



Cumbria

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Oral health of 5-year-old children

This profile describes the oral health of 5-year-olds living in Cumbria. 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 Cumbria 1,590 5-year-olds (approximately 75.0% 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 Cumbria, other local authorities in the North West and England.

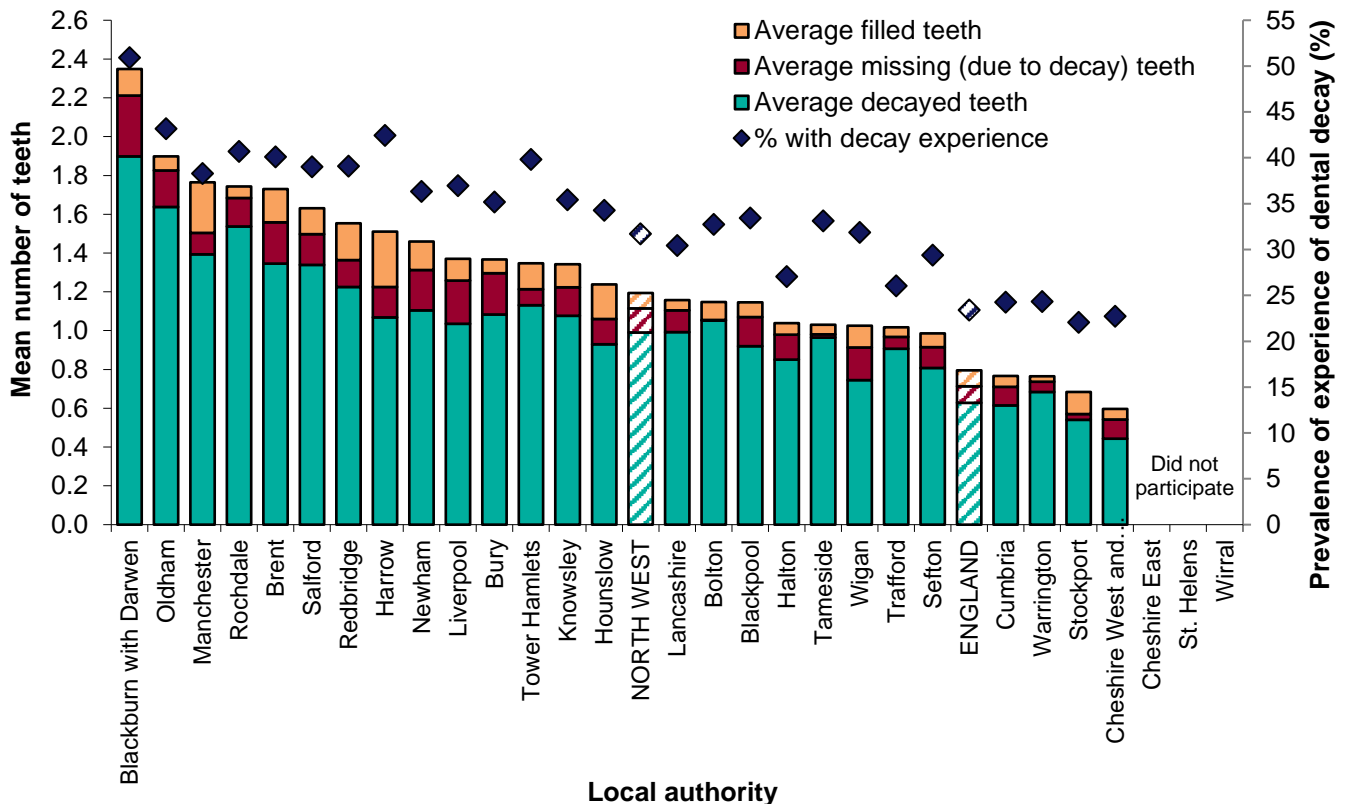


Table 1: Experience of dental decay in 5-year-olds in Cumbria, other local authorities in the North West and England.

