73	5.73	0.71	2.55
	E07000036	Erewash	56.7	0.6	0.5	81.1	18.9	3.4	4.1	0.28	0.24	5.73	5.73	1.04	2.98
	E07000173	Gedling	69.8	0.7	0.5	77.1	22.9	3.1	5.1	0.25	0.20	5.76	5.76	0.74	3.16
	E07000131	Harborough	79.6	0.5	0.4	77.3	22.7	2.2	3.7	0.15	0.13	5.34	5.34	0.42	2.25
	E07000037	High Peak	61.4	0.9	0.4	66.2	33.8	2.6	2.4	0.23	0.16	6.46	6.46	0.46	2.05
	E07000132	Hinckley and Bosworth	63.0	0.6	0.5	75.0	25.0	2.5	4.3	0.20	0.19	5.83	5.83	0.53	2.71
	E07000153	Kettering	69.4	0.9	0.8	78.0	22.0	4.0	4.6	0.34	0.32	5.33	5.33	1.14	3.02
	E06000016	Leicester	51.6	1.9	1.5	55.0	45.0	4.2	14.2	0.22	0.19	3.41	3.41	0.37	2.43
	E07000138	Lincoln	73.3	0.8	0.6	76.4	23.6	3.3	4.5	0.27	0.21	5.18	5.18	0.87	2.57
	E07000174	Mansfield	68.0	0.8	0.7	74.7	25.3	3.3	8.6	0.25	0.23	5.57	5.57	0.68	3.64
	E07000133	Melton	69.5	0.8	0.7	69.2	30.8	2.6	5.0	0.23	0.21	6.56	6.56	0.50	3.10
	E07000175	Newark and Sherwood	59.8	0.7	0.5	77.4	22.6	3.3	3.6	0.26	0.21	6.81	6.81	0.67	2.42
	E07000038	North East Derbyshire	58.8	0.4	0.3	87.6	12.4	3.3	0.4	0.20	0.19	4.89	4.89	1.01	0.87
	E07000139	North Kesteven	74.1	0.4	0.3	83.6	16.4	2.5	1.1	0.16	0.15	4.50	4.50	0.73	1.24
	E07000134	North West Leicestershire	69.9	0.6	0.5	78.7	21.3	2.6	4.0	0.20	0.17	5.48	5.48	0.68	2.54
	E07000154	Northampton	49.0	1.0	0.8	72.7	27.3	3.5	5.8	0.32	0.30	6.48	6.48	0.83	3.53
	E06000018	Nottingham	64.0	1.2	1.0	64.4	35.6	3.4	9.5	0.23	0.21	4.66	4.66	0.47	2.87
	E07000135	Oadby and Wigston	74.6	0.9	0.7	68.0	32.0	2.8	6.3	0.26	0.24	6.76	6.76	0.53	3.56
	E07000176	Rushcliffe	76.7	0.3	0.3	86.8	13.2	2.6	1.5	0.13	0.12	4.20	4.20	0.61	1.48
	E06000017	Rutland	81.9	0.7	0.7	71.2	28.8	2.6	6.3	0.23	0.21	6.08	6.08	0.58	3.28
	E07000039	South Derbyshire	55.9	0.4	0.2	84.8	15.2	2.5	1.5	0.16	0.12	4.89	4.89	0.70	1.63
	E07000140	South Holland	64.7	1.1	0.9	64.3	35.7	3.1	5.4	0.34	0.29	7.04	7.04	0.69	3.41
	E07000141	South Kesteven	70.6	0.5	0.4	78.5	21.5	2.3	4.0	0.16	0.13	5.53	5.53	0.44	2.57
	E07000155	South Northamptonshire	57.9	0.7	0.6	71.3	28.7	2.4	2.7	0.23	0.21	7.50	7.50	0.48	2.57
	E07000156	Wellingborough	61.8	0.6	0.4	76.1	23.9	2.6	3.5	0.22	0.17	6.37	6.37	0.62	2.88
	E07000142	West Lindsey	89.5	0.5	0.4	80.3	19.7	2.4	2.8	0.20	0.19	5.08	5.08	0.80	2.20

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				Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries	Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries
East of England	E07000200	Babergh	67.4	0.4	0.3	83.8	16.2	2.3	3.0	0.17	0.15	4.99	4.99	0.61	2.47
	E07000066	Basildon	57.2	0.5	0.4	83.9	16.1	2.9	1.4	0.15	0.14	4.15	4.15	0.62	1.26
	E06000055	Bedford	80.6	0.9	0.7	73.1	26.9	3.5	6.1	0.14	0.12	2.89	2.89	0.35	1.58
	E07000067	Braintree	67.4	0.4	0.4	83.5	16.5	2.7	2.6	0.17	0.12	3.88	3.88	0.53	1.59
	E07000143	Breckland	75.8	0.8	0.6	82.4	17.6	4.4	2.6	0.27	0.22	4.78	4.78	0.91	2.05
	E07000068	Brentwood	62.2	0.5	0.4	84.4	15.6	3.4	3.0	0.22	0.20	4.74	4.74	1.06	2.21
	E07000144	Broadland	66.5	0.6	0.5	83.6	16.4	3.5	2.0	0.22	0.20	5.36	5.36	0.78	2.07
	E07000095	Broxbourne	*	1.0	0.8	72.5	27.5	3.5	4.2	0.25	0.23	4.80	4.80	0.66	2.18
	E07000008	Cambridge	67.6	0.6	0.6	81.7	18.3	3.3	6.3	0.22	0.21	4.77	4.77	0.81	2.96
	E07000069	Castle Point	66.0	0.6	0.5	80.2	19.8	2.9	1.3	0.21	0.19	5.82	5.82	0.60	1.71
	E06000056	Central Bedfordshire	78.6	0.5	0.4	81.9	18.1	2.8	3.1	0.08	0.07	2.09	2.09	0.30	0.96
	E07000070	Chelmsford	58.1	0.5	0.4	85.5	14.5	3.4	4.7	0.15	0.13	3.42	3.42	0.68	2.08
	E07000071	Colchester	55.9	0.6	0.5	81.5	18.5	3.2	3.2	0.20	0.20	4.08	4.08	0.85	1.83
	E07000096	Dacorum	*	0.5	0.4	82.4	17.6	2.8	2.7	0.13	0.11	3.40	3.40	0.46	1.44
