

Publication Report



NATIONAL
DENTAL
INSPECTION
PROGRAMME



National Dental Inspection Programme (NDIP) 2015

**Report of the 2015 Detailed National Dental Inspection Programme of
Primary 7 children and the Basic Inspection of Primary 1 and Primary
7 children**

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Contents

Introduction	2
The 2015 National Dental Inspection Programme (NDIP) in school year 2014/15	2
Key Definitions	2
Specific Goals of the Detailed Inspection	4
How many children had a Detailed Inspection?	4
Key points	5
Results and Commentary.....	6
Detailed Inspection Results	6
What are the obvious decay experience results for the teeth of P7 children in NHS Boards in Scotland?	6
What proportion of P7 children in Scotland had no obvious decay experience in 2015?	7
What levels of obvious decay experience were seen in P7 children in 2015?	8
How has the dental health of P7 children in Scotland changed over time?.....	9
What proportion of obvious decay experience in P7 children was treated with fillings?	11
What proportion of P7 children had untreated decay?	12
Measures of Oral Health Inequalities	13
Is there a continuing link between area-based socio-economic deprivation and poor dental health among P7 children in Scotland?	13
Distribution of obvious decay experience across the population of P7 children in Scotland.....	15
Dental health of the first permanent molar teeth	16
Conclusions	19
Glossary	20
References.....	23
Acknowledgements	24
List of Tables, Figures and Diagrams.....	25
Contacts.....	27
Further Information.....	27
Rate this publication.....	27
Appendix	28
A1 – What are the stages of tooth decay?.....	28
A2 – National training and calibration course	29
A3– Links/comparisons to other sources of dental health information.....	30
A4– Results of Care Index at NHS Board level; Detailed Inspection	32
A5– Results at Community Health Partnership (CHP)level; Detailed Inspection for Primary 7 children in 2015.....	33
A6 – Basic Inspection results	54
A7 – Authors.....	57
A8 – Publication Metadata (including revisions details).....	58
A9 – Early Access details (including Pre-Release Access)	60
A10 – ISD and Official Statistics	61

Introduction

The 2015 National Dental Inspection Programme (NDIP) in school year 2014/15

The National Dental Inspection Programme (NDIP) is carried out annually with the support and approval of the Scottish Dental Epidemiology Co-ordinating Committee. Its principal aims are to inform parents/carers of the oral health status of their children and, through appropriately anonymised, aggregated data, advise the Scottish Government, NHS Boards and other organisations concerned with children's health of oral disease prevalence at national and local levels. This ensures that reliable oral health information is available for planning initiatives directed towards health improvements.

Two school year groups are involved: i) at entry into Local Authority schools in primary one (P1) and ii) in primary seven (P7) before the move to secondary education. The Inspection Programme has two levels: a *Basic Inspection* (intended for all P1 and P7 children) and a *Detailed Inspection* (where a representative sample of either the P1 or the P7 age group is inspected in alternate years).

This year's report focuses on the results of the *Detailed Inspection* of P7 school children in school year 2014/15 (noted as 2015 throughout the report). Information relating to the *Basic Inspection* of both P1 and P7 children can be found in [Appendix A6](#) of this Report. An Executive Summary of the main findings can be found at <http://www.isdscotland.org/Health-Topics/Dental-Care/National-Dental-Inspection-Programme/>.

Key Definitions

Detailed Inspection

- A comprehensive assessment of the mouth of each inspected child using a light, mirror and ball-ended probe.
- It involves recording the status of each surface of each tooth in accordance with international dental epidemiological conventions.
- It measures obvious decay into dentine (see below) when observed under school (rather than dental surgery) conditions.
- More detail on the different stages of dental decay can be found in [Appendix A1](#).
- Those undertaking the inspections attend (and pass) a training and calibration course prior to the annual inspection process. Details of the course and of the calibration results can be found in [Appendix A2](#).

Obvious Decay (D₃)

- This is when the disease process clinically appears to have penetrated dentine (i.e. the layer below the outer white enamel of the teeth) on a tooth surface.
- This is described internationally as decay at the D₃ level and includes *pulpal decay* (i.e. decay into the deeper dental pulp).
- The definition of decay used here is in accordance with the British Association for the Study of Community Dentistry (BASCD) guidelines and international epidemiological conventions, thus allowing comparisons to be made with other countries in Europe and beyond.
- This is a different diagnostic level from that used by many dentists when examining patients in a dental surgery, i.e. for dental check-ups.
- Decay is also known as caries.

Obvious Decay Experience (D₃MFT)

- The sum of teeth which have decay into dentine (including teeth with fillings which require further treatment), filled teeth and teeth that are missing (extracted) due to decay. A hierarchy was used to ensure there was no double counting of teeth.
- Thus no obvious decay experience has D₃MFT=0.

Care Index

- The proportion of obvious decay experience in a population that has been treated restoratively (filled).
- This is calculated as follows:

$$\frac{\text{number of filled teeth}}{\text{number of obviously decayed, missing and filled teeth}} \times 100$$

or simply

$$\frac{FT}{D_3MFT} \times 100$$

Scottish Index of Multiple Deprivation (SIMD)^{Ref 1}

- A tool for measuring the extent of deprivation across Scotland.
- Uses several different aspects of deprivation, combining them into a single index.
- This report looks at different versions of SIMD, broken down into both quintiles and deciles.

Slope Index of Inequality (SII)

- The absolute difference overall in obvious decay experience (D₃MFT) score when moving across the socio-economic (SES) spectrum and shows the total experience of individuals in the whole population and it is considered to be a consistent indicator with local populations.

Significant Caries Index (SiC)^{Ref 2}

- Used to bring attention to the individuals with the highest caries values in each population under investigation. The Significant Caries Index is calculated as follows:
 - Individuals are sorted according to their D₃MFT values
 - One third of the population with the highest caries scores is selected
 - The mean D₃MFT for this subgroup is calculated. This value is the SiC Index.

Significant Caries Index 10 (SiC10)

- The mean D₃MFT for the tenth of the sample with the most teeth affected by obvious decay experience.

Scottish Caries Inequality Metric (SCIM10)^{Ref 3}

- The area under the curve in relation to the distribution of the tenths of the population by obvious decay experience (D₃MFT).

SiC, SiC10 and SCIM10 are all considered to be non-socio-economic (non-SES) based tests of inequality.

Specific Goals of the Detailed Inspection

- To determine current levels of obvious decay experience at national and NHS Board levels.
- To determine the influence of deprivation on the dental health of children in Scotland.

How many children had a Detailed Inspection?

Each NHS Board is required to identify the number of Local Authority (LA) schools needed to obtain a representative sample of a given size from their P7 population. The sample sizes used provide adequate numbers to allow meaningful statistical comparisons between NHS Boards. Whole classes are randomly selected to simplify the process for schools while ensuring that results are representative of the P7 population in Scotland.

Between November 2014 and June 2015, 14,643 children from Local Authority Schools across Scotland were included in the Detailed Inspection (representing more than 27% of the estimated P7 population) (Table 1). Across the NHS Boards, the percentage of P7 children inspected ranged from 12% to 91%.

NHS Boards can choose to increase the sample size above minimum requirements to aid local planning needs, and some less populated NHS Boards need to include large proportions to achieve statistically meaningful results.

The average age of the children examined was 11.5 years for girls and 11.6 years for boys. The range of ages across Scotland was 10.2 – 13.0 years.

Table 1: Primary 7 population and the number and percentage who received a Detailed Inspection by NHS Board across Scotland in 2015¹⁻⁴

NHS Board	Estimated Primary 7 (P7) population	Number of P7 children receiving a Detailed Inspection	% of P7 population receiving a Detailed Inspection
Ayrshire & Arran	3,789	1,279	33.8
Borders	1,193	378	31.7
Dumfries & Galloway	1,390	362	26.0
Fife	3,638	933	25.6
Forth Valley	3,166	1,559	49.2
Grampian	5,545	1,823	32.9
Greater Glasgow & Clyde	10,774	3,099	28.8
Highland	3,338	762	22.8
Lanarkshire	7,031	834	11.9
Lothian	8,089	2,066	25.5
Orkney	234	196	83.8
Shetland	262	204	77.9
Tayside	4,015	906	22.6
Western Isles	267	242	90.6
Scotland	52,731	14,643	27.8

Source: ISD NDIP Database

1. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.

2. Based on NHS Board boundaries as defined in 2014.

3. Primary 7 population is estimated using an aggregated population lookup file of children aged 11 (2013).

4. The estimated Primary 7 population of Orkney and Western Isles was increased for the Detailed analysis.

Key points

- Three quarters (75%) of P7 children had no obvious decay experience in their permanent teeth in 2015. This is a large improvement over the past decade (53% in 2005).
- The average number of P7 children's teeth affected by obvious decay experience in 2015 is 0.53. This is less than half of the average number of teeth affected in 2005 (1.29).
- Only 64% of P7 children had no obvious decay experience in the most deprived areas compared with 85% in the least deprived areas. (Note no obvious decay experience means there are no obviously decayed, missing or filled teeth).

Results and Commentary

Detailed Inspection Results

What are the obvious decay experience results for the teeth of P7 children in NHS Boards in Scotland?

Table 2 provides details of the results for all 14 NHS Boards across Scotland. In this 2015 survey, approximately 25% of P7 children in Scotland had obvious decay experience in their permanent teeth. For those children, the mean number of affected teeth was 2.16. This ranged across the Boards from 1.84 in NHS Borders to 2.49 in NHS Lanarkshire. The number of teeth affected in an individual child varied from one tooth to 13 teeth.

Table 2: Obvious decay experience in permanent teeth of P7 children for each NHS Board and Scotland in 2015¹⁻⁴

NHS Board	% with no obvious decay experience in permanent teeth	Mean number of:				
		decayed, missing and filled teeth (D ₃ MFT)	decayed teeth (D ₃ T)	missing teeth (MT)	filled teeth (FT)	decayed, missing and filled teeth for those with obvious decay experience (D ₃ MFT>0)
Ayrshire & Arran	80.0	0.40	0.11	0.05	0.24	2.01
Borders	83.6	0.30	0.04	0.02	0.25	1.84
Dumfries & Galloway	75.1	0.54	0.13	0.08	0.33	2.13
Fife	76.1	0.46	0.12	0.05	0.29	1.96
Forth Valley	75.9	0.54	0.19	0.08	0.27	2.27
Grampian	73.2	0.57	0.21	0.05	0.31	2.15
Greater Glasgow & Clyde	72.5	0.62	0.21	0.07	0.34	2.27
Highland	81.2	0.37	0.12	0.07	0.18	1.95
Lanarkshire	68.1	0.80	0.30	0.14	0.36	2.49
Lothian	76.2	0.48	0.16	0.07	0.25	2.03
Orkney	71.3	0.54	0.23	0.06	0.24	1.88
Shetland	79.8	0.42	0.15	0.11	0.16	2.13
Tayside	80.0	0.44	0.12	0.08	0.23	2.23
Western Isles	82.8	0.38	0.10	0.02	0.26	2.12
Scotland	75.3	0.53	0.18	0.07	0.29	2.16

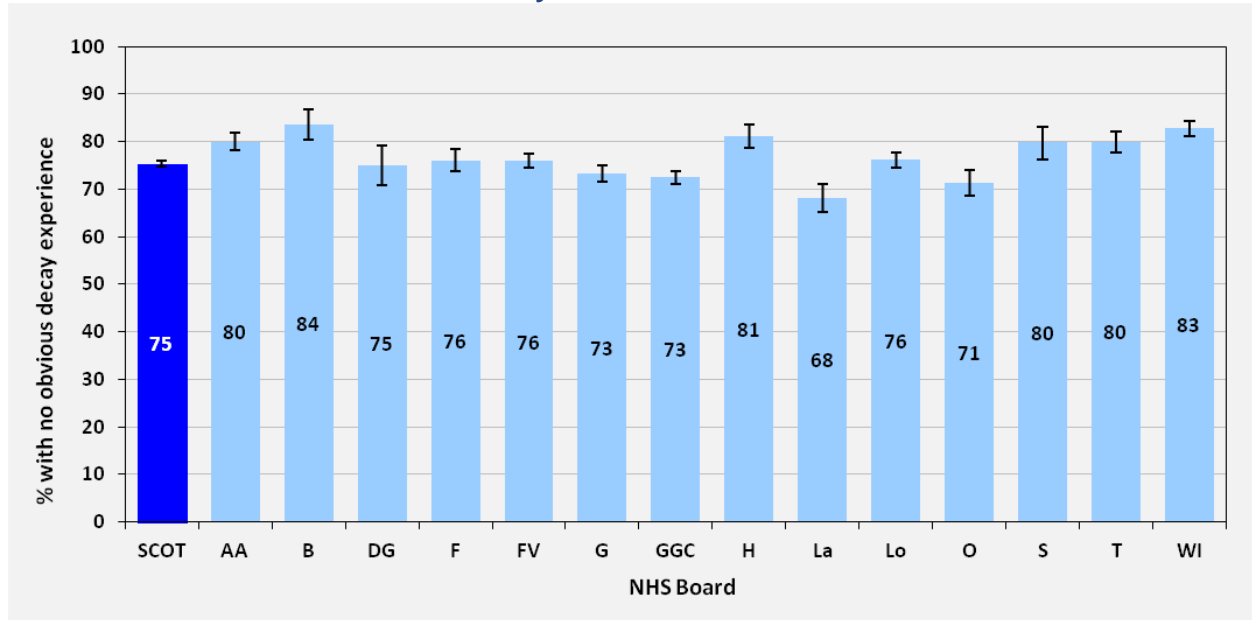
Source: ISD NDIP Database.

1. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.
2. Based on NHS Board boundaries as defined in 2014.
3. There may be some rounding issues.
4. The definitions of D₃MFT, DT, MT, FT and D₃MFT>0 can be found in [Glossary](#).

