



Dudley

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Oral health of 5-year-old children

This profile describes the oral health of 5-year-olds living in Dudley. 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 Dudley 1,702 5-year-olds (approximately 57.8% 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 Dudley, other local authorities in the West Midlands and England.

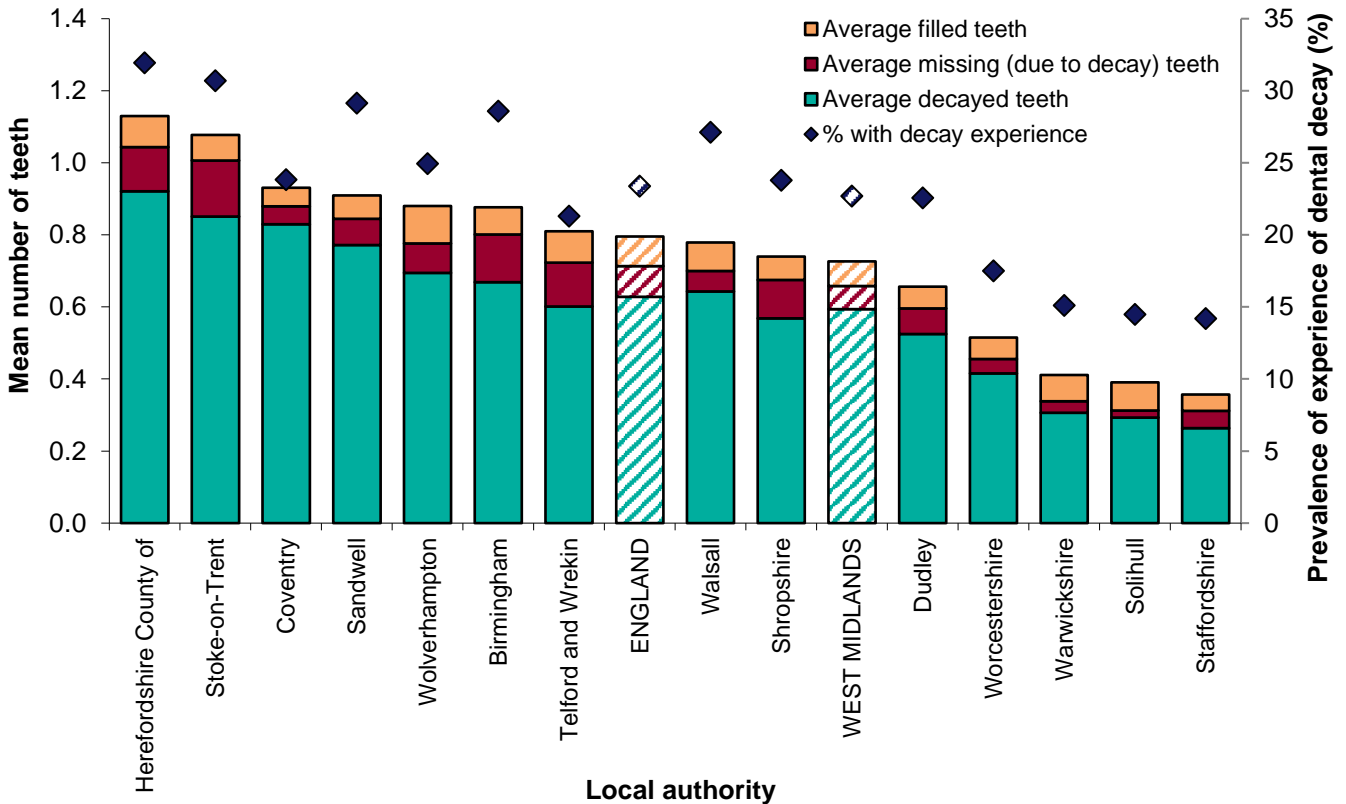


Table 1: Experience of dental decay in 5-year-olds in Dudley, other local authorities in the West Midlands and England.