	E07000009	East Cambridgeshire	67.7	0.3	0.2	89.9	10.1	2.5	1.9	0.13	0.11	3.54	3.54	0.94	1.64
	E07000242	East Hertfordshire	*	0.4	0.4	83.9	16.1	2.8	1.3	0.12	0.11	3.20	3.20	0.49	1.00
	E07000072	Epping Forest	67.2	0.5	0.4	82.6	17.4	3.0	1.9	0.15	0.12	3.68	3.68	0.62	1.30
	E07000010	Fenland	61.2	0.9	0.7	76.6	23.4	4.0	6.1	0.27	0.23	5.02	5.02	0.81	2.96
	E07000201	Forest Heath	54.4	0.9	0.6	76.5	23.1	3.8	6.9	0.27	0.21	5.44	5.41	0.71	3.27
	E07000145	Great Yarmouth	26.0	0.6	0.5	77.8	21.7	2.9	1.7	0.20	0.18	5.27	5.22	0.50	1.66
	E07000073	Harlow	56.7	0.6	0.4	84.6	15.4	3.7	3.7	0.18	0.15	3.73	3.73	0.70	1.98
	E07000098	Hertsmere	*	0.7	0.5	79.6	20.4	3.2	4.3	0.16	0.14	3.73	3.73	0.49	1.88
	E07000011	Huntingdonshire	71.3	0.6	0.4	81.5	18.5	3.3	4.3	0.21	0.15	4.54	4.54	0.80	2.41
	E07000202	Ipswich	59.0	0.8	0.7	74.9	25.1	3.2	7.2	0.23	0.20	5.25	5.25	0.55	3.35
	E07000146	King's Lynn and West Norfolk	57.4	0.8	0.6	81.0	19.0	4.2	3.2	0.25	0.21	4.87	4.87	0.74	2.33
	E06000032	Luton	77.7	1.7	1.2	57.4	42.6	4.0	14.7	0.29	0.24	5.10	5.10	0.49	3.64
	E07000074	Maldon	66.3	0.2	0.2	88.9	10.6	2.4	0.3	0.13	0.09	4.05	3.96	0.54	0.65
	E07000203	Mid Suffolk	70.0	0.4	0.3	88.4	11.6	3.0	0.9	0.16	0.15	4.20	4.20	0.83	1.25
	E07000099	North Hertfordshire	*	0.6	0.4	79.0	21.0	2.6	2.0	0.14	0.12	3.95	3.95	0.45	1.32
	E07000147	North Norfolk	58.8	0.7	0.5	84.0	16.0	4.2	3.0	0.27	0.21	5.41	5.41	0.93	2.35
	E07000148	Norwich	56.2	0.9	0.9	73.3	26.7	3.5	6.2	0.26	0.25	6.04	6.04	0.63	3.68
	E06000031	Peterborough	72.9	1.1	0.9	70.0	30.0	3.8	8.1	0.27	0.24	5.40	5.40	0.57	3.38
	E07000075	Rochford	64.9	0.2	0.2	87.1	12.9	1.9	0.9	0.10	0.10	4.48	4.48	0.48	1.27
	E07000012	South Cambridgeshire	67.7	0.5	0.3	84.0	16.0	2.9	3.4	0.15	0.11	4.08	4.08	0.53	2.00
	E07000149	South Norfolk	66.1	0.3	0.2	91.4	8.6	3.6	0.4	0.17	0.15	3.96	3.96	1.17	0.81
	E06000033	Southend-on-Sea	56.1	0.6	0.5	82.3	17.4	3.3	3.3	0.18	0.16	4.21	4.19	0.66	1.99
	E07000240	St Albans	*	0.3	0.3	85.5	14.5	2.4	2.1	0.10	0.08	3.23	3.23	0.45	1.32
	E07000204	St Edmundsbury	68.3	0.7	0.5	78.0	22.0	3.1	4.9	0.20	0.18	4.55	4.55	0.67	2.44
	E07000243	Stevenage	*	0.8	0.6	73.3	26.7	2.9	4.2	0.17	0.14	4.26	4.26	0.41	1.96
	E07000205	Suffolk Coastal	73.4	0.6	0.5	80.2	19.8	3.0	5.2	0.22	0.20	5.24	5.24	0.83	3.00
	E07000076	Tendring	58.6	0.7	0.6	79.0	21.0	3.3	5.5	0.20	0.18	4.37	4.37	0.67	2.45
	E07000102	Three Rivers	*	0.4	0.3	83.3	16.7	2.6	4.6	0.12	0.09	3.72	3.72	0.45	2.16
	E06000034	Thurrock	73.0	0.6	0.5	80.5	19.5	3.1	2.8	0.19	0.18	4.81	4.81	0.64	1.97

Appendix 2. Dental Public Health Epidemiology Programme for England, Oral Health Survey of five-year-old children 2015, lower tier local authority (LA)

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				Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries	Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries
East of England	E07000077	Uttlesford	57.8	0.3	0.2	89.5	10.5	2.6	2.4	0.12	0.10	3.20	3.20	0.77	1.65
	E07000103	Watford	*	0.8	0.7	75.1	24.9	3.3	6.4	0.17	0.15	3.89	3.89	0.40	2.21
	E07000206	Waveney	24.9	0.8	0.7	75.6	24.4	3.3	4.9	0.22	0.21	5.60	5.60	0.59	2.49
	E07000241	Welwyn Hatfield	*	0.6	0.5	79.1	20.9	2.9	4.5	0.16	0.14	3.99	3.99	0.53	2.05
London	E09000002	Barking and Dagenham	42.1	1.3	1.0	68.6	31.4	4.1	9.9	0.28	0.24	5.30	5.30	0.56	3.38
	E09000003	Barnet	70.0	1.2	1.0	68.0	31.6	3.8	7.9	0.26	0.21	5.04	5.03	0.57	2.97
	E09000004	Bexley	72.9	0.4	0.4	82.8	17.0	2.7	1.6	0.13	0.12	3.71	3.70	0.47	1.24
	E09000005	Brent	66.6	1.3	1.0	69.2	30.8	4.2	12.1	0.22	0.19	4.18	4.18	0.47	2.99
	E09000006	Bromley	86.5	0.4	0.4	84.0	16.0	2.7	5.1	0.15	0.14	4.19	4.19	0.64	2.54
	E09000007	Camden	59.7	0.9	0.5	76.5	23.5	3.6	6.0	0.20	0.15	4.10	4.10	0.55	2.22