What proportion of P7 children in Scotland had no obvious decay experience in 2015?

In Scotland, 75% of P7 children fell into this category, with a range of 68% in NHS Lanarkshire to 84% in NHS Borders across the 14 NHS Boards (Figure 1).

Figure 1: Percentage of P7 children in Scotland with no obvious decay experience in 2015; by NHS Board¹⁻³



NHS BOARD ABBREVIATIONS

AA AYRSHIRE & ARRAN	B BORDERS	DG DUMFRIES & GALLOWAY	F FIFE	FV FORTH VALLEY	G GRAMPIAN	GGC GREATER GLASGOW & CLYDE
H HIGHLAND	LA LANARKSHIRE	Lo LOTHIAN	O ORKNEY	S SHETLAND	T TAYSIDE	WI WESTERN ISLES

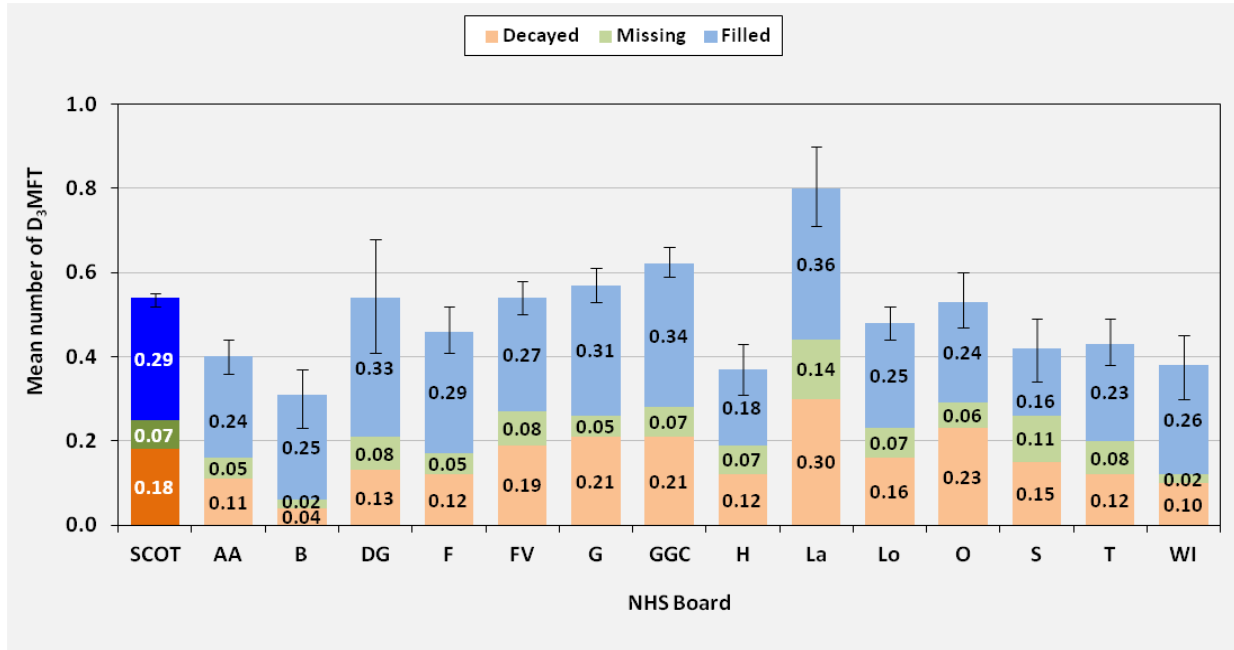
Source: ISD NDIP Database.

1. No obvious decay experience is when D₃MFT=0.
2. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.
3. Based on NHS Board boundaries as defined in 2014.

What levels of obvious decay experience were seen in P7 children in 2015?

The average number of obviously decayed, missing and filled teeth (D₃MFT) across all P7 children inspected in Scotland was 0.53. This ranged from 0.30 in NHS Borders to 0.80 in NHS Lanarkshire across the 14 NHS Boards in Scotland, (Figure 2).

Figure 2: Mean number of obviously decayed, missing and filled permanent teeth (D₃MFT) of P7 children in 2015 in Scotland and by NHS Board¹⁻⁴



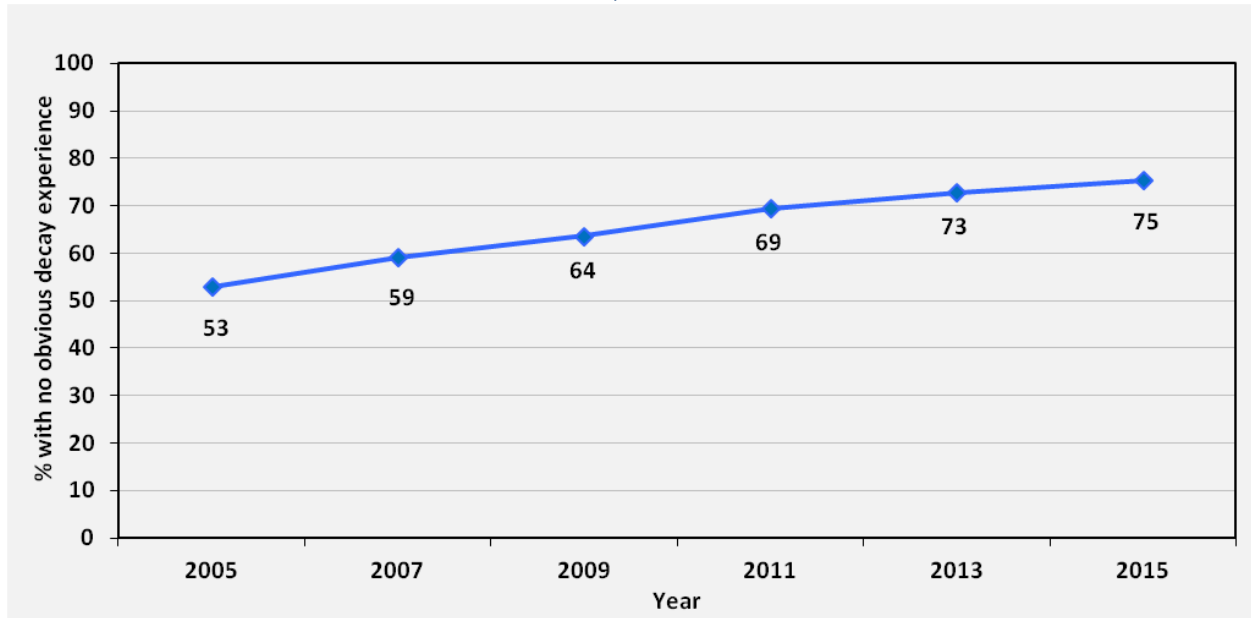
Source: ISD NDIP Database.

1. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.
2. Based on NHS Board boundaries as defined in 2014.
3. There may be some rounding issues.
4. A key for the NHS Board abbreviations can be found in the [Glossary](#).

How has the dental health of P7 children in Scotland changed over time?

Figure 3 shows there has been a small increase since 2013 in the percentage of P7 children with no obvious decay experience ($D_3MFT=0$), but a large increase since 2005.

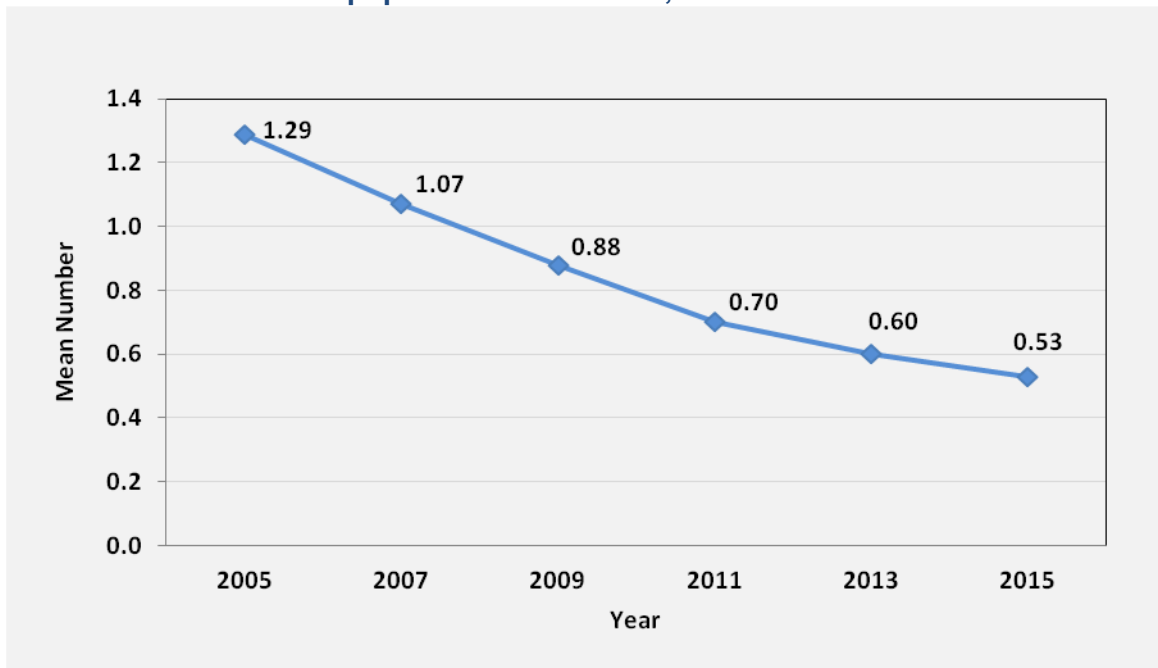
Figure 3: Trends in the percentage of P7 children with no obvious decay experience in Scotland; 2005-2015



Source: ISD NDIP Database.

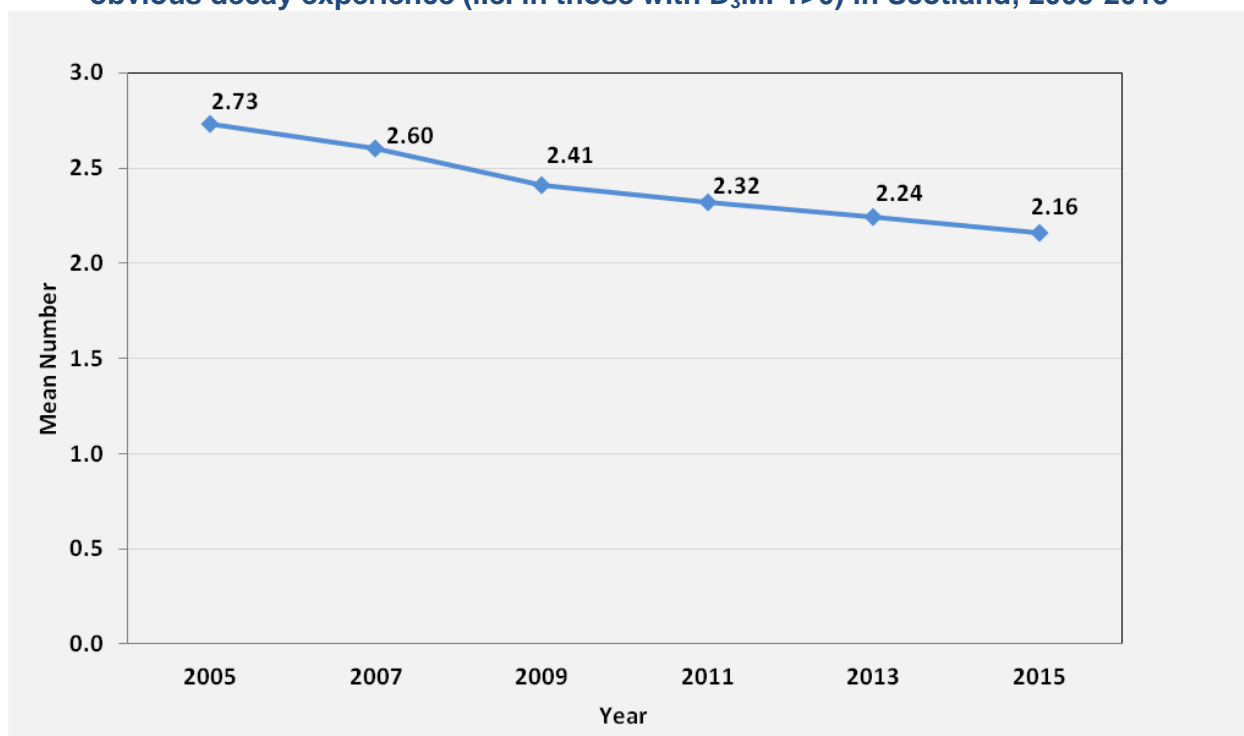
Similarly, there has been a continuing decline (improvement) in the mean number of decayed, missing and filled permanent teeth for the P7 population as a whole (Figure 4) and also for the subgroup with obvious decay experience (Figure 5).

Figure 4: Mean number of decayed, missing and filled permanent teeth (D_3MFT) in the P7 population in Scotland; 2005-2015



Source: ISD NDIP Database.

