



Newcastle upon Tyne

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Oral health of 5-year-old children

This profile describes the oral health of 5-year-olds living in Newcastle upon Tyne. It uses data from the National Dental Epidemiology Programme 2019 survey of 5-year-old children¹.

The profile is designed to help local government and health services improve the oral health and wellbeing of children and tackle health inequalities.

In Newcastle upon Tyne 523 5-year-olds (approximately 47.8% of those sampled) were examined at school by trained and calibrated examiners using the national standard method².

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

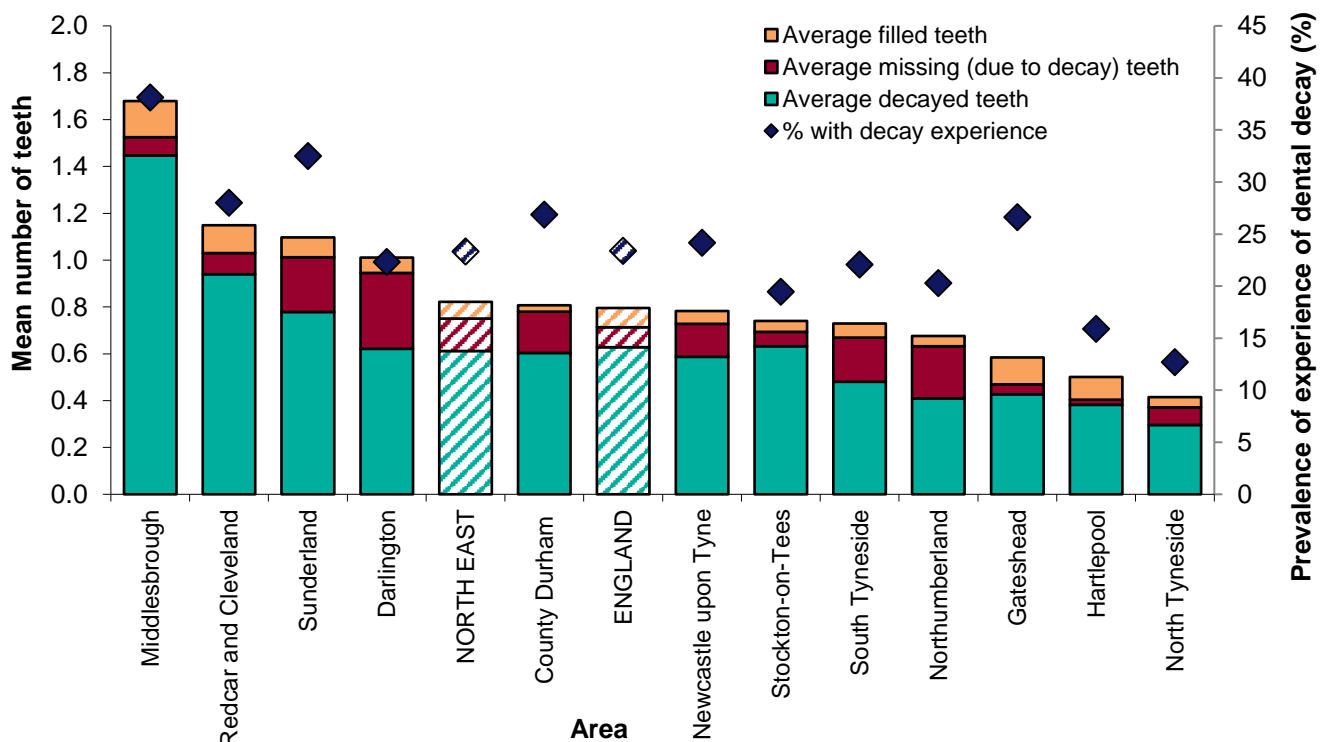


Table 1: Experience of dental decay in 5-year-olds in Newcastle upon Tyne, other local authorities in the North East and England.

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 Newcastle upon Tyne, it's statistical neighbours,ⁱ the North East and England.

