

Protecting and improving the nation's health

National Dental Epidemiology Programme for England: oral health survey report of five-year-old children in Yorkshire and The Humber, 2015

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Executive summary

This report uses data taken from the third National Dental Public Health Epidemiology Programme for England oral health survey of five-year-old children, 2015. The report focuses on the findings for five-year-old children in Yorkshire and The Humber at both a regional and lower tier local authority level. Survey findings at ward levels in each local authority are described in the appendices 2, 3 and 4. The methods used in this survey were the same as in previous surveys during 2008 and 2012, allowing for comparisons between these surveys.

Yorkshire and The Humber remains the second worst region in the country for the proportion of five-year-olds with experience of tooth decay. However, the results show a continued decrease in the proportion of children with tooth decay (prevalence) and a decrease in severity of decay (the number of teeth with decay) at a regional level and at a local authority level for most areas.

Despite these improvements there are wide variations at local authority level in both prevalence of tooth decay and severity of tooth decay.

Local authorities have had responsibility for improving health and reducing inequalities including in oral health since April 2013. This report provides benchmarking data that can be used in joint strategic needs assessments and oral health needs assessments. The data can assist with planning, commissioning and evaluating oral health improvement programmes and dental services and support the monitoring and reporting on water fluoridation programmes.

Summary of key findings for Yorkshire and The Humber

Prevalence

- Yorkshire and The Humber remains the second worst region in the country for the proportion of five-year olds with experience of tooth decay
- on average three out of every ten children experienced tooth decay, however there are wide variations between and within local authorities
- a significantly higher proportion of five-year-old children experienced tooth decay than the England average in all the South Yorkshire local authorities, in the West Yorkshire local authorities of Bradford, Leeds and Wakefield and in the North Yorkshire and Humber local authorities of North East Lincolnshire and Hull

- a significantly lower proportion of five-year-old children experienced tooth decay than the England average in the North Yorkshire and Humber local authorities of Harrogate, Ryedale, York and North Lincolnshire
- across Yorkshire and The Humber there has been a continued decrease in the proportion of children with tooth decay, reducing from 38.7% in 2008 to 33.6% in 2012 and to 28.5% in 2015, equating to a change of ten percentage points and an improvement of 30.3% since 2008
- at local authority level, between 2008 and 2015 there has been a significant reduction in the proportions of children with tooth decay in all local authorities in South Yorkshire and West Yorkshire with the exception of Wakefield and in the North Yorkshire and Humber local authorities of Craven and Richmondshire

Severity

- severity of tooth decay was significantly higher than the England average in the South Yorkshire local authorities of Barnsley, Sheffield and Rotherham, in the West Yorkshire local authorities of Bradford, Leeds and Wakefield and in the North Yorkshire and Humber local authorities' of North East Lincolnshire and Kingston upon Hull
- severity of tooth decay was significantly lower than the England average in the North Yorkshire and Humber local authorities of Harrogate, Ryedale, Selby, York, East Riding of Yorkshire and North Lincolnshire
- across Yorkshire and The Humber the average number of decayed, missing or filled teeth in all children examined (including those who were decay free) has fallen from 1.5 in 2008 to 1.2 in 2002 and to 1.0 in 2015, a reduction in severity of 40.0% since 2008
- at local authority level, between 2008 and 2015 there has been a significant reduction in the severity of tooth decay in Barnsley, Doncaster, Sheffield, in Bradford, Calderdale, Kirklees, Leeds and Craven and Richmondshire
- in Yorkshire and The Humber children with experience of tooth decay had on average 3.6 teeth affected
- the proportion of teeth with tooth decay that had been treated by fillings (Care Index) varied widely across Yorkshire and The Humber
- more five-year-old children have had teeth removed (extracted) due to tooth decay in the Yorkshire and The Humber than any other region in England

Deprivation and ethnicity

- as levels of deprivation increased, more children experienced tooth decay.
 Prevalence and severity was significantly worse than the Yorkshire and The Humber average for children living in the 20% most deprived areas
- prevalence and severity of tooth decay was significantly higher in the Other Ethnic Group, Eastern European, Asian/Asian British and Black/Black British ethnic groups than the Yorkshire and The Humber average

Putting this information to use

- the survey findings provide the dental indicator (4.2 tooth decay in children aged 5)
 for the Public Health Outcomes Framework
- dental survey findings are an important contribution to the joint strategic needs assessments and oral health needs assessments. The data can assist with planning, commissioning and evaluating oral health improvement programmes and dental services and support the monitoring and reporting on water fluoridation programmes
- 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 may be considered
- information and support to local authorities on the Public Health England Dental Public Health Epidemiology Programme can be found in: Commissioning High Quality Information to Support Oral Health Improvement: A toolkit for local authorities, commissioners and partners (Public Health England 2016)
- guidance is available to enable local authorities to review and evaluate existing oral health improvement programmes and consider evidence based commissioning intentions:
 - Local authorities improving oral health: commissioning better oral health for children and young people. An evidence-informed toolkit for local authorities (Public Health England 2016)
 - Oral health: approaches for local authorities and their partners to improve the oral health of their communities (National Institute for Health and Care Excellence (NICE), 2016)

Further information on the Public Health England Dental Public Health Epidemiology programme is available: http://www.nwph.net/dentalhealth/

Section 1. Introduction

This briefing provides a summary of the oral health of five-year-old school children in Yorkshire and the Humber in 2015. The survey is part of Public Health England's Dental Public Health Epidemiology Programme (DPHEP) and was commissioned by local authorities as part of their statutory responsibilities for dental public health.¹

Surveys of child dental health have been conducted across the United Kingdom since 1985. This was the third national dental survey of this age group to take place under positive consent for participation which was first introduced in the 2008 survey. The data is required to provide the dental indicator (proportion of children aged five who are free from obvious tooth decay) included in the Public Health Outcomes Framework.² The dental indicators are an essential measure of the success of a range of programmes and services that aim to improve the general health and well-being of young children. Data at local authority level is included in appendix 1.

NHS England, local authority commissioners and other health planners use the information from these surveys when conducting joint strategic needs assessments and oral health needs assessments at a local level. Needs assessments are a part of the commissioning cycle used when planning and evaluating local services and health improvement interventions.

A report of survey findings at regional level was published by Public Health England.³ The purpose of this report is to describe the survey findings in the Yorkshire and The Humber region at lower tier local authority level and discuss their implications for local authorities and NHS England. Data at local authority ward level is included in appendices 2, 3 and 4.

This report aims to:

- present the 2015 data from the oral health survey of five-year children in Yorkshire and The Humber at regional and local authority level
- describe the trends in tooth decay experience in five-year-old children
- identify areas at local authority and ward level (where data was available) where children are at greatest risk of poor oral health
- describe how this information can be put to use

Section 2. Background

Nationally, the greatest improvement seen in children's oral health was from the 1970s to the early 1990s. This improvement in oral health has been related to the introduction of fluoride toothpaste in the 1970s.⁴ Since 1993 the improvement in the oral health of five-year-old children plateaued, however there is evidence from more recent oral health surveys of further reductions in tooth decay levels in these children.³

Despite this overall improvement, oral health inequalities exist at a geographical level with children living in the north experiencing poorer oral health.³ Poorer oral health is also related to deprivation, with children living in more deprived local authority areas experiencing poorer oral health than those from less deprived areas.³

Tooth decay is caused by the frequent consumption of food and drinks containing free sugars. Free sugars are also contributory factors to other issues of public health concern in children, for example, childhood obesity and development of type 2 diabetes later in life. The impacts of tooth decay include pain and discomfort, sleepless nights, loss of function and self-esteem. The discomfort may disrupt family life and lead to time off school and work. Yet tooth decay is preventable.

Improving the oral health of children can be tackled by upstream and downstream actions (Figure 1).⁵ Upstream actions include those undertaken at national, regional and local authority levels. Downstream actions include dental care provided to patients by dentists and dental teams.

National &/or local policy initiatives Legislation/Regulation Upstream Fiscal measures healthy public policy Healthy settings- HPS Community development Training other professional groups Media campaigns School dental health education Chair side dental health education **Downstream** Clinical prevention health education & clinical prevention

Figure 1. Upstream/downstream: options for oral disease prevention

Source: Watt, 2007

The data from oral health surveys commissioned by local authorities provides an oral health profile of their population. This informs the place-based commissioning of new services by local authorities, facilitating the best use of resources to improve health and reduce inequalities through oral health improvement programmes and wider public health measures.^{6,7,8}

The NHS dental contract, introduced in 2006, aimed to focus dental services on prevention and give commissioners the flexibility to commission services appropriate to their populations' needs and to reduce inequalities in oral health and in access to care. The data from oral health surveys informs the commissioning of dental services by NHS England.

Comparison of data from successive surveys is important in monitoring the success of programmes and services provided by local authorities and NHS England in improving oral health and reducing oral health inequalities.

Section 3. Survey method

The Public Health England dental public health epidemiology team facilitated the survey. Each local authority commissioned local dental providers to undertake the fieldwork according to a national protocol.⁹

The survey was undertaken during the school year 2014/15 using a sampling frame of children attending mainstream schools who were aged five years at the time of the survey. 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. In seven local authorities 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 by trained and calibrated examiners who were generally employed by NHS trusts providing community dental services. This involved visual-only detection of missing teeth, filled teeth and teeth with obvious tooth decay. Obvious tooth decay can be seen by the naked eye either due to the presence of a visible hole or a grey shadow in the tooth. This threshold is widely accepted in the literature as a standard together with the caveat that it provides an underestimate of the true prevalence and severity of disease (compared with that which may be detected by additional diagnostic tests such as x-rays). In this report the term tooth decay will mean obvious tooth decay. The presence and absence of plaque and oral sepsis were also recorded.

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.⁹

Data was collected using Dental Survey Plus 2 or Access computer software. The dental public health intelligence team within Public Health England collated, checked and cleaned the data.

Measures of tooth decay

The measure of tooth decay experience, the dmft index, is obtained by calculating the average number of decayed (d), missing due to decay (m) and filled due to decay (f) teeth (t) in a population. The lower case letters of dmft signify that this index refers to the primary (baby/first/deciduous) teeth only and it serves as a measure of total tooth decay experience. Obvious tooth decay was the measure of decay in this survey and this is usually recorded as d₃mft. In this report dmft represents d₃mft.