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)
Blackburn with Darwen	50.9	2.3 (1.87 - 2.82)	4.6 (3.94 - 5.29)
Oldham	43.2	1.9 (1.45 - 2.34)	4.4 (3.63 - 5.16)
Rochdale	40.7	1.7 (1.30 - 2.19)	4.3 (3.64 - 4.93)
Salford	39.0	1.6 (1.25 - 2.01)	4.2 (3.48 - 4.88)
Manchester	38.3	1.8 (1.43 - 2.10)	4.6 (3.98 - 5.24)
Liverpool	37.0	1.4 (1.05 - 1.69)	3.7 (3.09 - 4.33)
Knowsley	35.4	1.3 (0.93 - 1.75)	3.8 (2.94 - 4.63)
Bury	35.2	1.4 (1.07 - 1.66)	3.9 (3.35 - 4.44)
Blackpool	33.4	1.1 (0.74 - 1.56)	3.4 (2.50 - 4.35)
Tameside	33.1	1.0 (0.75 - 1.31)	3.1 (2.52 - 3.71)
Bolton	32.7	1.1 (0.84 - 1.45)	3.5 (2.83 - 4.18)
Wigan	31.9	1.0 (0.79 - 1.26)	3.2 (2.70 - 3.74)
NORTH WEST	31.7	1.2 (1.14 - 1.25)	3.8 (3.65 - 3.89)
Lancashire	30.4	1.2 (1.06 - 1.25)	3.8 (3.59 - 4.02)
Sefton	29.4	1.0 (0.67 - 1.30)	3.4 (2.61 - 4.10)
Halton	27.0	1.0 (0.72 - 1.36)	3.8 (3.01 - 4.67)

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)
Trafford	26.0	1.0 (0.72 - 1.32)	3.9 (3.05 - 4.77)
Warrington	24.3	0.8 (0.52 - 1.01)	3.1 (2.43 - 3.85)
Cumbria	24.2	0.8 (0.67 - 0.86)	3.2 (2.89 - 3.43)
ENGLAND	23.4	0.8 (0.78 - 0.81)	3.4 (3.36 - 3.44)
Cheshire West and Chester	22.7	0.6 (0.41 - 0.78)	2.6 (2.07 - 3.19)
Stockport	22.0	0.7 (0.43 - 0.94)	3.1 (2.21 - 3.99)
Cheshire East	Did Not Participate		
St. Helens	Did Not Participate		
Wirral	Did Not Participate		

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

	Cumbria	Statistical neighbour within North West: Lancashire	Statistical neighbour comparator 1: Lincolnshire	North West	England
Prevalence of experience of dental decay	24.2%	30.4%	25.5%	31.7%	23.4%
Mean number of teeth with experience of dental decay	0.8	1.2	0.9	1.2	0.8
Mean number of teeth with experience of decay in those with experience of dental decay	3.2	3.8	3.4	3.8	3.4
Mean number of decayed teeth in those with experience of dental decay	2.5	3.2	2.9	3.0	2.7
Proportion with active decay	21.2%	28.5%	23.3%	29.0%	20.4%
Proportion with experience of tooth extraction ⁱⁱ	2.3%	2.6%	1.4%	2.9%	2.2%
Proportion with dental abscess	1.5%	1.0%	1.6%	1.2%	1.0%
Proportion with teeth decayed into pulp	3.0%	5.3%	5.8%	5.5%	3.3%
Proportion with decay affecting incisors ⁱⁱⁱ	2.6%	8.2%	3.9%	7.7%	5.2%
Proportion with high levels of plaque present on upper front teeth ^{iv}	1.6%	1.0%	0.2%	2.2%	1.2%

