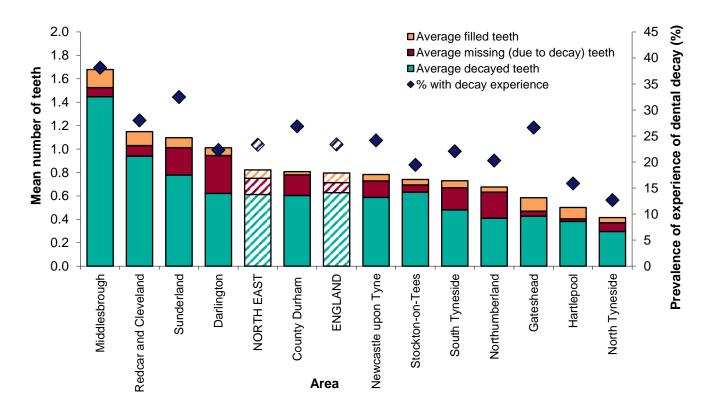


government and health services improve the oral health and wellbeing of children and tackle health inequalities.

In Northumberland 307 5-year-olds (approximately 75.9% of those sampled) were examined at school by trained and calibrated examiners using the national standard method<sup>2</sup>.

**Figure 1:** Prevalence of experience of dental decay and mean number of teeth with experience of dental decay in 5-year-olds in Northumberland, other local authorities in the North East and England.



**Table 1:** Experience of dental decay in 5-year-olds in Northumberland, other local authorities in the North East and England.

Local authority	Prevalence of experience of dental decay (%)	Mean number of teeth with experience of dental decay in all examined children n (95% confidence intervals)	Mean number of teeth with experience of dental decay in children with any decay experience n (95% confidence intervals)
Middlesbrough	38.1	1.7 (1.31 - 2.05)	4.4 (3.75 - 5.06)
Sunderland	32.5	1.1 (0.80 - 1.40)	3.4 (2.77 - 3.99)
Redcar and Cleveland	28.0	1.1 (0.78 - 1.51)	4.1 (3.23 - 4.98)
County Durham	26.8	0.8 (0.58 - 1.04)	3.0 (2.44 - 3.57)
Gateshead	26.6	0.6 (0.40 - 0.77)	2.2 (1.72 - 2.67)
Newcastle upon Tyne	24.2	0.8 (0.61 - 0.95)	3.2 (2.76 - 3.72)
ENGLAND	23.4	0.8 (0.78 - 0.81)	3.4 (3.36 - 3.44)
NORTH EAST	23.3	0.8 (0.75 - 0.89)	3.5 (3.32 - 3.72)
Darlington	22.3	1.0 (0.71 - 1.31)	4.5 (3.63 - 5.43)
South Tyneside	22.1	0.7 (0.46 - 1.00)	3.3 (2.42 - 4.18)
Northumberland	20.3	0.7 (0.48 - 0.87)	3.3 (2.71 - 3.96)
Stockton-on-Tees	19.5	0.7 (0.51 - 0.97)	3.8 (3.10 - 4.50)
Hartlepool	15.9	0.5 (0.29 - 0.71)	3.2 (2.25 - 4.06)
North Tyneside	12.7	0.4 (0.28 - 0.55)	3.3 (2.60 - 3.94)

**Table 2.** Measures of oral health among 5-year-olds in Northumberland, it's statistical neighbours, ithe North East and England.

	Northumberland	Statistical neighbour within North East: North Tyneside	Statistical neighbour comparator 2: Cheshire West and Chester	North East	England
Prevalence of experience of dental decay	20.3%	12.7%	22.7%	23.3%	23.4%
Mean number of teeth with experience of dental decay	0.7	0.4	0.6	0.8	0.8
Mean number of teeth with experience of decay in those with experience of dental decay	3.3	3.3	2.6	3.5	3.4
Mean number of decayed teeth in those with experience of dental decay	2.1	2.5	1.9	2.6	2.7
Proportion with active decay	16.6%	9.8%	19.5%	19.9%	20.4%
Proportion with experience of tooth extraction <sup>ii</sup>	4.4%	1.6%	1.9%	3.1%	2.2%
Proportion with dental abscess	0.6%	0.0%	1.2%	1.6%	1.0%
Proportion with teeth decayed into pulp	2.7%	3.5%	4.0%	4.0%	3.3%
Proportion with decay affecting incisorsiii	5.5%	2.8%	4.4%	5.6%	5.2%
Proportion with high levels of plaque present on upper front teeth <sup>iv</sup>	0.0%	0.0%	1.2%	2.2%	1.2%

