



Luton

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Oral health of 5-year-old children

This profile describes the oral health of 5-year-olds living in Luton. 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 Luton 266 5-year-olds (approximately 66.8% 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 Luton, other local authorities in the East of England and England.

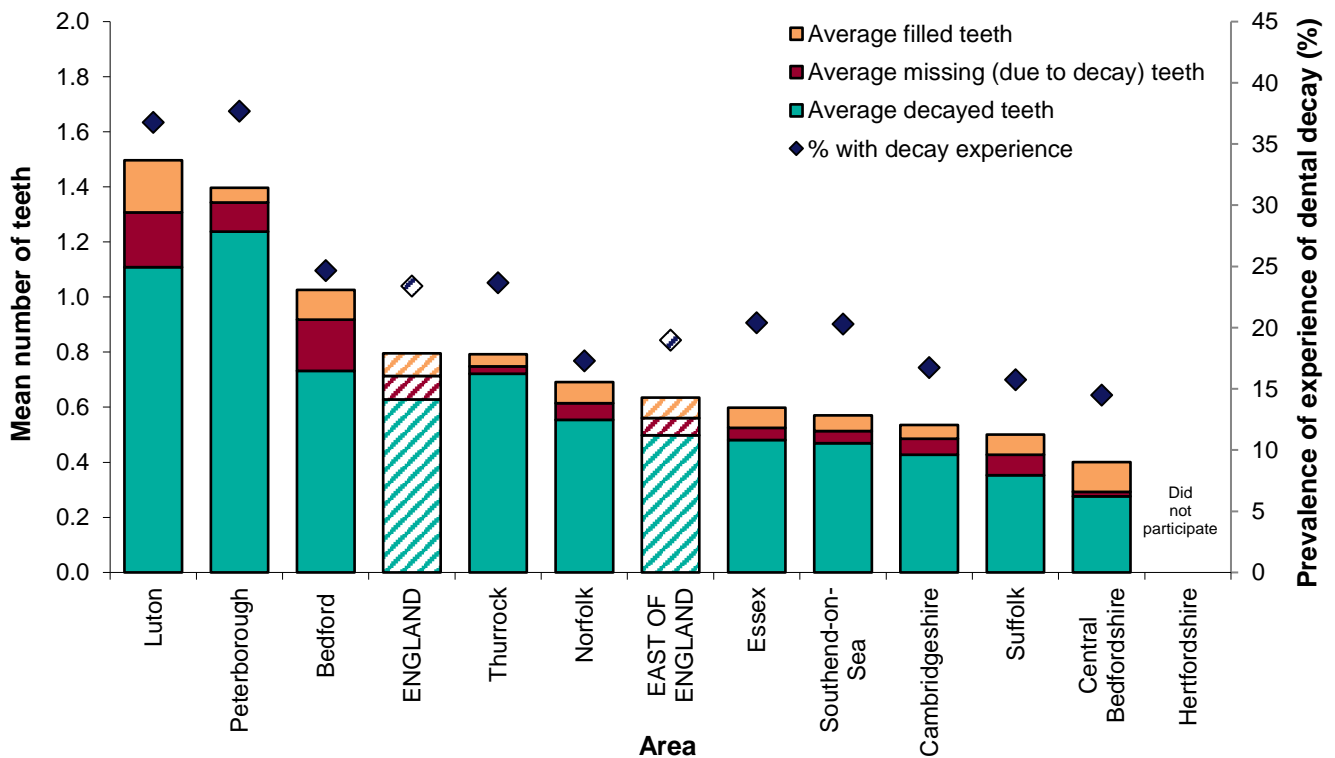


Table 1: Experience of dental decay in 5-year-olds in Luton, other local authorities in the East of England and England.