	E09000008	Croydon	65.4	0.9	0.5	73.7	26.3	3.2	7.5	0.18	0.13	4.33	4.33	0.42	2.57
	E09000009	Ealing	51.6	1.8	1.5	60.3	39.0	4.6	13.4	0.23	0.20	3.70	3.69	0.37	2.56
	E09000010	Enfield	67.0	1.2	1.0	66.1	33.9	3.4	11.6	0.18	0.17	3.94	3.94	0.37	2.69
	E09000011	Greenwich	60.6	0.8	0.6	76.1	23.9	3.2	4.3	0.20	0.17	4.71	4.71	0.57	2.14
	E09000012	Hackney (including City of London)	50.5	1.0	0.7	73.4	27.0	3.6	9.3	0.12	0.10	2.41	2.41	0.31	1.57
	E09000013	Hammersmith and Fulham	64.2	0.7	0.5	73.7	26.3	2.7	8.5	0.20	0.17	6.32	6.32	0.44	4.07
	E09000014	Haringey	68.8	1.2	0.9	69.7	30.3	3.9	10.2	0.21	0.18	3.74	3.74	0.48	2.57
	E09000015	Harrow	64.3	1.4	1.0	65.5	34.2	4.1	14.3	0.25	0.21	4.71	4.70	0.49	3.51
	E09000016	Havering	49.4	0.7	0.6	80.0	20.0	3.3	3.7	0.24	0.22	5.06	5.06	0.90	2.34
	E09000017	Hillingdon	69.9	1.5	1.2	62.2	37.8	3.9	16.7	0.26	0.24	4.75	4.75	0.50	3.72
	E09000018	Hounslow	68.6	1.1	0.8	69.4	30.5	3.6	5.2	0.14	0.12	3.02	3.02	0.31	1.46
	E09000019	Islington	57.5	0.9	0.5	75.6	24.4	3.5	6.7	0.16	0.11	3.45	3.45	0.45	2.01
	E09000020	Kensington and Chelsea	53.1	1.1	0.8	66.6	33.4	3.3	12.2	0.28	0.25	6.11	6.11	0.60	4.34
	E09000021	Kingston upon Thames	76.0	0.8	0.6	77.1	22.9	3.4	3.2	0.20	0.17	4.41	4.41	0.61	1.85
	E09000022	Lambeth	47.5	0.8	0.6	77.9	22.1	3.7	5.7	0.16	0.13	3.15	3.15	0.47	1.77
	E09000023	Lewisham	63.2	0.6	0.4	76.7	23.3	2.4	4.6	0.16	0.10	4.33	4.33	0.31	2.30
	E09000024	Merton	70.3	0.9	0.6	73.9	26.1	3.5	6.7	0.22	0.17	4.26	4.26	0.63	2.40
	E09000025	Newham	63.7	1.2	1.0	70.7	28.3	4.5	8.7	0.09	0.08	1.59	1.57	0.20	0.98
	E09000026	Redbridge	53.3	1.0	0.7	76.3	23.7	4.1	9.1	0.21	0.18	4.19	4.19	0.58	2.77
	E09000027	Richmond upon Thames	69.3	0.5	0.3	81.0	19.0	2.5	1.9	0.13	0.10	3.91	3.91	0.47	1.34
	E09000028	Southwark	45.8	0.6	0.4	81.2	18.8	3.3	4.5	0.15	0.10	3.43	3.43	0.50	1.84
	E09000029	Sutton	69.0	0.6	0.4	81.0	19.0	3.0	5.1	0.12	0.11	2.94	2.94	0.45	1.72
	E09000030	Tower Hamlets	59.9	1.3	1.0	64.5	35.5	3.6	12.3	0.11	0.09	2.29	2.29	0.21	1.56
	E09000031	Waltham Forest	61.3	1.1	0.8	70.2	29.8	3.5	8.5	0.22	0.19	4.51	4.51	0.50	2.76
	E09000032	Wandsworth	64.3	0.8	0.6	76.8	23.2	3.6	7.9	0.19	0.16	4.04	4.04	0.55	2.55
	E09000033	Westminster	65.4	1.2	0.8	64.9	35.1	3.3	13.5	0.15	0.13	3.25	3.25	0.31	2.34
North East	E06000047	County Durham	67.3	1.1	0.9	64.9	35.1	3.0	8.4	0.25	0.22	6.13	6.13	0.46	3.65
	E06000005	Darlington	59.6	1.2	0.9	64.6	35.4	3.4	9.5	0.30	0.26	5.99	5.99	0.64	3.66
	E08000037	Gateshead	61.3	0.7	0.5	76.2	23.8	2.7	3.3	0.21	0.17	6.02	6.02	0.59	2.38
	E06000001	Hartlepool	51.8	0.4	0.3	84.6	15.4	2.6	3.1	0.16	0.11	4.76	4.76	0.68	2.32
	E06000002	Middlesbrough	50.9	1.7	1.1	61.2	38.8	4.3	10.0	0.34	0.28	5.55	5.55	0.61	3.54

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				Mean d_3mft	Mean d_3t	% d_3mft = 0	% d_3mft > 0	Mean d_3mft (% d_3mft > 0)	% with incisor caries	Mean d_3mft	Mean d_3t	% d_3mft = 0	% d_3mft > 0	Mean d_3mft (% d_3mft > 0)	% with incisor caries
North East	E08000021	Newcastle upon Tyne	44.4	0.7	0.5	77.5	22.5	3.2	4.8	0.26	0.21	5.84	5.84	0.87	3.06
	E08000022	North Tyneside	68.0	0.5	0.4	81.7	18.3	2.9	3.2	0.17	0.15	5.02	5.02	0.51	2.36
	E06000057	Northumberland	65.9	0.7	0.5	74.3	25.7	2.9	3.9	0.18	0.14	4.90	4.90	0.45	2.24
	E06000003	Redcar and Cleveland	54.4	1.1	0.7	72.9	27.1	4.1	8.0	0.33	0.24	5.75	5.75	0.84	3.64
	E08000023	South Tyneside	58.7	0.7	0.5	74.0	26.0	2.7	1.5	0.22	0.18	6.02	6.02	0.55	1.65
	E06000004	Stockton-on-Tees	55.6	0.9	0.6	74.7	25.3	3.7	6.2	0.26	0.19	5.08	5.08	0.73	2.68
	E08000024	Sunderland	67.6	1.5	1.2	59.9	40.1	3.8	11.5	0.35	0.32	6.14	6.14	0.59	4.16
