



Barnsley

Published December 2020

Oral health of 5-year-old children

This profile describes the oral health of 5-year-olds living in Barnsley. 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 Barnsley 250 5-year-olds (approximately 76.9% 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 Barnsley, other local authorities in Yorkshire and The Humber and England.

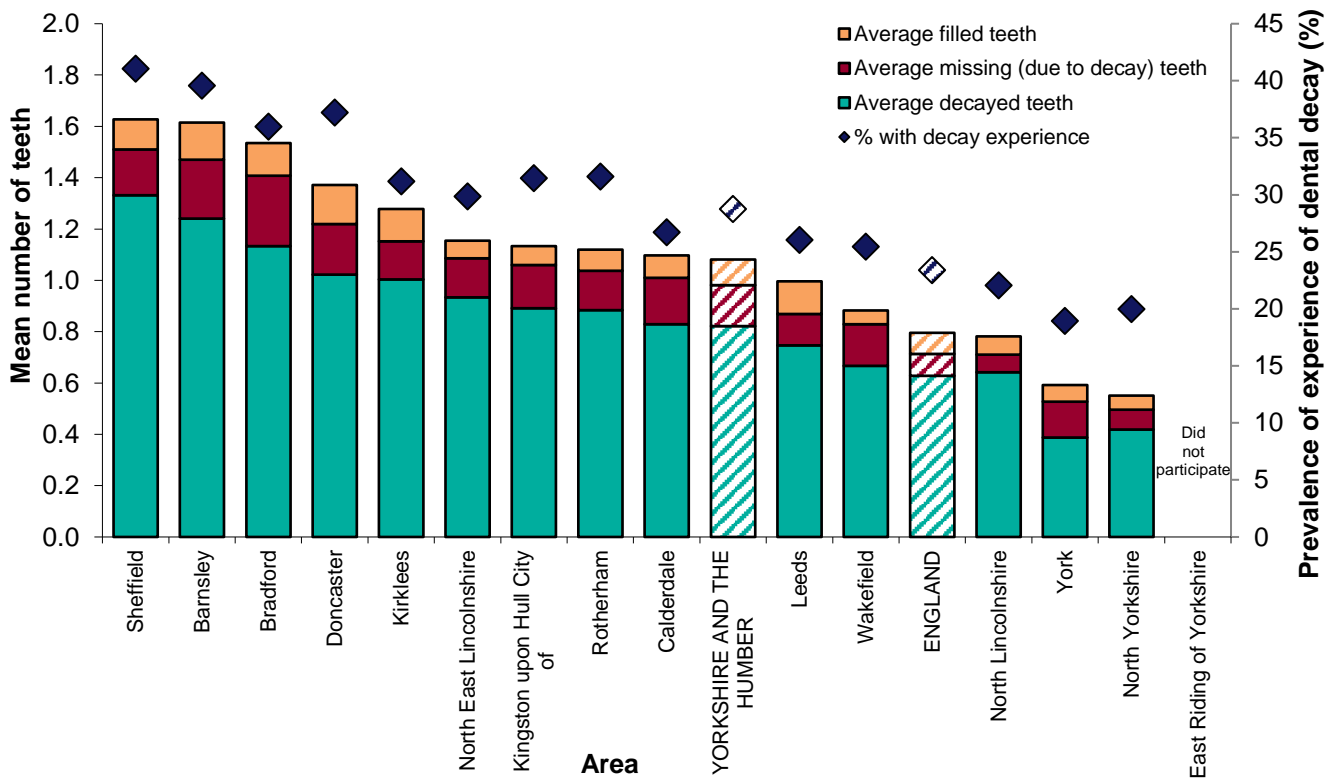


Table 1: Experience of dental decay in 5-year-olds in Barnsley, other local authorities in Yorkshire and The Humber and England.