	Newcastle upon Tyne	Statistical neighbour within North East: Gateshead	Statistical neighbour comparator 1: Salford	North East	England
Prevalence of experience of dental decay	24.2%	26.6%	39.0%	23.3%	23.4%
Mean number of teeth with experience of dental decay	0.8	0.6	1.6	0.8	0.8
Mean number of teeth with experience of decay in those with experience of dental decay	3.2	2.2	4.2	3.5	3.4
Mean number of decayed teeth in those with experience of dental decay	2.4	1.6	3.4	2.6	2.7
Proportion with active decay	20.8%	20.8%	34.8%	19.9%	20.4%
Proportion with experience of tooth extraction ⁱⁱ	3.0%	2.2%	2.3%	3.1%	2.2%
Proportion with dental abscess	1.1%	0.9%	0.9%	1.6%	1.0%
Proportion with teeth decayed into pulp	1.6%	2.5%	5.2%	4.0%	3.3%
Proportion with decay affecting incisors ⁱⁱⁱ	5.6%	1.7%	10.2%	5.6%	5.2%
Proportion with high levels of plaque present on upper front teeth ^{iv}	2.2%	4.2%	13.2%	2.2%	1.2%

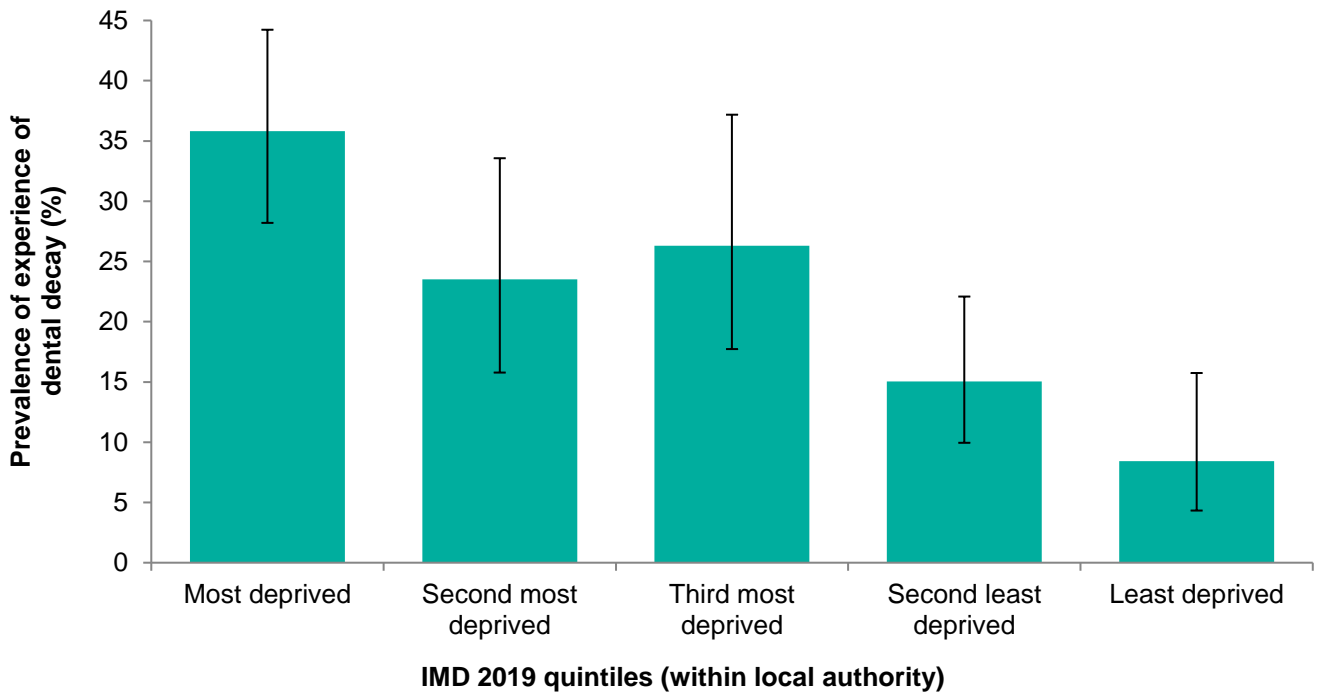
ⁱ generated by the children's services statistical neighbour benchmarking tool, the neighbour within the North East has "Very Close" comparator characteristics and the national neighbour 1 has "Very Close" comparator characteristics³.