North West	E07000026	Allerdale	*	1.1	0.8	70.5	29.5	3.8	7.4	0.27	0.21	5.43	5.43	0.59	3.12
	E07000027	Barrow-in-Furness	75.1	1.5	1.3	58.3	41.7	3.6	9.6	0.22	0.20	4.54	4.54	0.36	2.67
	E06000008	Blackburn with Darwen	70.0	2.4	2.1	43.9	55.7	4.4	13.5	0.42	0.38	6.08	6.09	0.56	4.32
	E06000009	Blackpool	60.3	1.8	1.4	57.5	42.5	4.3	11.8	0.43	0.36	7.28	7.28	0.68	4.87
	E08000001	Bolton	68.7	1.7	1.2	59.5	40.5	4.1	13.7	0.34	0.26	6.03	6.03	0.56	4.36
	E07000117	Burnley	68.3	1.8	1.4	57.4	42.6	4.2	11.7	0.36	0.30	6.15	6.15	0.58	4.07
	E08000002	Bury	59.7	0.9	0.7	73.3	26.7	3.4	3.6	0.25	0.22	5.70	5.70	0.60	2.34
	E07000028	Carlisle	*	1.2	1.0	67.8	32.2	3.6	8.8	0.23	0.22	4.73	4.73	0.50	2.94
	E06000049	Cheshire East	72.9	0.8	0.6	79.1	20.9	3.7	4.1	0.27	0.23	4.87	4.87	0.97	2.56
	E06000050	Cheshire West and Chester	66.3	0.7	0.6	79.7	20.3	3.3	2.1	0.26	0.24	5.78	5.78	0.87	2.28
	E07000118	Chorley	77.1	0.4	0.5	83.7	15.6	3.0	1.7	0.22	0.21	5.16	5.07	0.96	1.94
	E07000029	Copeland	*	1.2	0.9	65.2	34.8	3.5	7.4	0.34	0.27	6.86	6.86	0.67	3.81
	E07000030	Eden	67.8	1.0	0.9	70.9	29.1	3.5	7.3	0.28	0.26	5.31	5.31	0.70	3.03
	E07000119	Fylde	60.5	0.7	0.6	70.1	29.9	2.4	3.9	0.21	0.19	6.57	6.57	0.42	2.80
	E06000006	Halton	59.4	0.9	0.8	73.3	26.2	3.6	5.7	0.31	0.27	6.25	6.22	0.78	3.41
	E07000120	Hyndburn	66.0	1.5	1.5	56.5	43.5	3.5	8.4	0.34	0.33	6.46	6.46	0.54	3.73
	E08000011	Knowsley	45.4	1.2	0.8	67.5	32.5	3.8	6.8	0.27	0.20	5.04	5.04	0.59	2.79
	E07000121	Lancaster	*	0.7	0.6	79.4	20.6	3.5	2.9	0.20	0.18	4.25	4.25	0.66	1.77
	E08000012	Liverpool	41.3	1.4	0.9	68.2	31.8	4.3	8.3	0.27	0.23	4.90	4.90	0.56	2.68
	E08000003	Manchester	62.1	1.3	1.1	67.3	32.7	4.0	12.8	0.28	0.24	5.24	5.24	0.56	3.72
	E08000004	Oldham	63.1	2.5	2.2	49.1	50.9	4.8	20.8	0.44	0.42	6.29	6.29	0.63	5.23
	E07000122	Pendle	64.8	1.7	1.3	56.7	43.3	3.8	12.7	0.36	0.30	6.51	6.51	0.58	4.48
	E07000123	Preston	70.3	1.8	1.4	56.5	43.5	4.3	15.4	0.37	0.33	5.99	5.99	0.64	4.21
	E07000124	Ribble Valley	76.9	0.6	0.5	80.1	19.9	3.1	3.6	0.23	0.18	5.50	5.50	0.78	2.57
	E08000005	Rochdale	86.5	2.1	1.8	56.5	43.5	4.9	16.6	0.34	0.32	5.19	5.19	0.54	3.95
	E07000125	Rossendale	68.7	1.2	1.0	66.7	33.3	3.7	5.6	0.37	0.33	6.73	6.73	0.79	3.43
	E08000006	Salford	57.8	1.8	1.7	49.0	51.0	3.6	10.9	0.30	0.28	5.25	5.25	0.46	3.37
	E08000014	Sefton	53.0	0.6	0.5	77.3	22.7	2.8	4.7	0.16	0.13	4.47	4.47	0.44	2.31
	E07000031	South Lakeland	71.8	0.9	0.7	78.4	21.6	4.0	5.0	0.27	0.24	5.29	5.29	0.77	2.86
	E07000126	South Ribble	83.3	0.8	0.6	75.6	24.4	3.3	2.7	0.26	0.22	5.47	5.47	0.68	2.24
	E08000013	St. Helens	46.7	1.1	0.8	70.3	29.7	3.7	7.5	0.36	0.30	7.08	7.08	0.85	4.37
	E08000007	Stockport	64.1	0.8	0.6	78.3	21.7	3.5	5.4	0.25	0.22	5.15	5.15	0.80	2.92
	E08000008	Tameside	64.2	1.2	1.0	68.6	31.4	3.7	8.8	0.24	0.22	4.94	4.94	0.52	2.61
	E08000009	Trafford	82.5	0.9	0.8	73.6	26.4	3.3	6.9	0.20	0.19	4.41	4.41	0.55	2.58
	E06000007	Warrington	47.0	0.9	0.8	75.5	24.5	3.5	2.8	0.51	0.47	8.01	8.01	1.57	3.47

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Based on fewer than 30 volunteers

Region	Lower Tier LA Code	Lower Tier LA Name	% of sample examined (* unavailable)	Weighted Measures: Mean d_3mft	Mean d_3t	% d_3mft = 0	% d_3mft > 0	Mean d_3mft (% d_3mft > 0)	% with incisor caries	95% Confidence Intervals: Mean d_3mft	Mean d_3t	% d_3mft = 0	% d_3mft > 0	Mean d_3mft (% d_3mft > 0)	% with incisor caries
North West	E07000127	West Lancashire	55.0	1.0	0.8	70.5	28.8	3.5	5.3	0.31	0.25	6.77	6.77	0.58	3.45
	E08000010	Wigan	57.9	1.1	0.9	67.5	32.5	3.5	5.5	0.27	0.22	5.64	5.64	0.56	2.81
	E08000015	Wirral	57.1	1.2	0.8	67.1	32.9	3.5	7.2	0.30	0.25	6.55	6.55	0.61	3.51