Figure 5: Mean number of decayed, missing and filled permanent teeth in P7 children with obvious decay experience (i.e. in those with $D_3MFT > 0$) in Scotland; 2005-2015

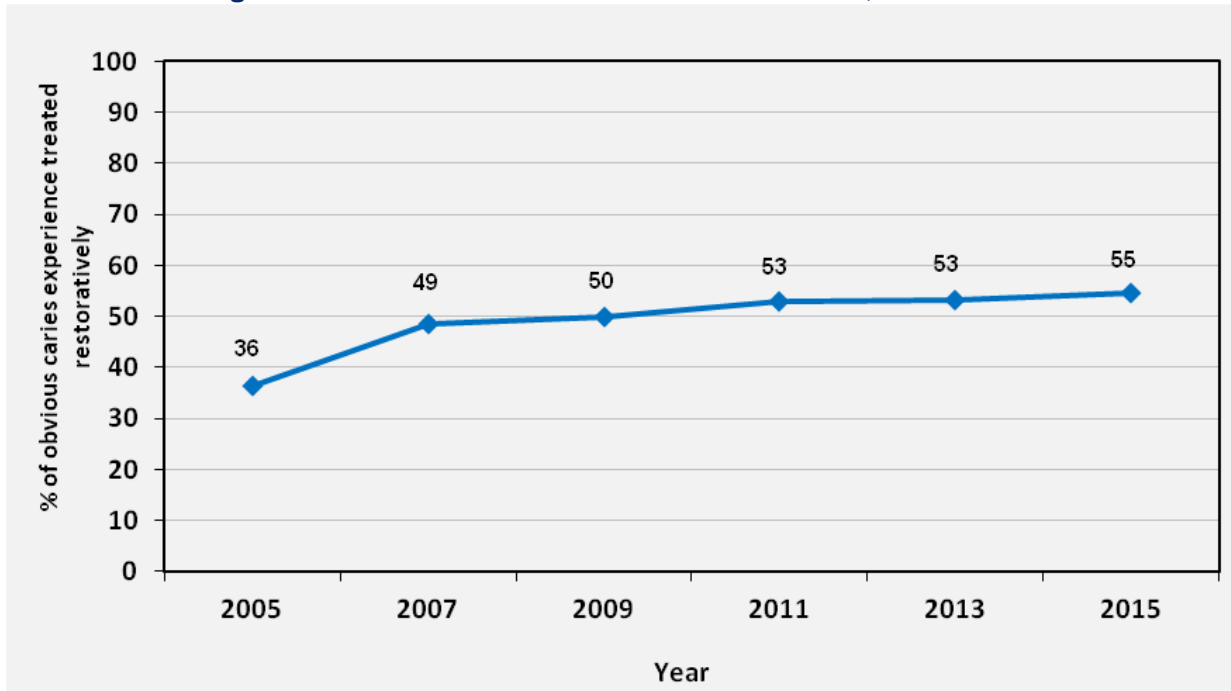


Source: ISD NDIP Database.

What proportion of obvious decay experience in P7 children was treated with fillings?

Figure 6 shows the Care Index for the last six surveys. There has been a relatively stable improvement since 2007. In the 2015 survey, 55% of teeth with obvious decay experience had been filled. There was variation across Scotland, with the Care Index ranging from 38% in NHS Shetland to 83% in NHS Borders. These results can be found in [Appendix A4](#) (Table A4.1).

Figure 6: Care Index for P7 children in Scotland; 2005-2015¹



Source: ISD NDIP Database.

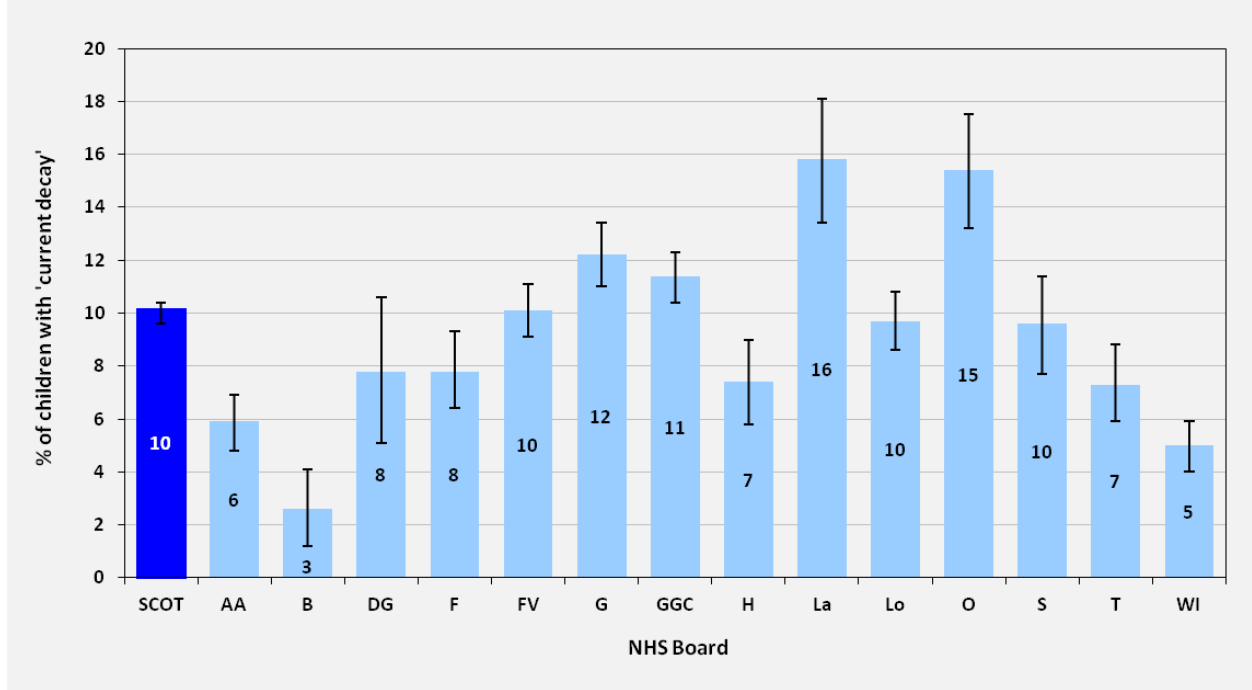
1.

$$\text{Care Index} = \frac{\text{number of filled teeth}}{\text{number of obviously decayed, missing and filled teeth}} \times 100$$

What proportion of P7 children had untreated decay?

In Scotland, 10% of P7 children had untreated decay ($D_3T > 0$), with a range of 3% in NHS Borders to 16% in NHS Lanarkshire across the 14 NHS Boards (Figure 7).

Figure 7: Percentage of P7 children in Scotland with current decay; by NHS Board in 2015¹⁻⁴



Source: ISD NDIP Database.

1. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.
2. Based on NHS Board boundaries as defined in 2014.
3. Current decay is when $D_3T > 0$ as per [BASCD](#).
4. A key for the NHS Board abbreviations can be found in the [Glossary](#).

Measures of Oral Health Inequalities

- Health inequalities can be measured and reported using simple or complex methods.
- The simple methods compare only two groups on a socio-economic scale, usually the most and least disadvantaged.
- The complex methods look across the whole social gradient, rather than solely at the most and least disadvantaged groups (e.g. Slope Index of Inequality (SII)).

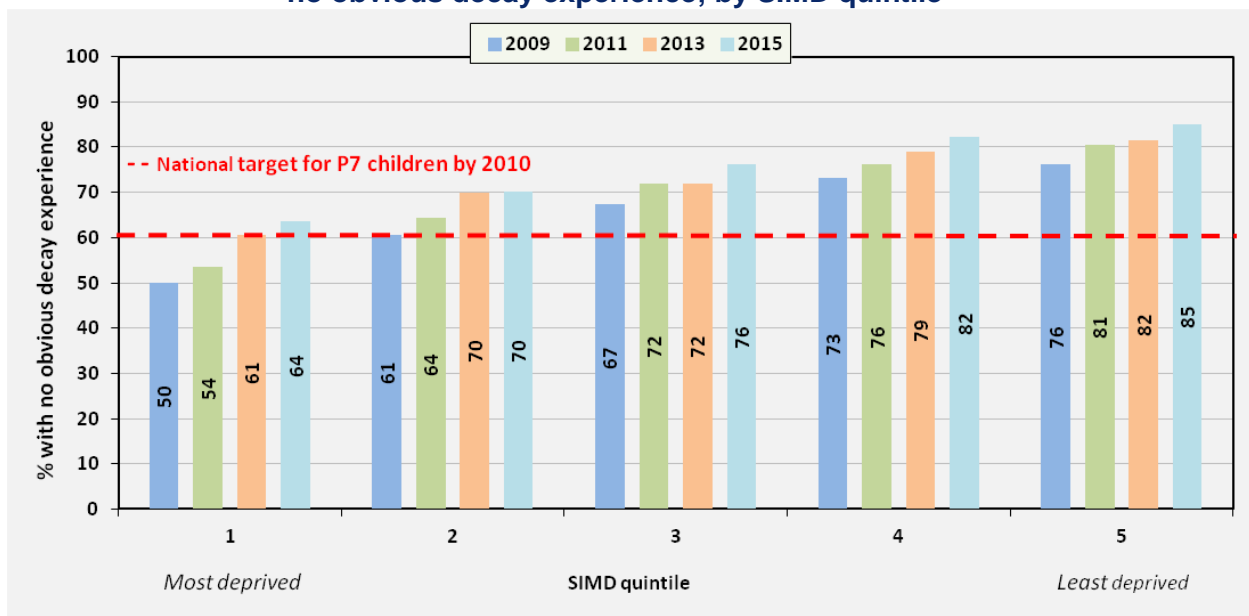
Is there a continuing link between area-based socio-economic deprivation and poor dental health among P7 children in Scotland?

The main SIMD classification used here is based on quintiles of deprivation, where quintile SIMD1 is the most deprived and quintile SIMD5 is the least deprived.

There is clearly a difference in dental health among P7 children in the different SIMD quintiles. Only the second most deprived quintile (SIMD2) did not show an increase (improvement) in percentage of no obvious decay experience from the 2013 inspection (Figure 8).

The absolute inequality between SIMD1 and SIMD5 in 2015 was 21 percentage points, with 64% of P7 children in SIMD1 showing no obvious decay experience, compared with 85% of P7 children in SIMD5. The absolute inequality was also 21 percentage points in the 2013 report, an improvement from the 2009 and 2011 reports where the absolute inequality was 26 and 27 percentage points, respectively. In addition, the national target set in 2010 (60% of all P7 children to have no obvious decay experience) was met in SIMD1 in 2013 and has improved in 2015 to 64%.

Figure 8: Change between 2009 and 2015 in the percentage of P7 children in Scotland with no obvious decay experience; by SIMD quintile¹⁻²



Source: ISD NDIP Database.

1. No obvious decay experience is when D₃MFT=0.

2. Scotland level SIMD has been used, subject to availability: 2009 - SIMD 2006; 2011 - SIMD 2009; 2013 & 2015 - SIMD 2012.

Similarly, there is an inequality gap in the average number of teeth with obvious decay experience (D₃MFT>0). This was 0.28 in the least deprived quintile (SIMD5) compared with

0.87 in the most deprived (SIMD1) in 2015; between these limits SIMD2 was 0.66, SIMD3 was 0.49 and SIMD4 was 0.36; data not shown.

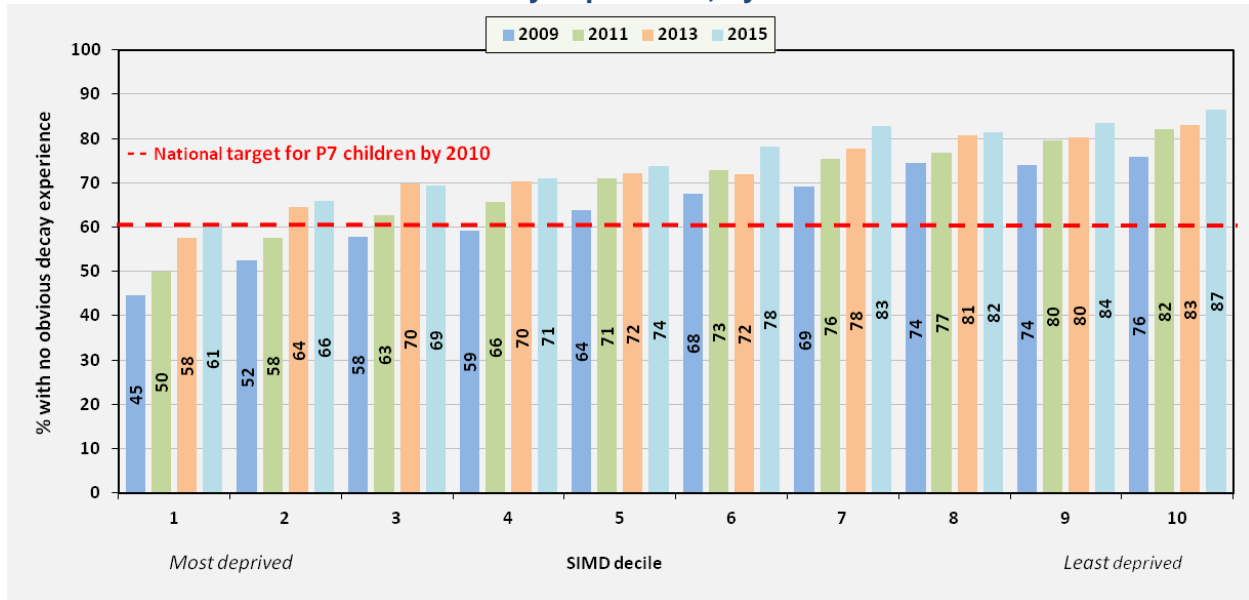
The SIMD decile classification has 10 divisions of deprivation from decile 1 (most deprived) to decile 10 (least deprived).

The national target set in 2010 (60% of all P7 children to have no obvious decay experience) has been met in the least deprived decile for the first time in 2015.

However, as with the SIMD quintiles, there is clearly a difference in dental health among P7 children in the different SIMD deciles. The third most deprived decile showed a decrease (worsening) of one percentage point since 2013. All other deciles showed an improvement between 2013 and 2015.

The absolute inequality between the most and least deprived deciles has decreased to 26% (61% in SIMD1 to 87% in SIMD10), a five percentage point decrease (improvement) since 2009.

