



Public Health  
England

APPENDIX 2

## **Five year old Dental Health Survey 2011/12**

**Locality supplement for**

**Durham County Council**

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2013  
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## **Background**

The Department of Health in England has supported regular surveys of the oral health of 5 year old children attending state funded schools since the mid-1980s<sup>i</sup>. These surveys are carried out by trained and calibrated dentally qualified examiners to a set national protocol<sup>ii</sup>. The results provide a picture of the oral health of children across England.

The studies were originally undertaken using negative consent, which lead to high participation rates and gave confidence in the representativeness of the samples of children examined for the population of children as a whole. Legal issues have led to a change to positive content in recent years. This has affected data collected with lower participation rates meaning that caution must be exercised in using the results of the study.

**The requirement for positive consent has introduced bias into the data which readers of the report should be aware of when drawing conclusions from the reports findings. Where fewer than 15 children in one ward have been examined the results have been suppressed as being too small to be reliable for service planning. Where fewer than 25 children were reported as being examined, caution should be exercised in the interpretation of the data.**

### Children's Dentition

Children at five years old will normally have 20 deciduous (baby) teeth. Oral health for children is measured using the dmft index (d = decayed, m = missing, f = filled, t = teeth). It can be used to give a measure of individual oral health or that of a community. A child who has 5 teeth affected by dental disease will have a dmft score of 5. A population of 100 children where 50 of them have one tooth affected by dental disease will have a population dmft of 0.5.

However, the nature of the index means that a small number of children with a high level of dental disease can result in a misleading level within a

community. It is often better to describe a community's oral health by the proportion of children in a population affected by dental decay which gives a clearer indication of needs in that community.

The dental decay identified in this study is likely to have developed over a period of time prior to the children entering schools. It is thus essential to use these data to support preventive oral health work amongst Early Years workers and locations to secure improvements in children's oral health at a population level. The data should be used to inform the targeting of resources to those areas with the poorest oral health to secure improvements in the health of those children.

The following table shows the results for each electoral ward in the local authority. It describes the participation level, the number of children examined and the oral health of the population of each ward where 15 or more children were examined. The same data have been used to produce a map of the local authority describing the proportion of children affected by dental decay.

The methodology used to produce the report is described in the technical appendix.

## **Technical Appendix**

The study was undertaken according to national criteria produced by the Dental Observatory based at the former North West Public Health Observatory, which then validated the data.

A data set was secured from the Dental Observatory who co-ordinate the analysis of the data for all the children examined in the North East. The data set contained 27,748 records. The reported postcode of the child's home address was used to match it to a data set for all electoral wards within the 12 local authorities in the North East using a data set obtained from Ordnance

Survey<sup>iii</sup>. Of the 27,748 records 27,323 were matched to a valid North East postcode, giving a 98% ascertainment rate.

The boundaries for electoral wards were secured from Ordnance Survey<sup>iv</sup> and mapping software was then used to produce the ward map.

The failure to match all the children to valid postcodes may have been due to incorrect postcodes being recorded or postcodes being for areas beyond the North East. This may be due to children living in border areas, or who were only temporarily resident in the North East with a permanent home elsewhere.

### **Acknowledgements**

I am very grateful for the help and support of Dr Gill Davies and her team in helping prepare this report.

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Table showing the oral health of 5 year old children in Durham Council for each electoral ward\*.