	E07000128	Wyre	53.2	1.5	1.2	65.6	34.4	4.3	8.6	0.42	0.36	7.06	7.06	0.88	4.43
South East	E07000223	Adur													
	E07000224	Arun	*												
	E07000105	Ashford	64.9	0.4	0.3	84.5	15.1	2.5	1.4	0.15	0.14	4.84	4.81	0.62	1.61
	E07000004	Aylesbury Vale	74.6	0.7	0.6	74.6	25.1	3.0	2.9	0.25	0.23	5.20	5.19	0.74	2.32
	E07000084	Basingstoke and Deane	47.2	0.5	0.4	83.1	16.9	2.8	2.5	0.22	0.20	5.76	5.76	0.71	2.39
	E06000036	Bracknell Forest	63.5	0.8	0.6	77.9	22.1	3.5	5.6	0.24	0.23	4.91	4.91	0.80	2.76
	E06000043	Brighton and Hove	54.1	0.4	0.2	82.4	16.2	2.3	1.3	0.17	0.10	5.83	5.22	0.67	1.51
	E07000106	Canterbury	69.1	0.6	0.4	84.9	15.1	4.2	0.7	0.26	0.21	4.73	4.73	0.88	1.02
	E07000177	Cherwell	67.8	0.7	0.6	78.2	21.8	3.1	5.5	0.21	0.19	5.00	5.00	0.64	2.86
	E07000225	Chichester	*	0.5	0.4	76.7	23.3	2.1	8.5	0.43	0.37	14.35	14.35	0.45	10.14
	E07000005	Chiltern	76.1	0.4	0.4	86.9	13.1	3.4	3.1	0.19	0.15	4.08	4.08	1.02	2.07
	E07000226	Crawley	*	0.7	0.9	72.0	25.3	3.6	7.8	0.78	0.61	11.37	10.67	1.84	7.72
	E07000107	Dartford	65.3	0.5	0.4	81.5	18.5	2.6	1.8	0.15	0.14	4.80	4.80	0.49	1.58
	E07000108	Dover	62.3	0.4	0.3	87.5	12.5	3.6	0.9	0.19	0.16	4.71	4.71	0.76	1.09
	E07000085	East Hampshire	49.2	0.3	0.2	89.0	11.0	2.7	0.7	0.18	0.13	5.01	5.01	1.08	1.27
	E07000061	Eastbourne	47.6	0.5	0.5	77.2	22.8	2.3	2.3	0.28	0.24	9.50	9.50	0.72	3.03
	E07000086	Eastleigh	49.5	0.3	0.2	87.3	12.7	2.0	0.7	0.10	0.08	4.01	4.01	0.45	0.91
	E07000207	Elmbridge	55.7	0.5	0.4	83.7	16.3	3.1	2.1	0.25	0.22	5.84	5.84	1.04	2.30
	E07000208	Epsom and Ewell	41.5	0.6	0.4	79.6	20.4	2.9	1.4	0.29	0.22	6.70	6.70	1.07	1.89
	E07000087	Fareham	60.3	0.3	0.3	88.3	11.7	2.7	1.1	0.16	0.15	4.54	4.54	0.87	1.49
	E07000088	Gosport	46.8	0.6	0.5	82.4	17.6	3.2	5.0	0.21	0.17	4.79	4.79	0.81	2.72
	E07000109	Gravesham	67.8	0.6	0.5	78.5	20.3	3.1	3.4	0.21	0.19	4.85	4.74	0.67	2.20
	E07000209	Guildford	54.4	0.7	0.4	80.3	19.7	3.3	5.2	0.31	0.27	6.08	6.08	1.19	3.50
	E07000089	Hart	56.2	0.5	0.4	86.2	13.8	3.5	2.2	0.21	0.19	4.32	4.32	0.92	1.95
	E07000062	Hastings	59.9	0.8	0.6	77.9	22.1	3.5	7.8	0.37	0.30	8.17	8.17	1.07	5.29
	E07000090	Havant	51.2	0.6	0.3	82.6	17.4	3.3	2.5	0.20	0.14	4.70	4.70	0.78	1.99
	E07000227	Horsham	*	0.4	0.4	86.7	13.3	3.1	2.1	0.36	0.36	6.84	6.84	2.29	2.81
	E06000046	Isle of Wight	75.4	0.8	0.6	73.6	26.4	3.1	3.1	0.17	0.14	3.88	3.88	0.45	1.52
	E07000063	Lewes	70.0	0.3	0.3	84.9	15.1	1.9	0.0	0.22	0.22	9.47	9.47	0.72	0.00
	E07000110	Maidstone	72.3	0.7	0.6	78.9	20.5	3.5	3.0	0.22	0.20	4.65	4.61	0.75	1.96
	E06000035	Medway	68.5	0.7	0.6	81.3	18.4	3.7	3.1	0.22	0.19	4.43	4.38	0.66	1.97
	E07000228	Mid Sussex	*	0.3	0.2	86.9	12.8	2.4	2.2	0.13	0.12	4.31	4.31	0.61	1.86
	E06000042	Milton Keynes	61.1	0.6	0.5	78.3	21.5	3.0	4.7	0.07	0.06	1.69	1.68	0.22	0.88
	E07000210	Mole Valley	56.0	0.5	0.4	80.5	19.5	2.4	1.6	0.16	0.15	5.68	5.68	0.58	1.74
	E07000091	New Forest	48.3	0.6	0.5	81.3	18.7	3.3	2.8	0.24	0.20	5.07	5.07	0.84	2.12
	E07000178	Oxford	65.6	1.2	1.0	67.2	32.8	3.6	9.3	0.27	0.24	5.64	5.64	0.52	3.54
	E06000044	Portsmouth	78.3	0.6	0.3	81.9	18.1	3.2	2.3	0.10	0.08	2.54	2.54	0.37	1.02
	E06000038	Reading	67.1	0.9	0.7	71.9	28.1	3.4	7.5	0.23	0.18	5.03	5.03	0.55	3.01

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South East	E07000211	Reigate and Banstead	50.6	0.3	0.2	87.7	12.3	2.3	0.8	0.16	0.14	6.50	6.50	0.77	1.51
	E07000064	Rother	59.6	0.7	0.4	69.7	30.3	2.2	3.1	0.27	0.16	9.07	9.07	0.60	3.43
	E07000212	Runnymede	55.9	0.6	0.4	77.6	22.4	2.6	1.5	0.26	0.20	7.56	7.56	0.79	1.98
	E07000092	Rushmoor	50.0	1.0	0.8	75.8	24.2	4.2	7.6	0.34	0.30	6.35	6.35	0.89	3.82
