



Plymouth

Published March 2021

Oral health of 5-year-old children

This profile describes the oral health of 5-year-olds living in Plymouth. 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 Plymouth 398 5-year-olds (approximately 84.1% 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 Plymouth, other local authorities in the South West and England.

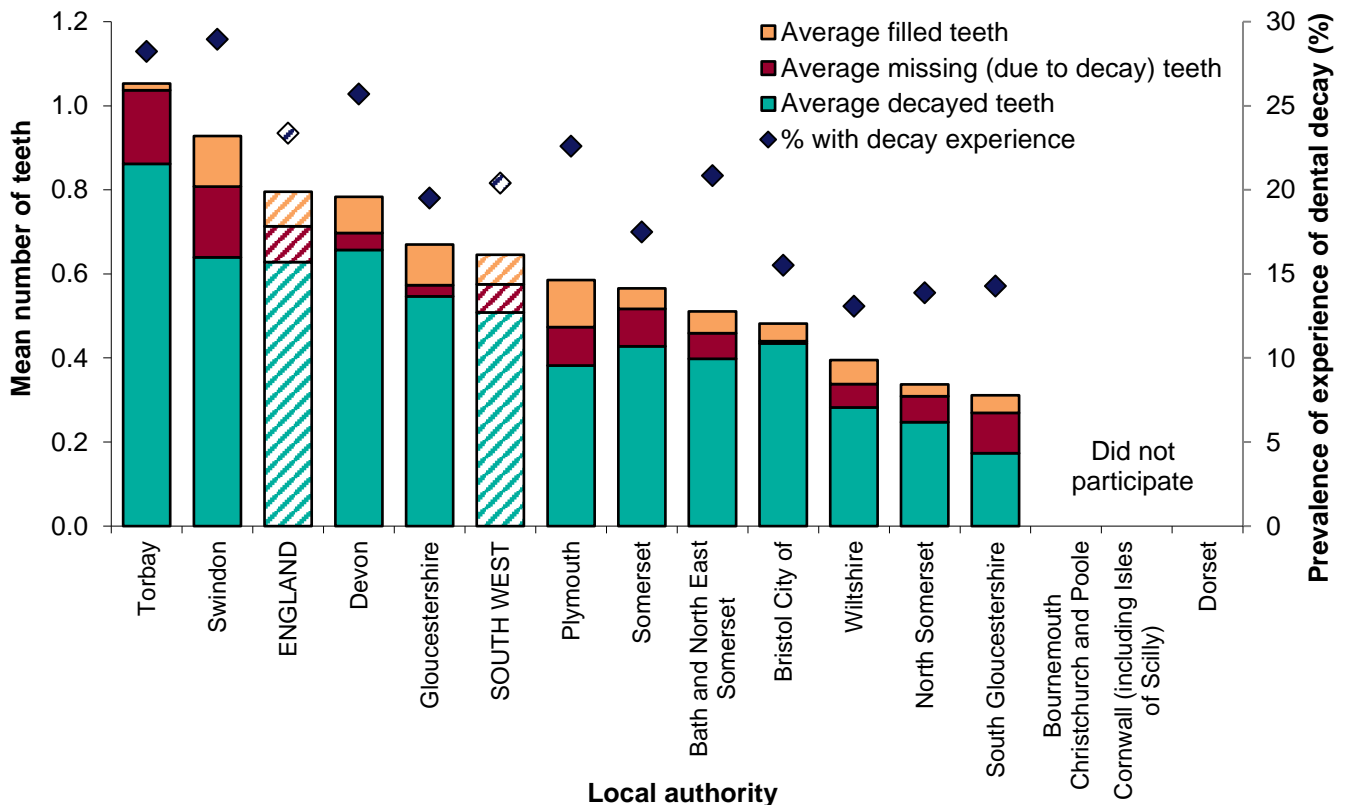


Table 1: Experience of dental decay in 5-year-olds in Plymouth, other local authorities in the South West and England.