Figure 9: Change between 2009 and 2015 in the percentage of P7 children in Scotland with no obvious decay experience; by SIMD decile¹⁻²



Source: ISD NDIP Database.

1. No obvious decay experience is when D₃MFT=0.
2. Scotland level SIMD has been used, subject to availability: 2009 - SIMD 2006; 2011 - SIMD 2009; 2013 & 2015 - SIMD 2012.

Distribution of obvious decay experience across the population of P7 children in Scotland

The value for the Slope Index of Inequality (SII) in 2015 is 0.75 which is very similar to 2013 (0.74), however, there has been an overall improvement since 2009 (Table 3). Similarly, the three non-SES-based measures of dental health inequalities shown in the table ([SiC](#), [SiC10](#), [SCIM10](#)) also show improvements since 2009.

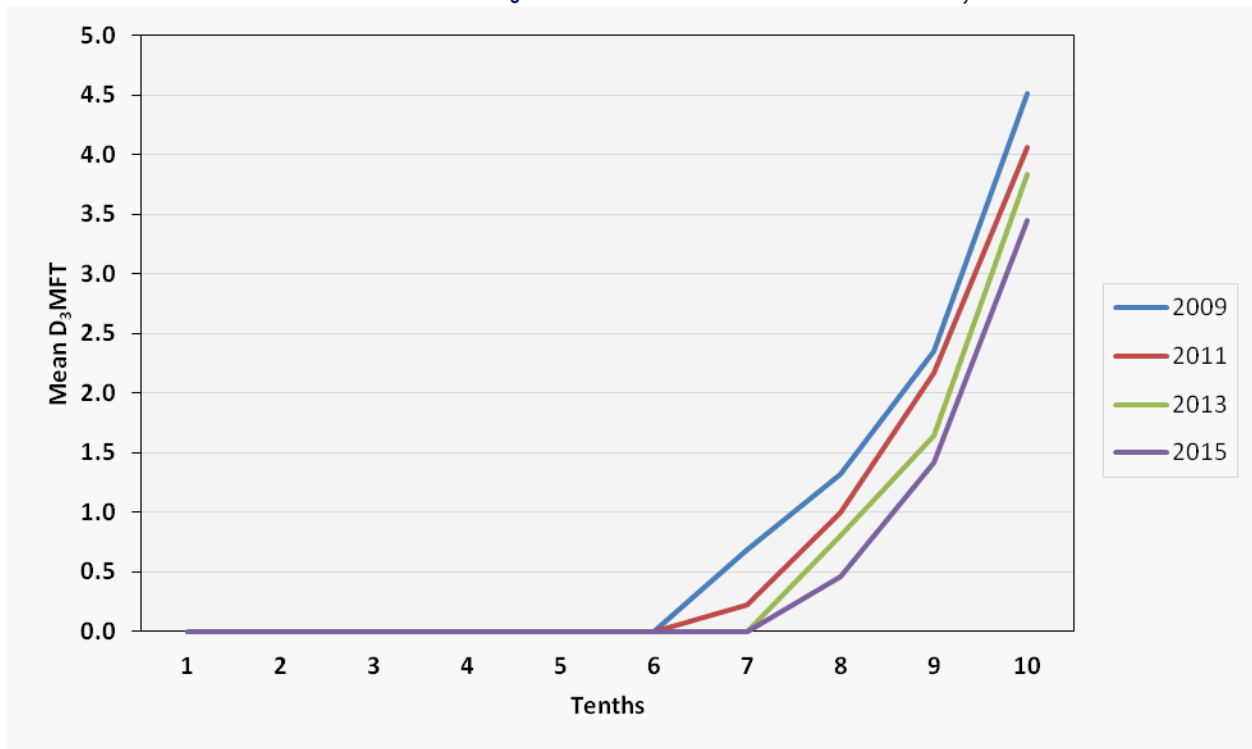
Table 3: Inequality measures in teeth of P7 children in Scotland; 2009-2015

Year	Slope Index of Inequality (SII)	Significant Caries (SiC) Index	Significant Caries 10 (SiC10)	Scottish Caries Inequality Metric (SCIM10)
2009	1.14	2.55	4.51	6.60
2011	0.95	2.24	4.06	5.42
2013	0.74	1.88	3.84	4.35
2015	0.75	1.60	3.45	3.60

Source: ISD NDIP Database.

Figure 10 shows the mean obvious decay experience (D_3MFT) of each tenth of the SiC10 sample, with children ranked by the number of teeth with obvious decay experience. Again this shows an overall reduction in the health inequality over time (SCIM10, area under the curve, reduced from 6.60 in 2009 to 3.60 in 2015).

Figure 10: Mean number of decayed, missing and filled permanent teeth (D_3MFT) in each tenth of the distribution of D_3MFT for P7 children in Scotland; 2009 – 2015



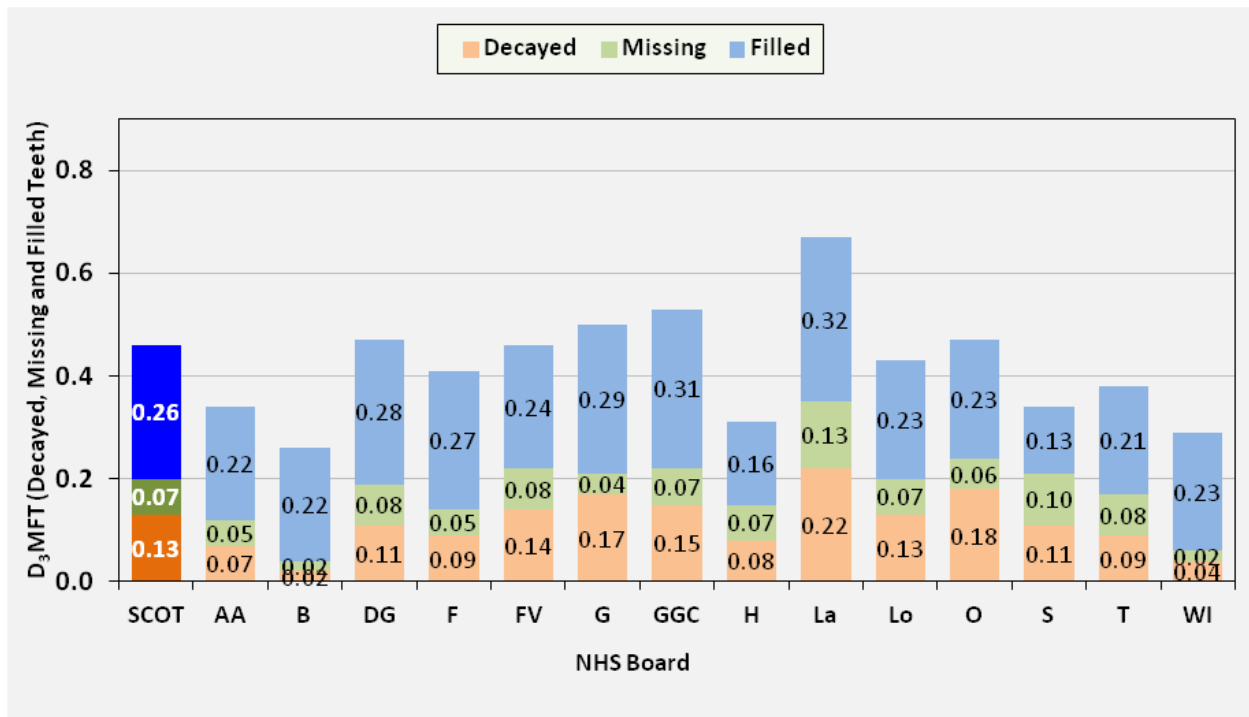
Source: ISD NDIP Database.

Dental health of the first permanent molar teeth

The first permanent molars erupt behind the primary molar teeth around the age of 6 years. The population of children with no obvious decay experience in the first permanent molars decreases with age and is an important indicator of the dental health of P7 children across Scotland.

Across Scotland, 77% of P7 children had no obvious decay experience in their first permanent molars. Across the 14 NHS Boards, the range was from 70% in NHS Lanarkshire to 85% in NHS Borders. Figure 11 shows the mean D₃MFT for first permanent molars for Scotland and for each NHS Board.

Figure 11: Mean number of obviously decayed, missing and filled first permanent molars in P7 children in 2015 in Scotland and in each NHS Board¹⁻³



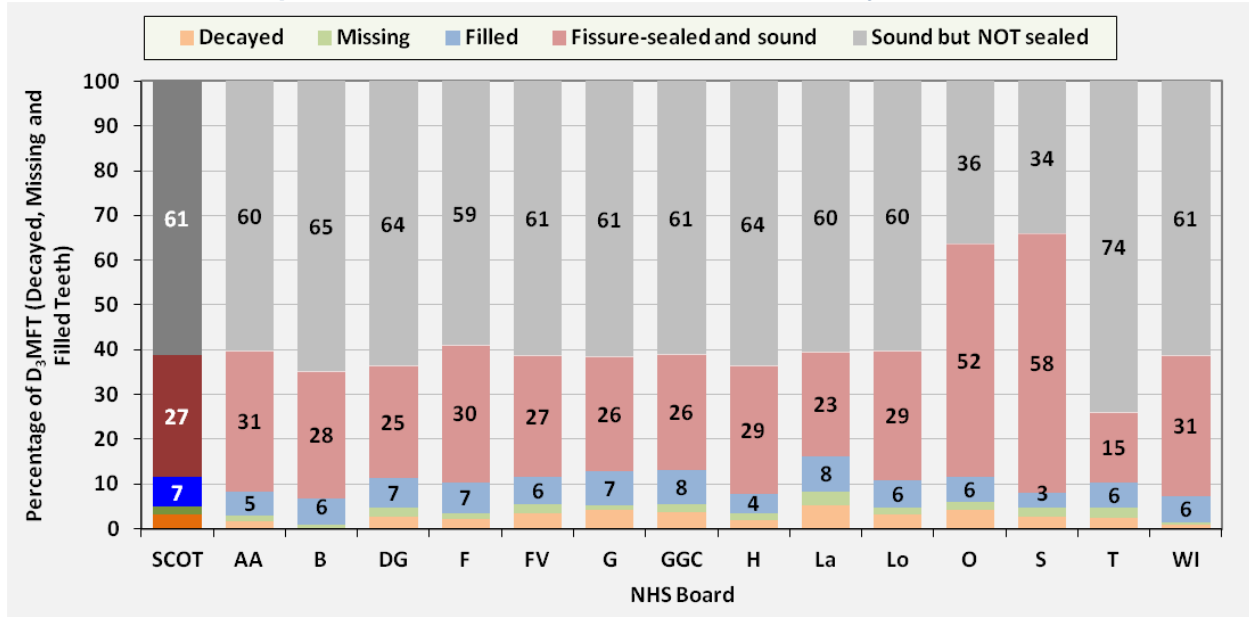
Source: ISD NDIP Database.

1. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.
2. Based on NHS Board boundaries as defined in 2014.
3. A key for the NHS Board abbreviations can be found in the [Glossary](#).

National guidance advises that fissure sealant should be applied to the occlusal surface of permanent molar teeth as early after eruption as possible to reduce the risk of decay^{Ref 4}.

Figure 12 shows the percentage of decayed, missing and filled first permanent molar teeth and also the percentage that are apparently sound or sound and fissure-sealed. The percentage of first permanent molars fissure-sealed and sound varied across NHS Boards from 15% in NHS Tayside to 58% in NHS Shetland.

Figure 12: Percentage of D₃MFT, fissure-sealed and apparently sound, and apparently sound but NOT sealed first permanent molars in P7 children in 2015 by NHS Board and Scotland¹⁻²

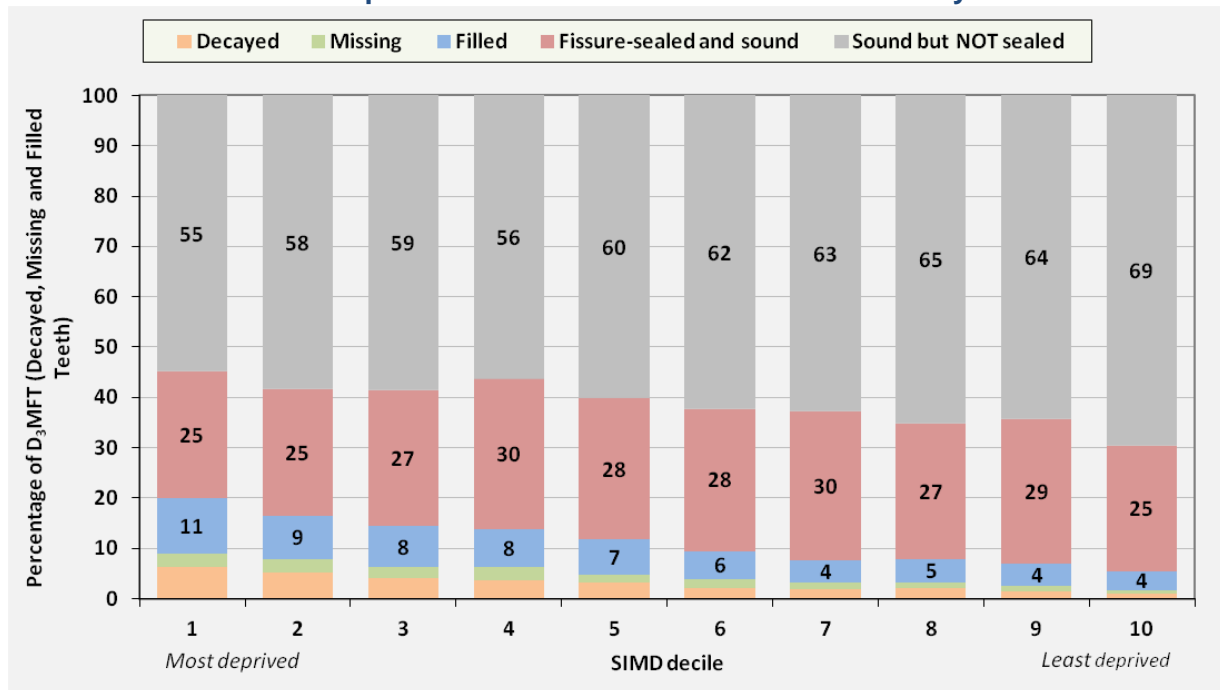


Source: ISD NDIP Database.

1. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.
2. Based on NHS Board boundaries as defined in 2014.
3. A key for the NHS Board abbreviations can be found in the [Glossary](#).

A similar analysis is presented in Figure 13, but this time illustrating the status of first permanent molars by SIMD decile. The percentage of first permanent molars affected by dental disease increases with increasing level of deprivation. The percentage of teeth fissure-sealed and apparently sound is relatively similar across the socio-economic deciles. However, the tenth of the P7 population with the highest level of deprivation has one of the lowest values.

Figure 13: Percentage of D₃MFT, fissure-sealed and apparently sound, and apparently sound but NOT sealed first permanent molars in P7 children in 2015 by SIMD decile¹



Source: ISD NDIP Database.

1. Scotland level SIMD has been used, subject to availability: 2015 – SIMD 2012.

Table 4 shows that approximately 9% of the occlusal surfaces of the first permanent molar teeth inspected were affected by obvious decay experience, i.e. untreated decay or a restoration was present. Additionally, of the first permanent molars inspected with decay experience, in 56% of these teeth the decay or restoration was recorded as being restricted to only the occlusal surface. It is acknowledged that the inspection process will tend to under-report caries on mesial and distal surfaces. Nevertheless, these findings support greater use of fissure sealants.

Table 4: Percentage of surfaces of P7 children’s first permanent molars present on inspection affected by decay experience in Scotland; in 2015

Tooth		Occlusal (%)	Mesial (%)	Surface Distal (%)	Buccal (%)	Lingual (%)
Upper	16 (right)	9.4	1.8	1.2	0.8	1.8
	26 (left)	9.3	2.0	1.2	0.9	2.0
Lower	36 (left)	8.9	1.3	1.3	2.5	1.1
	46 (right)	8.9	1.5	1.5	2.5	1.4

Source: ISD NDIP Database.

Results from the Detailed Inspection for the Community Health Partnerships are given in [Appendix A5](#) and results of the Basic Inspection for all P1 and P7 children are given in [Appendix A6](#).

Conclusions

- The oral health of P7 children in Scotland is slightly better than in 2013, and has considerably improved since the early 2000s when the National Dental Inspection Programme started.
- It is anticipated this improved level of dental health will be maintained as the Childsmile Programme^{Ref 5} continues to be refined and implemented at NHS Board level.
- Clear health inequalities remain, with only small improvements seen for both the socio-economic and non-socio-economic tests of dental health inequality over the time period.

Glossary

BASCD	British Association for the Study of Community Dentistry.
Basic Inspection	Simple assessment of the mouth of the child using a light, mirror and ball-ended probe. The dental status of each child is assigned to one of three categories, depending on the level of dental health and treatment need observed. Refer to Appendix A6 for further information.
Buccal	Tooth surface next to cheek.
Care Index	Proportion of obvious decay experience that has been treated restoratively; expressed as number of filled teeth divided by number of obviously decayed, missing and filled teeth, multiplied by 100 [(FT/D ₃ MFT)x100].
Childsmile	National oral health improvement programme for children in Scotland.
Deprivation decile	This SIMD classification is based on deciles of deprivation (and is often used for greater depth of geographical analysis): decile 1 is the most deprived and decile 10 is the least deprived.
Deprivation quintile	This SIMD classification is based on quintiles of deprivation: quintile 1 is the most deprived and quintile 5 is the least deprived.
Detailed Inspection	Comprehensive assessment of the mouth of the child using a light, mirror and ball-ended probe. The status of each surface of each tooth is recorded in accordance with international epidemiological conventions.
Distal	Tooth surface towards back of mouth.
D ₃ MFT	Obvious decay experience in permanent teeth, as noted above, includes both missing teeth (extracted due to decay) and filled teeth.
D ₃ MFT>0	(Any) amount of decay experience in permanent teeth.
D ₃ MFTfpm	D ₃ MFT for first permanent molar
D ₃ T	Obviously decayed permanent teeth.
Fissure-sealed	Protected from decay via protective plastic coating applied to the biting (occlusal) surfaces of back teeth.
FT	Filled permanent teeth.
HSCIC	Health & Social Care Information Centre.
LA	Local authority.
Lingual	Tooth surface next to tongue.
Mesial	Situated toward the middle of the front of the jaw along the curve of the dental arch.
MT	Missing permanent teeth.

NHS Board abbreviations	AA: Ayrshire & Arran B: Borders DG: Dumfries & Galloway F: Fife FV: Forth Valley G: Grampian GGC: Greater Glasgow & Clyde H: Highland La: Lanarkshire Lo: Lothian O: Orkney S: Shetland T: Tayside WI: Western Isles.
Obvious decay	Disease process that clinically appears to have penetrated dentine (the layer below the outer white enamel of the teeth). This is described internationally as decay at the D ₃ level and includes <i>pulpal decay</i> (i.e. decay into the deeper pulp).
Occlusal	Chewing or grinding tooth surface.
ONS	Office for National Statistics.
SCIM10	Scottish Caries Inequality Metric. The area under the curve in relation to the distribution of the tenths of the population by obvious decay experience (D ₃ MFT).
SES	Socio-economic status.
SiC	Significant Caries Index. This is used in order to bring attention to the individuals with the highest caries values in each population under investigation.
SiC10	Significant Caries 10. The mean D ₃ MFT for the tenth of the sample with the most teeth affected by caries experience.
SII	Slope Index of Inequality . One of the recommended tests of complex inequality, as it reflects the entire SES distribution and weights for the population share in the respective groups. SII may be interpreted as the absolute difference overall in D ₃ MFT score when moving across the SES spectrum and is indicative of the total experience of individuals in the whole population.
SIMD	<p>Scottish Index of Multiple Deprivation. Classification identifying small area concentrations of multiple deprivation presented at data zone level and based on postcode unit information. Seven domains (income, employment, education, housing, health, crime and geographical access) are combined into an overall index to rank relative multiple deprivation in all geographical areas throughout Scotland.</p> <p>Several different versions of the SIMD are used across time. In 2009, the 2006 SIMD was used; in 2011, the 2009 SIMD was used; in 2013 & 2015, the 2012 SIMD was used. For all of these indices, the most deprived quintile (or decile) is shown by SIMD1 or decile 1; and the</p>

	least deprived quintile (or decile) shown by SIMD5 or decile 10.
16: upper right 26: upper left 36: lower left 46: lower right	Numbering of first permanent molar teeth according to FDI World Dental Federation tooth notation system.

References

1. Scottish Index of Multiple Deprivation 2012 (www.scotland.gov.uk/topics/statistics/SIMD).
2. Bratthall D, (2000). Introducing the Significant Caries Index together with a proposal for a new global oral health goal for 12-year-olds. *International Dental Journal*; 50: 378-384.
3. Comparison and Relative Utility of Inequality Measurements: As Applied to Scotland's Child Dental Health (<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0058593>).
4. SIGN 138 –Dental interventions to prevent caries in children [Available at: <http://www.sign.ac.uk/pdf/SIGN138.pdf>].
5. Childsmile (<http://www.child-smile.org.uk>).
6. Mitropoulos C, Pitts NB, Deery C. BASCD Trainers pack for caries prevalence studies, 1992/93. Dundee: University of Dundee, 1992.
7. Landis JR, Koch GG. The measurement of observer agreement for categorical data. *Biometrics* 1977; 33: 159-174.
8. Petersen PE. The world oral health report 2003. Geneva: WHO Oral Health Programme, 2003.
9. The WHO Global Oral Health Database and the WHO Oral Health Country/Area Profile Programme (<http://www.mah.se/CAPP/>).
10. Scottish Public Health Observatory (ScotPHO) website (<http://www.scotpho.org.uk/>).

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List of Tables, Figures and Diagrams

Table.	Name	Time period	File & size
Table 1	Primary 7 population and the number and percentage who received a Detailed Inspection by NHS Board across Scotland.	School year 2014/15.	Excel [11KB]
Table 2	Obvious decay experience in permanent teeth of P7 children for each NHS Board and Scotland.	School year 2014/15.	Excel [11KB]
Table 3	Inequality measures in teeth of P7 children in Scotland.	2009-2015.	Excel [10KB]
Table 4	Percentage of surfaces of P7 children's first permanent molars present on inspection affected by decay experience in Scotland.	School year 2014/15.	Excel[10KB]
Table A3.1	Is NDIP comparable with other UK dental data?	N/A	Excel [10KB]
Table A4.1	Care Index for P7 children in Scotland; by NHS Board.	School year 2014/15.	Excel [10KB]
Table A5.1-A5.9	Detailed inspection – Primary 7 children: Results at Local Authority (LA) / Community Planning Partnership (CPP) level.	School year 2014/15.	Excel [48KB]
Table A6.1	Basic Inspection - Primary 1 children inspected by NHS Boards.	School year 2014/15.	Excel [12KB]
Table A6.2	Basic Inspection - Primary 7 children inspected by NHS Boards.	School year 2014/15.	Excel [12KB]
Figure.	Name	Time period	File & size
Figure 1	Percentage of P7 children in Scotland with no obvious decay experience by NHS Board.	School year 2014/15.	Excel [76KB]
Figure 2	Mean number of obviously decayed, missing and filled permanent teeth (D ₃ MFT) of P7 children in Scotland and by NHS Board.	School year 2014/15.	Excel [85KB]
Figure 3	Trends in the percentage of P7 children with no obvious decay experience in Scotland.	2005-2015	Excel [47KB]
Figure 4	Mean number of decayed, missing and filled permanent teeth (D ₃ MFT) in the P7 population in Scotland.	2005-2015	Excel [44KB]
Figure 5	Mean number of decayed, missing and filled permanent teeth in P7 children with obvious decay experience (D ₃ MFT>0) in Scotland.	2005-2015	Excel [44KB]
Figure 6	Care Index for P7 children in Scotland.	2005-2015	Excel [44KB]
Figure 7	Percentage of P7 children in Scotland with current decay; by NHS Board.	School year 2014/15.	Excel [76KB]
Figure 8	Change in the percentage of P7 children in Scotland with no obvious decay experience; by SIMD quintile.	2009-2015	Excel [79KB]
Figure 9	Change in the percentage of P7 children in Scotland with no obvious decay experience; by SIMD decile.	2009-2015	Excel [78KB]

Figure 10	Mean number of decayed, missing and filled permanent teeth (D ₃ MFT) in each tenth of the distribution of D ₃ MFT for P7 children in Scotland.	2009-2015	Excel [59KB]
Figure 11	Mean number of obviously decayed, missing and filled first permanent molars in P7 children in Scotland and in each NHS Board.	School year 2014/15	Excel [72KB]
Figure 12	Percentage of D ₃ MFT, fissure-sealed and apparently sound, and apparently sound but NOT sealed first permanent molars in P7 children by NHS Board and Scotland.	School year 2014/15	Excel [89KB]
Figure 13	Percentage of D ₃ MFT, fissure-sealed and apparently sound, and apparently sound but NOT sealed first permanent molars in P7 children by SIMD decile.	School year 2014/15	Excel [80KB]
Diagram.	Name	Time period	File & size
Diagram 1	The various stages of tooth decay.	n/a	Excel [263KB]

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Appendix

A1 – What are the stages of tooth decay?

Dentists use specific professional terms to identify the different stages of tooth decay. However, simpler terms are provided in Diagram 1 below to help illustrate the various stages of tooth decay. The early stages of decay occur at a sub-clinical level and cannot be detected by the naked eye. As decay progresses it can be detected visually, first on the outer surface of the tooth (enamel layer) and then, with further progression, the lesion is clinically detectable in the dentine layer under the enamel. It is decay which has reached this stage that is recorded by the dentists undertaking the NDIP inspections.

Diagram 1: The various stages of tooth decay



A2 – National training and calibration course

The training and calibration course for the Detailed NDIP survey of P7 children in Scotland was held in Edinburgh and Perth in November 2014. The training course was organised by NHS Lothian, NHS Fife and NHS Tayside.

Mandatory training and calibration were run over three separate courses to accommodate the 47 inspection teams (dentist and dental nurse) who came from all 14 NHS Boards.

Training involved sessions on inspection procedures, tooth/surface codes and diagnostic criteria based on the British Association for the Study of Community Dentistry (BASCD) Trainers' Pack^{Ref 6}. Clinical training sessions were then undertaken on schoolchildren, and were followed by the calibration sessions on a further group of P7 children. Calibration sessions involved each inspection team examining the same children. The number of children on each course ranged from 10 to 12.

Analyses were undertaken by the Community Oral Health Section, University of Glasgow, supported by colleagues in NHS Tayside, NHS Lothian and NHS National Services Scotland's Information Services Division. Inter-examiner agreement was assessed using the percentage agreement and Kappa statistic assessed at the patient level on D₃MFT and separately for D₃T, MT, and FT components.

Cohen Kappa estimates agreement, which is considered^{Ref 7}:

- *poor* if $Kappa \leq 0.20$
- *fair* if $0.21 \leq Kappa \leq 0.40$
- *moderate* if $0.41 \leq Kappa \leq 0.60$
- *substantial* if $0.61 \leq Kappa \leq 0.80$
- *good* if $Kappa > 0.80$

All 47 inspection teams calibrated with percentage agreement ranging from 73% to 100%, and the Kappa estimates for D₃MFT scores at the patient level did not drop below moderate. Further investigation of the data on 10 inspection teams where the Kappa was lower than substantial found that the disagreement was on no more than two children in either direction i.e. over scoring or underscoring.