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.

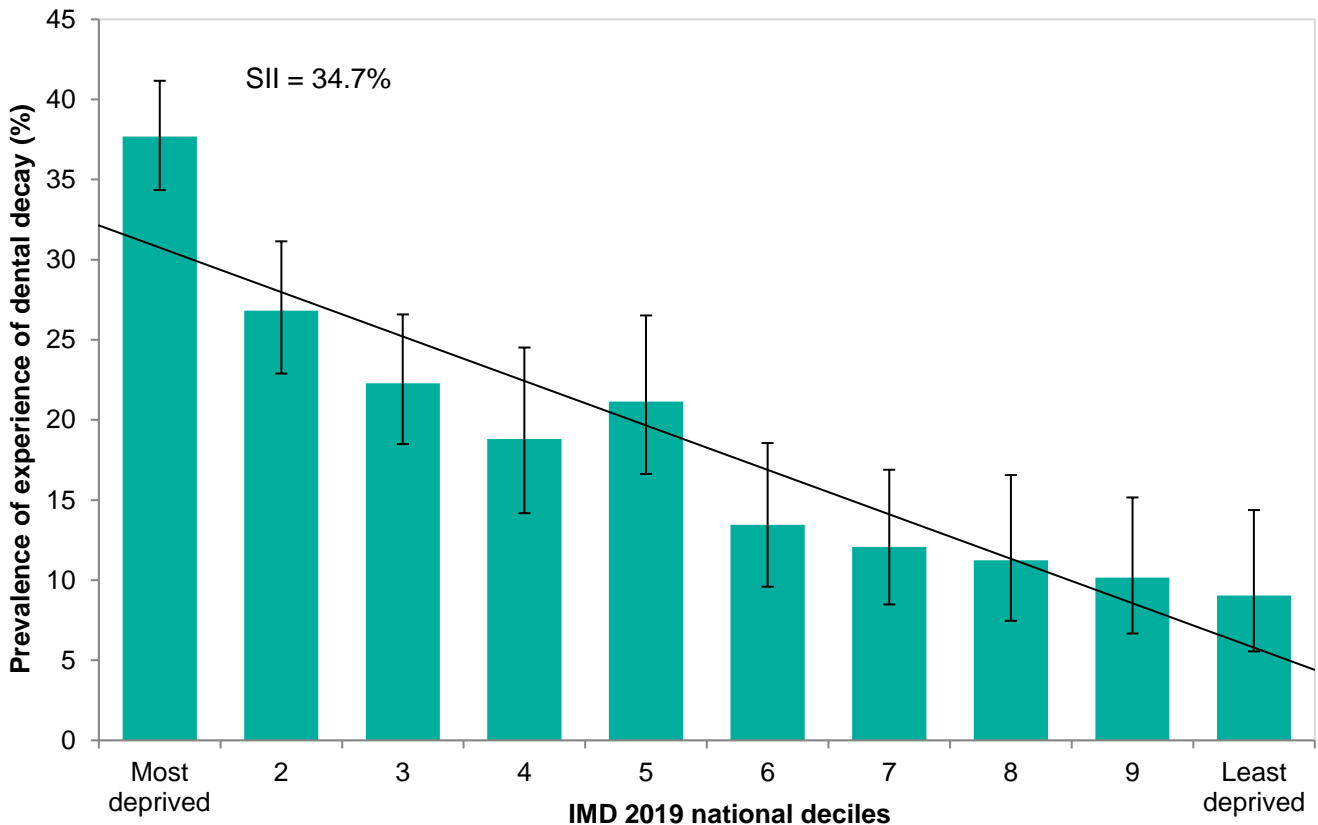
^{iv} indicative of poor tooth brushing habits.