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)
Swindon	28.9	0.9 (0.59 - 1.27)	3.2 (2.33 - 4.08)
Torbay	28.2	1.1 (0.77 - 1.34)	3.7 (3.01 - 4.44)
Devon	25.7	0.8 (0.65 - 0.91)	3.0 (2.69 - 3.41)
ENGLAND	23.4	0.8 (0.78 - 0.81)	3.4 (3.36 - 3.44)
Plymouth	22.6	0.6 (0.36 - 0.81)	2.6 (1.82 - 3.36)
Bath and North East Somerset	20.8	0.5 (0.32 - 0.70)	2.5 (1.86 - 3.04)
SOUTH WEST	20.4	0.6 (0.59 - 0.70)	3.2 (2.99 - 3.34)
Gloucestershire	19.5	0.7 (0.56 - 0.78)	3.4 (3.02 - 3.85)
Somerset	17.5	0.6 (0.47 - 0.66)	3.2 (2.84 - 3.63)
Bristol, City of	15.5	0.5 (0.22 - 0.74)	3.1 (1.91 - 4.31)
South Gloucestershire	14.3	0.3 (0.15 - 0.47)	2.2 (1.36 - 2.99)
North Somerset	13.9	0.3 (0.11 - 0.56)	2.4 (1.77 - 3.09)
Wiltshire	13.1	0.4 (0.23 - 0.56)	3.0 (2.24 - 3.8)
Bournemouth, Christchurch and Poole	Did Not Participate		
Cornwall (including Isles of Scilly)	Did Not Participate		
Dorset	Did Not Participate		

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

	Plymouth	Statistical neighbour within South West: Torbay	Statistical neighbour comparator 1: Torbay	South West	England
Prevalence of experience of dental decay	22.6%	28.2%	28.2%	20.4%	23.4%
Mean number of teeth with experience of dental decay	0.6	1.1	1.1	0.6	0.8
Mean number of teeth with experience of decay in those with experience of dental decay	2.6	3.7	3.7	3.2	3.4
Mean number of decayed teeth in those with experience of dental decay	1.6	3.0	3.0	2.5	2.7
Proportion with active decay	17.7%	26.3%	26.3%	17.3%	20.4%
Proportion with experience of tooth extraction ⁱⁱ	2.3%	4.4%	4.4%	1.9%	2.2%
Proportion with dental abscess	0.0%	2.1%	2.1%	1.0%	1.0%
Proportion with teeth decayed into pulp	3.7%	1.3%	1.3%	2.2%	3.3%
Proportion with decay affecting incisors ⁱⁱⁱ	1.6%	6.5%	6.5%	4.0%	5.2%
Proportion with high levels of plaque present on upper front teeth ^{iv}	0.4%	0.0%	0.0%	1.9%	1.2%

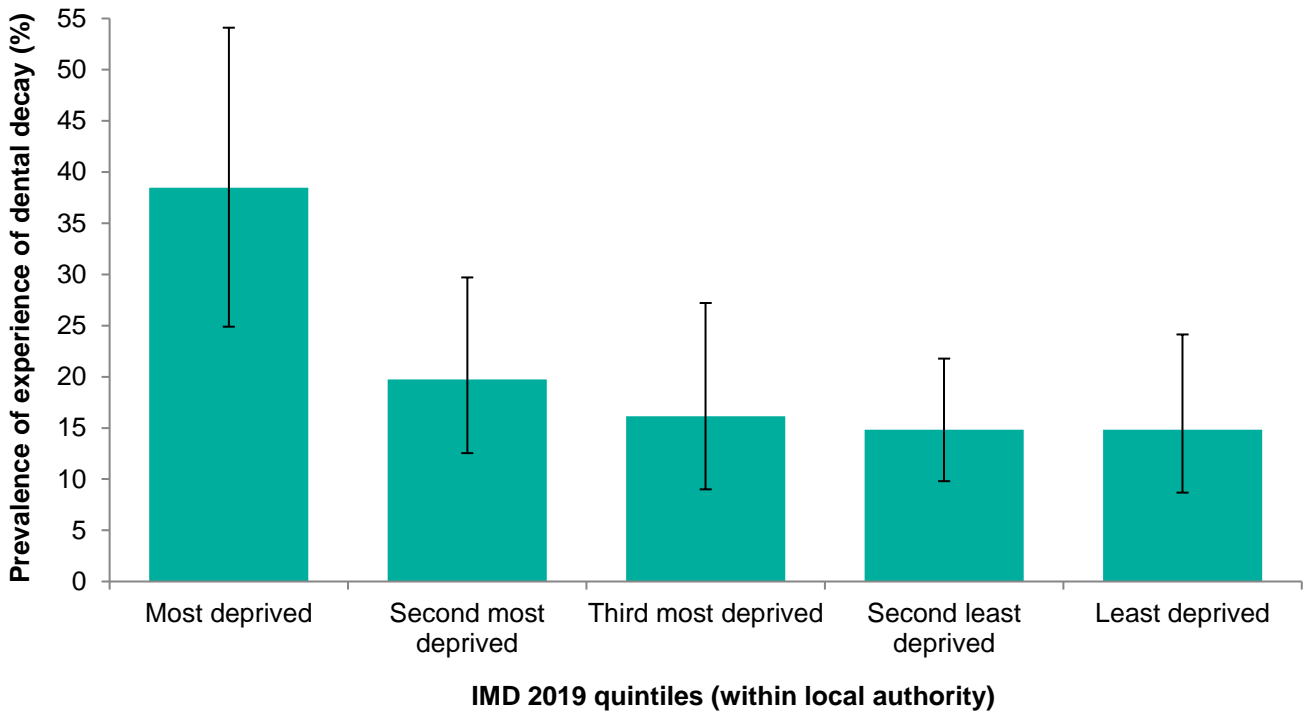
ⁱ generated by the children's services statistical neighbour benchmarking tool, the neighbour within the South West has "Very Close" comparator characteristics and the national neighbour 1 has "Very Close" comparator characteristics³.