	E07000111	Sevenoaks	78.9	0.2	0.2	86.6	13.4	1.8	0.7	0.10	0.09	4.10	4.10	0.49	0.93
	E07000112	Shepway	73.6	0.6	0.4	83.8	15.9	4.0	2.6	0.26	0.23	5.17	5.14	1.03	1.99
	E06000039	Slough	65.5	1.8	1.5	58.7	41.3	4.3	11.2	0.32	0.29	5.57	5.57	0.51	3.55
	E07000006	South Bucks	71.1	0.6	0.4	76.4	23.6	2.4	2.4	0.16	0.12	5.19	5.19	0.41	1.92
	E07000179	South Oxfordshire	77.4	0.6	0.3	82.8	17.2	3.4	1.8	0.20	0.13	4.29	4.29	0.73	1.59
	E06000045	Southampton	81.5	1.3	0.9	66.3	33.7	3.7	7.2	0.13	0.11	2.69	2.69	0.27	1.49
	E07000213	Spelthorne	46.4	0.4	0.4	82.7	17.3	2.4	0.6	0.21	0.19	6.04	6.04	0.83	1.25
	E07000214	Surrey Heath	61.9	0.4	0.3	86.5	13.5	2.9	4.6	0.20	0.20	5.82	5.82	0.87	3.32
	E07000113	Swale	69.0	1.0	0.7	81.6	18.4	5.3	2.6	0.39	0.36	5.64	5.64	0.99	2.46
	E07000215	Tandridge													
	E07000093	Test Valley	49.5	0.2	0.1	90.6	9.4	1.9	0.5	0.11	0.05	4.15	4.15	0.88	1.03
	E07000114	Thanet	69.3	0.6	0.5	82.7	16.7	3.6	1.6	0.23	0.21	4.74	4.65	0.87	1.74
	E07000115	Tonbridge and Malling	68.5	0.4	0.4	86.9	12.7	3.3	1.5	0.18	0.17	3.97	3.94	0.90	1.48
	E07000116	Tunbridge Wells	70.5	0.4	0.3	82.1	17.9	2.2	1.9	0.12	0.12	4.49	4.49	0.43	1.64
	E07000180	Vale of White Horse	67.8	0.8	0.6	79.4	20.6	3.7	5.3	0.21	0.19	4.72	4.72	0.58	2.61
	E07000216	Waverley	40.9	0.1	0.1	91.8	8.2	1.2	0.8	0.06	0.05	5.11	5.11	0.25	1.60
	E07000065	Wealden	59.2	0.3	0.2	87.5	12.5	2.1	1.8	0.18	0.17	5.75	5.75	1.11	2.49
	E06000037	West Berkshire	63.2	0.7	0.6	76.9	23.1	3.2	3.3	0.29	0.24	6.03	6.03	0.86	3.10
	E07000181	West Oxfordshire	70.9	0.5	0.4	81.2	18.8	2.8	1.8	0.16	0.13	4.49	4.49	0.44	1.54
	E07000094	Winchester	52.8	0.2	0.1	89.3	10.7	2.2	2.0	0.15	0.12	4.75	4.75	1.05	2.29
	E06000040	Windsor and Maidenhead	67.5	0.6	0.5	81.5	18.5	3.4	5.5	0.21	0.20	4.66	4.66	0.75	2.80
	E07000217	Woking	53.4	0.9	0.7	75.3	24.7	3.6	7.0	0.33	0.30	6.71	6.71	0.95	3.86
	E06000041	Wokingham	65.3	0.6	0.4	85.2	14.8	3.8	4.6	0.25	0.20	4.45	4.45	1.21	2.64
	E07000229	Worthing	*	0.3	0.2	84.1	15.9	1.9	3.8	0.16	0.15	6.52	6.52	0.61	3.62
	E07000007	Wycombe	73.7	0.9	0.7	71.1	28.9	3.0	4.4	0.22	0.18	5.04	5.04	0.55	2.32
South West	E06000022	Bath and North East Somerset	65.7	0.4	0.3	85.0	15.0	2.5	3.5	0.16	0.12	4.47	4.47	0.71	2.25
	E06000028	Bournemouth	81.0	0.9	0.6	71.8	28.2	3.3	4.7	0.23	0.18	5.33	5.33	0.56	2.45
	E06000023	Bristol, City of	59.9	1.1	0.7	71.1	28.9	3.9	6.1	0.28	0.23	5.39	5.39	0.67	2.97
	E07000078	Cheltenham	76.4	0.5	0.4	81.9	18.1	2.8	3.7	0.18	0.14	4.98	4.98	0.64	2.55
	E07000048	Christchurch	74.4	0.9	0.5	73.5	26.5	3.3	7.5	0.48	0.32	10.39	10.39	0.87	6.25
	E06000052	Cornwall (including Isles of Scilly)	70.7	0.7	0.5	78.3	21.7	3.2	5.1	0.13	0.11	2.95	2.95	0.38	1.61
	E07000079	Cotswold	79.7	0.4	0.3	86.3	13.7	3.2	3.2	0.24	0.19	4.54	4.54	1.31	2.34
	E07000040	East Devon	83.0	0.3	0.3	84.8	15.2	2.3	3.5	0.12	0.11	4.31	4.31	0.40	2.23
	E07000049	East Dorset	69.1	0.4	0.3	79.5	20.5	2.2	0.4	0.14	0.12	5.82	5.82	0.32	0.80
	E07000041	Exeter	77.5	0.7	0.5	74.7	25.3	2.9	6.2	0.19	0.16	4.56	4.56	0.51	2.57
	E07000080	Forest of Dean	67.6	1.0	0.8	71.6	28.4	3.5	5.4	0.25	0.22	5.29	5.29	0.57	2.66
	E07000081	Gloucester	59.2	0.8	0.6	80.3	19.7	4.0	5.2	0.27	0.25	5.26	5.26	0.91	3.13
	E07000187	Mendip	65.5	0.5	0.4	80.3	19.7	2.7	1.9	0.17	0.14	4.72	4.72	0.58	1.63

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Region	Lower Tier LA Code	Lower Tier LA Name	% of sample examined (* unavailable)	Weighted Measures						95% Confidence Intervals					
				Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries	Mean d_3mft	Mean d_3t	% $d_3mft = 0$	% $d_3mft > 0$	Mean d_3mft (% $d_3mft > 0$)	% with incisor caries