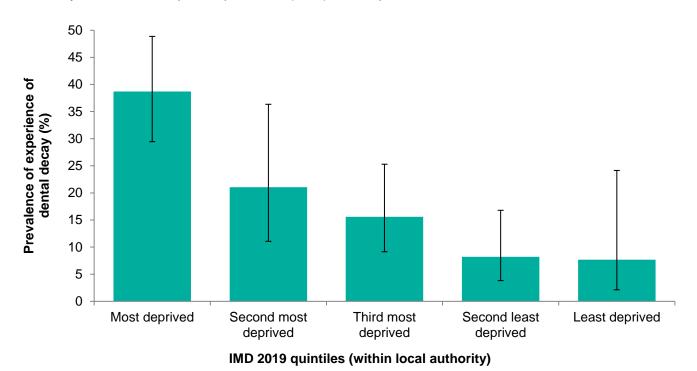
<sup>&</sup>lt;sup>1</sup> generated by the children's services statistical neighbour benchmarking tool, the neighbour within the North East has "Very Close" comparator characteristics and the national neighbour 2 has "Very Close" comparator characteristics<sup>3</sup>.

ii experience of extraction of one or more teeth on one or more occasions.

iii dental decay involving one or more surfaces of upper anterior teeth.

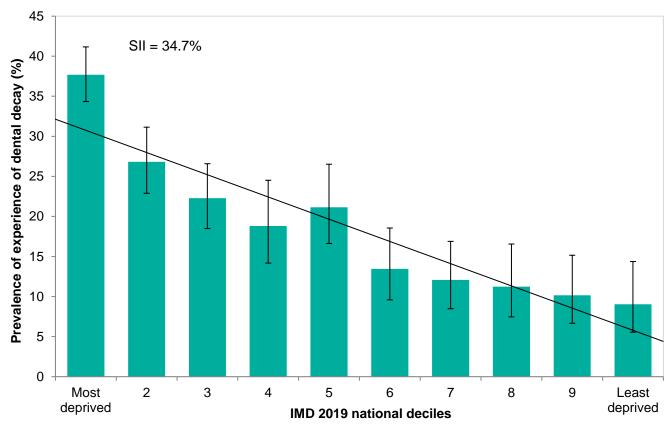
iv indicative of poor tooth brushing habits.

Figure 2: Prevalence of experience of dental decay in 5-year-olds in Northumberland, by local authority Index of Multiple Deprivation (IMD) 2019 quintiles.



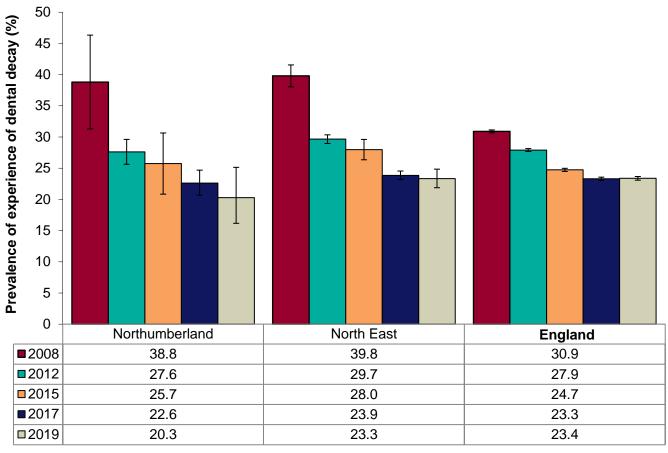
Error bars represent 95% confidence limits

**Figure 3:** Slope index of inequality in the prevalence of experience of dental decay in 5-year-olds in the North East.



Error bars represent 95% confidence limits

**Figure 4:** Prevalence of experience of dental decay in 5-year-olds in Northumberland, the North East and England, by year.