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.

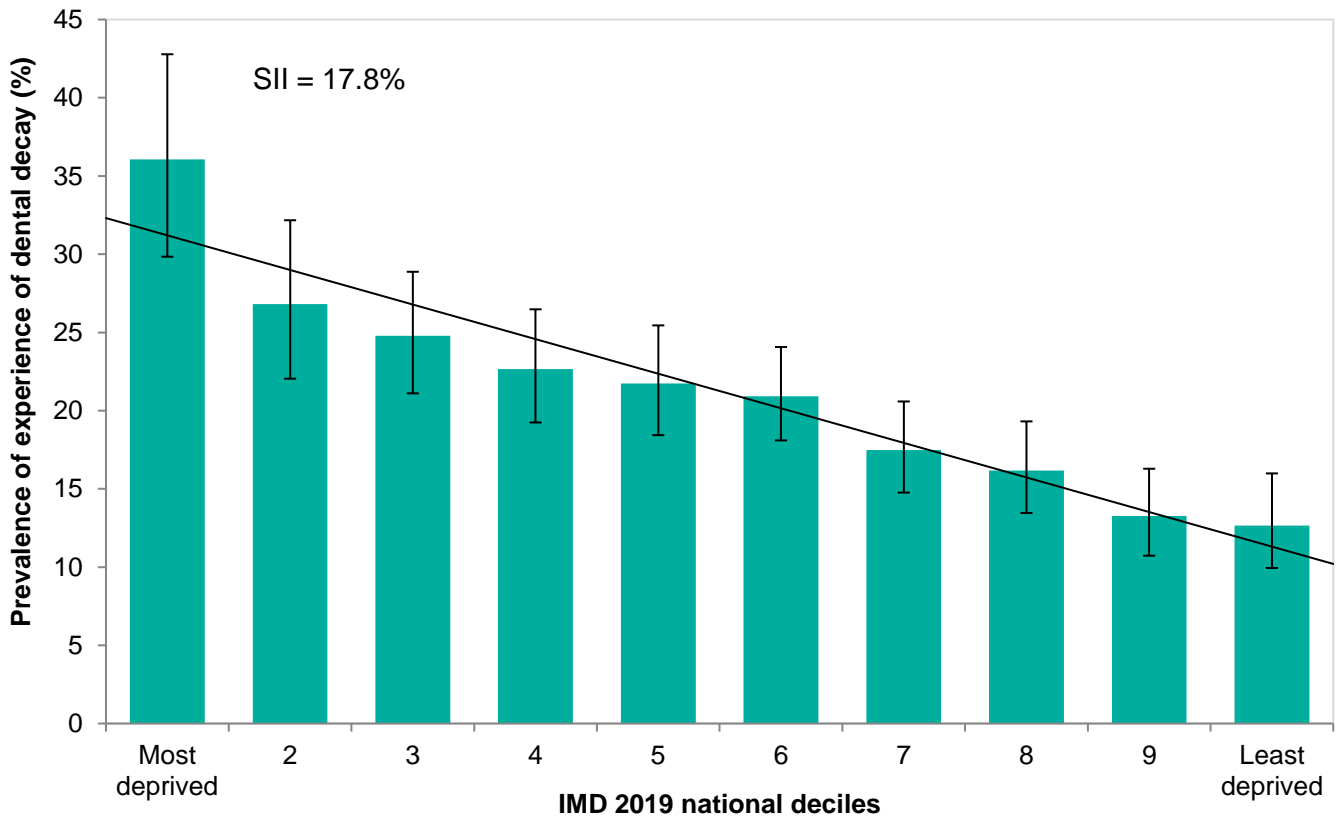
^{iv} indicative of poor tooth brushing habits.