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)
Peterborough	37.7	1.4 (1.05 - 1.75)	3.7 (3.03 - 4.38)
Luton	36.8	1.5 (1.16 - 1.84)	4.1 (3.39 - 4.75)
Bedford	24.7	1.0 (0.73 - 1.33)	4.2 (3.40 - 4.92)
Thurrock	23.6	0.8 (0.53 - 1.06)	3.3 (2.63 - 4.07)
England	23.4	0.8 (0.78 - 0.81)	3.4 (3.36 - 3.44)
Essex	20.4	0.6 (0.54 - 0.66)	2.9 (2.73 - 3.15)
Southend-on-Sea	20.3	0.6 (0.34 - 0.80)	2.8 (2.06 - 3.56)
East of England	19.0	0.6 (0.60 - 0.67)	3.3 (3.21 - 3.48)
Norfolk	17.3	0.7 (0.60 - 0.78)	4.0 (3.67 - 4.33)
Cambridgeshire	16.7	0.5 (0.44 - 0.63)	3.2 (2.79 - 3.61)
Suffolk	15.7	0.5 (0.42 - 0.58)	3.2 (2.85 - 3.52)
Central Bedfordshire	14.5	0.4 (0.19 - 0.61)	2.8 (1.81 - 3.74)
Hertfordshire	Did not participate		

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

	Luton	Statistical neighbour within East of England: Peterborough	Statistical neighbour comparator 1: Birmingham	East of England	England
Prevalence of experience of dental decay	36.8%	37.7%	28.6%	19.0%	23.4%
Mean number of teeth with experience of dental decay	1.5	1.4	0.9	0.6	0.8
Mean number of teeth with experience of decay in those with experience of dental decay	4.1	3.7	3.1	3.3	3.4
Mean number of decayed teeth in those with experience of dental decay	3.2	3.3	2.3	2.6	2.7
Proportion with active decay	32.1%	35.8%	24.2%	16.3%	20.4%
Proportion with experience of tooth extraction ⁱⁱ	5.5%	2.7%	2.2%	1.8%	2.2%
Proportion with dental abscess	1.3%	4.5%	0.0%	0.7%	1.0%
Proportion with teeth decayed into pulp	7.7%	8.9%	3.7%	2.5%	3.3%
Proportion with decay affecting incisors ⁱⁱⁱ	13.3%	11.0%	6.4%	3.5%	5.2%
Proportion with high levels of plaque present on upper front teeth ^{iv}	1.4%	0.0%	0.8%	0.5%	1.2%

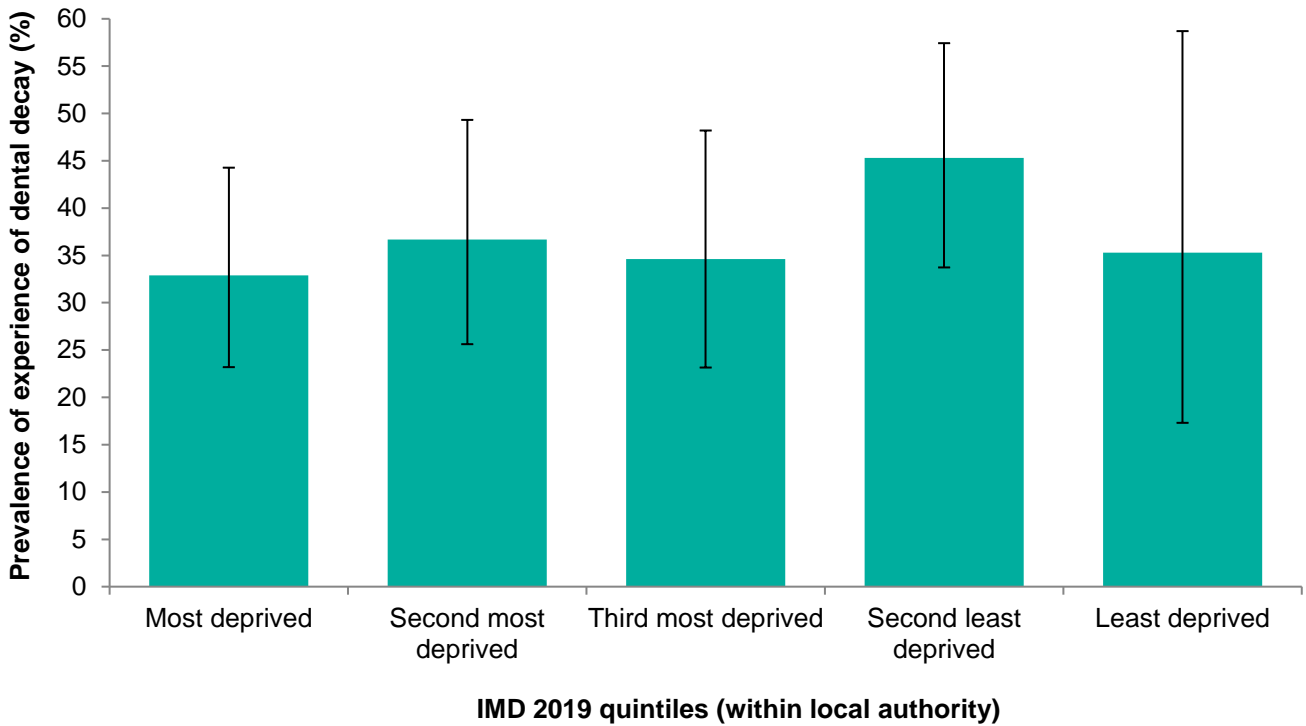
ⁱ generated by the children's services statistical neighbour benchmarking tool, the neighbour within the East of England has "Somewhat close" comparator characteristics and the national neighbour 1 has "Very Close" comparator characteristics³.