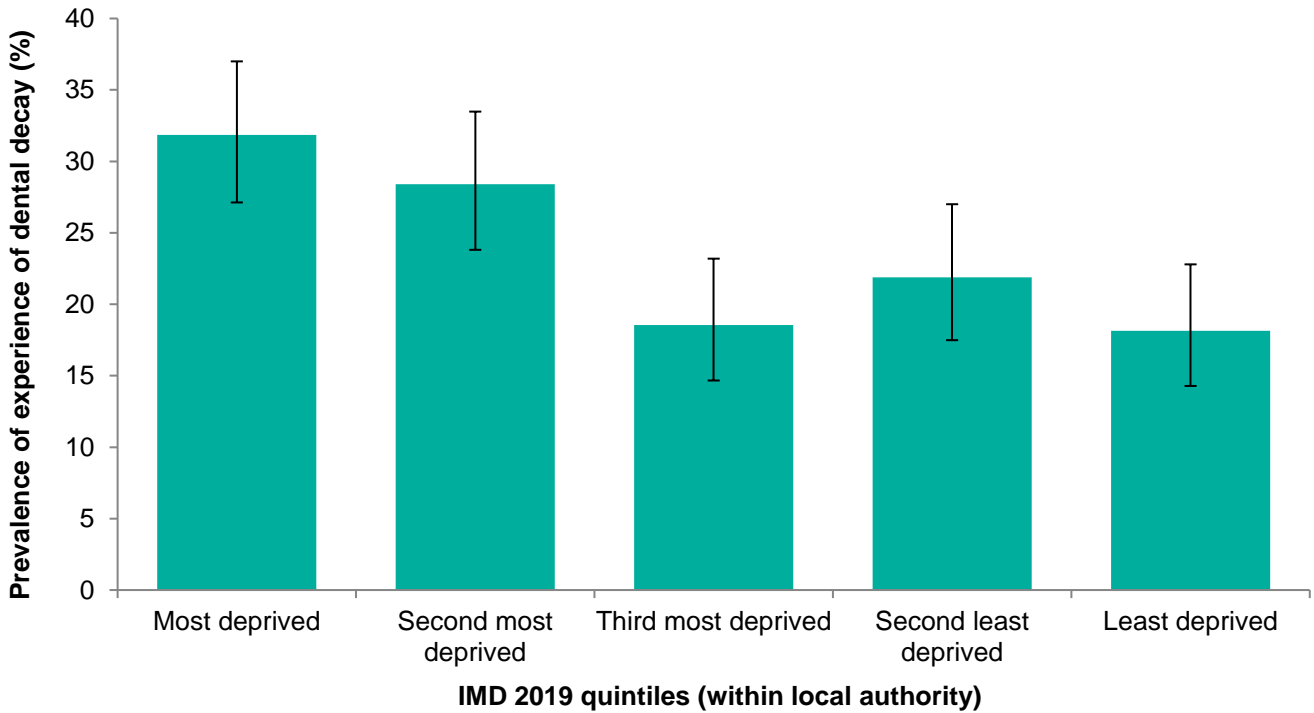
ⁱ generated by the children's services statistical neighbour benchmarking tool, the neighbour within the North West has "Very Close" comparator characteristics and the national neighbour 1 has "Extremely Close" comparator characteristics³.

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.

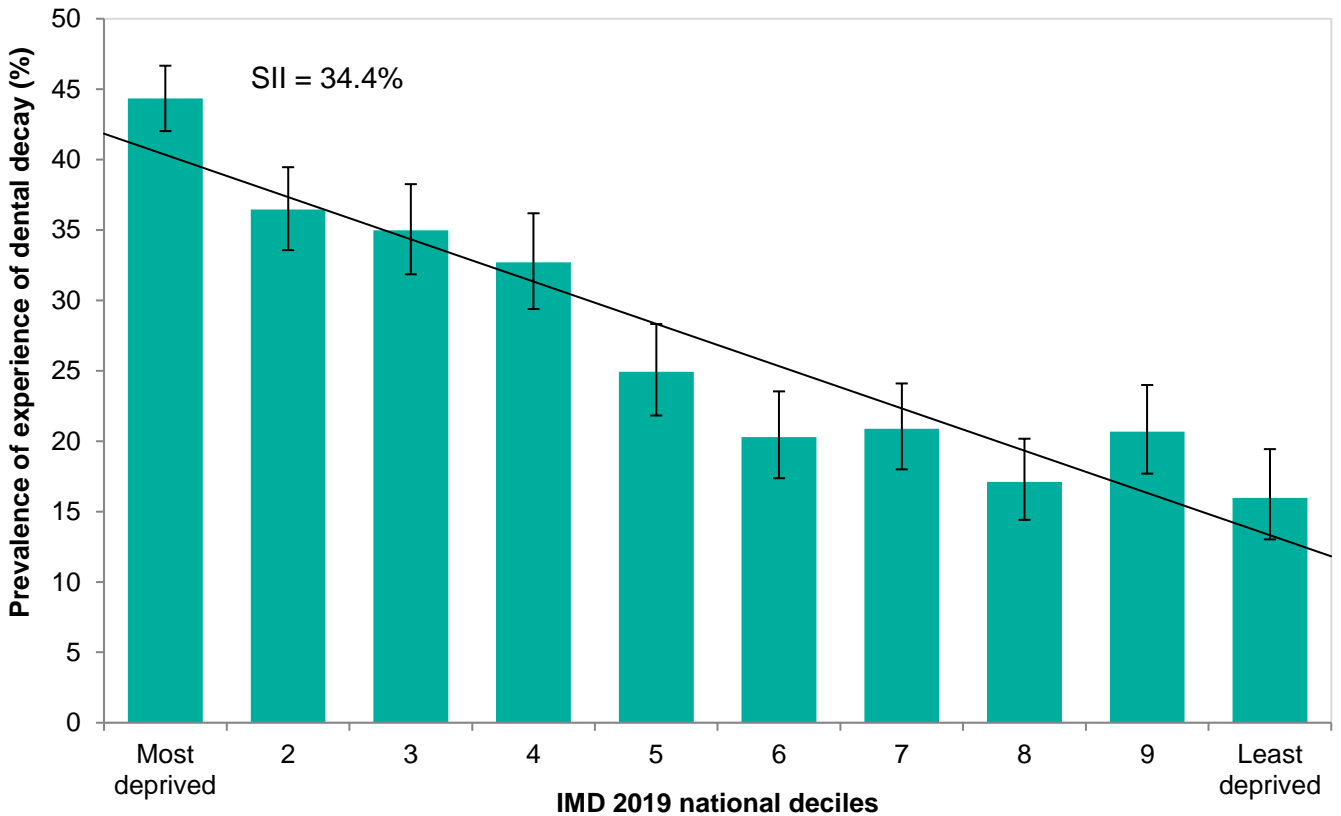
^{iv} indicative of poor tooth brushing habits.