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



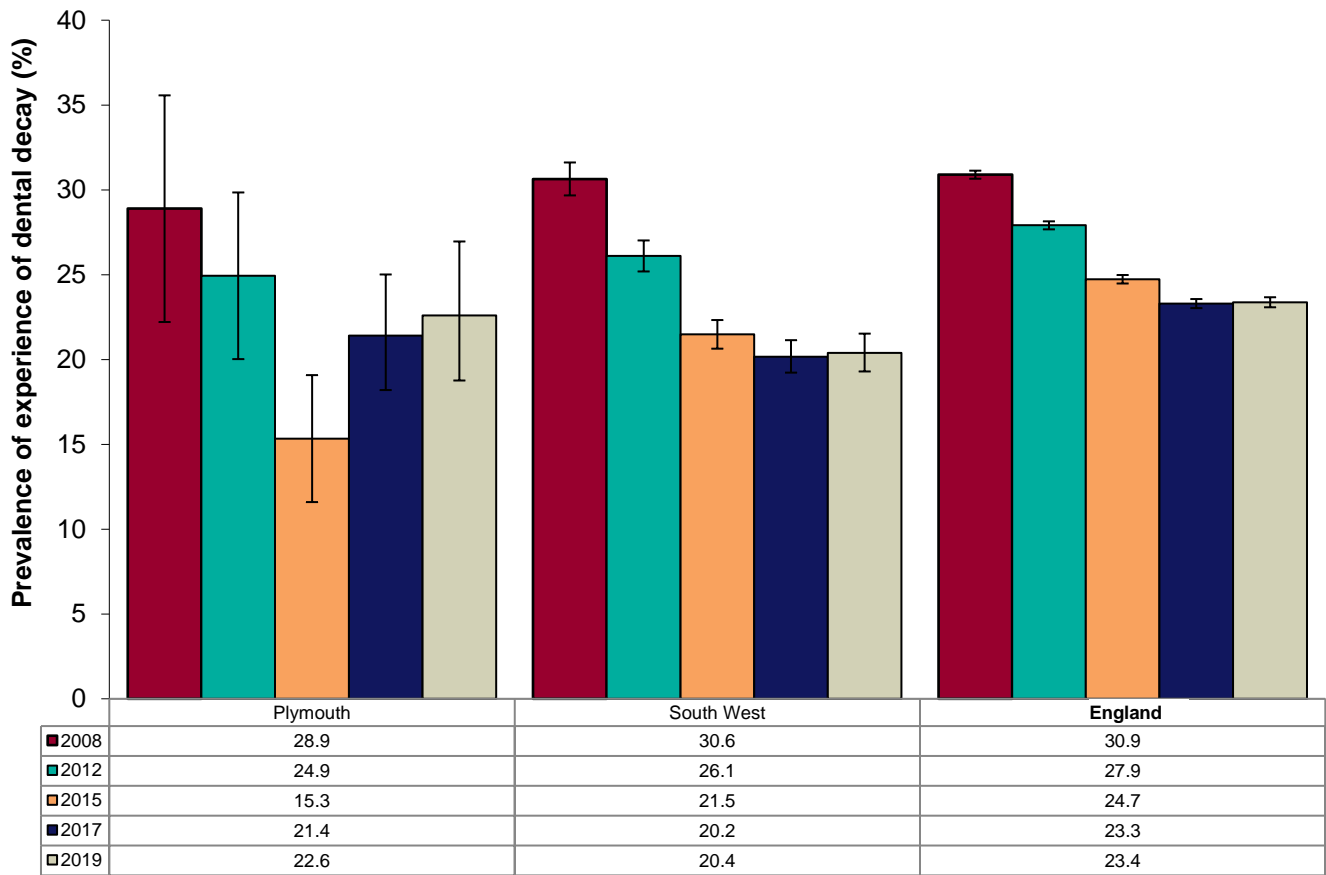
Error bars represent 95% confidence limits