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.

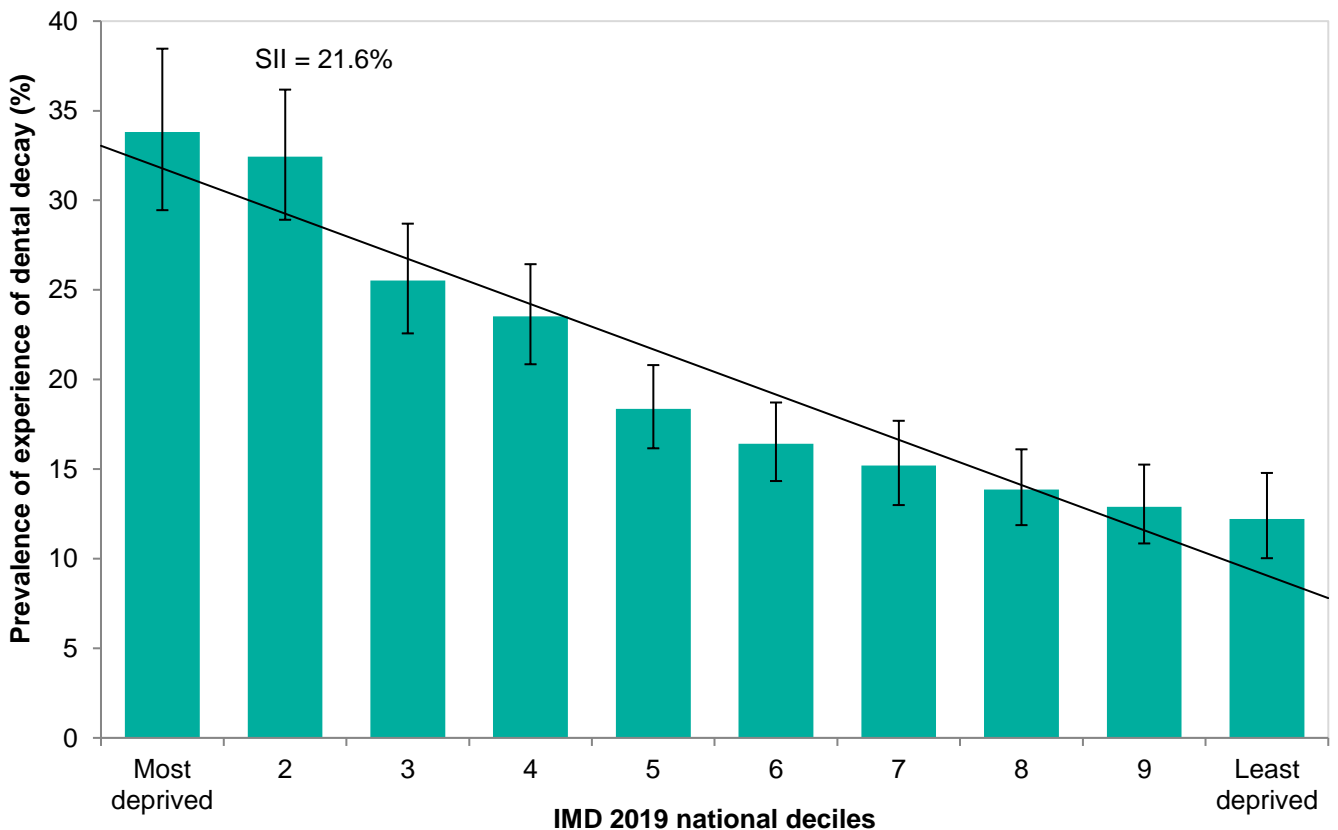
^{iv} indicative of poor tooth brushing habits.