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)
Herefordshire, County of	31.9	1.1 (0.92 - 1.33)	3.5 (3.08 - 3.99)
Stoke-on-Trent	30.7	1.1 (0.84 - 1.31)	3.5 (3.01 - 4.02)
Sandwell	29.1	0.9 (0.81 - 1.01)	3.1 (2.88 - 3.36)
Birmingham	28.6	0.9 (0.69 - 1.06)	3.1 (2.59 - 3.54)
Walsall	27.1	0.8 (0.68 - 0.87)	2.9 (2.62 - 3.12)
Wolverhampton	24.9	0.9 (0.79 - 0.97)	3.5 (3.29 - 3.77)
Coventry	23.8	0.9 (0.84 - 1.03)	3.9 (3.63 - 4.18)
Shropshire	23.8	0.7 (0.44 - 1.04)	3.1 (2.28 - 3.94)
ENGLAND	23.4	0.8 (0.78 - 0.81)	3.4 (3.36 - 3.44)
WEST MIDLANDS	22.7	0.7 (0.70 - 0.75)	3.2 (3.11 - 3.29)
Dudley	22.6	0.7 (0.57 - 0.74)	2.9 (2.64 - 3.18)
Telford and Wrekin	21.3	0.8 (0.50 - 1.12)	3.8 (2.91 - 4.71)
Worcestershire	17.5	0.5 (0.46 - 0.57)	2.9 (2.74 - 3.15)
Warwickshire	15.1	0.4 (0.33 - 0.49)	2.7 (2.36 - 3.09)
Solihull	14.5	0.4 (0.23 - 0.55)	2.7 (2.08 - 3.31)
Staffordshire	14.2	0.4 (0.3 - 0.42)	2.5 (2.23 - 2.8)

Table 2. Measures of oral health among 5-year-olds in Dudley, it's statistical neighbours,ⁱ the West Midlands and England.

	Dudley	Statistical neighbour within West Midlands: Telford and Wrekin	Statistical neighbour comparator 1: Rotherham	West Midlands	England
Prevalence of experience of dental decay	22.6%	21.3%	31.6%	22.7%	23.4%
Mean number of teeth with experience of dental decay	0.7	0.8	1.1	0.7	0.8
Mean number of teeth with experience of decay in those with experience of dental decay	2.9	3.8	3.5	3.2	3.4
Mean number of decayed teeth in those with experience of dental decay	2.3	3.0	2.8	2.6	2.7
Proportion with active decay	19.8%	18.8%	27.4%	20.1%	20.4%
Proportion with experience of tooth extraction ⁱⁱ	1.7%	3.6%	4.2%	1.7%	2.2%
Proportion with dental abscess	0.3%	2.8%	1.2%	0.8%	1.0%
Proportion with teeth decayed into pulp	2.3%	3.9%	5.9%	2.9%	3.3%
Proportion with decay affecting incisors ⁱⁱⁱ	4.7%	8.3%	9.7%	4.9%	5.2%
Proportion with high levels of plaque present on upper front teeth ^{iv}	0.8%	2.5%	0.0%	0.9%	1.2%

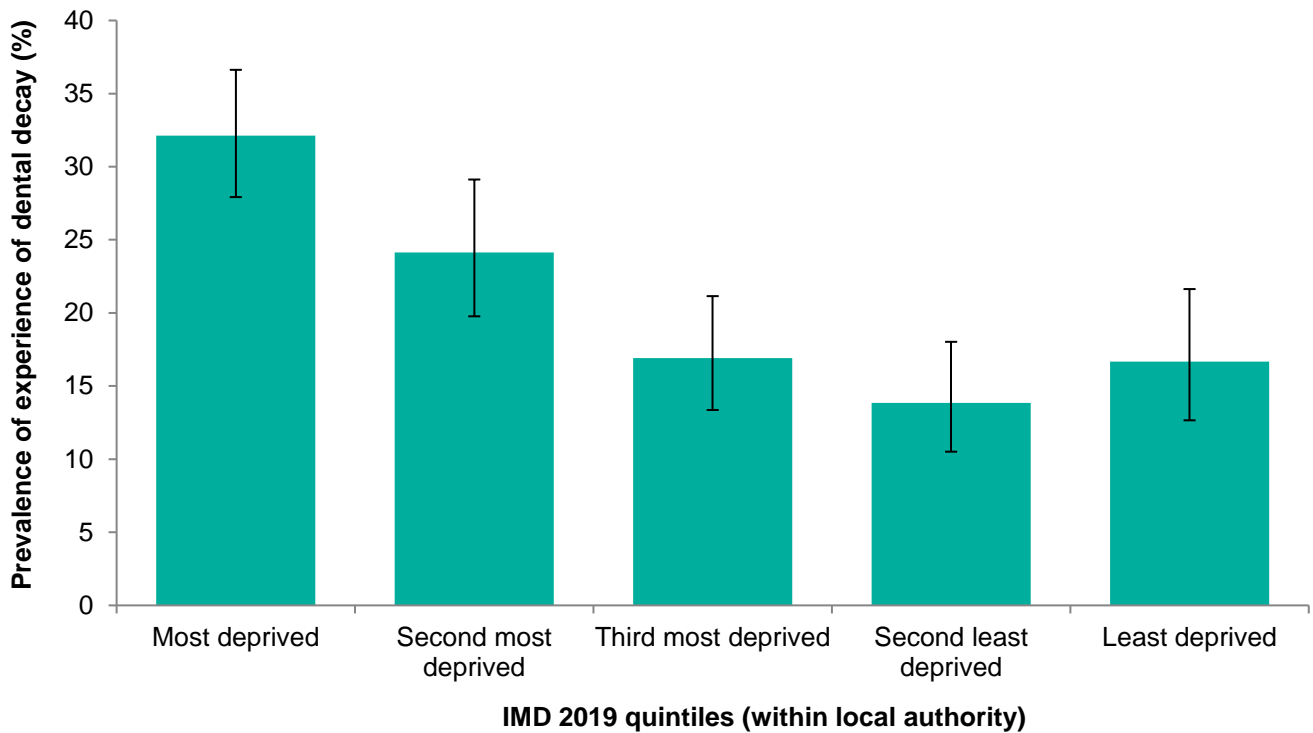
ⁱ generated by the children's services statistical neighbour benchmarking tool, the neighbour within the West Midlands has "Very Close" comparator characteristics and the national neighbour 1 has "Very Close" comparator characteristics³.