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



Error bars represent 95% confidence limits

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

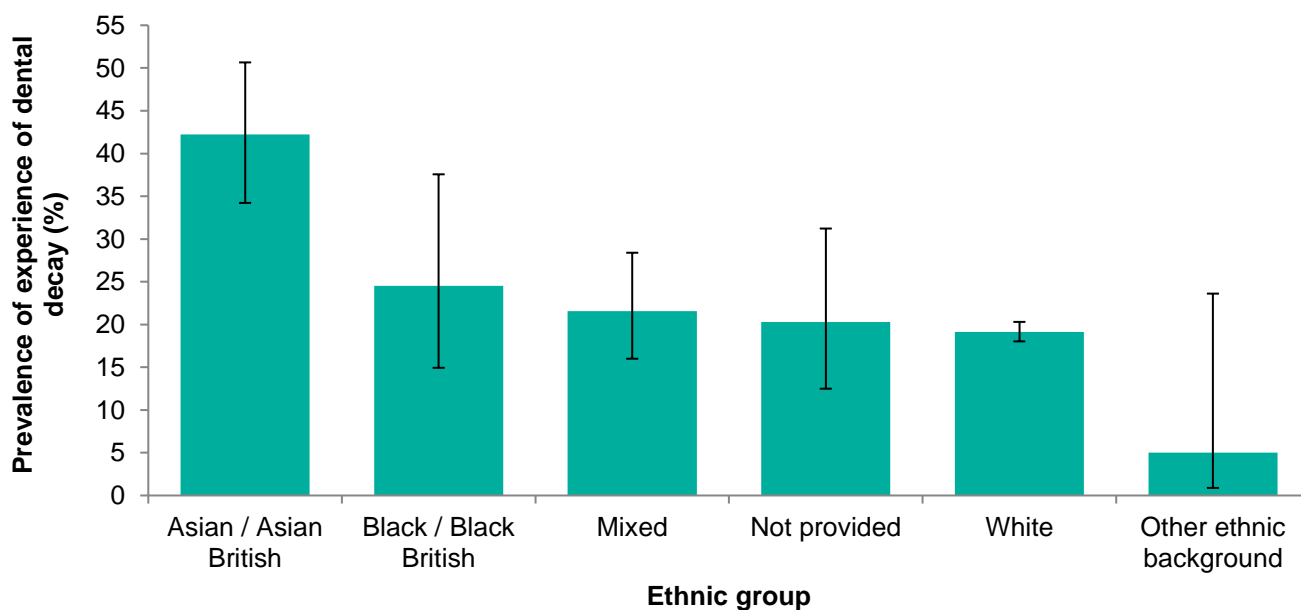


Error bars represent 95% confidence limits

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

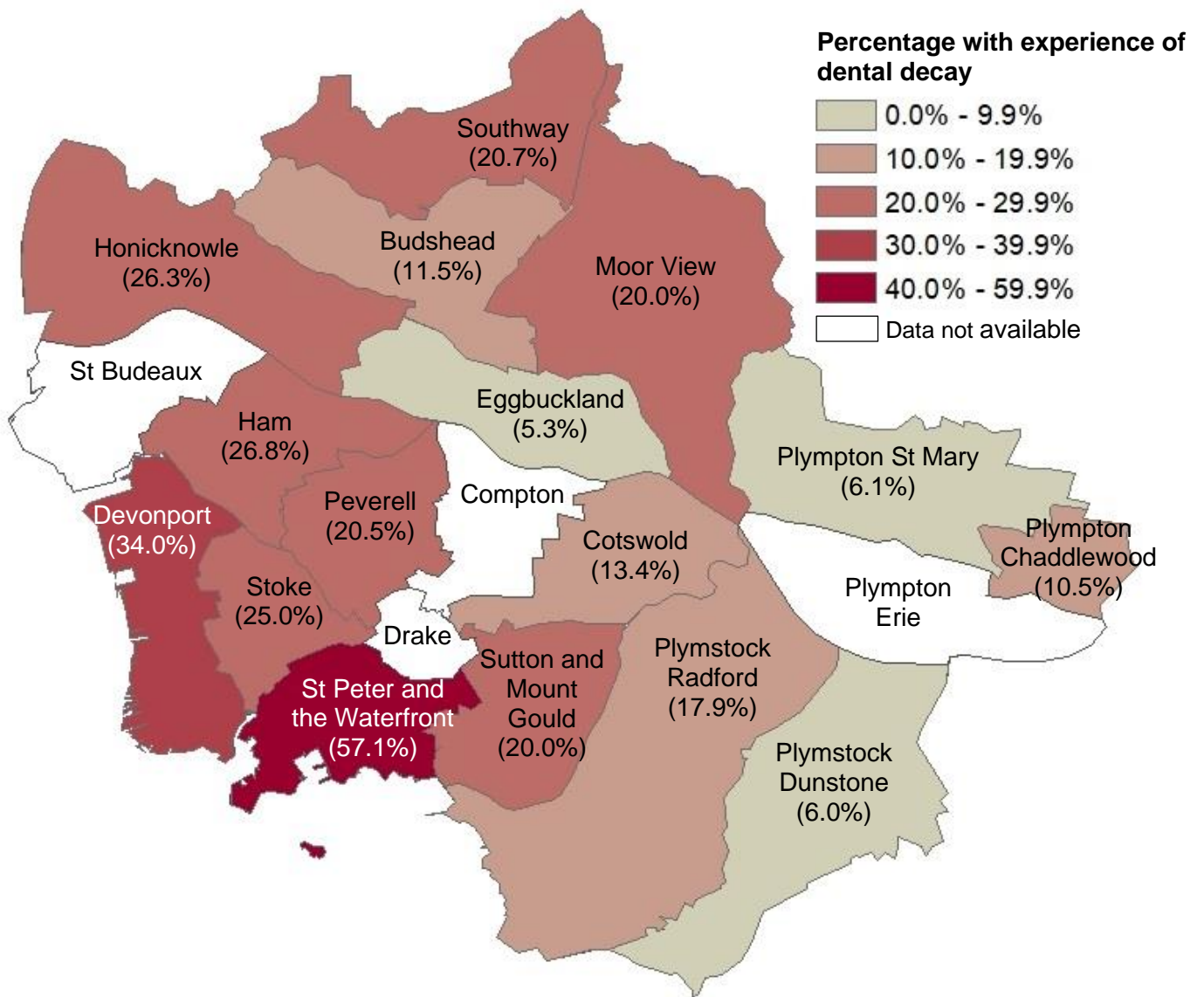
Ethnic group	Number of children examined (N)	Prevalence of experience of dental decay (%)	Mean number of teeth with experience of dental decay among children with any experience of dental decay n (95% CI)	Prevalence of dental decay affecting incisors (%)
Asian / Asian British	135	42.2	4.3 (3.39 - 5.21)	24.4
Black / Black British	53	24.5	2.2 (1.34 - 3.12)	3.8
Mixed	167	21.6	3.7 (2.72 - 4.72)	4.8
Not provided	69	20.3	3.2 (2.14 - 4.29)	5.8
White	4,577	19.1	3.0 (2.85 - 3.21)	3.2
Other ethnic background	20	5.0	2.0 (2.0 - 2.0)	0.0
South West	5,021	20.4	3.2 (2.99 - 3.34)	4.0

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



Error bars represent 95% confidence limits

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



Summary

In Plymouth average levels of dental decay are similar to the average for England. Within Plymouth, the highest levels of experience of dental decay are clustered around the St Peter and the Waterfront ward.

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