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



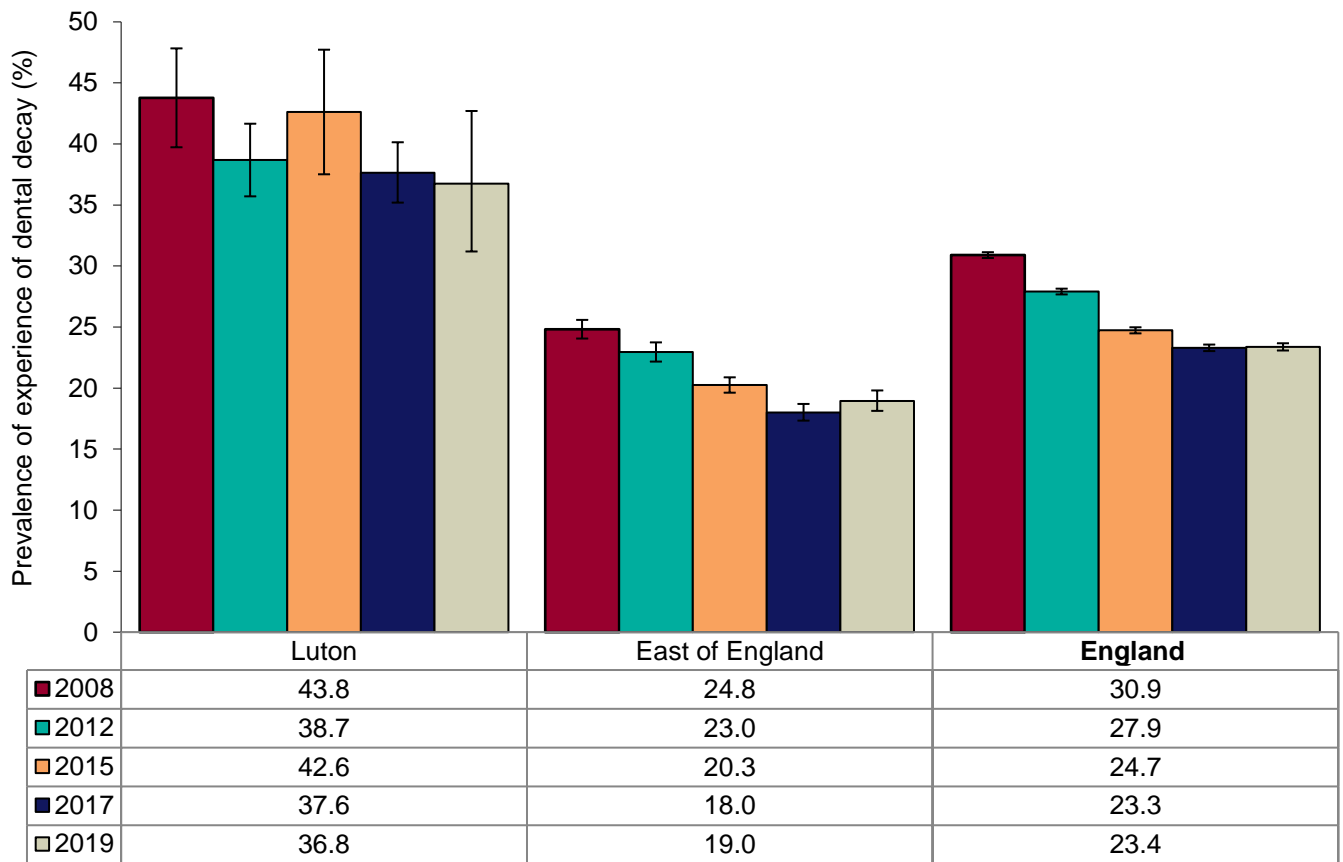
Error bars represent 95% confidence limits