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



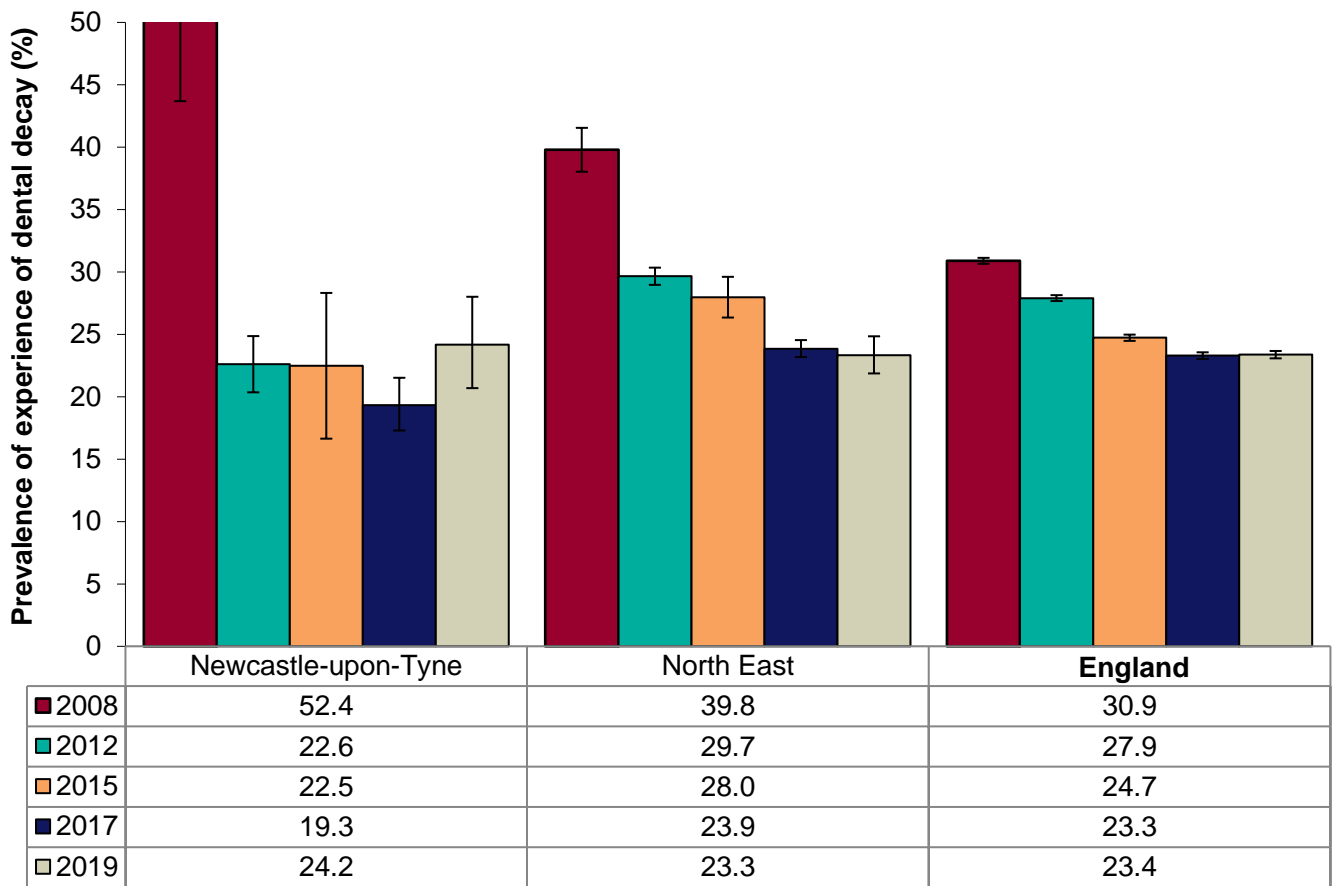
Error bars represent 95% confidence limits

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 Newcastle upon Tyne, the North East and England, by year.