South West	E07000042	Mid Devon	85.8	0.6	0.3	80.6	19.4	3.0	2.5	0.17	0.13	4.52	4.52	0.57	1.81
	E07000043	North Devon	81.3	0.7	0.5	77.4	22.6	3.1	3.0	0.20	0.16	4.92	4.92	0.57	2.00
	E07000050	North Dorset	76.5	0.6	0.5	76.4	23.6	2.6	2.3	0.27	0.24	8.24	8.24	0.69	2.54
	E06000024	North Somerset	62.7	0.6	0.4	81.9	18.1	3.1	2.0	0.19	0.17	4.74	4.74	0.66	1.55
	E06000026	Plymouth	48.3	0.4	0.4	84.7	15.3	2.8	1.8	0.14	0.13	3.74	3.74	0.57	1.36
	E06000029	Poole	89.4	0.7	0.5	78.7	21.3	3.5	4.9	0.18	0.15	3.82	3.82	0.58	2.11
	E07000051	Purbeck	94.5	0.8	0.7	74.5	25.5	3.3	6.9	0.38	0.32	8.14	8.14	0.94	4.83
	E07000188	Sedgemoor	73.1	0.9	0.7	72.9	27.1	3.3	4.2	0.27	0.20	5.61	5.61	0.73	2.62
	E06000025	South Gloucestershire	73.5	0.4	0.3	85.9	14.1	2.9	0.7	0.15	0.11	4.18	4.18	0.69	0.95
	E07000044	South Hams	74.6	0.5	0.3	81.6	18.4	2.6	3.9	0.15	0.11	4.78	4.78	0.44	2.39
	E07000189	South Somerset	64.1	0.9	0.7	75.0	25.0	3.7	7.7	0.30	0.24	5.72	5.72	0.85	3.58
	E07000082	Stroud	80.5	0.3	0.2	86.6	13.4	2.4	2.5	0.14	0.10	4.42	4.42	0.70	2.00
	E06000030	Swindon	67.8	0.8	0.7	72.1	27.9	2.8	5.7	0.22	0.20	5.64	5.64	0.55	2.87
	E07000190	Taunton Deane	67.6	0.6	0.5	80.2	19.8	2.8	4.0	0.21	0.19	5.07	5.07	0.79	2.59
	E07000045	Teignbridge	75.0	0.6	0.4	80.6	19.4	2.9	4.1	0.18	0.15	4.70	4.70	0.63	2.30
	E07000083	Tewkesbury	71.8	0.9	0.7	77.0	23.0	3.9	5.1	0.25	0.23	5.12	5.12	0.67	2.62
	E06000027	Torbay	74.5	0.8	0.6	73.2	26.8	3.1	4.3	0.22	0.17	5.22	5.22	0.57	2.24
	E07000046	Torridge	83.5	0.6	0.5	79.2	20.8	3.0	4.3	0.18	0.16	4.73	4.73	0.54	2.36
	E07000047	West Devon	81.4	0.5	0.4	84.6	15.4	3.0	4.2	0.19	0.16	4.37	4.37	0.90	2.42
	E07000052	West Dorset	74.8	0.4	0.3	79.2	20.8	1.8	1.9	0.16	0.14	7.53	7.53	0.38	2.63
	E07000191	West Somerset	64.2	0.7	0.5	75.7	24.3	2.9	2.5	0.24	0.18	6.50	6.50	0.63	2.41
	E07000053	Weymouth and Portland	73.6	0.7	0.6	70.7	29.3	2.5	5.3	0.27	0.23	9.32	9.32	0.47	5.11
	E06000054	Wiltshire	66.9	0.4	0.3	78.2	21.8	2.0	3.3	0.17	0.13	6.08	6.08	0.58	2.70
West Midlands	E08000025	Birmingham	53.9	0.8	0.5	71.3	28.7	2.9	3.7	0.21	0.14	4.90	4.90	0.52	2.13
	E07000234	Bromsgrove	64.3	0.3	0.2	87.1	12.9	2.3	1.3	0.08	0.06	2.72	2.72	0.41	0.88
	E07000192	Cannock Chase	60.9	0.2	0.2	90.2	9.8	2.5	0.0	0.15	0.11	4.36	4.36	1.08	0.00
	E08000026	Coventry	79.7	1.0	0.9	71.6	28.4	3.7	11.1	0.28	0.26	5.31	5.31	0.71	3.77
	E08000027	Dudley	59.1	0.5	0.4	81.5	18.5	2.5	2.3	0.06	0.06	1.88	1.88	0.24	0.74
	E07000193	East Staffordshire	61.0	0.5	0.4	87.0	13.0	3.6	1.1	0.21	0.18	4.47	4.47	0.91	1.45
	E06000019	Herefordshire, County of	79.1	1.4	1.2	58.7	41.3	3.5	6.5	0.27	0.24	5.66	5.66	0.44	2.74
	E07000194	Lichfield	55.0	0.3	0.3	83.3	16.7	2.1	1.2	0.13	0.11	5.27	5.27	0.41	1.70
	E07000235	Malvern Hills	60.0	0.5	0.4	82.3	17.7	3.0	2.5	0.17	0.16	3.80	3.80	0.70	1.55
	E07000195	Newcastle-under-Lyme	78.9	0.8	0.7	74.5	25.5	3.0	1.3	0.24	0.21	5.55	5.55	0.66	1.41
	E07000218	North Warwickshire	67.0	0.6	0.5	78.5	21.5	2.8	2.5	0.23	0.19	5.76	5.76	0.73	2.19
	E07000219	Nuneaton and Bedworth	70.4	0.8	0.6	74.5	25.5	3.2	6.7	0.23	0.19	5.16	5.16	0.64	2.80
	E07000236	Redditch	55.0	0.6	0.4	81.1	18.9	3.1	3.4	0.13	0.11	3.26	3.26	0.45	1.52
	E07000220	Rugby	73.7	1.4	1.2	59.9	40.1	3.4	5.5	0.34	0.29	6.33	6.33	0.64	2.99
	E08000028	Sandwell	62.4	0.7	0.5	76.6	23.4	2.9	4.1	0.06	0.05	1.64	1.64	0.18	0.77
	E06000051	Shropshire	54.4	0.8	0.7	78.5	21.5	3.7	5.7	0.34	0.30	6.42	6.42	1.07	4.03
	E08000029	Solihull	71.6	0.6	0.5	82.9	17.1	3.3	2.5	0.22	0.21	4.70	4.70	0.88	1.86
	E07000196	South Staffordshire	73.1	0.5	0.4	83.4	16.6	2.7	1.3	0.17	0.16	4.65	4.65	0.64	1.40
	E07000197	Stafford	66.2	0.5	0.4	77.8	22.2	2.3	1.4	0.18	0.17	6.49	6.49	0.46	1.60