The proportion of children examined who have tooth decay experience at age five is the prevalence of tooth decay experience. This measure is used to compare differences in tooth decay experience in five-year-old children living in different geographical areas and how that has changed over time.

The average number of teeth affected by decay per child in an area is a measure of the severity of tooth decay experience averaged across all children examined, including those without decay (mean dmft). Higher average dmft scores indicate areas where children have higher experience of tooth decay.

The severity of tooth decay experience in children with tooth decay after excluding those children with no decay gives the average number of teeth with decay experience only in those children (mean dmft>0).

The Care Index is the proportion of decayed teeth (d) that have been treated by fillings (restorations). The proportions of children with missing teeth (m) are those who have had teeth removed (extracted) due to tooth decay.

Section 4. Results

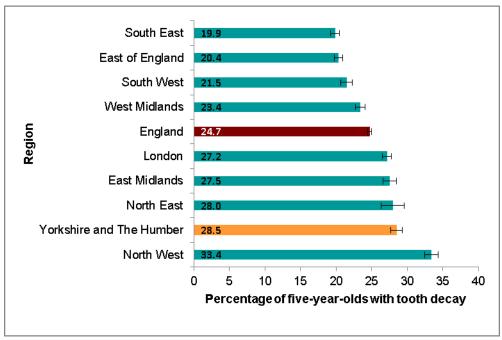
Participation in the survey

All the local authorities in Yorkshire and The Humber participated in the survey. From the sample drawn, 57.4% (n=11,557) of children consented to take part and were examined. The proportion of these children who were examined varied at local authority level from 29.1% in Wakefield to 73.3% in Craven.

Prevalence of tooth decay at age five

Yorkshire and The Humber remains the second worst region in England for the proportion of five-year olds with tooth decay experience. The proportion of five-year-old children experiencing tooth decay in Yorkshire and The Humber (28.5%) was significantly higher than the England average (24.7%) (Figure 2).

Figure 2. Percentage of five-year-old children with tooth decay experience by region, 2015



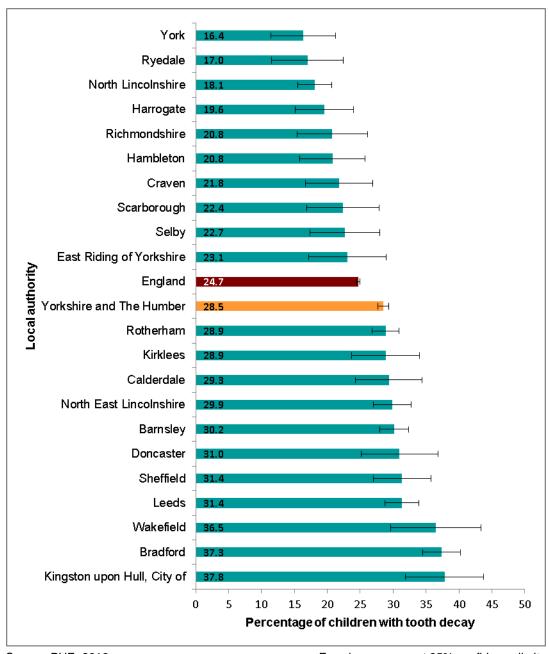
Source: PHE, 2016

Error bars represent 95% confidence limits

The proportions of five-year-old children with tooth decay varied widely between different local authorities in Yorkshire and The Humber region, ranging from an average of 16.4% of children in York to 37.8% of children in Hull. A significantly higher proportion of five-year-old children experienced tooth decay than the England average in all the South Yorkshire local authorities, in the West Yorkshire local authorities of Bradford, Leeds and Wakefield and in the North Yorkshire and Humber local authorities

of North East Lincolnshire and Hull. A significantly lower proportion of five-year-old children experienced tooth decay than the England average in the North Yorkshire and Humber local authorities of Harrogate, Ryedale, York and North Lincolnshire (Figures 3 and 4).

Figure 3. Percentage of five-year-old children with tooth decay experience in Yorkshire and The Humber by local authority, 2015



Source: PHE, 2016

Error bars represent 95% confidence limits

Differences in prevalence of tooth decay in five-year-olds also occurred at ward level within local authorities. The tables for each local authority show the differences in prevalence at ward level (Appendices 2, 3 and 4).

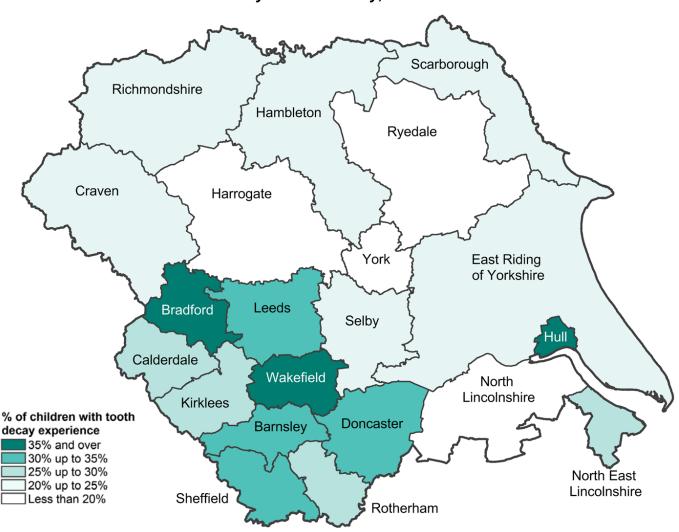


Figure 4. Map of percentage of five-year-old children with tooth decay experience in Yorkshire and The Humber by local authority, 2015

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Dental indicator for Public Health Outcomes Framework

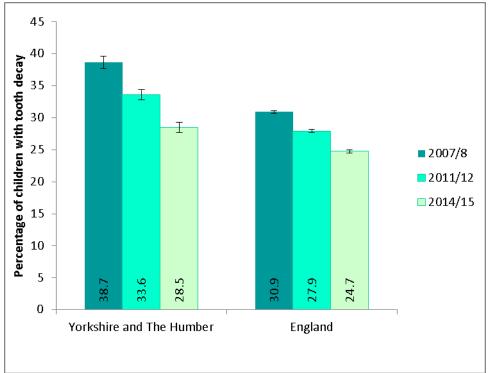
The data from the epidemiology survey provides the data for the dental indicator (proportion of children aged five who are free from obvious tooth decay) included in the Public Health Outcomes Framework (Department of Health, 2016). The dental indicator is used to monitor health improvement and the reduction of health inequalities at national and local levels. Rather than show the proportion of children with experience of tooth decay (as described in the tables above) the indicator describes the proportion of children without tooth decay (Appendix 1).

Trends in prevalence of tooth decay over time

The same methods for consent and the application of weighting in the analyses were used for the three five-year-old surveys of 2008, 2012 and 2015 and therefore direct comparison of these surveys can be made. There is a clear downward trend in f the prevalence of tooth decay experienced by five-year-old children across the years in all regions of England.

In Yorkshire and The Humber the trends show there is a continued significant reduction in the proportion of children with tooth decay, from 38.7% in 2008, 33.6% in 2012 to 28.5% in 2015. This equates to a change of ten percentage points and an improvement of 30.3% since 2008 (Figure 5).

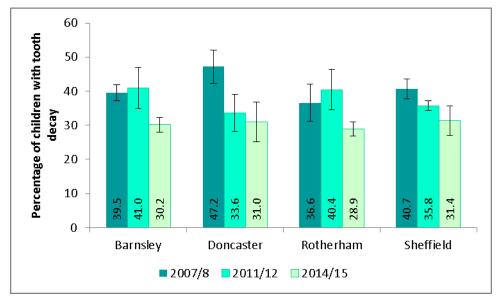
Figure 5. Percentage of five-year-old children with tooth decay experience in England and Yorkshire and The Humber, 2008, 2012 and 2015



Source: NWPHO, 2009¹¹; PHE, 2013¹⁰; PHE, 2016³. Error bars represent 95% confidence limits

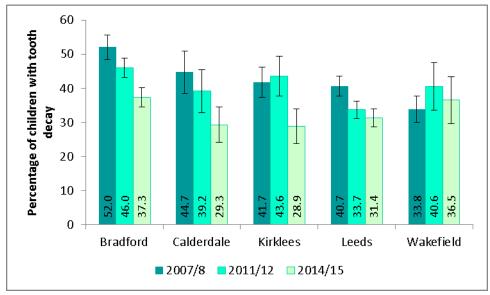
The trends in the reduction of the proportion of children with tooth decay can be seen across most local authorities in Yorkshire and The Humber. Between 2008 and 2015 at local authority level there has been a significant reduction in the proportions of children with tooth decay in all local authorities in South Yorkshire and West Yorkshire with the exception of Wakefield and in the North Yorkshire and Humber local authorities of Craven and Richmondshire (Figures 6 to 8).

Figure 6. Percentage of five-year-old children with tooth decay experience in South Yorkshire by local authority, 2008, 2012 and 2015



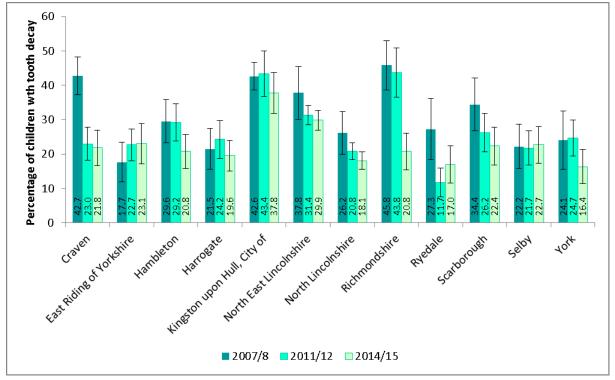
Source: NWPHO, 2009; PHE, 2013; PHE, 2016. Error bars represent 95% confidence limits

Figure 7. Percentage of five-year-old children with tooth decay experience in West Yorkshire by local authority, 2008, 2012 and 2015



Source: NWPHO, 2009; PHE, 2013; PHE, 2016. Error bars represent 95% confidence limits

Figure 8. Percentage of five-year-old children with tooth decay experience in North Yorkshire and Humber by local authority, 2008, 2012 and 2015

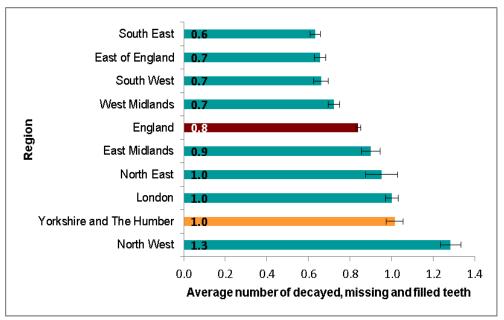


Source: NWPHO, 2009; PHE, 2013; PHE, 2016.