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)
Sheffield	41.0	1.6 (1.26 - 1.99)	4.0 (3.32 - 4.60)
Barnsley	39.6	1.6 (1.25 - 1.98)	4.1 (3.42 - 4.74)
Doncaster	37.2	1.4 (1.06 - 1.68)	3.7 (3.07 - 4.30)
Bradford	36.0	1.5 (1.37 - 1.70)	4.3 (3.94 - 4.60)
Rotherham	31.6	1.1 (0.84 - 1.40)	3.5 (2.92 - 4.17)
Kingston upon Hull, City of	31.4	1.1 (0.85 - 1.42)	3.6 (2.96 - 4.25)
Kirklees	31.2	1.3 (0.98 - 1.58)	4.1 (3.40 - 4.80)
North East Lincolnshire	29.8	1.2 (0.86 - 1.45)	3.9 (3.21 - 4.53)
Yorkshire and The Humber	28.7	1.1 (1.02 - 1.14)	3.8 (3.62 - 3.90)
Calderdale	26.7	1.1 (0.83 - 1.36)	4.1 (3.51 - 4.70)
Leeds	26.0	1.0 (0.87 - 1.12)	3.8 (3.49 - 4.16)
Wakefield	25.4	0.9 (0.65 - 1.11)	3.5 (2.85 - 4.09)
England	23.4	0.8 (0.78 - 0.81)	3.4 (3.36 - 3.44)
North Lincolnshire	22.0	0.8 (0.51 - 1.06)	3.5 (2.66 - 4.44)
North Yorkshire	20.0	0.6 (0.48 - 0.63)	2.8 (2.50 - 3.01)
York	18.9	0.6 (0.25 - 0.94)	3.1 (2.62 - 3.64)
East Riding of Yorkshire	Did not participate		

Table 2. Measures of oral health among 5-year-olds in Barnsley, it's statistical neighbours,ⁱ Yorkshire and The Humber and England.

	Barnsley	Statistical neighbour within Yorkshire and The Humber: Doncaster	Statistical neighbour comparator 1: Redcar and Cleveland	Yorkshire and The Humber	England
Prevalence of experience of dental decay	39.6%	37.2%	28.0%	28.7%	23.4%
Mean number of teeth with experience of dental decay	1.6	1.4	1.1	1.1	0.8
Mean number of teeth with experience of decay in those with experience of dental decay	4.1	3.7	4.1	3.8	3.4
Mean number of decayed teeth in those with experience of dental decay	3.1	2.9	3.2	2.8	2.7
Proportion with active decay	34.7%	33.2%	25.1%	24.8%	20.4%
Proportion with experience of tooth extraction ⁱⁱ	5.5%	3.8%	3.0%	3.6%	2.2%
Proportion with dental abscess	1.9%	3.0%	2.5%	1.4%	1.0%
Proportion with teeth decayed into pulp	9.9%	7.0%	6.4%	5.2%	3.3%
Proportion with decay affecting incisors ⁱⁱⁱ	11.3%	9.3%	10.7%	7.6%	5.2%
Proportion with high levels of plaque present on upper front teeth ^{iv}	0.0%	0.0%	0.8%	1.3%	1.2%

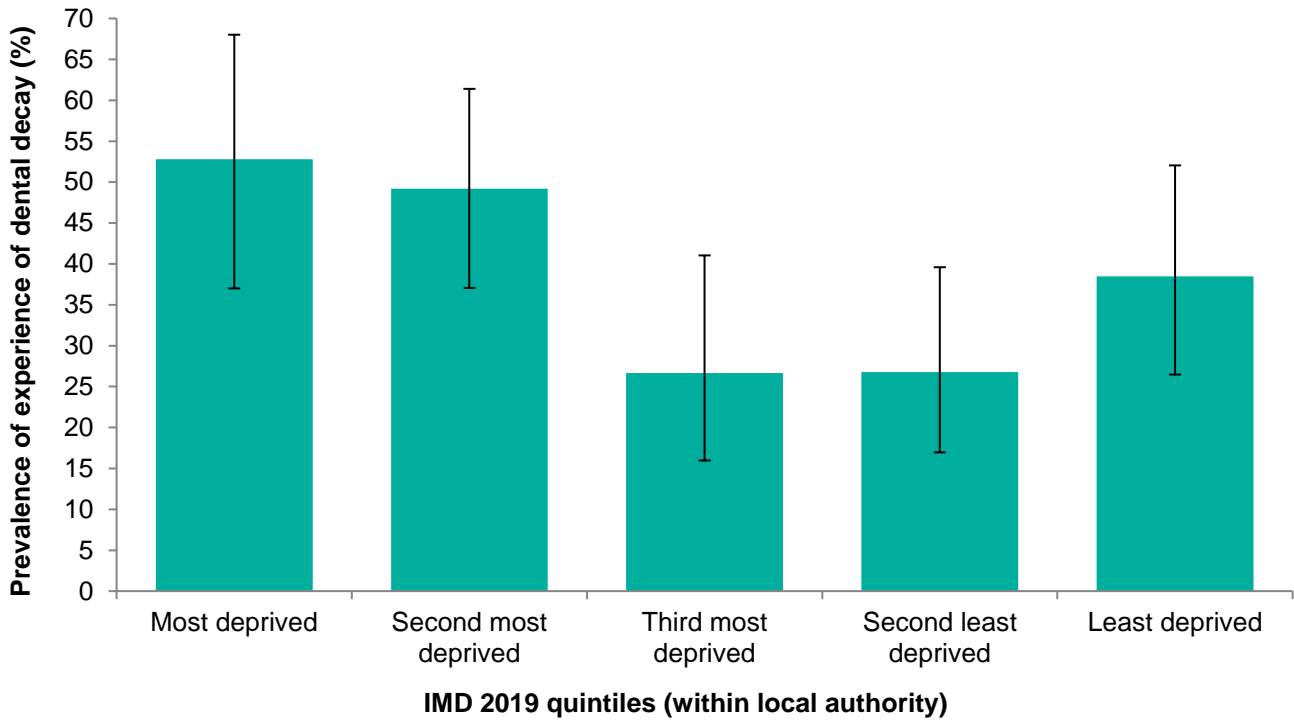
ⁱ generated by the children's services statistical neighbour benchmarking tool, the neighbour within Yorkshire and The Humber has "Extremely Close" comparator characteristics and the national neighbour 1 has "Extremely Close" comparator characteristics³.