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West Midlands	E07000198	Staffordshire Moorlands	51.9	0.6	0.6	79.0	21.0	3.1	1.2	0.19	0.18	5.10	5.10	0.55	1.33
	E06000021	Stoke-on-Trent	69.9	1.2	1.0	70.7	29.3	4.1	5.2	0.29	0.25	5.37	5.37	0.63	2.66
	E07000221	Stratford-on-Avon	74.7	0.6	0.5	80.4	19.6	3.2	2.6	0.23	0.20	5.09	5.09	0.81	2.05
	E07000199	Tamworth	59.1	0.4	0.3	85.9	14.1	2.6	0.0	0.21	0.15	5.34	5.34	1.09	0.00
	E06000020	Telford and Wrekin	47.8	0.9	0.7	77.0	23.0	3.8	8.3	0.37	0.31	6.55	6.55	1.07	4.57
	E08000030	Walsall	64.3	0.7	0.5	74.8	25.2	2.7	4.1	0.07	0.06	2.06	2.06	0.20	0.94
	E07000222	Warwick	78.5	0.8	0.7	72.8	27.2	3.0	3.0	0.25	0.21	5.41	5.41	0.69	2.22
	E08000031	Wolverhampton	64.4	1.0	0.9	72.2	27.8	3.6	7.0	0.09	0.09	1.90	1.90	0.23	1.09
	E07000237	Worcester	59.1	0.9	0.7	72.7	27.3	3.3	6.5	0.15	0.13	3.21	3.21	0.39	1.82
	E07000238	Wychavon	65.6	0.7	0.5	78.1	21.9	3.1	3.8	0.12	0.10	2.96	2.96	0.37	1.38
	E07000239	Wyre Forest	51.4	0.7	0.6	76.4	23.6	3.0	4.5	0.17	0.14	3.86	3.86	0.48	1.94
Yorkshire and the Humber	E08000016	Barnsley	60.4	1.1	0.8	69.8	30.2	3.5	7.3	0.11	0.08	2.19	2.19	0.24	1.26
	E08000032	Bradford	48.4	1.5	1.0	62.5	37.3	4.0	9.3	0.16	0.12	2.85	2.85	0.30	1.76
	E08000033	Calderdale	73.2	1.1	0.8	70.7	29.3	3.7	5.6	0.26	0.20	5.10	5.10	0.60	2.70
	E07000163	Craven	73.3	0.6	0.5	78.2	21.8	2.8	4.8	0.22	0.20	5.12	5.12	0.65	2.67
	E08000017	Doncaster	59.5	1.1	0.7	69.0	31.0	3.6	7.8	0.29	0.22	5.84	5.84	0.67	3.41
	E06000011	East Riding of Yorkshire	72.4	0.6	0.5	76.9	23.1	2.6	4.2	0.18	0.15	5.85	5.85	0.45	2.74
	E07000164	Hambleton	68.0	0.7	0.5	78.8	20.8	3.4	2.7	0.22	0.19	5.03	4.99	0.69	1.92
	E07000165	Harrogate	73.0	0.5	0.4	80.4	19.6	2.8	3.4	0.17	0.14	4.43	4.43	0.61	2.04
	E06000010	Kingston upon Hull, City of	65.5	1.6	1.2	62.2	37.8	4.1	12.7	0.31	0.28	5.93	5.93	0.54	4.02
	E08000034	Kirklees	62.7	1.1	0.9	71.1	28.9	3.7	7.0	0.26	0.23	5.17	5.17	0.60	3.03
	E08000035	Leeds	51.6	1.1	0.9	68.6	31.4	3.5	10.3	0.13	0.11	2.59	2.59	0.28	1.75
	E06000012	North East Lincolnshire	56.8	1.1	0.9	70.1	29.9	3.6	7.1	0.14	0.12	2.85	2.85	0.32	1.64
	E06000013	North Lincolnshire	49.5	0.5	0.4	81.9	18.1	2.9	2.2	0.10	0.08	2.54	2.54	0.38	1.00
	E07000166	Richmondshire	58.8	0.7	0.5	79.2	20.8	3.2	4.8	0.23	0.19	5.37	5.37	0.64	2.92
	E08000018	Rotherham	58.9	1.0	0.7	71.1	28.9	3.5	8.1	0.10	0.08	2.07	2.07	0.22	1.27
	E07000167	Ryedale	62.5	0.5	0.4	83.0	17.0	3.2	1.7	0.20	0.17	5.47	5.47	0.71	1.47
	E07000168	Scarborough	63.5	0.7	0.7	77.6	22.4	3.3	3.8	0.25	0.24	5.49	5.49	0.75	2.72
	E07000169	Selby	62.5	0.6	0.4	77.3	22.7	2.5	1.6	0.18	0.14	5.32	5.32	0.54	1.73
	E08000019	Sheffield	68.0	1.1	0.8	68.6	31.4	3.5	6.3	0.23	0.20	4.35	4.35	0.54	2.39
	E08000036	Wakefield	29.1	1.6	1.3	63.5	36.5	4.5	12.6	0.44	0.36	6.87	6.87	0.85	4.87
	E06000014	York	57.5	0.5	0.4	83.6	16.4	3.3	4.7	0.23	0.19	4.92	4.92	0.93	2.92
Region	E12000004	East Midlands	64.1	0.9	0.7	72.5	27.5	3.3	5.6	0.04	0.04	0.93	0.93	0.11	0.49
	E12000006	East of England	65.5	0.7	0.5	79.7	20.2	3.2	4.1	0.03	0.02	0.63	0.63	0.09	0.31
	E12000007	London	61.1	1.0	0.8	72.6	27.2	3.7	8.2	0.03	0.03	0.63	0.63	0.08	0.38
	E12000001	North East	58.0	1.0	0.7	72.0	28.0	3.4	6.2	0.08	0.06	1.63	1.63	0.19	0.89
	E12000002	North West	65.1	1.3	1.0	66.6	33.4	3.8	8.5	0.05	0.04	0.92	0.92	0.10	0.56
	E12000008	South East	63.0	0.6	0.5	79.9	20.0	3.2	3.6	0.03	0.02	0.59	0.59	0.08	0.27
	E12000009	South West	72.5	0.7	0.5	78.5	21.5	3.1	4.0	0.04	0.03	0.84	0.84	0.11	0.41
	E12000005	West Midlands	62.5	0.7	0.6	76.6	23.4	3.1	4.2	0.03	0.02	0.65	0.65	0.08	0.32
	E12000003	Yorkshire and The Humber	57.4	1.0	0.8	71.5	28.5	3.6	7.0	0.04	0.03	0.81	0.81	0.10	0.48