Severity of tooth decay at age five

In Yorkshire and The Humber the average number of teeth affected by tooth decay (mean dmft) in all children examined (including those who were free of tooth decay) was 1.0. This was the second highest regional average for five-year-olds in 2014/15 and significantly higher than the average for England of 0.8 (Figure 9).

Figure 9. Average number of decayed, missing and filled teeth among five-yearold children by region, 2015



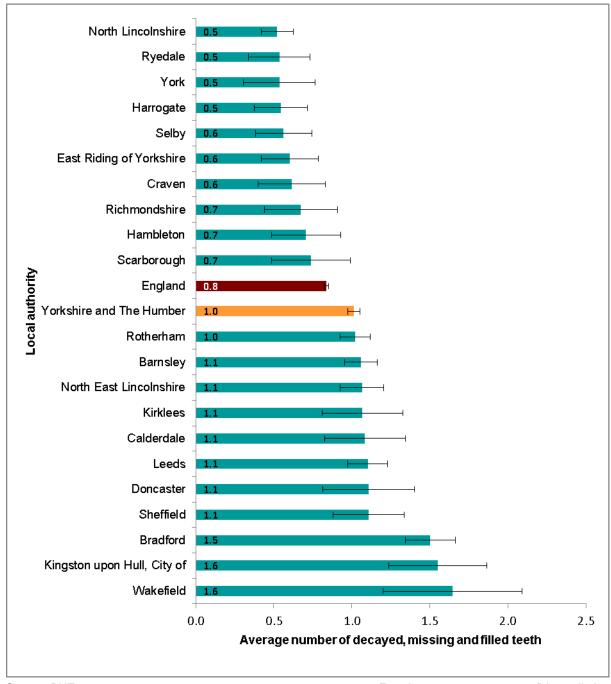
Source: PHE, 2016

Error bars represent 95% confidence limits

The severity of tooth decay varied between local authorities in Yorkshire and The Humber. Severity of tooth decay was significantly higher in South Yorkshire in Barnsley, Sheffield and Rotherham, in West Yorkshire in Bradford, Leeds and Wakefield and in North Yorkshire and Humber in North East Lincolnshire and Hull.

Severity of tooth decay was significantly lower in local authorities of Harrogate, Ryedale, Selby, York, East Riding of Yorkshire and North Lincolnshire (Figures 10 and 11), all in North Yorkshire and Humber.

Figure 10. Average number of decayed, missing and filled teeth among five-yearold children in Yorkshire and The Humber by local authority, 2015



Error bars represent 95% confidence limits

Prevalence and severity of tooth decay in five-year-olds in North Lincolnshire is significantly better than the Yorkshire and The Humber average, which may reflect the benefits of water fluoridation.

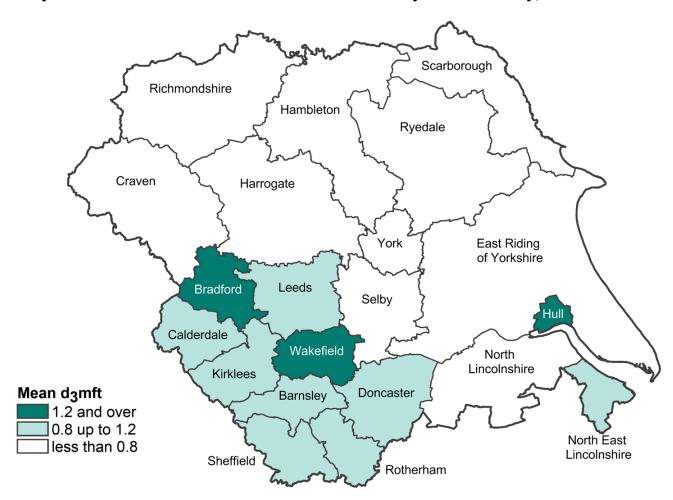


Figure 11. Map of the average number of decayed, missing and filled teeth among five-year-old children in Yorkshire and The Humber by local authority, 2015

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Differences in severity of tooth decay in five-year-olds also occur within local authorities. The tables for each local authority show the differences in severity at ward level (Appendices 2, 3 and 4).

Trends in tooth decay severity over time

Comparison of the results across the three surveys reveals a clear trend of a significant reduction of the severity of tooth decay across the region. In Yorkshire and The Humber the average number of decayed, missing or filled teeth in all children examined (including those who were decay free) has fallen significantly from 1.5 in 2008 to 1.2 in 2012 and to 1.0 in 2015, a reduction in severity of 40.0% since 2008 (Figure 12).

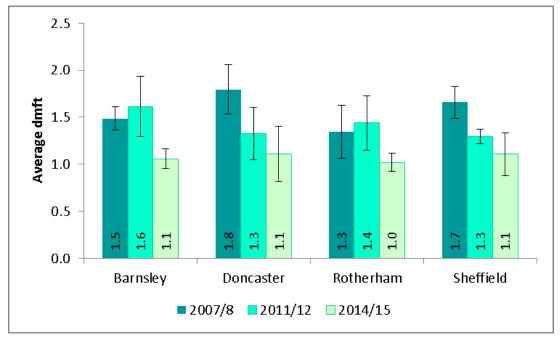
1.8 1.6 1.4 1.2 Average dmft 1.0 2007/8 2011/12 0.8 **2014/15** 0.6 0.4 0.2 1.0 0.0 Yorkshire and The Humber England

Figure 12. Average number of decayed, missing and filled teeth among five-yearold children in England and Yorkshire and The Humber, 2008, 2012 and 2015

Source: NWPHO, 2009¹¹; PHE, 2013¹⁰; PHE, 2016³. Error bars represent 95% confidence limits

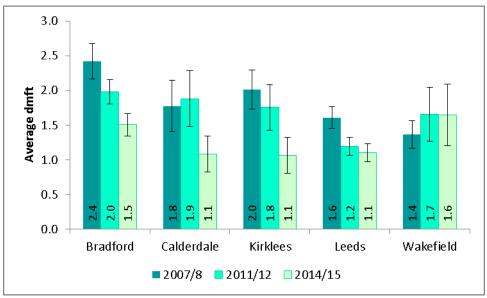
The trend in the reduction of severity of tooth decay can be seen across most of the local authorities in Yorkshire and The Humber. Between 2008 and 2015 there has been a significant reduction in the severity of tooth decay in South Yorkshire, with the exception of Rotherham, in West Yorkshire with the exception of Wakefield, and in North Yorkshire and Humber in Craven and Richmondshire (Figures 13 to 15).

Figure 13. Average number of decayed, missing and filled teeth among five-year-old children in South Yorkshire by local authority, 2008, 2012 and 2015



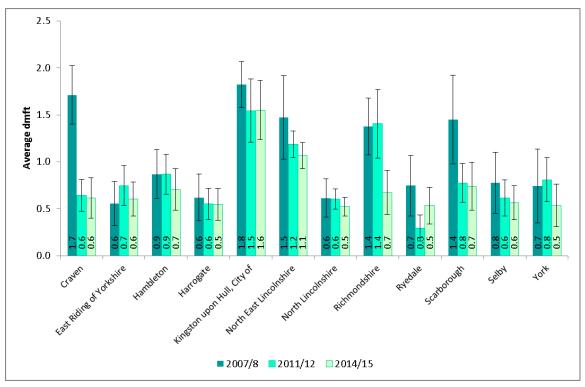
Source: NWPHO, 2009; PHE, 2013; PHE, 2016. Error bars represent 95% confidence limits

Figure 14. Average number of decayed, missing and filled teeth among five-yearold children in West Yorkshire by local authority, 2008, 2012 and 2015



Source: NWPHO, 2009; PHE, 2013; PHE, 2016. Error bars represent 95% confidence limits

Figure 15. Average number of decayed, missing and filled teeth among five-yearold children in North Yorkshire and Humber by local authority, 2008, 2012 and 2015



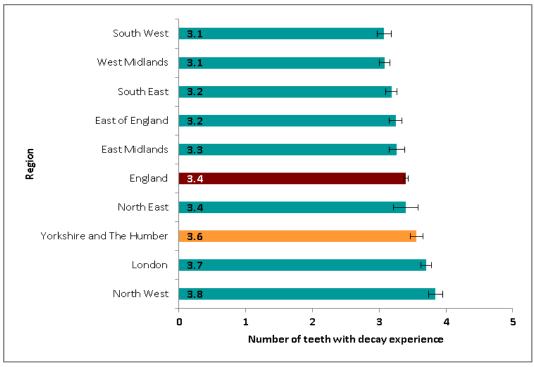
Source: NWPHO, 2009; PHE, 2013; PHE, 2016.

Error bars represent 95% confidence limits

Severity of tooth decay in children with experience of tooth decay

Children in England with experience of tooth decay had on average 3.4 teeth affected. Children in Yorkshire and The Humber with experience of tooth decay had an average of 3.6 decayed, missing or filled teeth, which was similar to the England average (Figure 16).

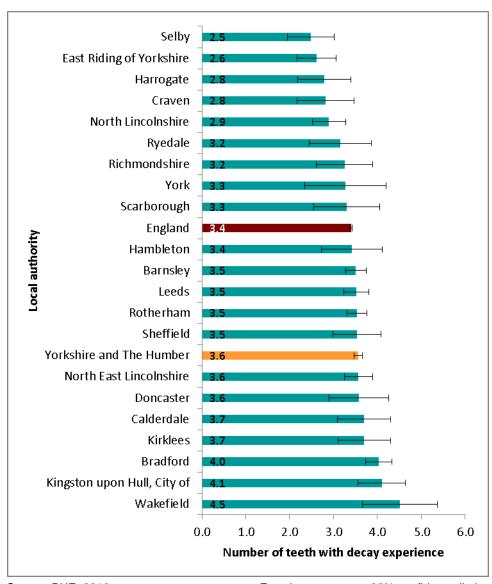
Figure 16. Severity of tooth decay experience in five-year-old children with any tooth decay by region, 2015



Error bars represent 95% confidence limits

The severity of tooth decay in those children with decay was significantly worse than the England average in the local authorities of Bradford, Hull and Wakefield. It was significantly better in Selby, East Riding of Yorkshire and North East Lincolnshire (Figure 17). In areas where higher proportions of five-year-old children had tooth decay they also had a higher number of teeth affected by the disease. Children in Selby had an average of 2.5 teeth affected and children in Wakefield had an average of 4.5 teeth affected.