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.

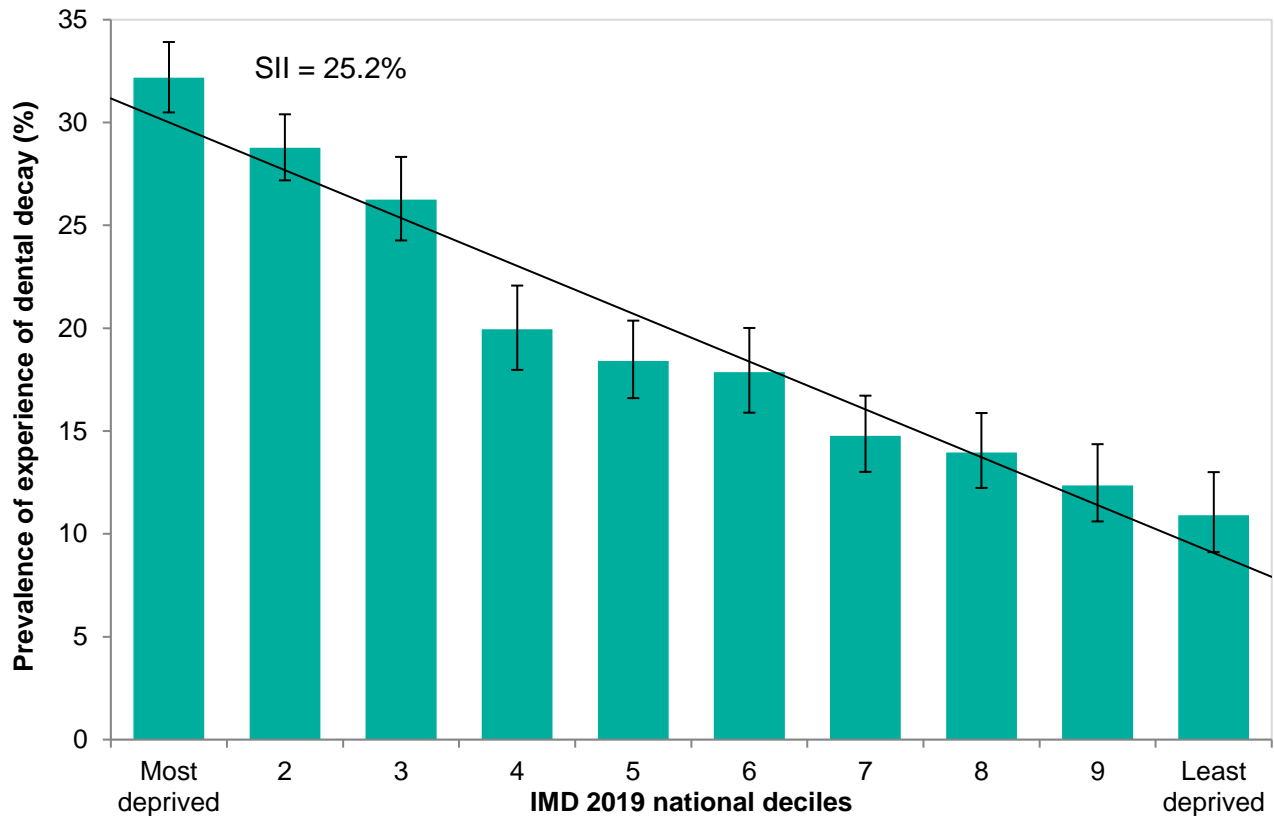
^{iv} indicative of poor tooth brushing habits.