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



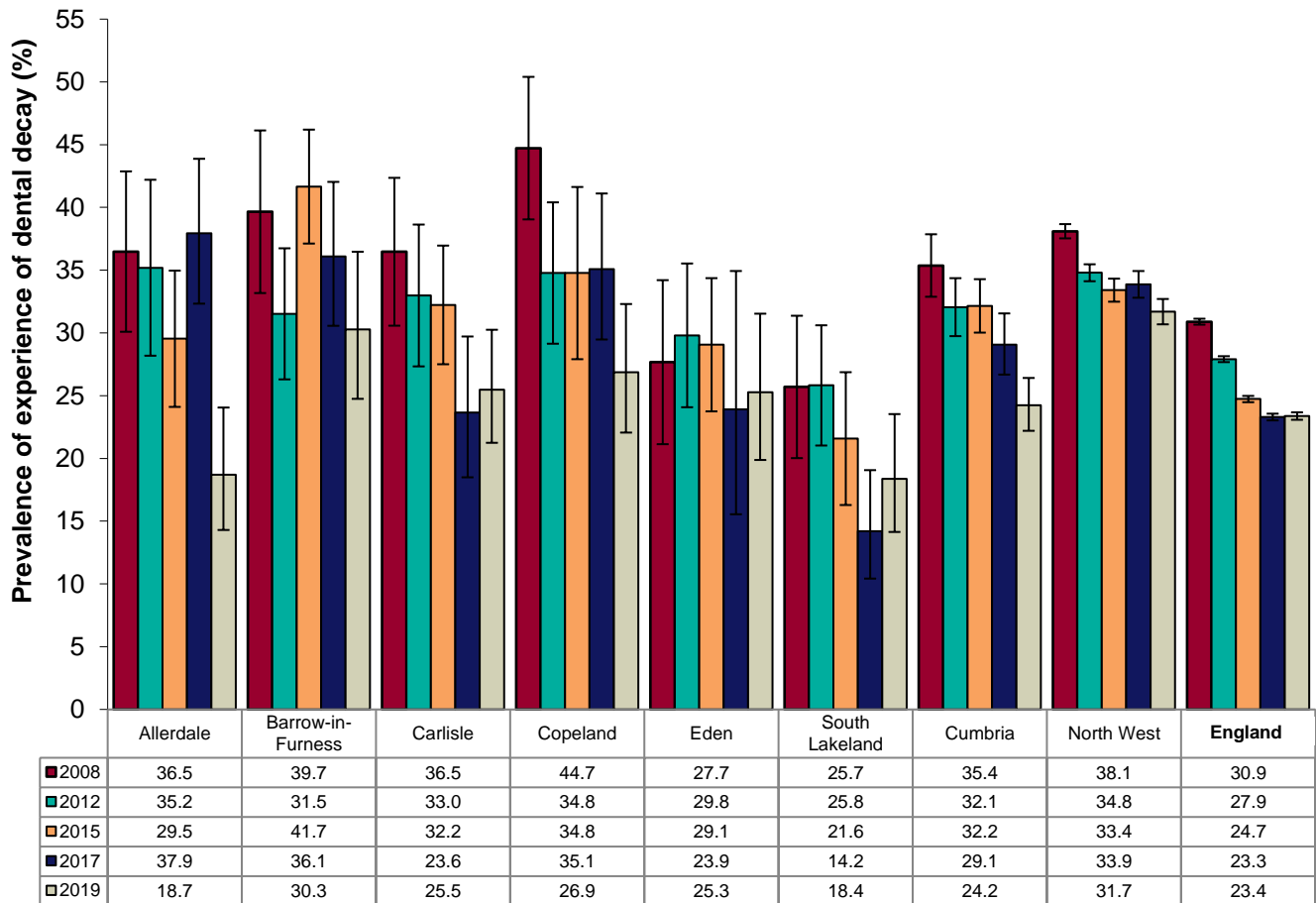
Error bars represent 95% confidence limits