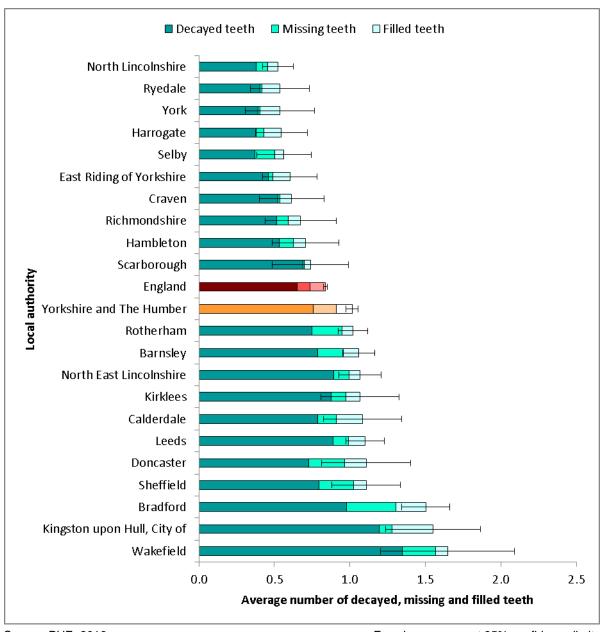
Figure 17. Severity of tooth decay experience in five-year-old children with any tooth decay in Yorkshire and The Humber by local authority, 2015



The average number of decayed, missing or filled teeth

Teeth with tooth decay experience requiring treatment are recorded as decayed. When teeth have been removed (extracted) due to decay they are recorded as missing and if the decay has been restored with a filling they are recorded as filled. The average number of teeth with tooth decay, with fillings or missing is shown below (Figure 18).

Figure 18. The average number of decayed, missing or filled teeth among fiveyear-old children in Yorkshire and The Humber by local authority, 2015



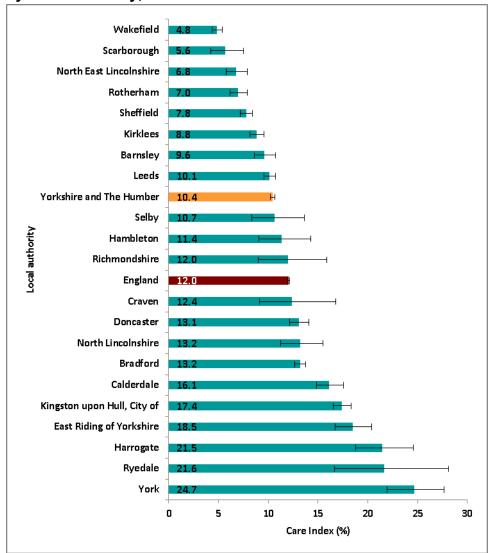
Source: PHE, 2016

The Care Index

The Care Index gives an indication of the percentage of teeth with tooth decay that have been treated with fillings. The proportion of decayed teeth that were filled in Yorkshire and The Humber (10.4%) was lower than the England average (12.0%). There was considerable variation in Yorkshire and The Humber ranging from 4.8% in Wakefield to 24.7% in York (Figure 19).

Opinions differ regarding the benefit of filling primary dental teeth and there is a lack of definitive evidence-based guidance on this. Hence care should be taken in making assumptions about the extent or quality of clinical care available when using this index.

Figure 19. Care Index among five-year-old children in Yorkshire and The Humber by local authority, 2015

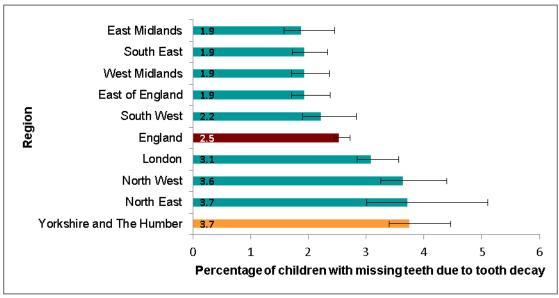


Source: PHE, 2016

Proportion of children with missing teeth due to tooth decay

Teeth removed due to tooth decay in children are recorded as missing. Tooth removal (extraction of teeth) in young children often involves admission to hospital and removal of the teeth under general anaesthesia. This might have occurred at any age prior to the survey. Children in Yorkshire and The Humber are more likely to have had teeth removed due to tooth decay than children in other regions in England. The proportion of children who had experienced tooth decay and had missing teeth in Yorkshire and The Humber (3.7%) was significantly higher than the England average (2.5%) (Figure 20).

Figure 20. Percentage of five-year-old children with experience of tooth decay who have missing teeth by region, 2015



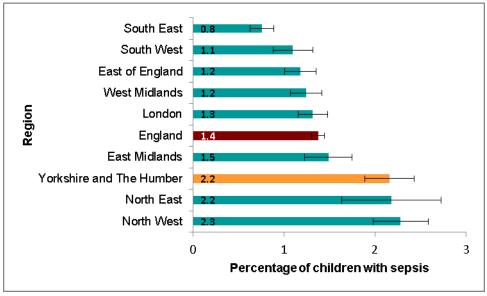
Source: PHE, 2016

Error bars represent 95% confidence limits

Children with sepsis at the time of examination

Sepsis is the presence of an abscess or sinus in the mouth caused by an infection originating from a tooth. Sepsis was recorded for 1.4% of all children examined in England. 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 21). Yorkshire and The Humber had significantly more children with sepsis than the England average. The numbers were too small to allow for comparison at local authority level.

Figure 21. Percentage of five-year-old children with evidence of sepsis by region, 2015

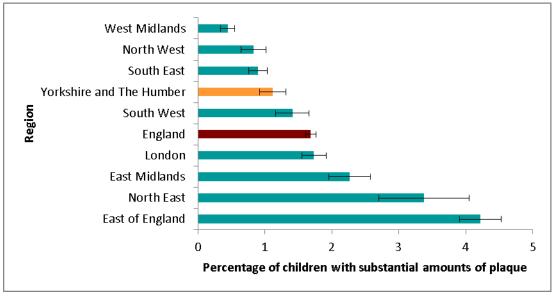


Error bars represent 95% confidence limits

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. Substantial amounts of plaque were recorded for 1.7% of the children examined in England, ranging from 0.5% in the West Midlands to 4.2% in the East of England. Children who do not brush their teeth or brush them rarely cannot benefit from the protective effects of fluoride in toothpaste on tooth decay. In Yorkshire and The Humber the presence of substantial amounts of plaque was found in 1.1% of children which was less than the England average of 1.7% (Figure 22). The numbers were too small to allow for comparison at local authority level.

Figure 22. Percentage of five-year-old children with substantial amounts of plaque by region, 2015.



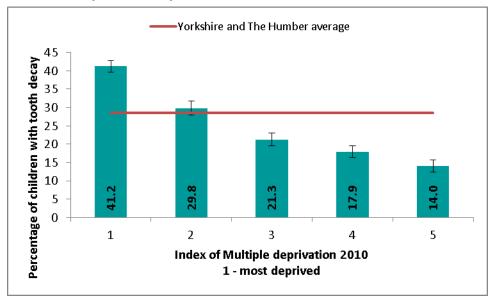
Error bars represent 95% confidence limits

Health inequalities

Deprivation

Poorer oral health is related to deprivation with children living in more deprived local authority areas experiencing poorer oral health than those from less deprived areas.³ An association between prevalence of tooth decay and level of deprivation was found. As levels of deprivation increased, more children experienced tooth decay. Prevalence was significantly worse than the Yorkshire and The Humber average for children living in the most deprived quintile of deprivation (Figure 23).

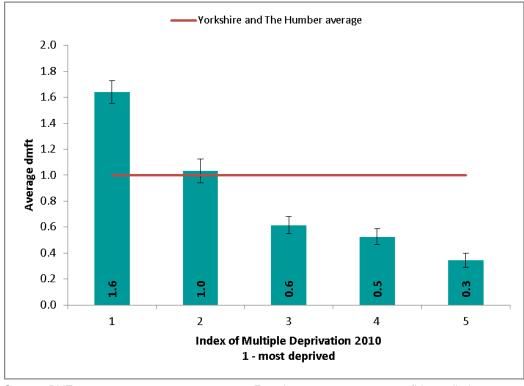
Figure 23. Percentage of five-year-old children with tooth decay experience by national deprivation quintile score in Yorkshire and The Humber, 2015



Error bars represent 95% confidence limits

An association between severity of tooth decay and level of deprivation was found. Severity of tooth decay was significantly worse than the Yorkshire and The Humber average for children living in the most deprived quintile of deprivation (Figure 24).

Figure 24. Average number of decayed, missing and filled teeth by national deprivation quintile score in Yorkshire and The Humber, 2015



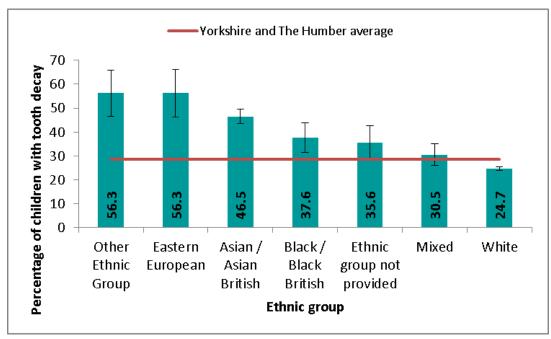
Source: PHE, 2016

Ethnicity

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. At national level the proportion of children with tooth decay was significantly higher in the Chinese (51.3%), Eastern European (47.6%) and Other Ethnic Groups (44.6%). The Other Ethnic Groups would usually include the Chinese group but at a national level the Chinese group was analysed as a separate group. At Yorkshire and The Humber level the numbers for the Chinese group (n=51) were too few to analyse as a separate group and these children were included in the Other Ethnic Group category.