A3– Links/comparisons to other sources of dental health information

The sources below offer information related to dental services and dental health. Most of these sources are external to ISD and we cannot guarantee the content or accessibility of these external web sites.

[Childsmile](#) - improving the oral health of children in Scotland.

Dental data in Scotland

ISD publishes information relating to the [general dental service workforce](#) in Scotland.

ISD publishes an annual [NHS Adult & Child Fees and Treatments](#) report providing information on GDS fees paid to dentists and on treatments provided to children and adults.

ISD publishes a biannual [NHS Registration and Participation](#) report providing information on NHS General Dental Services (GDS) registrations and participation (contact with GDS).

The 2012 [Scottish Health Survey](#) covers dental health topics such as dental health problems and trends in prevalence of natural teeth.

ISD published information on the application of [fluoride varnishing](#) to children’s teeth. The recorded clinical activity was also monitored under the Scottish Government’s [HEAT target](#) (at least 60% of 3- and 4-year-old children in each SIMD quintile to receive at least two applications of FV per year by March 2014). Further publications currently under review.

Dental data in England, Wales and Northern Ireland

Table A3.1: Is NDIP Comparable with other UK dental data?

Country	Comparable to NDIP?	Available	Links
England, Northern Ireland, and Wales	No – consent affects participation rates of children with and without decay	Yes	<i>The Health & Social Care Information Centre (HSCIC) commissioned the ONS to undertake the 2013 Child Dental Health Survey, England, Wales and Northern Ireland (published March 2015). The study provides information to underpin dental health care for children in England, Wales and Northern Ireland. This has been carried out every every ten years since 1973.</i>

As stated, the results from the report are not directly comparable with the NDIP report.

Please note that if you want to compare deprivation levels in Scotland and England, the Scottish Index of Multiple Deprivation (SIMD) is not directly comparable with the Index of Multiple Deprivation used in England.

International comparisons

According to the World Health Organisation (WHO), dental caries is still a major oral health problem in most high- and middle-income countries, affecting 60-90% of schoolchildren and the vast majority of adults^{Ref 8}. The WHO Global Oral Health Database and the WHO Oral Health Country/Area Profile Programme^{Ref 9} provide information on trends in dental caries, mainly among 12-year-old children, from 1937.

Recent figures show how dental caries prevalence compares across a large number of countries. However, as some results are from national surveys with representative samples and others relate only to small local surveys, caution is required in making simplistic international comparisons using the raw data. It is also necessary to understand the public health aims behind the WHO 'basic methods' diagnostic criteria employed by most datasets in the databank, and these surveys are only intended to provide an overview of caries prevalence.

International data comparing prevalence and trends in 12-year-olds are available on the Scottish Public Health Observatory (ScotPHO)^{Ref 10} [website](#).

A4– Results of Care Index at NHS Board level; Detailed Inspection

Table A4.1 displays the Care Index from the 2015 survey for all 14 NHS Boards. This ranged from 38% in NHS Shetland to 83% in NHS Borders.

Table A4.1: Care Index for P7 children in Scotland; by NHS Board¹⁻³

NHS Board	% of obvious caries experience treated restoratively
Ayrshire & Arran	60.0
Borders	83.3
Dumfries & Galloway	61.1
Fife	63.0
Forth Valley	50.0
Grampian	54.4
Greater Glasgow & Clyde	54.8
Highland	48.6
Lanarkshire	45.0
Lothian	52.1
Orkney	44.4
Shetland	38.1
Tayside	52.3
Western Isles	68.4
Scotland	54.7

Source: ISD NDIP Database

1.
$$\text{Care Index} = \frac{\text{number of filled teeth}}{\text{number of obviously decayed, missing and filled teeth}} \times 100$$

2. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.
3. Based on NHS Board boundaries as defined in 2014.

A5– Results at Community Health Partnership (CHP) level; Detailed Inspection for Primary 7 children in 2015

Tables A5.1- A5.9 show the 2015 Detailed NDIP results at CHP level for the nine NHS Boards which included the minimum target sample of 250 children in each CHP (if the CHP is within 10% of reaching the target, it was included). In addition, Community Health Partnership (CHP) reports are only provided for NHS Boards which contain more than one CHP. Please note, CHPs are co-terminous with Local Authority / Community Planning Partnerships, for all NHS Boards with the exception of NHS Fife. This is clearly labelled within the report.

CHPs ceased to exist legally on 1st April 2015; as a result, this will be the final year of CHP level reporting. Going forward Local Authority / Community Planning Partnership results will be presented.

The following variables are presented:

- Mean age
- Weighted % no obvious decay experience
- Weighted mean D₃MFT
- Weighted mean D₃MFT for first permanent molar (D₃MFT_{1pm})
- Weighted mean D₃T
- Weighted mean MT
- Weighted mean FT
- Weighted mean number of teeth decayed into the pulp
- Weighted mean number of sealed teeth
- Mean D₃MFT for children with D₃MFT>0

The results are weighted by population SIMD 2012 categories, specific to each NHS Board. This is different to the SIMD 2012 used in the main report which used Scotland level figures.

Table A5.1: NHS Ayrshire & Arran: Community Health Partnership results
(Co-terminous with Local Authority / Community Planning Partnership)

CHP name	no. of children	Mean age			
		Mean	Std dev	Minimum	Maximum
East Ayrshire	404	11.5	0.3	10.9	12.3
North Ayrshire	467	11.6	0.3	10.9	12.6
South Ayrshire	408	11.5	0.3	10.9	12.4

CHP name	Weighted % no obvious decay experience		
	%	Lower 95% CL	Upper 95% CL
East Ayrshire	75.4	71.9	78.9
North Ayrshire	81.4	78.5	84.3
South Ayrshire	82.5	79.5	85.4

CHP name	Weighted mean D ₃ MFT		
	Mean D ₃ MFT	Lower 95% CL	Upper 95% CL
East Ayrshire	0.5	0.4	0.6
North Ayrshire	0.4	0.3	0.4
South Ayrshire	0.3	0.3	0.4

CHP name	Weighted mean D ₃ MFT for first permanent molar		
	Mean D ₃ MFTfpm	Lower 95% CL	Upper 95% CL
East Ayrshire	0.4	0.4	0.5
North Ayrshire	0.3	0.3	0.4
South Ayrshire	0.3	0.2	0.3

CHP name	Weighted mean D ₃ T		
	Mean D ₃ T	Lower 95% CL	Upper 95% CL
East Ayrshire	0.1	0.1	0.2
North Ayrshire	0.1	0.1	0.2
South Ayrshire	0.1	0.1	0.2

CHP name	Weighted mean MT		
	Mean MT	Lower 95% CL	Upper 95% CL
East Ayrshire	0.1	0.0	0.1
North Ayrshire	0.0	0.0	0.1
South Ayrshire	0.1	0.0	0.1

Table A5.1: NHS Ayrshire & Arran: Community Health Partnership results continued

CHP name	Weighted mean FT		
	Mean FT	Lower 95% CL	Upper 95% CL
East Ayrshire	0.4	0.3	0.4
North Ayrshire	0.2	0.2	0.2
South Ayrshire	0.2	0.1	0.2

CHP name	Weighted mean number of teeth decayed into the pulp		
	Mean PT	Lower 95% CL	Upper 95% CL
East Ayrshire	0.0	0.0	0.0
North Ayrshire	0.0	0.0	0.0
South Ayrshire	0.0	0.0	0.0

CHP name	Weighted mean number of sealed teeth		
	Mean ST	Lower 95% CL	Upper 95% CL
East Ayrshire	1.5	1.3	1.6
North Ayrshire	1.2	1.1	1.4
South Ayrshire	1.4	1.3	1.5

CHP name	no. of children with obvious decay experience	Mean D ₃ MFT for children with obvious decay experience (D ₃ MFT >0)		
		Mean	Lower 95% CL	Upper 95% CL
East Ayrshire	96	2.1	1.8	2.4
North Ayrshire	86	2.0	1.7	2.2
South Ayrshire	71	1.9	1.6	2.2

Table A5.2: NHS Fife: Community Health Partnership results

CHP name	no. of children	Mean age			
		Mean	Std dev	Minimum	Maximum
Dunfermline & West Fife	322	11.4	0.3	10.8	12.5
Glenrothes & North East Fife	283	11.4	0.3	10.8	12.4
Kirkcaldy & Levenmouth	328	11.4	0.3	10.8	12.5

CHP name	Weighted % no obvious decay experience		
	%	Lower 95% CL	Upper 95% CL
Dunfermline & West Fife	76.1	71.7	80.4
Glenrothes & North East Fife	78.8	74.4	83.3
Kirkcaldy & Levenmouth	72.1	68.3	75.9

CHP name	Weighted mean D ₃ MFT		
	Mean D ₃ MFT	Lower 95% CL	Upper 95% CL
Dunfermline & West Fife	0.4	0.3	0.5
Glenrothes & North East Fife	0.4	0.3	0.4
Kirkcaldy & Levenmouth	0.6	0.5	0.7

CHP name	Weighted mean D ₃ MFT for first permanent molar		
	Mean D ₃ MFTfpm	Lower 95% CL	Upper 95% CL
Dunfermline & West Fife	0.4	0.3	0.4
Glenrothes & North East Fife	0.3	0.3	0.4
Kirkcaldy & Levenmouth	0.6	0.5	0.6

CHP name	Weighted mean D ₃ T		
	Mean D ₃ T	Lower 95% CL	Upper 95% CL
Dunfermline & West Fife	0.2	0.1	0.2
Glenrothes & North East Fife	0.1	0.0	0.1

Kirkcaldy & Levenmouth	0.1	0.1	0.2
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Table A5.2: NHS Fife: Community Health Partnership results continued

CHP name	Weighted mean MT		
	Mean MT	Lower 95% CL	Upper 95% CL
Dunfermline & West Fife	0.0	0.0	0.1
Glenrothes & North East Fife	0.0	0.0	0.1
Kirkcaldy & Levenmouth	0.1	0.0	0.1

CHP name	Weighted mean FT		
	Mean FT	Lower 95% CL	Upper 95% CL
Dunfermline & West Fife	0.2	0.2	0.3
Glenrothes & North East Fife	0.2	0.2	0.3
Kirkcaldy & Levenmouth	0.4	0.3	0.5

CHP name	Weighted mean number of teeth decayed into the pulp		
	Mean PT	Lower 95% CL	Upper 95% CL
Dunfermline & West Fife	0.0	0.0	0.0
Glenrothes & North East Fife	0.0	0.0	0.0
Kirkcaldy & Levenmouth	0.0	0.0	0.0

CHP name	Weighted mean number of sealed teeth		
	Mean ST	Lower 95% CL	Upper 95% CL
Dunfermline & West Fife	1.4	1.2	1.6
Glenrothes & North East Fife	1.5	1.3	1.7
Kirkcaldy & Levenmouth	1.2	1.0	1.3

Table A5.2: NHS Fife: Community Health Partnership results continued

CHP name	no. of children with obvious decay experience	Mean D ₃ MFT for children with obvious decay experience (D ₃ MFT >0)		
		Mean	Lower 95% CL	Upper 95% CL
Dunfermline & West Fife	70	1.8	1.5	2.0
Glenrothes & North East Fife	59	1.8	1.6	2.0
Kirkcaldy & Levenmouth	97	2.2	1.9	2.5

Table A5.3: NHS Forth Valley: Community Health Partnership results
(Co-terminous with Local Authority / Community Planning Partnership)

CHP name	no. of children	Mean age			
		Mean	Std dev	Minimum	Maximum
Clackmannanshire	250	11.4	0.3	10.6	12.4
Falkirk	859	11.5	0.3	10.7	12.9
Stirling	450	11.4	0.3	10.3	12.6

CHP name	Weighted % no obvious decay experience		
	%	Lower 95% CL	Upper 95% CL
Clackmannanshire	71.0	66.7	75.2
Falkirk	75.6	73.7	77.6
Stirling	78.9	76.1	81.7

CHP name	Weighted mean D ₃ MFT		
	Mean D ₃ MFT	Lower 95% CL	Upper 95% CL
Clackmannanshire	0.7	0.6	0.8
Falkirk	0.6	0.5	0.6
Stirling	0.4	0.4	0.5

CHP name	Weighted mean D ₃ MFT for first permanent molar		
	Mean D ₃ MFTfpm	Lower 95% CL	Upper 95% CL
Clackmannanshire	0.6	0.5	0.7
Falkirk	0.5	0.4	0.5
Stirling	0.4	0.3	0.5

CHP name	Weighted mean D ₃ T		
	Mean D ₃ T	Lower 95% CL	Upper 95% CL
Clackmannanshire	0.2	0.2	0.3
Falkirk	0.2	0.2	0.2
Stirling	0.2	0.1	0.2

CHP name	Weighted mean MT		
	Mean MT	Lower 95% CL	Upper 95% CL
Clackmannanshire	0.1	0.0	0.1
Falkirk	0.1	0.1	0.1
Stirling	0.1	0.0	0.1

Table A5.3: NHS Forth Valley: Community Health Partnership results continued

CHP name	Weighted mean FT		
	Mean FT	Lower 95% CL	Upper 95% CL
Clackmannanshire	0.4	0.3	0.4
Falkirk	0.3	0.2	0.3
Stirling	0.2	0.2	0.3

CHP name	Weighted mean number of teeth decayed into the pulp		
	Mean PT	Lower 95% CL	Upper 95% CL
Clackmannanshire	0.0	0.0	0.1
Falkirk	0.0	0.0	0.0
Stirling	0.0	0.0	0.0

CHP name	Weighted mean number of sealed teeth		
	Mean ST	Lower 95% CL	Upper 95% CL
Clackmannanshire	1.1	1.0	1.3
Falkirk	1.2	1.1	1.3
Stirling	1.2	1.1	1.3