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.

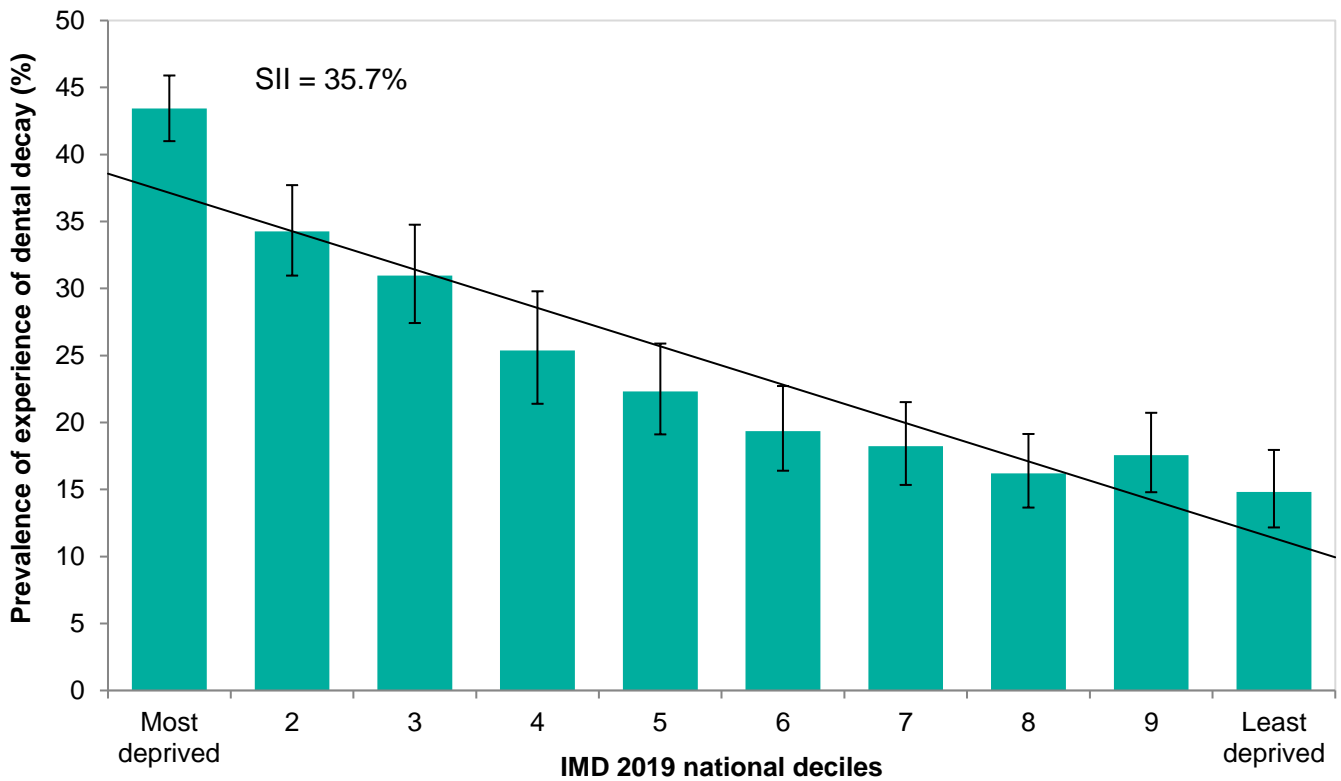
^{iv} indicative of poor tooth brushing habits.