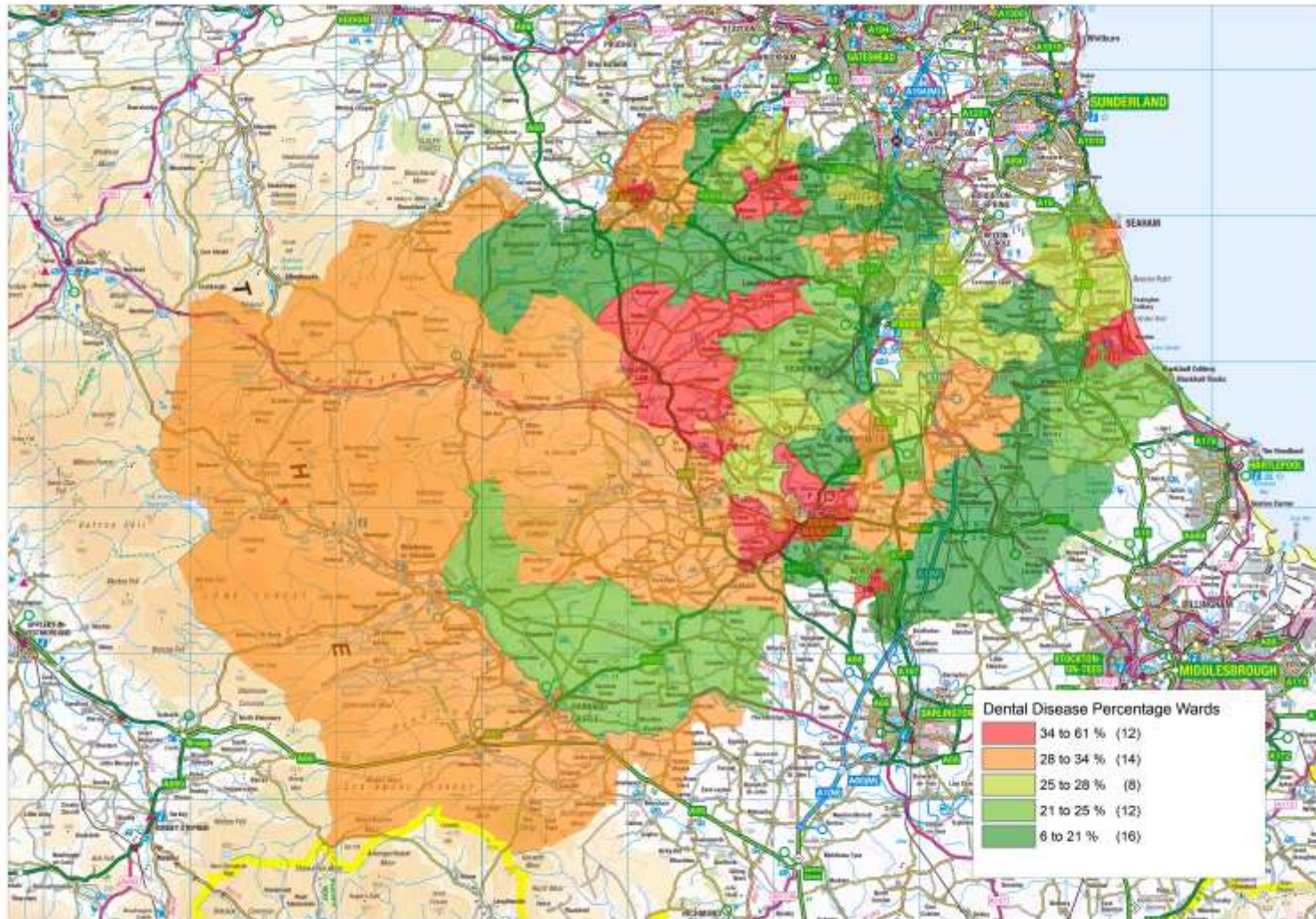
Ward Name	Children Selected	Children Examined	Proportion seen	dmft	dmft>0
Annfield Plain ED	79	38	48%	0.7	21%
Aycliffe East ED	70	45	64%	0.6	20%
Aycliffe North ED	70	39	56%	0.7	23%
Aycliffe West ED	88	57	65%	1.7	46%
Barnard Castle East ED	43	29	67%	0.9	24%
Barnard Castle West ED	55	42	76%	0.9	29%
Belmont ED	59	38	64%	0.3	11%
Benfieldside ED	82	49	60%	1.0	29%
Bishop Auckland Town ED	84	45	54%	1.3	31%
Blackhalls ED	56	33	59%	0.9	24%
Brandon ED	89	61	69%	0.6	20%
Burnopfield and Dipton ED	86	49	57%	0.6	18%
Chester-le-Street North and East ED	85	58	68%	0.7	19%
Chester-le-Street South ED	74	50	68%	0.1	6%
Chester-le-Street West Central ED	85	47	55%	0.9	28%
Chilton ED	74	40	54%	1.0	30%
Consett North ED	78	41	53%	0.9	37%
Coundon ED	83	45	54%	2.0	51%
Coxhoe ED	70	37	53%	1.1	30%
Craghead and South Moor ED	91	52	57%	1.0	37%
Crook North and Tow Law ED	94	68	72%	1.0	35%
Crook South ED	82	49	60%	0.8	29%
Dawdon ED	94	63	67%	1.6	32%