In Yorkshire and The Humber the proportion of children with tooth decay was significantly higher in Other Ethnic Group (56.3%), the Eastern European (56.3%), Asian/Asian British (46.5%) and Black/Black British ethnic groups (37.6) than the Yorkshire and The Humber average (Figure 25).

Figure 25. Percentage of five-year-old children with tooth decay experience by ethnic group in Yorkshire and The Humber, 2015

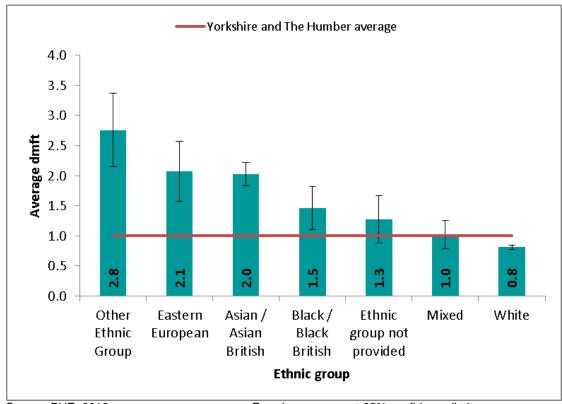


Source: PHE, 2016

Error bars represent 95% confidence limits

Nationally the average numbers of teeth affected by tooth decay among the Chinese (2.5), Eastern European (2.2) and Other Ethnic Group (1.9) groups were higher than for White children and for Black/Black British children (both 0.7). In Yorkshire and The Humber the average number of decayed, missing and filled teeth varied between different ethnic groups. It was significantly higher in the Other Ethnic Groups (2.8), Eastern European (2.1), Asian/Asian British groups and Black/Black British ethnic groups (2.0) than the Yorkshire and The Humber average (Figure 26).

Figure 26. Average number of decayed, missing and filled teeth among five-yearold children in Yorkshire and The Humber by ethnic group, 2015



Section 5. Summary and putting this information to use

Yorkshire and The Humber remains the second worst region in the country for the proportion of five-year olds with experience of tooth decay, with an average of three out of every ten children experiencing tooth decay. The proportions of children experiencing tooth decay vary widely across the region. Significantly greater proportions of five-year-old children have experience of tooth decay than the England average in all the South Yorkshire local authorities, in the West Yorkshire local authorities of Bradford, Leeds and Wakefield and in the North Yorkshire and Humber local authorities of North East Lincolnshire and Hull. A significantly lower proportion of five-year-old children experienced tooth decay than the England average in the North Yorkshire and Humber local authorities of Harrogate, Ryedale, York and North Lincolnshire.

Across Yorkshire and The Humber, between 2008 and 2015, there has been a continued decrease in the proportion of five-year-old children with tooth decay. These reductions are significant in all local authorities in South Yorkshire, in West Yorkshire with the exception of Wakefield, and in Craven and Richmondshire in North Yorkshire and Humber

The severity of tooth decay, that is the number of teeth with experience of tooth decay, also varied across the region. It was significantly higher in South Yorkshire in Barnsley, Sheffield and Rotherham, in West Yorkshire in Bradford, Leeds and Wakefield and in North Yorkshire and Humber in North East Lincolnshire and Hull. Severity of tooth decay was significantly lower in Harrogate, Ryedale, Selby, York, East Riding of Yorkshire and North Lincolnshire, in North Yorkshire and Humber.

Between 2008 and 2015 there has continued to be a reduction in the severity of tooth decay across the region and these reductions have been significant in South Yorkshire with the exception of Rotherham, in West Yorkshire with the exception of Wakefield and in North Yorkshire and Humber in Craven and Richmondshire.

The proportion of teeth with tooth decay that had been treated by fillings (Care Index) varied widely across Yorkshire and The Humber. The care index did not appear to be related to the proportions of children seen by a dentist in the previous 24 months in local authorities in Yorkshire and The Humber. 15,16,17

More five-year-old children have had teeth removed (extracted) due to tooth decay in the Yorkshire and The Humber than any other region in England. Prevalence of tooth decay was found to be linked to deprivation, with prevalence and severity of tooth decay increasing as levels of deprivation increased. Prevalence and severity was significantly worse than the Yorkshire and The Humber average for children living in the most deprived quintile of deprivation.

Prevalence of tooth decay was also linked to ethnicity. Prevalence and severity of tooth decay was significantly higher in the Other Ethnic Group, Eastern European, Asian/Asian British and Black/Black British ethnic groups than the Yorkshire and The Humber average

The survey findings provide the dental indicator (4.2 tooth decay in children aged 5) for the Public Health Outcomes Framework 2 (Appendix 1). Locally the dental survey findings are an important contribution to the joint strategic needs assessments process and oral health needs assessments. The data can assist with planning, commissioning and evaluating oral health improvement programmes and dental services and support the monitoring and reporting on water fluoridation programmes.

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 maybe considered. These should be commissioned following strategic planning, taking into account the measured health needs of the population.

Local authorities may seek dental public health advice from Public Health England on:

- oral health surveys, sample sizes required to provide ward level data, the commissioning of additional surveys to evaluate interventions and to investigate specific population groups
- assessing the oral health needs of their population
- commissioning oral health improvement programmes

A number of guidance documents and toolkits are available from Public Health England and NICE to support local authorities with oral health surveys, oral health needs assessments and commissioning of oral health improvement programmes. These include:

- information and support to local authorities on the Public Health England Dental Public Health Epidemiology Programme: Commissioning High Quality Information to Support Oral Health Improvement: A toolkit for local authorities, commissioners and partners (Public Health England 2016)¹³
- guidance to enable local authorities review and evaluate existing oral health improvement programmes and consider future evidence based commissioning intentions:

- Local authorities improving oral health: commissioning better oral health for children and young people. An evidence-informed toolkit for local authorities (Public Health England 2016)⁶
- Oral health: approaches for local authorities and their partners to improve the oral health of their communities (National Institute for Health and Care Excellence (NICE) 2016)^{7,14}

Further information on the Public Health England Dental Public Health Epidemiology programme is available: http://www.nwph.net/dentalhealth/

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Appendices

Appendix 1: Dental indicator for Public Health Outcomes Framework

Appendix 2: Ward tables for local authorities in South Yorkshire

Appendix 3: Ward tables for local authorities in West Yorkshire

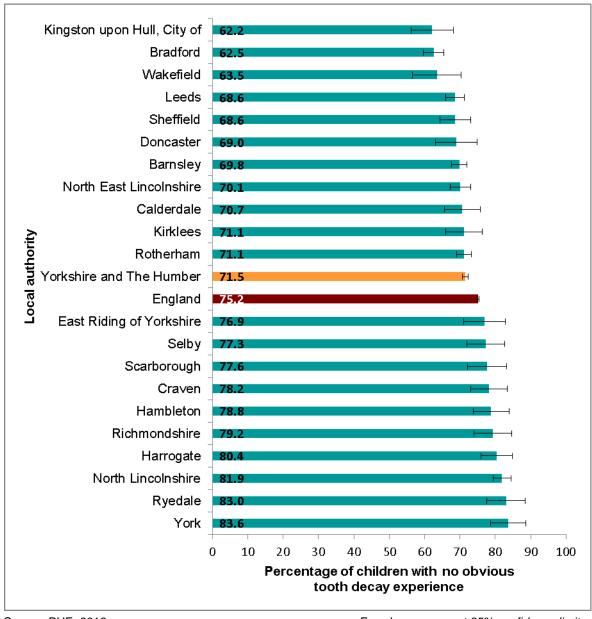
Appendix 4: Ward tables for local authorities in North Yorkshire and Humber

Appendix 1

Dental indicator for Public Health Outcomes Framework

The data from the epidemiology survey provides the data for the dental indicator 4.2, the proportion of children aged five who are free from obvious tooth decay, included in the Public Health Outcomes Framework (Department of Health, 2016). The dental indicator is used to monitor health improvement and the reduction of health inequalities at national and local levels (Figure 1).

Figure 1. Percentage of five-year-old children with no obvious tooth decay experience in Yorkshire and The Humber by local authority, 2015



Source: PHE, 2016

Error bars represent 95% confidence limits

Appendix 2

Tables of prevalence of tooth decay and the average number of decayed, missing or filled teeth (average dmft) is shown at ward level for each local authority in South Yorkshire.

In wards where more than 15 children were examined the results may be more indicative of the prevalence and severity at ward level. In wards where fewer than 15 children were examined the results may be less indicative of the prevalence and severity due to small sample size.

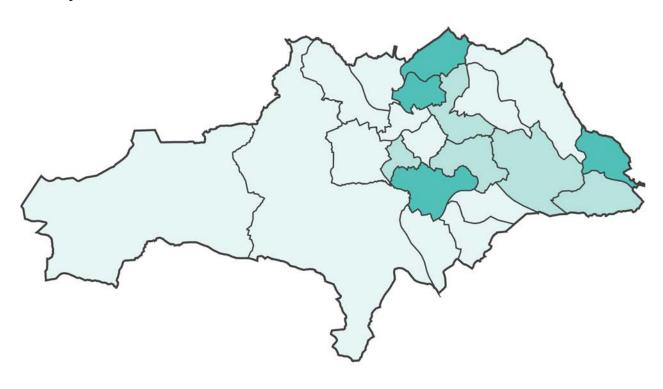
In local authorities where enhanced sampling was undertaken, maps show prevalence at ward level.