CHP name	no. of children with obvious decay experience	Mean D ₃ MFT for children with obvious decay experience (D ₃ MFT >0)		
		Mean	Lower 95% CL	Upper 95% CL
Clackmannanshire	72	2.3	2.0	2.6
Falkirk	208	2.3	2.1	2.5
Stirling	101	2.2	1.9	2.5

Table A5.4: NHS Grampian: Community Health Partnership results
(Co-terminous with Local Authority / Community Planning Partnership)

CHP name	no. of children	Mean age			
		Mean	Std dev	Minimum	Maximum
Aberdeen City	565	11.6	0.3	10.9	12.9
Aberdeenshire	899	11.6	0.3	10.8	13.0
Moray	359	11.7	0.3	10.7	13.0

CHP name	Weighted % no obvious decay experience		
	%	Lower 95% CL	Upper 95% CL
Aberdeen City	71.8	68.8	74.8
Aberdeenshire	73.3	70.9	75.7
Moray	76.8	73.3	80.4

CHP name	Weighted mean D ₃ MFT		
	Mean D ₃ MFT	Lower 95% CL	Upper 95% CL
Aberdeen City	0.6	0.5	0.7
Aberdeenshire	0.5	0.5	0.6
Moray	0.5	0.4	0.6

CHP name	Weighted mean D ₃ MFT for first permanent molar		
	Mean D ₃ MFTfpm	Lower 95% CL	Upper 95% CL
Aberdeen City	0.5	0.5	0.6
Aberdeenshire	0.5	0.4	0.5
Moray	0.4	0.3	0.5

CHP name	Weighted mean D ₃ T		
	Mean D ₃ T	Lower 95% CL	Upper 95% CL
Aberdeen City	0.3	0.2	0.3
Aberdeenshire	0.2	0.2	0.3
Moray	0.1	0.1	0.2

CHP name	Weighted mean MT		
	Mean MT	Lower 95% CL	Upper 95% CL
Aberdeen City	0.1	0.0	0.1
Aberdeenshire	0.0	0.0	0.1
Moray	0.0	0.0	0.1

Table A5.4: NHS Grampian: Community Health Partnership results continued

CHP name	Weighted mean FT		
	Mean FT	Lower 95% CL	Upper 95% CL
Aberdeen City	0.3	0.3	0.4
Aberdeenshire	0.3	0.2	0.3
Moray	0.3	0.3	0.4

CHP name	Weighted mean number of teeth decayed into the pulp		
	Mean PT	Lower 95% CL	Upper 95% CL
Aberdeen City	0.0	0.0	0.1
Aberdeenshire	0.0	0.0	0.0
Moray	0.0	0.0	0.0

CHP name	Weighted mean number of sealed teeth		
	Mean ST	Lower 95% CL	Upper 95% CL
Aberdeen City	0.9	0.8	1.0
Aberdeenshire	1.1	1.1	1.2
Moray	1.4	1.3	1.6

CHP name	no. of children with obvious decay experience	Mean D ₃ MFT for children with obvious decay experience (D ₃ MFT >0)		
		Mean	Lower 95% CL	Upper 95% CL
Aberdeen City	160	2.2	2.0	2.4
Aberdeenshire	253	2.1	1.9	2.3
Moray	83	2.1	1.8	2.4

Table A5.5: NHS Greater Glasgow & Clyde: Community Health Partnership results
(Co-terminous with Local Authority / Community Planning Partnership)

CHP name	no. of children	Mean age			
		Mean	Std dev	Minimum	Maximum
East Dunbartonshire	378	11.5	0.3	10.2	12.5
East Renfrewshire	426	11.5	0.3	10.8	12.5
Glasgow City	1197	11.5	0.3	10.4	12.9
Inverclyde	362	11.5	0.3	10.9	12.6
Renfrewshire	378	11.5	0.3	10.8	12.8
West Dunbartonshire	358	11.5	0.3	10.9	13.0

CHP name	Weighted % no obvious decay experience		
	%	Lower 95% CL	Upper 95% CL
East Dunbartonshire	81.4	78.1	84.6
East Renfrewshire	82.8	79.8	85.7
Glasgow City	70.1	67.8	72.4
Inverclyde	65.4	60.9	69.9
Renfrewshire	72.5	68.3	76.7
West Dunbartonshire	67.4	63.5	71.3

CHP name	Weighted mean D ₃ MFT		
	Mean D ₃ MFT	Lower 95% CL	Upper 95% CL
East Dunbartonshire	0.3	0.3	0.4
East Renfrewshire	0.3	0.3	0.4
Glasgow City	0.7	0.6	0.8
Inverclyde	0.8	0.7	0.9
Renfrewshire	0.7	0.6	0.8
West Dunbartonshire	0.7	0.6	0.8

CHP name	Weighted mean D ₃ MFT for first permanent molar		
	Mean D ₃ MFT _{fp} m	Lower 95% CL	Upper 95% CL
East Dunbartonshire	0.3	0.3	0.4
East Renfrewshire	0.3	0.2	0.4
Glasgow City	0.6	0.5	0.7
Inverclyde	0.7	0.6	0.8
Renfrewshire	0.6	0.5	0.7
West Dunbartonshire	0.6	0.5	0.7

Table A5.5: NHS Greater Glasgow & Clyde: Community Health Partnership results continued

CHP name	Weighted mean D ₃ T		
	Mean D ₃ T	Lower 95% CL	Upper 95% CL
East Dunbartonshire	0.1	0.0	0.1
East Renfrewshire	0.1	0.1	0.1
Glasgow City	0.2	0.2	0.3
Inverclyde	0.3	0.2	0.3
Renfrewshire	0.2	0.2	0.3
West Dunbartonshire	0.3	0.3	0.4

CHP name	Weighted mean MT		
	Mean MT	Lower 95% CL	Upper 95% CL
East Dunbartonshire	0.0	0.0	0.1
East Renfrewshire	0.0	0.0	0.1
Glasgow City	0.1	0.1	0.1
Inverclyde	0.1	0.0	0.1
Renfrewshire	0.1	0.0	0.2
West Dunbartonshire	0.1	0.0	0.1

CHP name	Weighted mean FT		
	Mean FT	Lower 95% CL	Upper 95% CL
East Dunbartonshire	0.3	0.2	0.3
East Renfrewshire	0.2	0.1	0.2
Glasgow City	0.4	0.4	0.5
Inverclyde	0.4	0.4	0.5
Renfrewshire	0.3	0.2	0.4
West Dunbartonshire	0.3	0.2	0.3

CHP name	Weighted mean number of teeth decayed into the pulp		
	Mean PT	Lower 95% CL	Upper 95% CL
East Dunbartonshire	0.0	0.0	0.0
East Renfrewshire	0.0	0.0	0.0
Glasgow City	0.0	0.0	0.1
Inverclyde	0.0	0.0	0.0
Renfrewshire	0.0	0.0	0.0
West Dunbartonshire	0.0	0.0	0.1

Table A5.5: NHS Greater Glasgow & Clyde: Community Health Partnership results continued

CHP name	Weighted mean number of sealed teeth		
	Mean ST	Lower 95% CL	Upper 95% CL
East Dunbartonshire	1.3	1.1	1.4
East Renfrewshire	1.0	0.9	1.1
Glasgow City	1.1	1.0	1.2
Inverclyde	1.6	1.4	1.8
Renfrewshire	1.3	1.1	1.4
West Dunbartonshire	0.8	0.7	0.9

CHP name	no. of children with obvious decay experience	Mean D ₃ MFT for children with obvious decay experience (D ₃ MFT >0)		
		Mean	Lower 95% CL	Upper 95% CL
East Dunbartonshire	74	1.9	1.7	2.2
East Renfrewshire	72	1.9	1.6	2.2
Glasgow City	357	2.4	2.2	2.5
Inverclyde	136	2.4	2.1	2.7
Renfrewshire	99	2.5	2.1	2.8
West Dunbartonshire	113	2.1	1.8	2.3

Table A5.6: NHS Highland: Community Health Partnership results
(Co-terminous with Local Authority / Community Planning Partnership)

CHP name	no. of children	Mean age			
		Mean	Std dev	Minimum	Maximum
Argyll & Bute	312	11.4	0.3	10.7	12.6
Highland	450	11.6	0.3	10.7	12.5

CHP name	Weighted % no obvious decay experience		
	%	Lower 95% CL	Upper 95% CL
Argyll & Bute	85.6	82.6	88.6
Highland	78.3	75.0	81.7

CHP name	Weighted mean D ₃ MFT		
	Mean D ₃ MFT	Lower 95% CL	Upper 95% CL
Argyll & Bute	0.3	0.2	0.3
Highland	0.4	0.4	0.5

CHP name	Weighted mean D ₃ MFT for first permanent molar		
	Mean D ₃ MFTfpm	Lower 95% CL	Upper 95% CL
Argyll & Bute	0.2	0.2	0.3
Highland	0.4	0.3	0.4

CHP name	Weighted mean D ₃ T		
	Mean D ₃ T	Lower 95% CL	Upper 95% CL
Argyll & Bute	0.1	0.0	0.1
Highland	0.1	0.1	0.2

CHP name	Weighted mean MT		
	Mean MT	Lower 95% CL	Upper 95% CL
Argyll & Bute	0.0	0.0	0.0
Highland	0.1	0.0	0.1

CHP name	Weighted mean FT		
	Mean FT	Lower 95% CL	Upper 95% CL
Argyll & Bute	0.1	0.1	0.2
Highland	0.2	0.2	0.3

Table A5.6: NHS Highland: Community Health Partnership results continued

CHP name	Weighted mean number of teeth decayed into the pulp		
	Mean PT	Lower 95% CL	Upper 95% CL
Argyll & Bute	0.0	0.0	0.0
Highland	0.0	0.0	0.0

CHP name	Weighted mean number of sealed teeth		
	Mean ST	Lower 95% CL	Upper 95% CL
Argyll & Bute	1.0	0.8	1.2
Highland	1.4	1.3	1.6

CHP name	no. of children with obvious decay experience	Mean D ₃ MFT for children with obvious decay experience (D ₃ MFT >0)		
		Mean	Lower 95% CL	Upper 95% CL
Argyll & Bute	51	1.8	1.4	2.1
Highland	99	2.1	1.8	2.3

Table A5.7: NHS Lanarkshire: Community Health Partnership results
(Co-terminous with Local Authority / Community Planning Partnership)

CHP name	no. of children	Mean age			
		Mean	Std dev	Minimum	Maximum
North Lanarkshire	452	11.5	0.3	10.9	12.9
South Lanarkshire	382	11.5	0.3	10.8	12.8

CHP name	Weighted % no obvious decay experience		
	%	Lower 95% CL	Upper 95% CL
North Lanarkshire	65.1	61.0	69.2
South Lanarkshire	72.0	67.6	76.3

CHP name	Weighted mean D ₃ MFT		
	Mean D ₃ MFT	Lower 95% CL	Upper 95% CL
North Lanarkshire	0.9	0.8	1.1
South Lanarkshire	0.6	0.5	0.8

CHP name	Weighted mean D ₃ MFT for first permanent molar		
	Mean D ₃ MFTfpm	Lower 95% CL	Upper 95% CL
North Lanarkshire	0.8	0.7	0.9
South Lanarkshire	0.6	0.5	0.7

CHP name	Weighted mean D ₃ T		
	Mean D ₃ T	Lower 95% CL	Upper 95% CL
North Lanarkshire	0.4	0.3	0.5
South Lanarkshire	0.2	0.1	0.3

CHP name	Weighted mean MT		
	Mean MT	Lower 95% CL	Upper 95% CL
North Lanarkshire	0.2	0.1	0.2
South Lanarkshire	0.1	0.0	0.2

CHP name	Weighted mean FT		
	Mean FT	Lower 95% CL	Upper 95% CL
North Lanarkshire	0.4	0.3	0.5
South Lanarkshire	0.3	0.3	0.4

Table A5.7: NHS Lanarkshire: Community Health Partnership results continued

CHP name	Weighted mean number of teeth decayed into the pulp		
	Mean PT	Lower 95% CL	Upper 95% CL
North Lanarkshire	0.0	0.0	0.1
South Lanarkshire	0.0	0.0	0.0

CHP name	Weighted mean number of sealed teeth		
	Mean ST	Lower 95% CL	Upper 95% CL
North Lanarkshire	1.1	0.9	1.2
South Lanarkshire	1.0	0.8	1.1

CHP name	no. of children with obvious decay experience	Mean D ₃ MFT for children with obvious decay experience (D ₃ MFT >0)		
		Mean	Lower 95% CL	Upper 95% CL
North Lanarkshire	154	2.6	2.4	2.9
South Lanarkshire	103	2.3	2.0	2.6

Table A5.8: NHS Lothian: Community Health Partnership results
(Co-terminous with Local Authority / Community Planning Partnership)

CHP name	no. of children	Mean age			
		Mean	Std dev	Minimum	Maximum
East Lothian	313	11.6	0.3	11.1	12.5
Edinburgh	890	11.6	0.3	10.8	12.8
Midlothian	289	11.5	0.3	10.8	12.5
West Lothian	574	11.6	0.3	10.8	12.9

CHP name	Weighted % no obvious decay experience		
	%	Lower 95% CL	Upper 95% CL
East Lothian	76.7	72.6	80.9
Edinburgh	77.7	75.4	80.1
Midlothian	73.8	69.5	78.2
West Lothian	73.7	70.5	76.9

CHP name	Weighted mean D ₃ MFT		
	Mean D ₃ MFT	Lower 95% CL	Upper 95% CL
East Lothian	0.5	0.4	0.6
Edinburgh	0.4	0.4	0.5
Midlothian	0.5	0.4	0.6
West Lothian	0.6	0.5	0.7