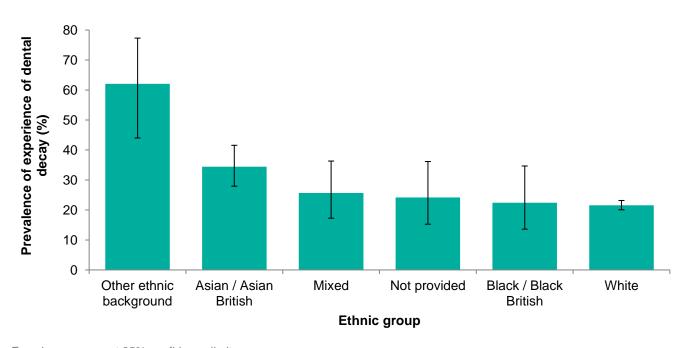


Error bars represent 95% confidence limits

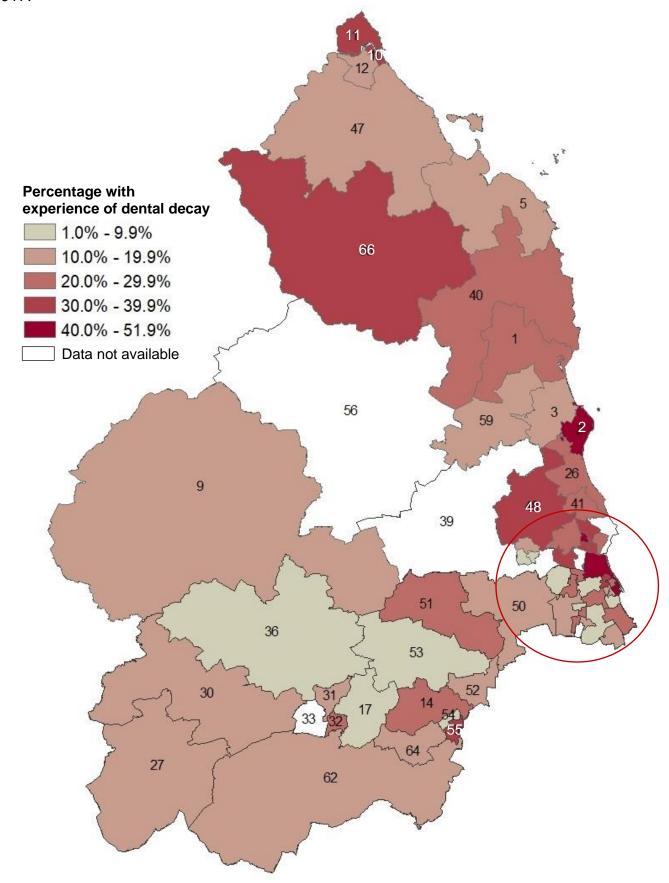
Table 3: Experience of dental decay in 5-year-olds in the North East, by ethnic group.

Ethnic group	Number of children examined (N)	Prevalence of experience of dental decay (%)	Mean number of teeth with experience of dental decay among children with any experience of dental decay n (95% CI)	Prevalence of dental decay affecting incisors (%)
Other ethnic background	29	62.1	4.8 (3.23 - 6.33)	27.6
Asian / Asian British	183	34.4	3.5 (2.87 - 4.21)	13.1
Mixed	78	25.6	3.6 (2.51 - 4.69)	5.1
Not provided	62	24.2	2.5 (1.70 - 3.23)	9.7
Black / Black British	58	22.4	3.1 (1.34 - 4.82)	1.7
White	2,689	21.6	3.5 (3.28 - 3.72)	4.8
North East	3,099	23.3	3.5 (3.32 - 3.72)	5.6