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



Error bars represent 95% confidence limits

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

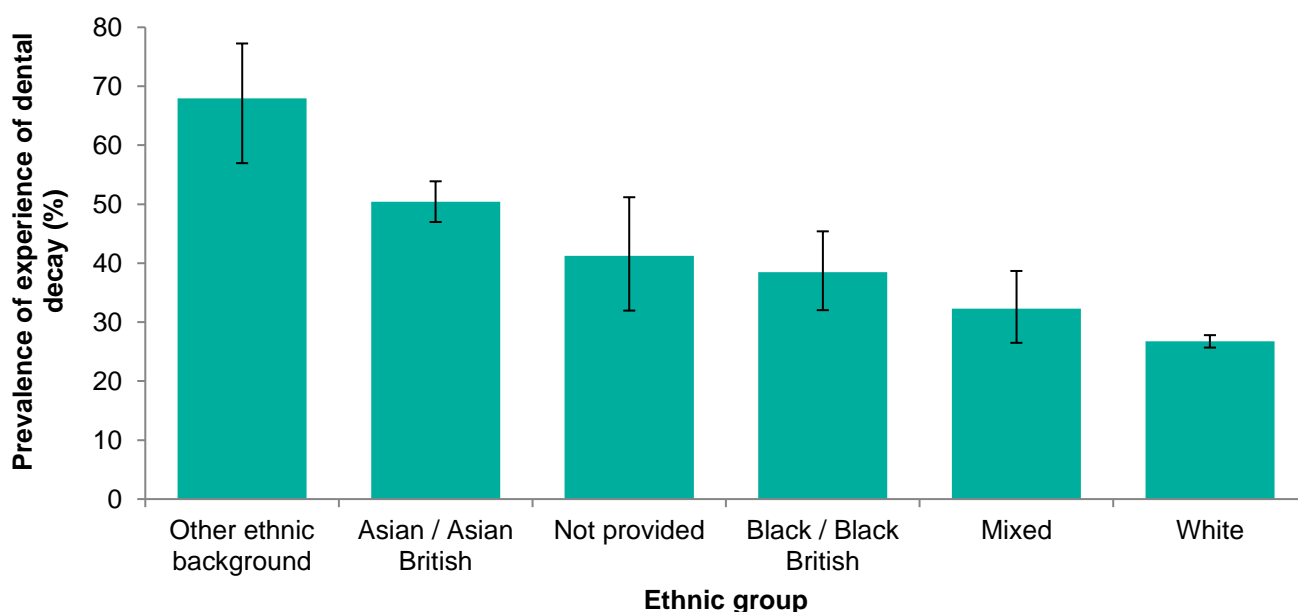


Error bars represent 95% confidence limits

Table 3: Experience of dental decay in 5-year-olds in the North 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 (%)
Other ethnic background	78	67.9	5.0 (4.05 - 5.98)	30.8
Asian / Asian British	803	50.4	4.7 (4.39 - 5.07)	20.0
Not provided	97	41.2	3.8 (2.59 - 4.96)	9.3
Black / Black British	200	38.5	3.9 (3.25 - 4.62)	12.5
Mixed	223	32.3	3.4 (2.74 - 4.10)	9.0
White	6,753	26.7	3.4 (3.25 - 3.51)	4.9
North West	8,154	31.7	3.8 (3.65 - 3.89)	7.7

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



Error bars represent 95% confidence limits

Figure 6: Prevalence of experience of dental decay in 5-year-olds in Cumbria, by lower-tier local authority.