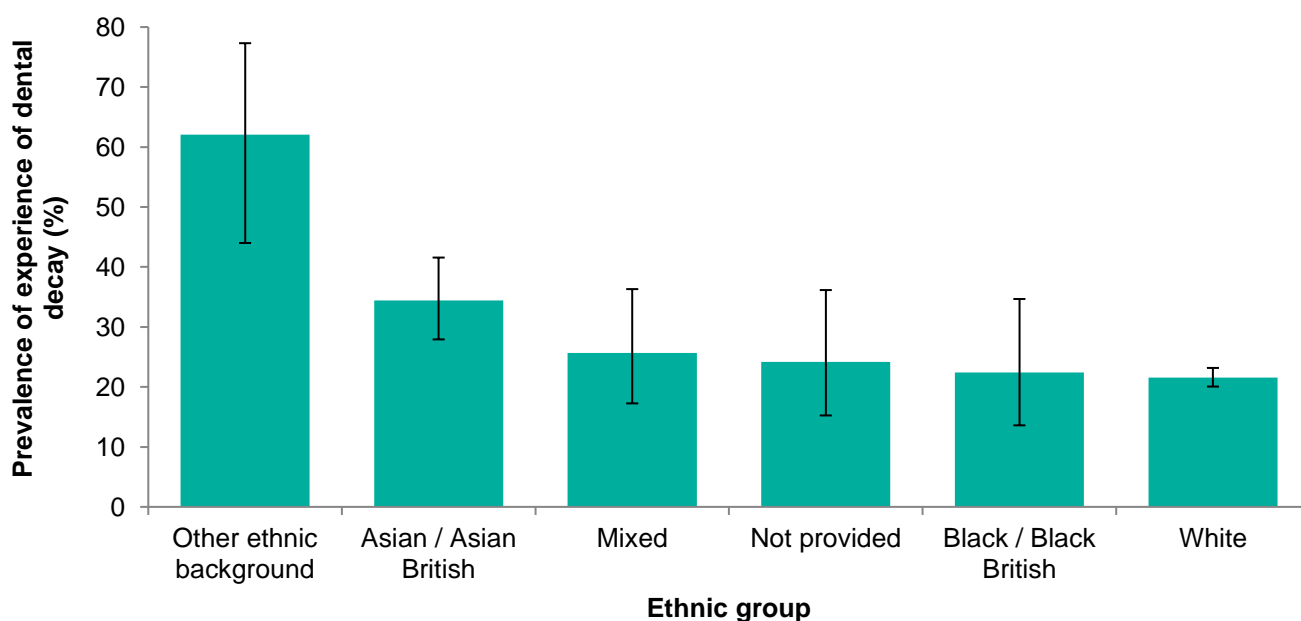


Error bars represent 95% confidence limits

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

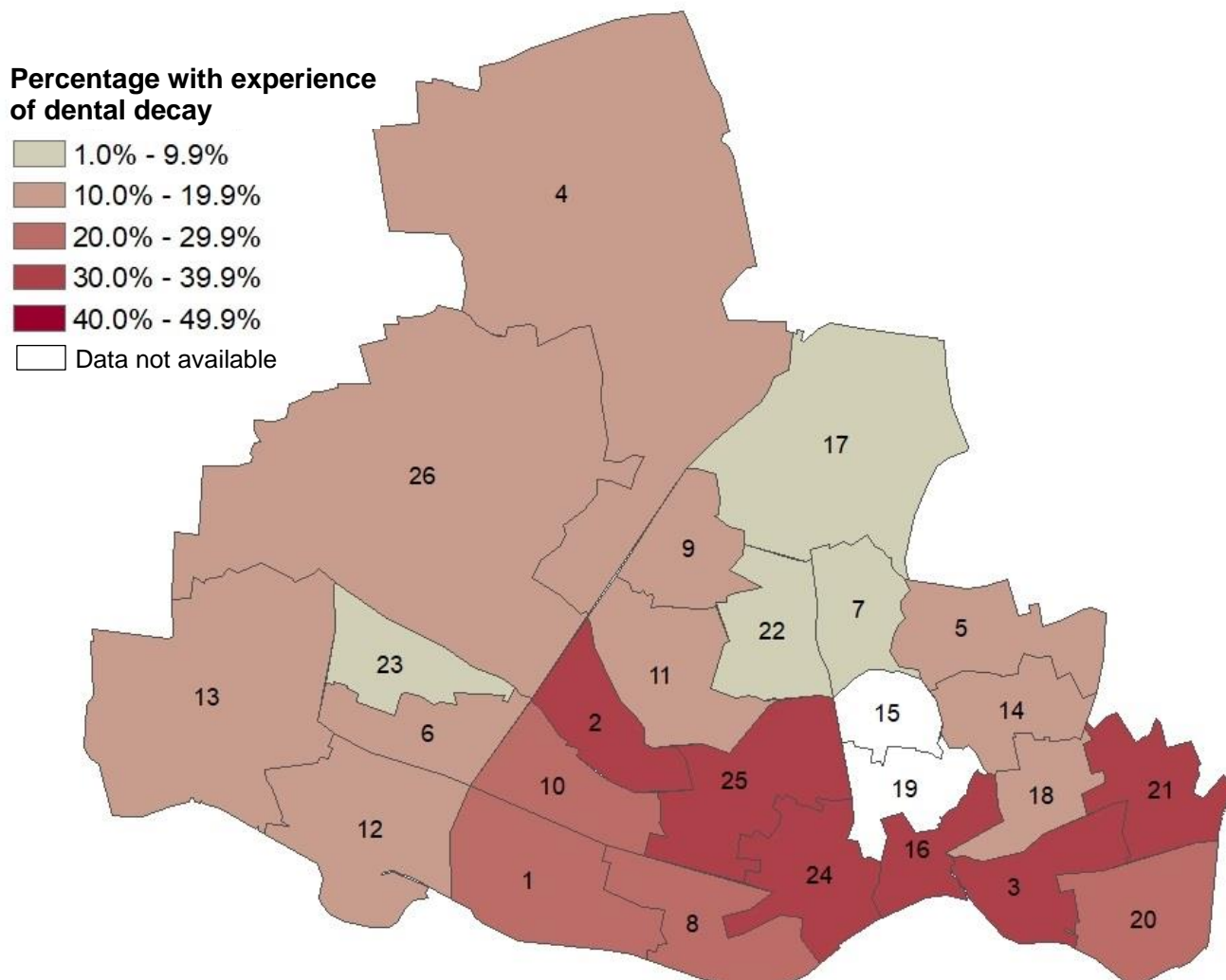
Ethnic group	Number of children examined (N)	Prevalence of experience of dental decay (%)	Mean number of teeth with experience of dental decay among children with any experience of dental decay n (95% CI)	Prevalence of dental decay affecting incisors (%)
Other ethnic background	29	62.1	4.8 (3.23 - 6.33)	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.



Error bars represent 95% confidence limits

Figure 6: Prevalence of experience of dental decay in 5-year-olds in Newcastle upon Tyne, by ward, 2017.



Key	Label
1	Benwell and Scotswood (20.9%)
2	Blakelaw (33.8%)
3	Byker (36.7%)
4	Castle (14.4%)
5	Dene (14.3%)
6	Denton (19.4%)
7	East Gosforth (6.3%)
8	Elswick (29.0%)
9	Fawdon (12.8%)
10	Fenham (20.5%)
11	Kenton (17.6%)
12	Lemington (16.7%)
13	Newburn (14.3%)

Key	Label
14	North Heaton (17.2%)
15	North Jesmond
16	Ouseburn (30.0%)
17	Parklands (6.1%)
18	South Heaton (15.8%)
19	South Jesmond
20	Walker (21.4%)
21	Walkergate (30.4%)
22	West Gosforth (6.4%)
23	Westerhope (2.4%)
24	Westgate (32.4%)
25	Wingrove (35.0%)
26	Woolsington (19.5%)

Summary

In Newcastle upon Tyne average levels of dental decay are similar to the England average. Within Newcastle upon Tyne, the highest levels of experience of dental decay are clustered around the Byker, Blakelaw, Wingrove and Westgate 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 surveys⁴.

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 years⁵.

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

References

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