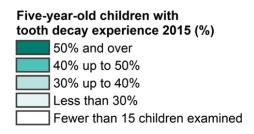
Ward tables for local authorities in South Yorkshire

Table 1. Wards in Barnsley ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Worsbrough	48.6	1.61
2	Dearne North	46.5	1.77
3	Royston	41.7	1.71
4	St Helens	41.3	1.44
5	Monk Bretton	36.4	1.24
6	Kingstone	36.0	1.37
7	Darfield	35.3	0.97
8	Stairfoot	34.7	1.46
9	Dearne South	33.3	0.92
10	Cudworth	28.9	0.98
11	North East	28.6	1.13
12	Wombwell	28.4	1.18
13	Rockingham	28.1	1.41
14	Central	26.3	0.88
15	Old Town	24.7	0.77
16	Hoyland Milton	21.4	0.82
17	Darton East	20.3	0.52
18	Darton West	19.4	0.6
19	Penistone West	17.1	0.35
20	Dodworth	16.7	0.39
21	Penistone East	13.6	0.37
	Barnsley	30.2	1.1
	Yorkshire and Humber	28.5	1.0
	England	24.7	8.0

Figure 1. Map of percentage of five-year-old children with tooth decay experience in Barnsley, 2015





In the wards of Worsbrough, Dearne North, Royston and St Helens over 40% of children aged five had experience of tooth decay.

Table 2. Wards in Doncaster ranked by prevalence of tooth decay in five-year-old children, 2015

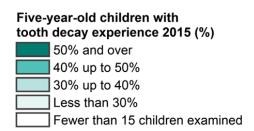
Rank	Ward	Prevalence (%)	Average dmft (n)
1	Askern Spa	100.0	1.50
2	Central	87.5	6.13
3	Town Moor	54.2	1.58
4	Conisbrough and Denaby	53.8	2.31
5	Finningley	50.0	1.33
6	Rossington	50.0	0.50
7	Adwick	46.2	1.62
8	Mexborough	31.3	1.16
9	Bentley	30.8	1.00
10	Armthorpe	25.0	0.75
11	Wheatley	25.0	0.42
12	Edlington and Warmsworth	23.5	0.53
13	Bessacarr and Cantley	21.7	1.04
14	Torne Valley	20.0	0.60
15	Edenthorpe, Kirk Sandall and Barnby Dun	16.7	0.17
16	Great North Road	12.5	0.25
17	Balby	10.0	0.45
18	Hatfield	0.0	0.00
19	Sprotbrough	0.0	0.00
20	Stainforth and Moorends	0.0	0.00
21	Thorne	0.0	0.00
	Doncaster	31.0	1.1
	Yorkshire and Humber	28.5	1.0
IZ a	England	24.7	8.0

Table 3. Wards in Rotherham ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence	Average
		(%)	dmft (n)
1	Rotherham West	45.3	3.99
2	Boston Castle	42.6	4.36
3	Maltby	38.2	3.07
4	Rotherham East	37.9	2.93
5	Valley	37.6	3.63
6	Rawmarsh	31.8	1.91
7	Wickersley	30.1	2.12
8	Wingfield	30.0	2.40
9	Holderness	28.9	1.92
10	Rother Vale	28.3	2.12
11	Hoober	28.2	2.32
12	Dinnington	25.3	1.99
13	Wath	24.7	2.00
14	Swinton	24.2	1.65
15	Anston and Woodsetts	21.3	0.91
16	Hellaby	20.3	1.12
17	Silverwood	19.8	1.44
18	Keppel	19.2	1.29
19	Sitwell	18.8	1.38
20	Brinsworth and Catcliffe	18.1	1.39
21	Wales	11.8	0.47
	Rotherham	28.9	1.0
	Yorkshire and Humber	28.5	1.0
	England	24.7	0.8

Figure 2. Map of percentage of five-year-old children with tooth decay experience in Rotherham, 2015





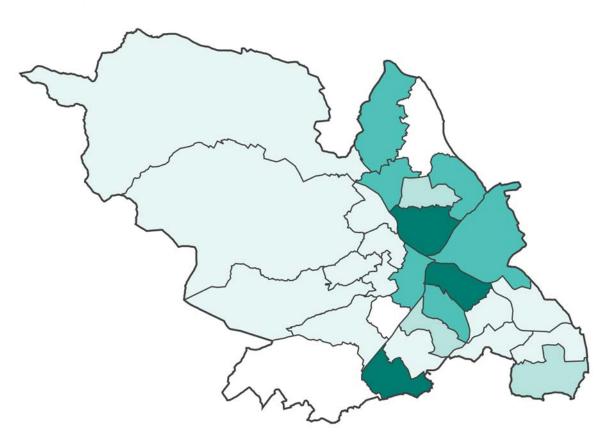
In the wards of Rotherham West and Boston Castle over 40% of children aged five had experience of tooth decay.

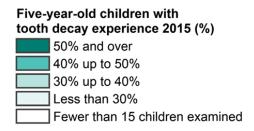
Table 4. Wards in Sheffield ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence	Average
		(%)	dmft (n)
1	Burngreave	54.2	2.79
2	Manor Castle	52.3	1.89
3	Beauchief and Greenhill	50.0	2.05
4	West Ecclesfield	47.4	1.84
5	Shiregreen and Brightside	46.7	1.10
6	Arbourthorne	45.7	1.51
7	Central	45.5	1.42
8	Southey	43.3	1.63
9	Darnall	42.9	1.48
10	Mosborough	36.4	1.14
11	Gleadless Valley	35.5	1.23
12	Firth Park	35.3	1.35
13	Nether Edge	33.3	1.33
14	East Ecclesfield	30.0	0.50
15	Walkley	23.8	1.29
16	Hillsborough	23.5	1.18
17	Woodhouse	22.7	0.86
18	Ecclesall	20.5	0.26
19	Birley	20.0	1.00
20	Stocksbridge and Upper Don	18.5	0.30
21	Stannington	17.1	0.56
22	Graves Park	15.0	0.70
23	Beighton	14.7	0.38
24	Richmond	14.3	0.19
25	Broomhill	13.6	0.32
26	Dore and Totley	11.1	0.33
27	Fulwood	9.7	0.19
28	Crookes	9.1	0.18
	Sheffield	31.4	1.1
	Yorkshire and Humber	28.5	1.0
_	England	24.7	0.8

Key:

Figure 3. Map of percentage of five-year-old children with tooth decay experience in Sheffield, 2015





In the wards of Burngreave, Manor Castle and Beauchief and Greenhill over 50% of children aged five had experience of tooth decay.

In the wards of West Ecclesfield, Shiregreen and Brightside, Arbourthorne, Central Southey and Darnall over 40% of children aged five had experience of tooth decay.

Appendix 3

Tables of prevalence of tooth decay and the average number of decayed, missing or filled teeth (average dmft) is shown at ward level for each local authority in West Yorkshire.

In wards where more than 15 children were examined the results may be more indicative of the prevalence and severity at ward level. In wards where fewer than 15 children were examined the results may be less indicative of the prevalence and severity due to small sample size.

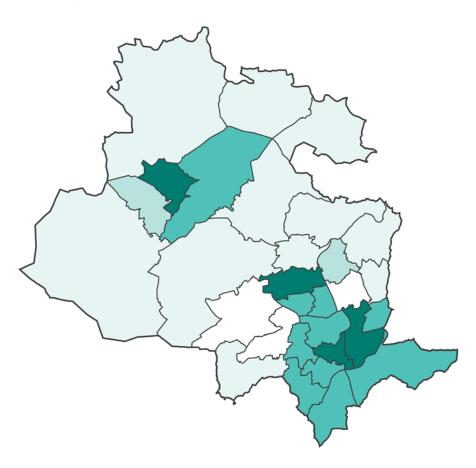
In local authorities where enhanced sampling was undertaken, maps show prevalence at ward level.

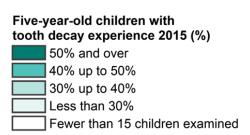
Ward tables for local authorities in West Yorkshire

Table 1. Wards in Bradford ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Bowling and Barkerend	69.4	4.08
2	Keighley Central	55.8	1.88
3	Heaton	52.0	1.44
4	Little Horton	50.9	2.30
5	Toller	46.4	2.13
6	Tong	45.9	1.73
7	Manningham	45.8	1.92
8	Wibsey	45.5	1.32
9	Bradford Moor	45.0	2.33
10	Wyke	42.9	1.38
11	City	42.0	1.84
12	Royds	41.9	1.39
13	Keighley East	41.7	1.33
14	Great Horton	40.0	1.97
15	Bolton and Undercliffe	33.3	0.92
16	Keighley West	33.3	1.81
17	Windhill and Wrose	32.1	1.29
18	Queensbury	26.1	0.98
19	Eccleshill	25.0	1.38
20	Clayton and Fairweather Green	20.0	1.60
21	Shipley	17.6	0.35
22	Bingley Rural	17.1	0.46
23	Thornton and Allerton	16.7	0.67
24	Worth Valley	16.7	0.28
25	Craven	16.3	0.42
26	Bingley	15.7	0.43
27	Baildon	15.4	0.23
28	Wharfedale	11.1	0.15
29	Ilkley	8.3	0.28
30	Idle and Thackley	0.0	0.00
	Bradford	37.3	1.5
	Yorkshire and Humber	28.5	1.0
	England	24.7	8.0

Figure 1. Map of percentage of five-year-old children with tooth decay experience in Bradford, 2015





In the wards of Bowling and Barkerend, Keighley Central, Heaton and Little Horton over 50% of children aged five had experience of tooth decay. The highest prevalence was found in Bowling and Barerend at over 69%.