**Figure 5:** Prevalence of experience of dental decay in 5-year-olds in the North East, by ethnic group.

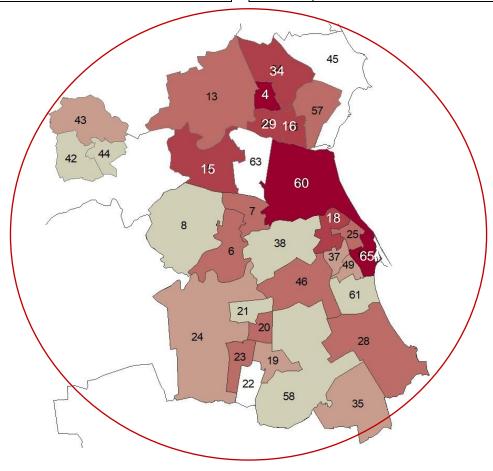


**Figure 6:** Prevalence of experience of dental decay in 5-year-olds in Northumberland, by ward, 2017.



Key	Label
1	Alnwick (22.4%)
2	Amble (44.4%)
3	Amble West with Warkworth (10.5%)
5	Bamburgh (17.2%)
9	Bellingham (17.6%)
10	Berwick East (35.7%)
11	Berwick North (34.5%)
12	Berwick West with Ord (12.1%)
14	Bywell (22.9%)
17	Corbridge (5.6%)
26	Druridge Bay (25.6%)
27	Haltwhistle (18.8%)
30	Haydon and Hadrian (16.0%)
31	Hexham Central with Acomb (17.6%)
32	Hexham East (26.9%)
33	Hexham West
36	Humshaugh (8.0%)

Key	Label
39	Longhorsley
40	Longhoughton (21.1%)
41	Lynemouth (27.6%)
47	Norham and Islandshires (16.7%)
48	Pegswood (37.5%)
50	Ponteland East and Stannington (15%)
51	Ponteland North (20%)
52	Ponteland South with Heddon (16.7%)
53	Ponteland West (6.5%)
54	Prudhoe North (9.7%)
55	Prudhoe South (30.3%)
56	Rothbury
59	Shilbottle (15.0%)
62	South Tynedale (13.6%)
64	Stocksfield and Broomhaugh (16.0%)
65	Wensleydale (47.1%)
66	Wooler (39.1%)



Key	Label
4	Ashington Central (51.9%)
6	Bedlington Central (20.0%)
7	Bedlington East (29.4%)
8	Bedlington West (8.3%)
13	Bothal (21.4%)
15	Choppington (38.1%)
16	College (38.7%)
18	Cowpen (32.1%)
19	Cramlington East (19.0%)
20	Cramlington Eastfield (20.7%)
21	Cramlington North (9.3%)
22	Cramlington South East
23	Cramlington Village (29.4%)
24	Cramlington West (17.1%)
25	Croft (23.8%)
28	Hartley (24.1%)
29	Haydon (30.8%)

Key	Label
34	Hirst (35.1%)
35	Holywell (17.6%)
37	Isabella (13%)
38	Kitty Brewster (7.1%)
42	Morpeth Kirkhill (4.5%)
43	Morpeth North (14.3%)
44	Morpeth Stobhill (6.7%)
45	Newbiggin Central and East
46	Newsham (28.6%)
49	Plessey (16.7%)
57	Seaton with Newbiggin West (29.6%)
58	Seghill with Seaton Delaval (3.0%)
60	Sleekburn (51.6%)
61	South Blyth (4.8%)
63	Stakeford
65	Wensleydale (47.1%)

## **Summary**

In Northumberland average levels of dental decay are similar to the average for England. Within Northumberland, the highest levels of experience of dental decay are clustered around the Amble, Ashington Central, Sleekburn and Wensleydale wards.

The small sample size means it is not possible to provide information at ward level using 2019 data. Future surveys could be commissioned to provide larger samples to facilitate local analysis. Commissioning High Quality Information to Support Oral Health Improvement: A toolkit about dental epidemiology for local authorities, commissioners and partners is available to support the commissioning of oral health surveys<sup>4</sup>.

Public health interventions can improve child oral health at a local level. Local authorities improving oral health: commissioning better oral health for children and young people is available to support local authorities to commission oral health improvement programmes for children and young people aged up to 19 years<sup>5</sup>.

If further local analysis is required, please contact the national dental public health team: DentalPHIntelligence@phe.gov.uk

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- 1. Public Health England (2020). National Dental Epidemiology Programme for England: oral health survey of 5-year-olds 2019 [Online]. Available at: https://www.gov.uk/government/statistics/oral-health-survey-of-5-year-old-children-2019 [Accessed 29 May 2020].
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More information is available at www.gov.uk/government/collections/oral-health Please send any enquiries to DentalPHIntelligence@phe.gov.uk

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