CHP name	Weighted mean D ₃ MFT for first permanent molar		
	Mean D ₃ MFTfpm	Lower 95% CL	Upper 95% CL
East Lothian	0.4	0.3	0.5
Edinburgh	0.4	0.3	0.4
Midlothian	0.5	0.4	0.6
West Lothian	0.5	0.4	0.6

CHP name	Weighted mean D ₃ T		
	Mean D ₃ T	Lower 95% CL	Upper 95% CL
East Lothian	0.2	0.1	0.2
Edinburgh	0.2	0.1	0.2
Midlothian	0.2	0.1	0.2
West Lothian	0.2	0.1	0.2

Table A5.8: NHS Lothian: Community Health Partnership results continued

CHP name	Weighted mean MT		
	Mean MT	Lower 95% CL	Upper 95% CL
East Lothian	0.1	0.0	0.1
Edinburgh	0.1	0.0	0.1
Midlothian	0.1	0.0	0.1
West Lothian	0.1	0.1	0.1

CHP name	Weighted mean FT		
	Mean FT	Lower 95% CL	Upper 95% CL
East Lothian	0.3	0.2	0.3
Edinburgh	0.2	0.2	0.3
Midlothian	0.3	0.2	0.4
West Lothian	0.3	0.2	0.4

CHP name	Weighted mean number of teeth decayed into the pulp		
	Mean PT	Lower 95% CL	Upper 95% CL
East Lothian	0.0	0.0	0.0
Edinburgh	0.0	0.0	0.0
Midlothian	0.0	0.0	0.0
West Lothian	0.0	0.0	0.0

CHP name	Weighted mean number of sealed teeth		
	Mean ST	Lower 95% CL	Upper 95% CL
East Lothian	1.2	1.1	1.4
Edinburgh	1.2	1.1	1.3
Midlothian	1.2	1.1	1.4
West Lothian	1.4	1.2	1.5

CHP name	no. of children with obvious decay experience	Mean D ₃ MFT for children with obvious decay experience (D ₃ MFT >0)		
		Mean	Lower 95% CL	Upper 95% CL
East Lothian	70	2.0	1.7	2.4
Edinburgh	211	2.0	1.8	2.1
Midlothian	73	2.0	1.7	2.3
West Lothian	153	2.2	2.0	2.3

Table A5.9: NHS Tayside: Community Health Partnership results
(Co-terminous with Local Authority / Community Planning Partnership)

CHP name	no. of children	Mean age			
		Mean	Std dev	Minimum	Maximum
Angus	295	11.7	0.3	11.0	12.6
Dundee	328	11.7	0.3	11.0	12.7
Perth & Kinross	283	11.6	0.3	10.9	12.4

CHP name	Weighted % no obvious decay experience		
	%	Lower 95% CL	Upper 95% CL
Angus	82.2	78.6	85.9
Dundee	75.8	71.6	79.9
Perth & Kinross	80.8	76.0	85.5

CHP name	Weighted mean D ₃ MFT		
	Mean D ₃ MFT	Lower 95% CL	Upper 95% CL
Angus	0.4	0.3	0.5
Dundee	0.6	0.4	0.7
Perth & Kinross	0.4	0.3	0.5

CHP name	Weighted mean D ₃ MFT for first permanent molar		
	Mean D ₃ MFTfpm	Lower 95% CL	Upper 95% CL
Angus	0.3	0.2	0.4
Dundee	0.5	0.4	0.6
Perth & Kinross	0.4	0.3	0.5

CHP name	Weighted mean D ₃ T		
	Mean D ₃ T	Lower 95% CL	Upper 95% CL
Angus	0.1	0.0	0.1
Dundee	0.2	0.1	0.2
Perth & Kinross	0.1	0.1	0.2

CHP name	Weighted mean MT		
	Mean MT	Lower 95% CL	Upper 95% CL
Angus	0.1	0.0	0.1
Dundee	0.1	0.1	0.2
Perth & Kinross	0.1	0.0	0.2

Table A5.9: NHS Tayside: Community Health Partnership results continued

CHP name	Weighted mean FT		
	Mean FT	Lower 95% CL	Upper 95% CL
Angus	0.2	0.2	0.3
Dundee	0.3	0.2	0.3
Perth & Kinross	0.2	0.1	0.3

CHP name	Weighted mean number of teeth decayed into the pulp		
	Mean PT	Lower 95% CL	Upper 95% CL
Angus	0.0	0.0	0.0
Dundee	0.1	0.0	0.1
Perth & Kinross	0.0	0.0	0.0

CHP name	Weighted mean number of sealed teeth		
	Mean ST	Lower 95% CL	Upper 95% CL
Angus	0.8	0.6	0.9
Dundee	0.8	0.6	0.9
Perth & Kinross	0.6	0.4	0.7

CHP name	no. of children with obvious decay experience	Mean D ₃ MFT for children with obvious decay experience (D ₃ MFT >0)		
		Mean	Lower 95% CL	Upper 95% CL
Angus	60	2.1	1.7	2.4
Dundee	84	2.3	2.0	2.6
Perth & Kinross	53	2.3	1.9	2.7

A6 – Basic Inspection results

What does the NDIP Basic Inspection consist of?

The *Basic Inspection* involves a simple assessment of the mouth of the child using a light, mirror and ball-ended probe. The dental status of each child is then categorised into three groups, depending on the level of dental health and treatment need observed, and parents/carers are advised of this by letter. The information in the letter explains the state of dental health observed in the mouth of the child at the time of the inspection (the letter varies slightly according to whether a P1 or a P7 child has been inspected).

The letter types are as follows:

- Letter A - should seek immediate dental care on account of severe decay or abscess.
- Letter B - should seek dental care in the near future due to one or more of the following: history of tooth decay, a broken or damaged front tooth, tooth wear, poor oral hygiene or may require orthodontics.
- Letter C - no obvious decay experience but should continue to see the family dentist on a regular basis.

The results of the *Basic Inspection* are then anonymised and aggregated. They are used to monitor the impact of local and national NHS oral health improvement programmes and assist in the development of local dental services.

Primary 1 Basic Data in P1 & P7 in Scotland; 2015

During the school year of 2014/15, all P1 classes of Scottish Local Authority schools were invited to participate in the Programme. The *Basic Inspections* were conducted in primary schools in all NHS Board areas, and overall 52,579 P1 children were inspected (representing more than 88% of the estimated P1 population) (Table A6.1). Across the NHS Boards, the percentage of P1 children inspected and the parents/carers of those P1 children who received a *Basic Inspection* were advised by letter of the oral health of their child ranged from 77% to 94%.

Table A6.1: Primary 1 children inspected by NHS Boards in 2015; Basic Inspection¹⁻⁷

NHS Board	Estimated Total no. of P1 children in Local Authority schools	Total no. of P1 children inspected	Proportion (%) of P1 children inspected	Proportion (%) of A letters issued	Proportion (%) of B letters issued	Proportion (%) of C letters issued
Ayrshire & Arran	4,006	3,561	88.9	4.3	24.7	71.1
Borders	1,200	1,037	86.4	2.8	22.4	74.8
Dumfries & Galloway	1,535	1,374	89.5	9.6	21.3	69.1
Fife	4,236	3,762	88.8	6.3	24.7	69.0
Forth Valley	3,420	3,138	91.8	9.0	21.4	69.7
Grampian	6,537	5,745	87.9	8.5	20.0	71.5
Greater Glasgow & Clyde	12,369	11,191	90.5	10.3	24.9	64.9
Highland	3,493	2,914	83.4	5.3	21.0	73.7
Lanarkshire	7,743	6,972	90.0	8.8	20.8	70.4
Lothian	9,858	8,314	84.3	7.0	22.0	71.0
Orkney	231	197	85.3	-	15.7	84.3
Shetland	245	230	93.9	1.3	16.5	82.2
Tayside	4,299	3,926	91.3	10.1	21.6	68.3
Western Isles	285	218	76.5	3.7	26.6	69.7
Scotland	59,457	52,579	88.4	8.0	22.4	69.5

Source: ISD NDIP Database

1. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.

2. Based on NHS Board boundaries as defined in 2014.

3. Primary 1 population is estimated using an aggregated population lookup file of children aged 5 (2013).

4. Children with a missing postcode, had an exam but did not receive a letter, or did not have an exam, were removed before analysis.

This accumulated to 4,954 children. Repeat examinations were also omitted.

5. Letter A - should seek immediate dental care on account of severe decay or abscess.

6. Letter B - should seek dental care in the near future due to one or more of the following: history of tooth decay, a broken or damaged front tooth, tooth wear, poor oral hygiene or may require orthodontics.

7. Letter C - no obvious decay experience but should continue to see the family dentist on a regular basis.

Primary 7 Basic Data

In 2014/15 a total of 45,511 P7 children received a *Basic Inspection* (representing more than 86% of the estimated P7 population) (Table A6.2). Across the NHS Boards, the percentage of P7 children inspected and the parents/carers of those P7 children who received a *Basic Inspection* were advised by letter of the oral health of their child ranged from 83% to 95%.

Table A6.2: Primary 7 children inspected by NHS Boards in 2015; Basic Inspection¹⁻⁷

NHS Board	Total no. of P7 children in Local Authority schools	Total no. of P7 children inspected	Proportion (%) of P7 children inspected	Proportion (%) of A letters issued	Proportion (%) of B letters issued	Proportion (%) of C letters issued
Ayrshire & Arran	3,789	3,341	88.2	1.3	47.9	50.8
Borders	1,193	1,062	89.0	0.4	37.3	62.3
Dumfries & Galloway	1,390	1,281	92.2	2.7	57.7	39.6
Fife	3,638	3,223	88.6	1.4	38.7	59.9
Forth Valley	3,166	2,752	86.9	3.1	49.1	47.8
Grampian	5,545	4,599	82.9	2.1	50.9	47.1
Greater Glasgow & Clyde	10,774	9,091	84.4	2.7	49.9	47.5
Highland	3,338	2,768	82.9	1.7	44.3	54.0
Lanarkshire	7,031	6,328	90.0	2.1	43.3	54.6
Lothian	8,089	6,743	83.4	1.7	47.4	50.9
Orkney	216	196	90.7	1.0	60.7	38.3
Shetland	262	225	85.9	0.9	24.9	74.2
Tayside	4,015	3,656	91.1	1.7	40.8	57.5
Western Isles	260	246	94.6	0.8	38.2	61.0
Scotland	52,706	45,511	86.3	2.0	46.4	51.6

Source: ISD NDIP Database

1. Numbers are based on the postcode of the child's home address and not the postcode of the school where the child was inspected.
2. Based on NHS Board boundaries as defined in 2014.
3. Primary 7 population is estimated using an aggregated population lookup file of children aged 11 (2013).
4. Children with a missing postcode, had an exam but did not receive a letter, or did not have an exam, were removed before analysis. This accumulated to 5,056 children. Repeat examinations were also omitted.
5. Letter A - should seek immediate dental care on account of severe decay or abscess.
6. Letter B - should seek dental care in the near future due to one or more of the following: history of tooth decay, a broken or damaged front tooth, tooth wear, poor oral hygiene or may require orthodontics.
7. Letter C - no obvious decay experience but should continue to see the family dentist on a regular basis.

A7 – Authors

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A8 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication title	National Dental Inspection Programme (NDIP) 2015.
Description	This report presents the results of the programme of children's dental inspections carried out in Scotland during school year 2014/15.
Theme	Dental care.
Topic	Children's dental health.
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Data source(s)	2004/05, 2006/07, 2008/09, 2010/11, 2012/13, 2014/15 National Dental Inspection Programme databases.
Date that data are acquired	Various dates during school year 2014/15.
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Frequency	Annual.
Timeframe of data and timeliness	School year ending June 2015; four months in arrears.
Continuity of data	Reports annually.
Revisions statement	These data are not subject to planned major revisions. However, ISD aims to continually improve the interpretation of the data and therefore analysis methods are regularly reviewed and may be updated in future.
Revisions relevant to this publication	None.
Concepts and definitions	See Glossary, Appendix and References.
Relevance and key uses of the statistics	The principal aims of the National Dental Inspection Programme (NDIP) are to inform parents/carers of the oral health status of their children and, through appropriately anonymised, aggregated data, advise the Scottish Government, NHS Boards and other organisations concerned with children's health of oral disease prevalence at national and local levels.
Accuracy	These data are regarded as highly accurate as per the Kappa estimates agreement in Appendix A2 .
Completeness	These data are regarded as suitably complete. The Basic inspection saw 88% of P1's and 86% of P7's inspected.
Comparability	Each annual NDIP report has two levels: a Basic Inspection (intended for all P1 and P7 children) and a Detailed Inspection (where a representative sample of either the P1 or the P7 age group is inspected in alternate years).
Accessibility	It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines .
Coherence and clarity	Tables and charts are accessible via the ISD website .
Value type and unit of measurement	Various dental/epidemiological and demographic units of measurement.
Disclosure	The ISD Statistical Disclosure Protocol is followed.
Official Statistics designation	Official Statistics.
UK Statistics Authority Assessment	Not assessed at this time.
Last published	28 th October 2014.
Next published	25 th October 2016.

Date of first publication	31 st December 2003 (revised 3 rd March 2008).
Help email	nss.isd-dental-info@nhs.net
Date form completed	17/08/2015

A9 – Early Access details (including Pre-Release Access)

Pre-Release Access

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD are obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access and, separately, those receiving extended Pre-Release Access.

Standard Pre-Release Access:

Scottish Government Health Department

NHS Board Chief Executives

NHS Board Communication leads

Scottish Government Health Department (Analytical Services Division)

A10 – ISD and Official Statistics

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

Purpose: To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

Mission: Better Information, Better Decisions, Better Health

Vision: To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD's statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#). The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.