Table 2. Wards in Calderdale ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Warley	53.8	2.54
2	Elland	50.0	2.50
3	Park	50.0	2.08
4	Todmorden	34.6	1.58
5	Ryburn	33.3	1.33
6	Ovenden	31.3	0.84
7	Brighouse	27.3	0.58
8	Town	26.7	0.73
9	Illingworth and Mixenden	25.0	0.25
10	Sowerby Bridge	25.0	0.25
11	Northowram and Shelf	21.4	1.07
12	Calder	17.9	0.54
13	Hipperholme and Lightcliffe	17.6	0.26
14	Skircoat	16.2	0.81
15	Luddendenfoot	11.8	0.41
16	Greetland and Stainland	0.0	0.00
17	Rastrick	0.0	0.00
	Calderdale	29.3	1.1
	Yorkshire and Humber	28.5	1.0
	England	24.7	0.8

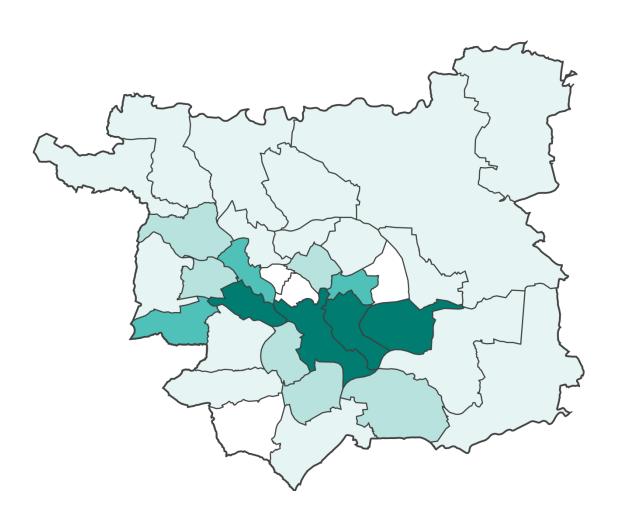
Table 3. Wards in Kirklees ranked by prevalence of tooth decay in five-year-old children, 2015

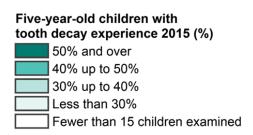
Rank	Ward	Prevalence (%)	Average dmft (n)
1	Dewsbury West	51.5	4.79
2	Batley West	43.8	5.19
3	Newsome	40.0	3.20
4	Dewsbury South	38.9	3.22
5	Dewsbury East	33.3	2.33
6	Heckmondwike	33.3	1.93
7	Crosland Moor and Netherton	25.0	2.75
8	Liversedge and Gomersal	24.4	0.93
9	Ashbrow	20.0	0.20
10	Holme Valley North	20.0	0.95
11	Cleckheaton	19.4	1.65
12	Colne Valley	16.7	0.75
13	Golcar	16.7	4.17
14	Mirfield	10.5	0.37
15	Denby Dale	7.7	0.15
16	Holme Valley South	5.0	0.30
17	Almondbury	0.0	0.00
18	Birstall and Birkenshaw	0.0	0.00
19	Kirkburton	0.0	0.00
	Kirklees	28.9	1.1
	Yorkshire and Humber	28.5	1.0
	England	24.7	0.8

Table 4. Wards in Leeds ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Headingley	100.0	2.00
2	Burmantofts and Richmond Hill	55.9	2.71
3	City and Hunslet	54.5	2.33
4	Temple Newsam	52.6	1.89
5	Armley	51.8	1.80
6	Gipton and Harehills	48.4	2.31
7	Pudsey	45.8	1.04
8	Hyde Park and Woodhouse	42.9	0.71
9	Kirkstall	40.0	1.35
10	Chapel Allerton	38.7	1.53
11	Middleton Park	37.8	1.65
12	Rothwell	37.5	0.81
13	Killingbeck and Seacroft	36.4	1.00
14	Beeston and Holbeck	32.0	1.08
15	Bramley and Stanningley	31.4	1.06
16	Horsforth	31.3	0.69
17	Moortown	27.3	0.65
18	Wetherby	25.0	0.66
19	Farnley and Wortley	23.8	0.63
20	Cross Gates and Whinmoor	22.9	0.91
21	Calverley and Farsley	19.2	0.63
22	Alwoodley	18.9	0.49
23	Roundhay	18.9	0.55
24	Weetwood	18.8	0.41
25	Ardsley and Robin Hood	16.7	0.37
26	Morley South	16.7	0.33
27	Morley North	15.4	0.38
28	Guiseley and Rawdon	14.5	0.20
29	Harewood	14.3	0.33
30	Garforth and Swillington	13.8	0.55
31	Adel and Wharfedale	12.5	0.13
32	Kippax and Methley	10.4	0.25
33	Otley and Yeadon	3.4	0.03
	Leeds	31.4	1.1
	Yorkshire and Humber	28.5	1.0
	England	24.7	0.8

Figure 2. Map of percentage of five-year-old children with tooth decay experience in Leeds, 2015





In the wards of Burmantofts and Richmond Hill, City and Hunslet, Temple Newsam and Armley over 50% of children aged five had experience of tooth decay.

In the wards of Gipton and Harehills, Pudsey, Kirkstall over 40% of children aged five had experience of tooth decay.

Table 5. Wards in Wakefield ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Wakefield East	76.9	4.85
2	Knottingley	57.9	1.68
3	Pontefract North	50.0	3.67
4	Crofton, Ryhill and Walton	43.8	1.81
5	Pontefract South	40.0	1.00
6	Hemsworth	38.1	2.05
7	Wakefield West	33.3	1.33
8	Altofts and Whitwood	28.6	1.43
9	Castleford Central and Glasshoughton	28.6	0.86
10	Wakefield Rural	28.1	1.06
11	Normanton	21.4	0.71
12	Horbury and South Ossett	21.1	1.00
13	Wakefield South	20.0	1.40
14	Ossett	18.8	0.63
15	Wrenthorpe and Outwood West	11.1	0.78
16	Ackworth, North Elmsall and Upton	0.0	0.00
17	Airedale and Ferry Fryston	0.0	0.00
18	Featherstone	0.0	0.00
19	South Elmsall and South Kirkby	0.0	0.00
20	Stanley and Outwood East	0.0	0.00
21	Wakefield North	0.0	0.00
	Wakefield	36.5	1.6
	Yorkshire and Humber	28.5	1.0
	England	24.7	8.0

Appendix 4

Tables of prevalence of tooth decay and the average number of decayed, missing or filled teeth (average dmft) is shown at ward level for each local authority in North Yorkshire and Humber.

In wards where more than 15 children were examined the results may be more indicative of the prevalence and severity at ward level. In wards where fewer than 15 children were examined the results may be less indicative of the prevalence and severity due to small sample size.

In local authorities where enhanced sampling was undertaken, maps show prevalence at ward level.

Ward tables for local authorities in North Yorkshire and Humber

Table 1. Wards in East Riding of Yorkshire ranked by prevalence of tooth decay in fiveyear-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Beverley Rural	100.0	2.00
2	Bridlington Central and Old Town	42.9	1.29
3	Goole South	40.0	1.20
4	Willerby and Kirk Ella	37.5	1.75
5	South East Holderness	33.3	0.87
6	Pocklington Provincial	30.0	0.60
7	Dale	27.8	0.83
8	Howden	27.3	0.45
9	Bridlington South	25.0	0.81
10	Goole North	25.0	1.00
11	South West Holderness	25.0	0.88
12	Hessle	21.4	0.57
13	Howdenshire	20.0	0.40
14	Tranby	16.7	0.33
15	East Wolds and Coastal	14.3	0.29
16	Snaith, Airmyn, Rawcliffe and Marshland	14.3	0.14
17	Driffield and Rural	12.5	0.25
18	Bridlington North	11.1	0.11
19	South Hunsley	7.7	0.08
20	Mid Holderness	0.0	0.00
21	North Holderness	0.0	0.00
	East Riding of Yorkshire	23.1	0.6
	Yorkshire and Humber	28.5	1.0
	England	24.7	0.8

Key

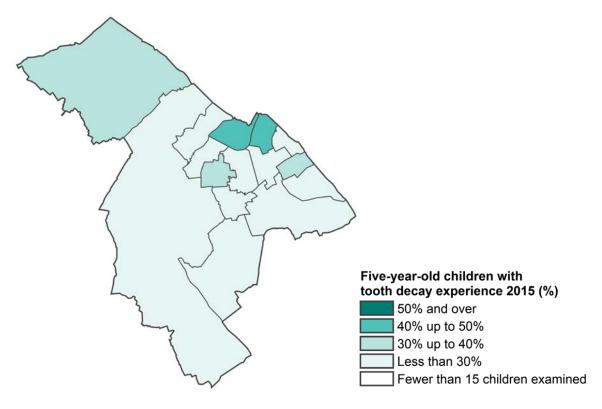
Table 2. Wards in Kingston upon Hull ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Newington	100.0	3.00
2	Newland	100.0	5.14
3	St Andrew's	75.0	3.00
4	Orchard Park and Greenwood	61.9	2.60
5	Longhill	55.6	2.00
6	Avenue	50.0	2.50
7	Holderness	50.0	1.50
8	Kings Park	50.0	0.50
9	University	44.4	1.78
10	Marfleet	38.9	1.83
11	Myton	34.4	1.78
12	Derringham	33.3	1.83
13	Pickering	33.3	0.33
14	Bransholme East	30.8	1.62
15	Ings	30.0	1.10
16	Bransholme West	25.0	1.00
17	Boothferry	21.4	0.36
18	Sutton	21.1	1.00
19	Beverley	20.0	0.33
20	Southcoates East	14.3	0.14
21	Drypool	13.3	0.53
22	Bricknell	12.5	0.13
	Kingston upon Hull	37.8	1.6
	Yorkshire and Humber	28.5	1.0
	England	24.7	8.0

Table 3. Wards in North East Lincolnshire ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	East Marsh	47.5	2.03
2	West Marsh	44.4	1.59
3	Immingham	39.1	1.71
4	South	37.6	1.39
5	Croft Baker	30.0	0.94
6	Yarborough	29.2	0.67
7	Sidney Sussex	28.8	1.03
8	Park	27.8	1.11
9	Heneage	27.2	0.90
10	Freshney	25.0	0.63
11	Scartho	20.0	0.59
12	Wolds	15.5	0.84
13	Waltham	14.3	0.31
14	Haverstoe	12.8	0.38
15	Humberston and New Waltham	7.9	0.37
	North East Lincolnshire	29.9	1.1
	Yorkshire and Humber	28.5	1.0
	England	24.7	8.0

Figure 1. Map of percentage of five-year-old children with tooth decay experience in North East Lincolnshire, 2015

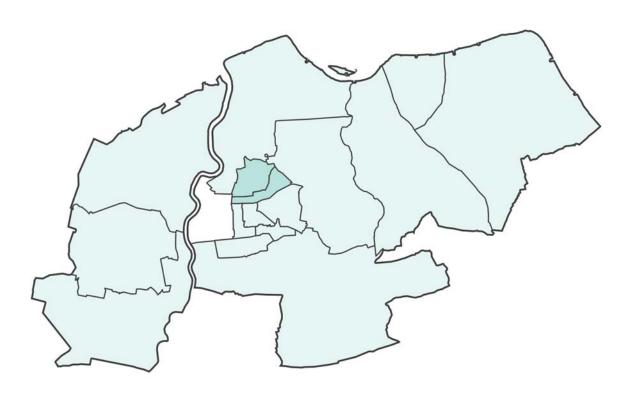


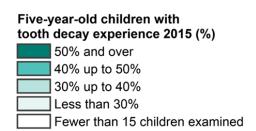
In the wards of East Marsh and West Marsh over 40% of children aged five had experience of tooth decay.