Deerness Valley ED	91	56	62%	0.7	21%
Delves Lane and Consett South ED	155	101	65%	1.1	30%
Deneside ED	75	42	56%	1.0	29%
Durham South ED	72	53	74%	1.1	26%
Easington ED	73	42	58%	0.9	26%
Elvet ED	2	1	50%		
Esh ED	69	49	71%	1.1	39%
Evenwood ED	76	56	74%	1.0	34%
Ferryhill ED	93	45	48%	1.1	22%
Framwellgate Moor ED	97	66	68%	0.9	24%
Gilesgate ED	67	37	55%	0.9	27%
Horden ED	95	58	61%	1.3	38%
Lanchester ED	71	49	69%	0.8	20%
Leadgate and Medomsley ED	77	53	69%	0.8	34%
Lumley ED	99	66	67%	0.5	17%
Murton ED	83	52	63%	0.9	25%
Neville's Cross ED	69	48	70%	0.4	13%
Newton Hall ED	64	40	63%	0.8	23%
Ouston and Urpeth ED	77	48	62%	0.3	10%
Pelton ED	87	51	59%	0.6	24%
Peterlee East ED	100	55	55%	1.5	42%
Peterlee West ED	82	49	60%	1.1	35%
Sacriston ED	82	48	59%	1.2	31%
Seaham ED	93	61	66%	0.8	25%
Sedgefield ED	60	39	65%	0.6	21%
Sherburn ED	109	57	52%	0.8	26%
Sildon East ED	111	71	64%	0.7	24%
Sildon West ED	84	52	62%	0.7	13%
Shotton ED	125	73	58%	0.8	18%

Spennymoor and Middlestone ED	98	68	69%	0.5	19%
Stanley ED	106	73	69%	1.1	37%
Tanfield ED	79	59	75%	0.8	25%
Thornley ED	88	44	50%	0.6	16%
Trimdon ED	84	48	57%	0.5	21%
Tudhoe ED	92	56	61%	1.6	32%
Weardale ED	72	50	69%	1.0	28%
West Auckland ED	80	49	61%	1.5	37%
Willington ED	85	47	55%	1.1	26%
Wingate ED	112	68	61%	0.7	22%
Woodhouse Close ED	110	56	51%	2.4	61%

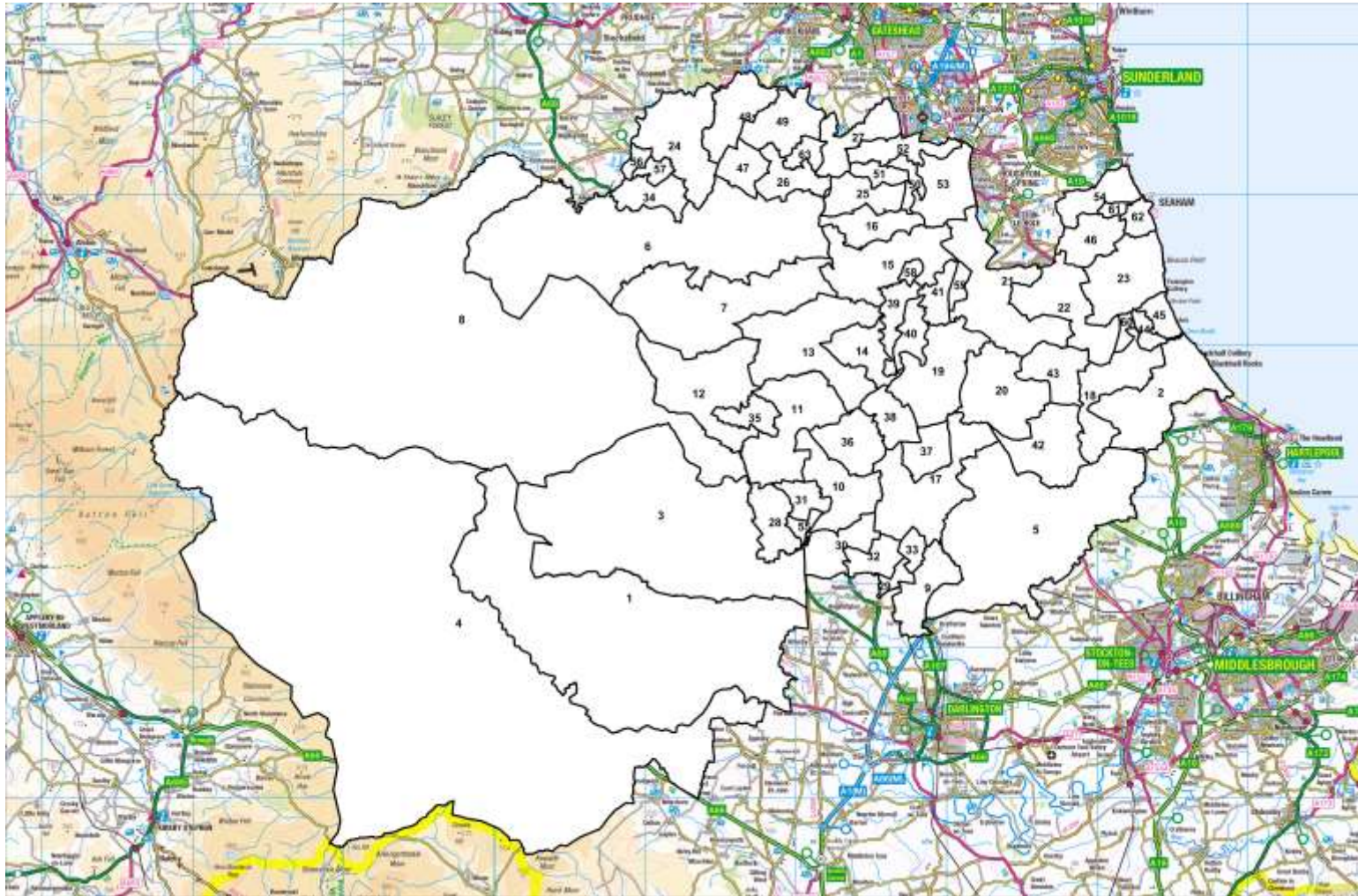
\*Data for fewer than 15 observations suppressed