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



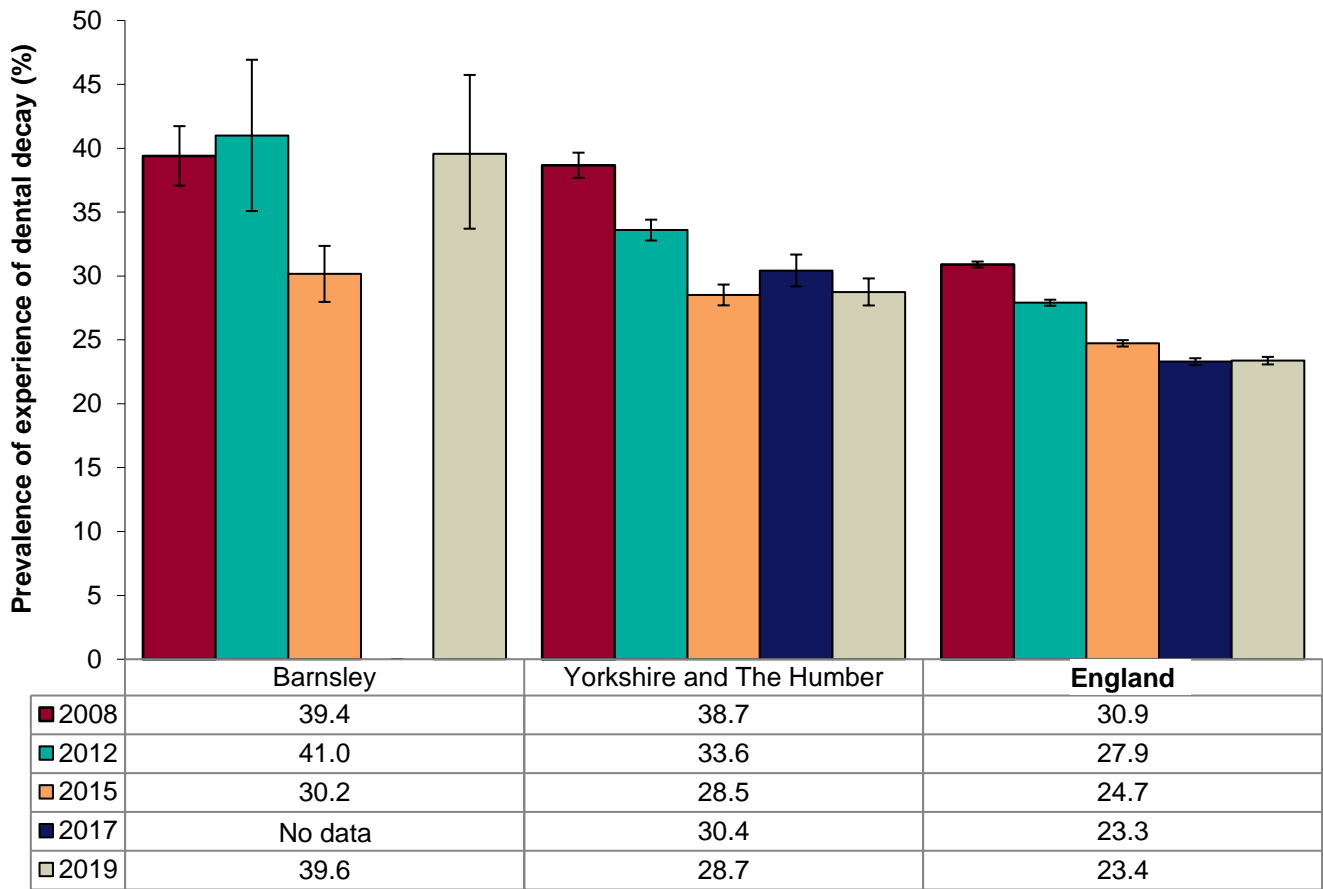
Error bars represent 95% confidence limits

Figure 3: Slope index of inequality in the prevalence of experience of dental decay in 5-year-olds in Yorkshire and The Humber.



Error bars represent 95% confidence limits

Figure 4: Prevalence of experience of dental decay in 5-year-olds in Barnsley, Yorkshire and The Humber and England, by year.