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



Error bars represent 95% confidence limits

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

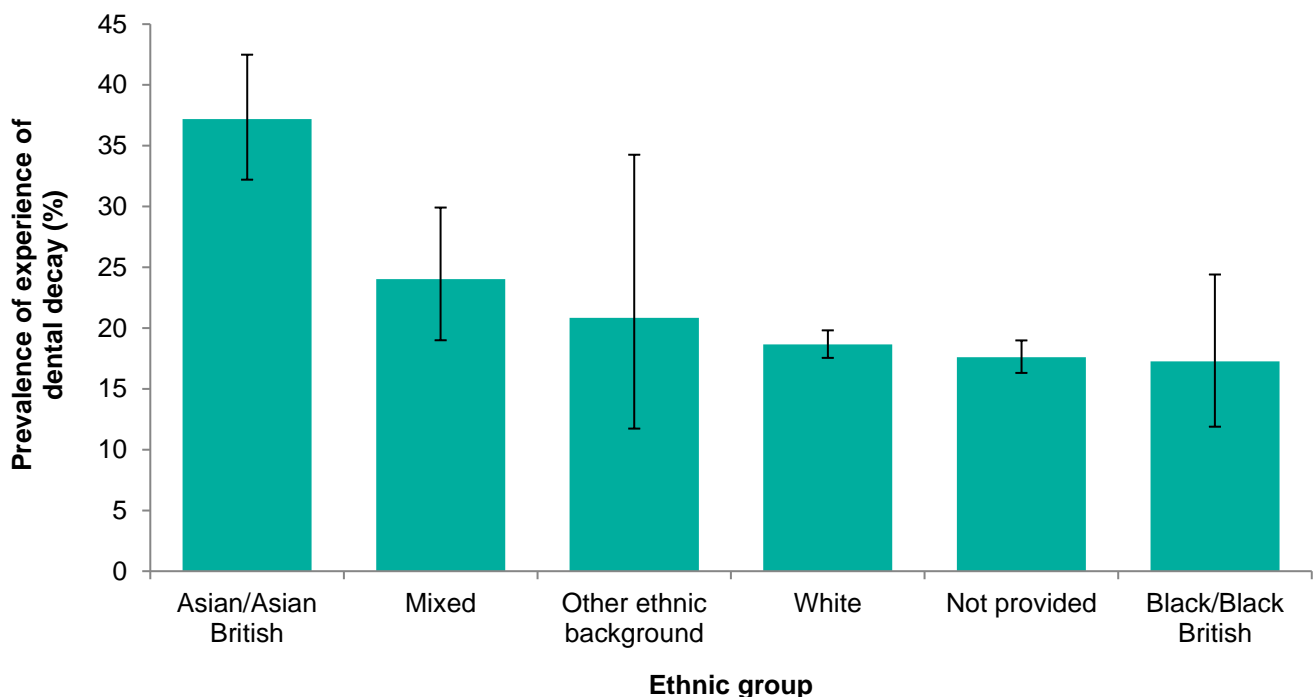


Error bars represent 95% confidence limits

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

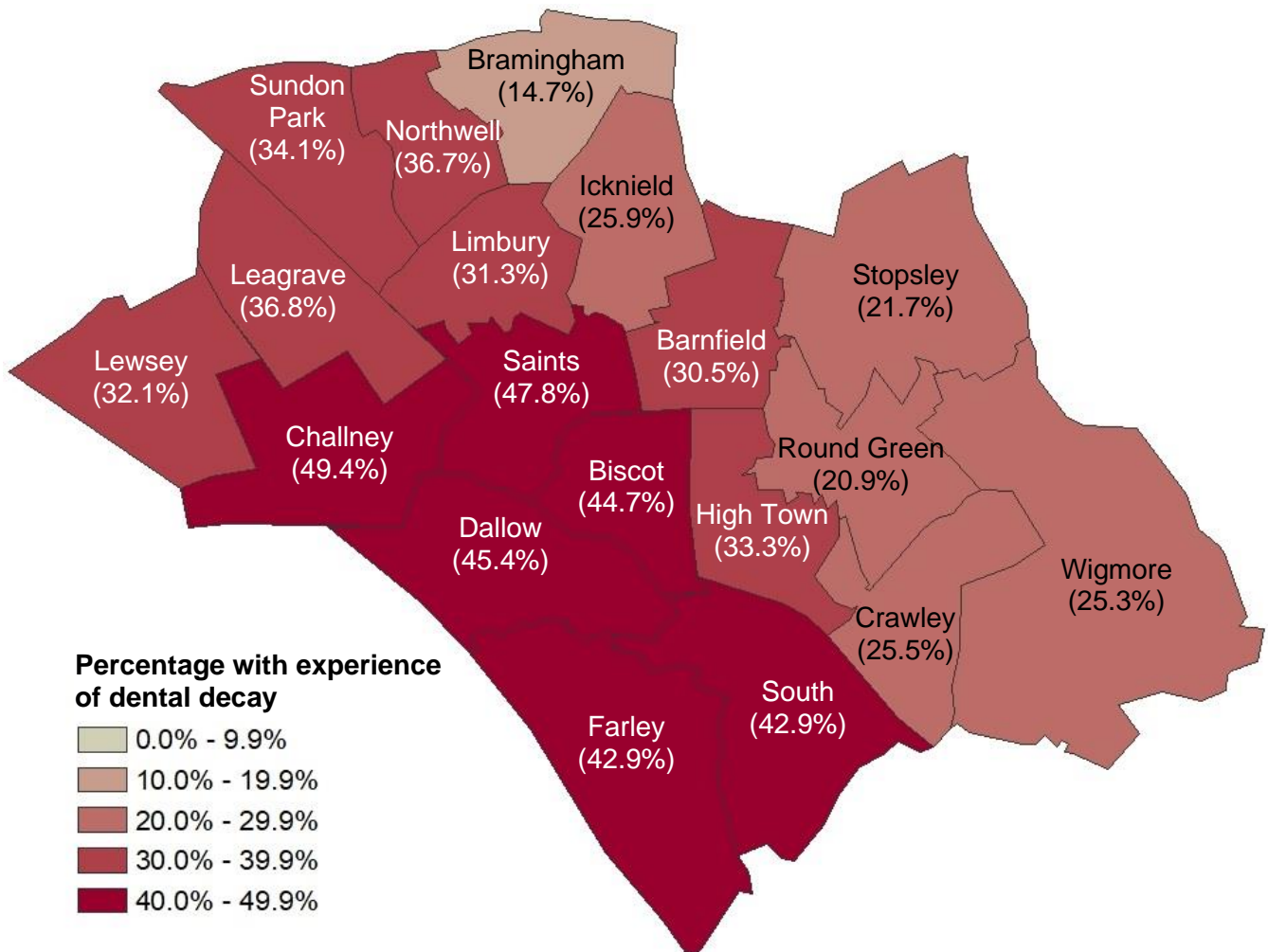
Ethnic group	Number of children examined (N)	Prevalence of experience of dental decay (%)	Mean number of teeth with experience of dental decay among children with any experience of dental decay n (95% CI)	Prevalence of dental decay affecting incisors (%)
Asian/Asian British	336	37.2	4.2 (3.59 - 4.75)	12.8
Mixed	233	24.0	4.4 (3.54 - 5.28)	8.6
Other ethnic background	48	20.8	4.4 (2.37 - 6.43)	6.3
White	4,546	18.7	3.4 (3.17 - 3.56)	2.8
Not provided	3,118	17.6	3.1 (2.84 - 3.26)	3.2
Black/Black British	139	17.3	3.3 (2.24 - 4.43)	3.6
East of England	8,420	19.0	3.3 (3.21 - 3.48)	3.5

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



Error bars represent 95% confidence limits

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



Summary

In Luton average levels of dental decay are higher than the average for England. Within Luton, the highest levels of experience of dental decay are clustered around the Challney, Saints, Dallow, Biscot, Farley and South wards.

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

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

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