Map showing the proportion of 5 year old children in each electoral ward affected by dental disease (in wards where less than 15 children were examined the data has been suppressed, wards are white)





# Durham Wards



## Legend

Ward	Number
Barnard Castle East ED	1
Blackhalls ED	2
Evenwood ED	3
Barnard Castle West ED	4
Sedgefield ED	5
Lanchester ED	6
Esh ED	7
Weardale ED	8
Aycliffe East ED	9
Coundon ED	10
Willington ED	11
Crook North and Tow Law ED	12
Deerness Valley ED	13
Brandon ED	14
Framwellgate Moor ED	15
Sacriston ED	16
Chilton ED	17
Wingate ED	18
Durham South ED	19
Coxhoe ED	20
Sherburn ED	21
Shotton ED	22
Easington ED	23
Leadgate and Medomsley ED	24
Chester-le-Street South ED	25
Craghead and South Moor ED	26
Ouston and Urpeth ED	27
West Auckland ED	28
Aycliffe West ED	29
Sildon West ED	30
Bishop Auckland Town ED	31
Sildon East ED	32
Aycliffe North ED	33
Delves Lane and Consett South ED	34
Crook South ED	35
Spennymoor and Middlestone ED	36
Ferryhill ED	37
Tudhoe ED	38
Neville's Cross ED	39

Elvet ED	40
Gilesgate ED	41
Trimdon ED	42
Thornley ED	43
Peterlee East ED	44
Horden ED	45
Murton ED	46
Annfield Plain ED	47
Burnopfield and Dipton ED	48
Tanfield ED	49
Chester-le-Street North and East ED	50
Chester-le-Street West Central ED	51
Pelton ED	52
Lumley ED	53
Seaham ED	54
Woodhouse Close ED	55
Benfieldside ED	56
Consett North ED	57
Newton Hall ED	58
Belmont ED	59
Peterlee West ED	60
Denside ED	61
Dawdon ED	62
Stanley ED	63

<sup>i</sup> Department of Health, Dental Public Health Regulations 2006 statutory instrument no 185, Department of Health 2006. Available on line at: [http://www.legislation.gov.uk/ukxi/2006/185/pdfs/ukxi\\_20060185\\_en.pdf](http://www.legislation.gov.uk/ukxi/2006/185/pdfs/ukxi_20060185_en.pdf)

<sup>ii</sup> North West Public Health Observatory, NHS Dental Epidemiological Oral Health Survey of 5-year-old children in England. 2011/2012 North West Public Health Observatory 2011. Available on line at: [http://www.nwph.net/dentalhealth/reports/National%20Protocol%205yr%20olds%202011\\_12.pdf](http://www.nwph.net/dentalhealth/reports/National%20Protocol%205yr%20olds%202011_12.pdf)

<sup>iii</sup> Ordnance Survey, Code Point Open, Ordnance Survey 2013 Available on line at: <http://www.ordnancesurvey.co.uk/oswebsite/products/code-point-open/index.html>

<sup>iv</sup> Ordnance Survey, Boundary Line, Ordnance Survey 2013. Available on line at: <http://www.ordnancesurvey.co.uk/oswebsite/products/boundary-line/index.html>