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



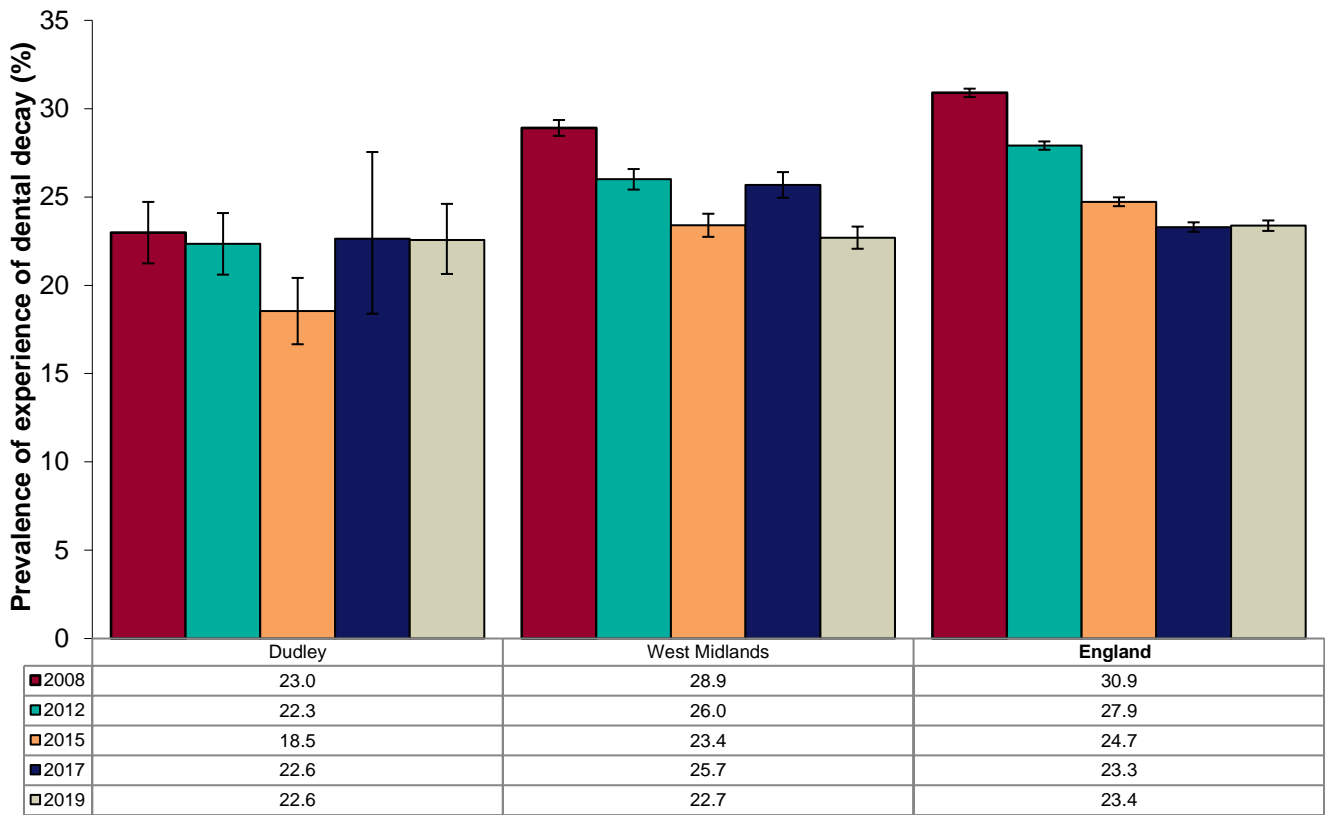
Error bars represent 95% confidence limits

Figure 3: Slope index of inequality in the prevalence of experience of dental decay in 5-year-olds in the West Midlands.



Error bars represent 95% confidence limits

Figure 4: Prevalence of experience of dental decay in 5-year-olds in Dudley, the West Midlands and England, by year.