Table 4. Wards in North Lincolnshire ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Town	35.6	1.42
2	Crosby and Park	33.7	0.99
3	Burringham and Gunness	27.3	0.27
4	Frodingham	24.1	0.57
5	Brumby	23.1	0.95
6	Axholme South	20.0	0.48
7	Kingsway with Lincoln Gardens	17.7	0.46
8	Axholme North	17.4	0.59
9	Ridge	15.7	0.31
10	Barton	15.4	0.65
11	Bottesford	14.8	0.26
12	Ashby	11.8	0.29
13	Brigg and Wolds	11.3	0.19
14	Ferry	7.1	0.20
15	Broughton and Appleby	6.9	0.07
16	Burton upon Stather and Winterton	6.5	0.15
17	Axholme Central	0.0	0.00
	North Lincolnshire Yorkshire and Humber	18.1 28.5	0.5 1.0
	England	24.7	0.8

Figure 2. Map of percentage of five-year-old children with tooth decay experience in North Lincolnshire, 2015





In the wards of Town Crosby and Park over 30% of children aged five had experience of tooth decay.

Table 5. Wards in York ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Acomb	0.0	0.00
2	Bishopthorpe	0.0	0.00
3	Heslington	0.0	0.00
4	Strensall	0.0	0.00
5	Heworth Without	6.7	0.13
6	Wheldrake	11.8	0.29
7	Clifton	12.5	1.13
8	Heworth	12.5	0.19
9	Holgate	12.5	0.13
10	Rural West York	12.5	0.31
11	Hull Road	14.3	0.29
12	Dringhouses and Woodthorpe	16.0	0.40
13	Guildhall	18.8	1.06
14	Fishergate	20.0	0.20
15	Westfield	20.0	0.80
16	Derwent	25.0	0.75
17	Haxby and Wigginton	25.0	0.25
18	Huntington and New Earswick	25.0	0.63
19	Osbaldwick	28.6	1.43
20	Skelton, Rawcliffe and Clifton Without	28.6	1.29
21	Micklegate	100.0	2.00
	York	16.4	0.5
	Yorkshire and Humber	28.5	1.0
	England	24.7	8.0

Wards in local authorities in North Yorkshire ranked by prevalence of tooth decay in five-year-old children

Table 6. Wards in Craven ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Grassington	100.0	5.00
2	Hellifield and Long Preston	66.7	1.00
3	Barden Fell	50.0	0.50
4	Ingleton and Clapham	38.5	1.08
5	Skipton South	37.5	1.06
6	Upper Wharfedale	33.3	0.33
7	West Craven	33.3	0.67
8	Cowling	30.0	0.55
9	Skipton West	28.6	1.43
10	Bentham	27.3	0.64
11	Embsay-with-Eastby	22.2	0.28
12	Aire Valley with Lothersdale	13.8	0.31
13	Gargrave and Malhamdale	13.6	0.27
14	Sutton-in-Craven	13.3	0.43
15	Skipton East	11.8	0.12
16	Glusburn	8.3	0.33
17	Skipton North	7.4	0.22
18	Settle and Ribblebanks	0.0	0.00
	Craven	21.8	0.6
	Yorkshire and Humber	28.5	1.0
	England	24.7	8.0

Key

Table 7. Wards in Hambleton ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Grassington	100.0	5.00
2	Hellifield and Long Preston	66.7	1.00
3	Barden Fell	50.0	0.50
4	Ingleton and Clapham	38.5	1.08
5	Skipton South	37.5	1.06
6	Upper Wharfedale	33.3	0.33
7	West Craven	33.3	0.67
8	Cowling	30.0	0.55
9	Skipton West	28.6	1.43
10	Bentham	27.3	0.64
11	Embsay-with-Eastby	22.2	0.28
12	Aire Valley with Lothersdale	13.8	0.31
13	Gargrave and Malhamdale	13.6	0.27
14	Sutton-in-Craven	13.3	0.43
15	Skipton East	11.8	0.12
16	Glusburn	8.3	0.33
17	Skipton North	7.4	0.22
18	Settle and Ribblebanks	0.0	0.00
	Hambleton	20.8	0.7
	Yorkshire and Humber	28.5	1.0
	England	24.7	8.0

Table 8. Wards in Harrogate ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Ripon Spa	100.0	1.00
2	Ribston	50.0	0.50
3	Ripon Moorside	36.8	1.58
4	High Harrogate	36.0	1.36
5	Hookstone	29.4	1.12
6	Nidd Valley	25.0	0.50
7	Harlow Moor	23.1	0.38
8	Starbeck	23.1	0.69
9	Boroughbridge	22.2	0.89
10	Saltergate	20.0	0.40
11	Woodfield	20.0	0.40
12	Granby	19.0	0.24
13	Low Harrogate	18.8	0.50
14	Rossett	18.8	0.25
15	Bilton	16.7	1.00
16	Knaresborough Scriven Park	16.7	0.25
17	Marston Moor	16.7	0.39
18	Ripon Minster	15.4	0.23
19	New Park	14.3	0.57
20	Knaresborough East	9.1	0.09
21	Pannal	8.3	0.17
22	Knaresborough King James	5.3	0.05
23	Bishop Monkton	0.0	0.00
24	Claro	0.0	0.00
25	Killinghall	0.0	0.00
26	Lower Nidderdale	0.0	0.00
27	Newby	0.0	0.00
28	Ouseburn	0.0	0.00
29	Pateley Bridge	0.0	0.00
30	Spofforth with Lower Wharfedale	0.0	0.00
31	Stray	0.0	0.00
32	Washburn	0.0	0.00
33	Wathvale	0.0	0.00
	Harrogate	19.6	0.5
	Yorkshire and Humber	28.5	1.0
	England	24.7	0.8

Table 9. Wards in Richmondshire ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Barton	50.0	1.17
2	Gilling West	50.0	2.75
3	Middleham	40.0	1.60
4	Addlebrough	37.5	0.63
5	Hornby Castle	37.5	1.00
6	Leyburn	36.4	0.82
7	Catterick	33.3	0.33
8	Richmond West	31.3	0.69
9	Scotton	26.7	1.40
10	Melsonby	25.0	0.50
11	Reeth and Arkengarthdale	25.0	0.25
12	Colburn	18.2	0.91
13	Hipswell	14.7	0.50
14	Bolton Castle	14.3	0.14
15	Newsham with Eppleby	14.3	0.71
16	Richmond Central	14.3	0.43
17	Richmond East	13.3	0.27
18	Brompton-on-Swale and Scorton	11.1	0.56
19	Croft	9.1	0.55
20	Hawes and High Abbotside	0.0	0.00
21	Lower Wensleydale	0.0	0.00
22	Penhill	0.0	0.00
23	Swaledale	0.0	0.00
	Richmondshire	20.8	0.7
	Yorkshire and Humber	28.5	1.0
Kov	England	24.7	0.8

Table 10. Wards in Ryedale ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Rillington	50.0	1.25
2	Cropton	40.0	1.20
3	Thornton Dale	33.3	1.13
4	Sherburn	28.6	1.43
5	Ryedale South West	27.3	0.91
6	Kirkbymoorside	25.0	0.79
7	Derwent	20.0	0.90
8	Malton	20.0	0.40
9	Helmsley	16.7	0.83
10	Norton West	16.7	0.33
11	Norton East	15.9	0.59
12	Pickering West	15.0	0.65
13	Pickering East	12.0	0.16
14	Amotherby	0.0	0.00
15	Ampleforth	0.0	0.00
16	Dales	0.0	0.00
17	Sheriff Hutton	0.0	0.00
18	Sinnington	0.0	0.00
19	Wolds	0.0	0.00
	Ryedale	17.0	0.5
	Yorkshire and Humber	28.5	1.0
	England	24.7	8.0

Table 11. Wards in Scarborough ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence	Average
4	D 1	(%)	dmft (n)
1	Danby	100.0	3.00
2	Ramshill	75.0	3.75
3	Castle	66.7	4.33
4	Woodlands	37.5	1.06
5	Hertford	33.3	1.08
6	Streonshalh	33.3	0.33
7	Eastfield	30.4	0.91
8	Lindhead	28.6	1.00
9	Mulgrave	28.6	0.29
10	North Bay	26.7	1.27
11	Central	20.0	0.40
12	Northstead	20.0	0.80
13	Newby	19.0	0.33
14	Cayton	17.6	0.53
15	Esk Valley	14.3	0.24
16	Falsgrave Park	14.3	0.43
17	Mayfield	10.0	0.30
18	Seamer	6.7	0.17
19	Derwent Valley	0.0	0.00
20	Scalby, Hackness and Staintondale	0.0	0.00
21	Stepney	0.0	0.00
22	Whitby West Cliff	0.0	0.00
	Scarborough	22.4	0.7
	Yorkshire and Humber	28.5	1.0
	England	24.7	0.8

Table 12. Wards in Selby ranked by prevalence of tooth decay in five-year-old children, 2015

Rank	Ward	Prevalence (%)	Average dmft (n)
1	Barlby	50.0	2.50
2	Fairburn with Brotherton	38.9	0.44
3	Tadcaster East	36.4	1.45
4	Selby South	34.6	0.85
5	Hemingbrough	28.6	0.71
6	Appleton Roebuck	25.0	1.13
7	Sherburn in Elmet	25.0	0.38
8	Saxton and Ulleskelf	22.2	0.89
9	Selby West	22.2	0.67
10	Camblesforth	20.0	0.20
11	Hambleton	18.2	0.27
12	Cawood with Wistow	14.8	0.22
13	Riccall with Escrick	11.1	0.22
14	Brayton	9.5	0.10
15	Selby North	6.7	0.27
16	Eggborough	0.0	0.00
17	Monk Fryston and South Milford	0.0	0.00
18	North Duffield	0.0	0.00
19	Tadcaster West	0.0	0.00
20	Whitley	0.0	0.00
	Selby	22.7	0.6
	Yorkshire and Humber	28.5	1.0
	England	24.7	0.8