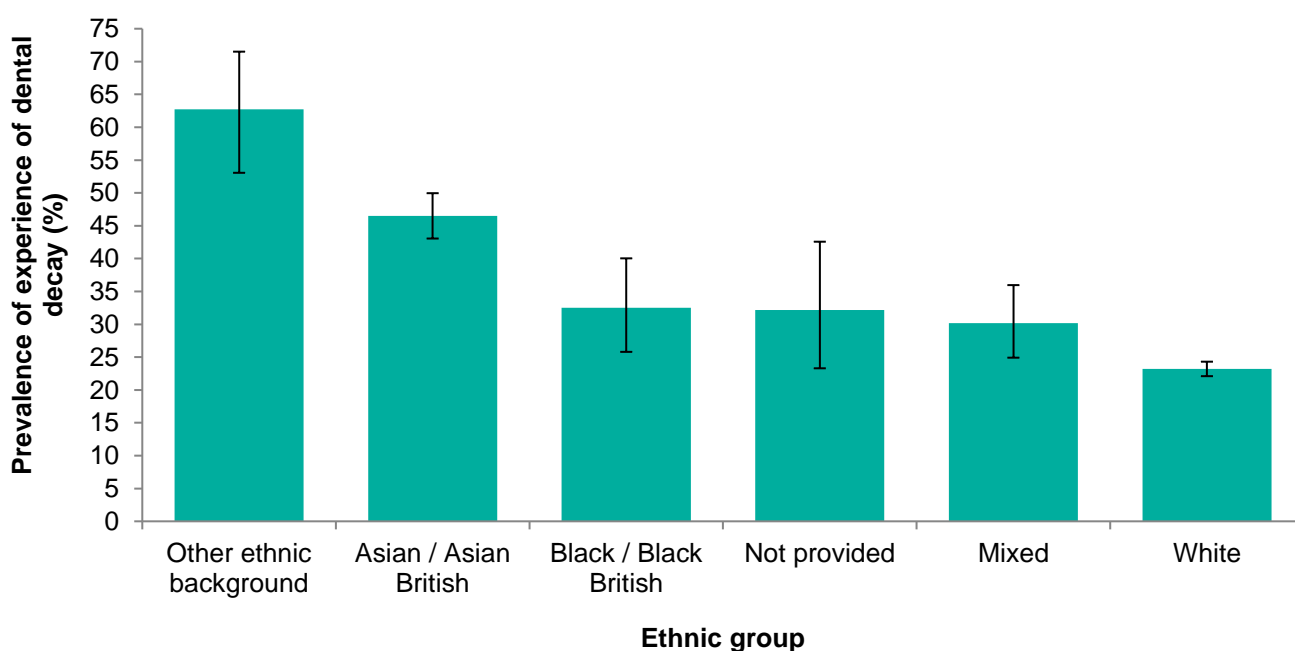


Error bars represent 95% confidence limits

Table 3: Experience of dental decay in 5-year-olds in Yorkshire and The Humber, 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	102	62.7	5.2 (4.26 - 6.08)	31.4
Asian / Asian British	798	46.5	4.4 (4.10 - 4.78)	16.3
Black / Black British	163	32.5	4.3 (3.36 - 5.21)	11.7
Not provided	87	32.2	4.2 (2.89 - 5.47)	8.0
Mixed	262	30.2	3.7 (3.04 - 4.35)	7.6
White	5,607	23.2	3.3 (3.17 - 3.47)	4.9
Yorkshire and The Humber	7,019	28.7	1.1 (3.62 - 3.90)	7.6

Figure 5: Prevalence of experience of dental decay in 5-year-olds in Yorkshire and The Humber, by ethnic group.



Error bars represent 95% confidence limits

Table 4: Prevalence and severity of experience of dental decay in 5-year-olds in Barnsley, by ward area council.

Ward area council	Prevalence of experience of dental decay (%)	Mean number of teeth with experience of dental decay in all examined children n (95% CI)	Mean number of teeth with experience of dental decay in children with any decay experience n (95% CI)
Central Area Council	48.4	2.4 (1.66 - 3.04)	4.9 (3.87 - 5.86)
Dearne Area Council	28.9	1.1 (0.34 - 1.82)	3.7 (1.95 - 5.50)
North Barnsley Area Council	39.6	1.2 (0.64 - 1.78)	3.0 (2.01 - 4.08)
North East Barnsley Area Council	Data not available		
Penistone Area Council	33.3	1.2 (0.21 - 2.15)	3.5 (1.13 - 5.96)
South Barnsley Area Council	16.7	0.4 (0.01 - 0.79)	Data not available

Summary

In Barnsley average levels of dental decay are higher than the average for England. Within Barnsley, the highest levels of experience of dental decay are clustered around the Central Area and North Barnsley Area council wards.

The small sample size means it is not possible to provide information at ward level. 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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