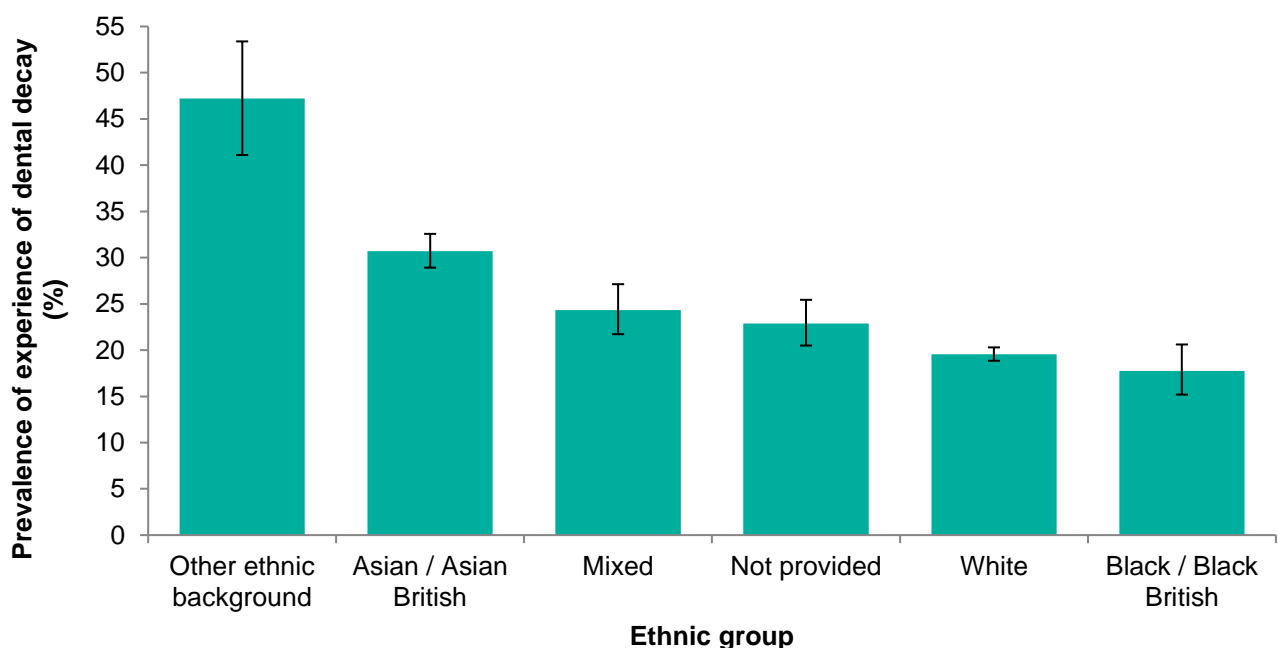


Error bars represent 95% confidence limits

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

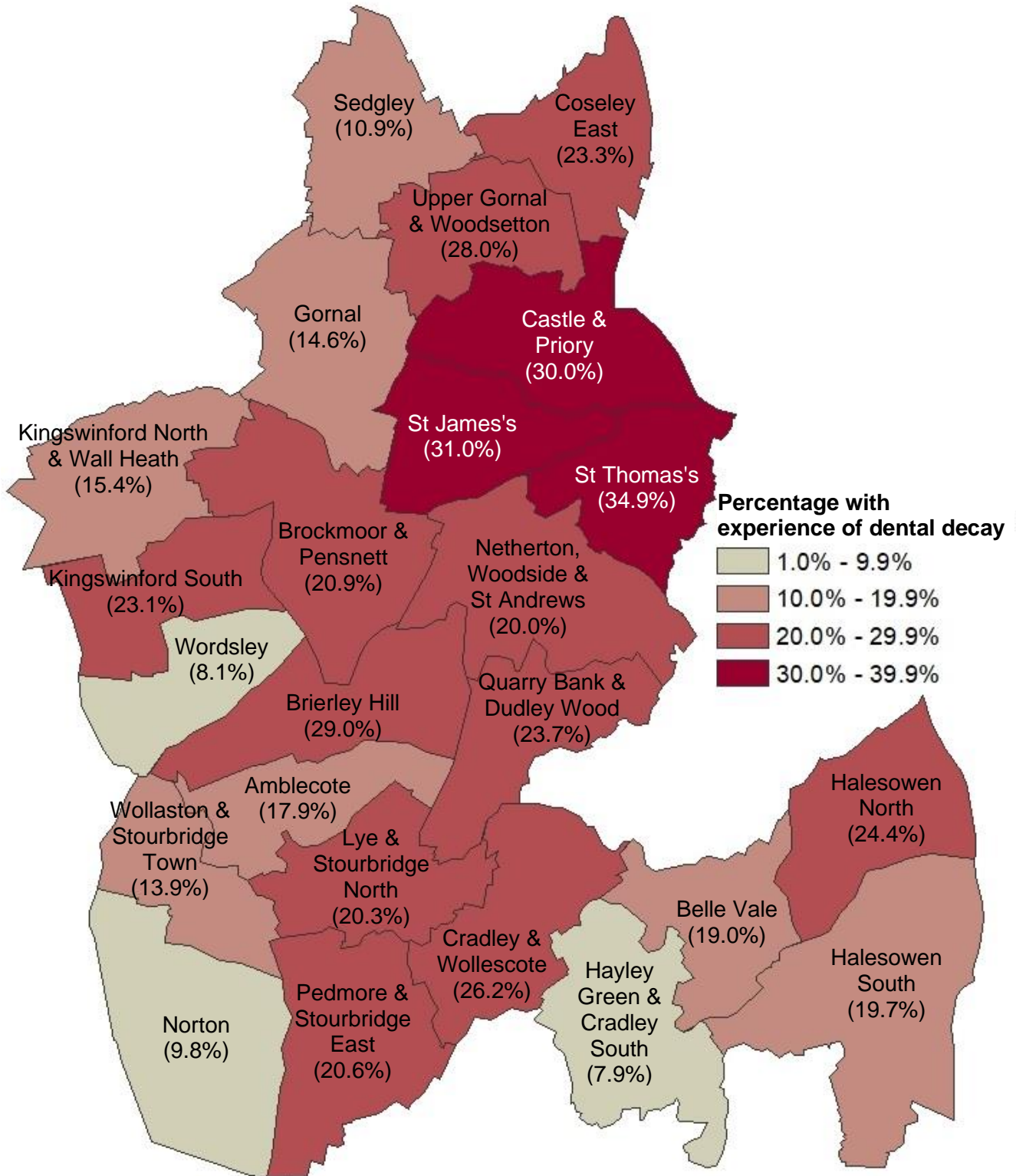
Ethnic group	Number of children examined (N)	Prevalence of experience of dental decay (%)	Mean number of teeth with experience of dental decay among children with any experience of dental decay n (95% CI)	Prevalence of dental decay affecting incisors (%)
Other ethnic background	250	47.2	4.5 (3.90 - 5.12)	14.4
Asian / Asian British	2445	30.7	3.6 (3.41 - 3.82)	9.6
Mixed	966	24.3	3.1 (2.73 - 3.37)	4.2
Not provided	1106	22.9	3.3 (2.95 - 3.66)	6.8
White	11567	19.6	2.9 (2.84 - 3.05)	3.2
Black / Black British	761	17.7	3.2 (2.74 - 3.64)	4.2
West Midlands	17,095	22.7	3.2 (3.11 - 3.29)	4.9

Figure 5: Prevalence of experience of dental decay in 5-year-olds in the West Midlands, by ethnic group.



Error bars represent 95% confidence limits

Figure 6: Prevalence of experience of dental decay in 5-year-olds in Dudley, by Ward.



Summary

In Dudley average levels of dental decay are similar to the average for England. Within Dudley, the highest levels of experience of dental decay are clustered around the Castle & Priory, St James' and St Thomas' wards.

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

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].
2. Pine, C.M., Pitts, N.B. and Nugent, Z.J. (1997a). British Association for the Study of Community Dentistry (BASCD) guidance on the statistical aspects of training and calibration of examiners for surveys of child dental health. A BASCD co-ordinated dental epidemiology programme quality standard. Community Dental Health 14 (Supplement 1):18-29.
3. Children's services statistical neighbour benchmarking tool [online]. Available at: www.gov.uk/government/publications/local-authority-interactive-tool-lait [Accessed 29 May 2020].
4. Public Health England (2016). Commissioning high quality information to support oral health improvement. A toolkit about dental epidemiology for local authorities, commissioners and partners [Online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/773332/Commissioning_High_Quality_Information_to_Support_Oral_Health_Improvement.pdf

5. Public Health England (2014). Local authorities improving oral health: commissioning better oral health for children and young people [Online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/321503/CBOHMaindocumentJUNE2014.pdf

More information is available at www.gov.uk/government/collections/oral-health
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