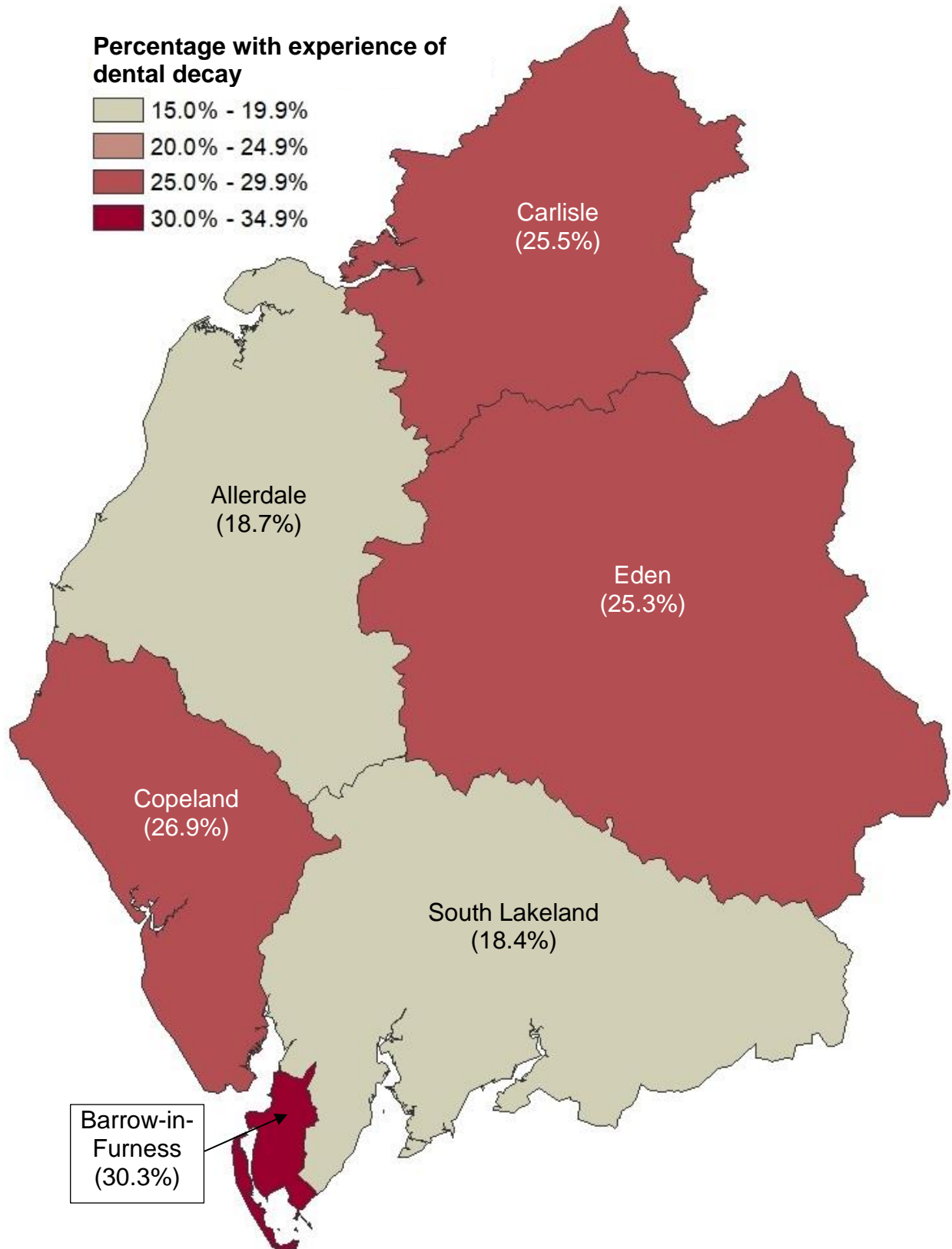


Figure 7: Prevalence of experience of dental decay in 5-year-olds in Barrow-in-Furness, by middle super output area.

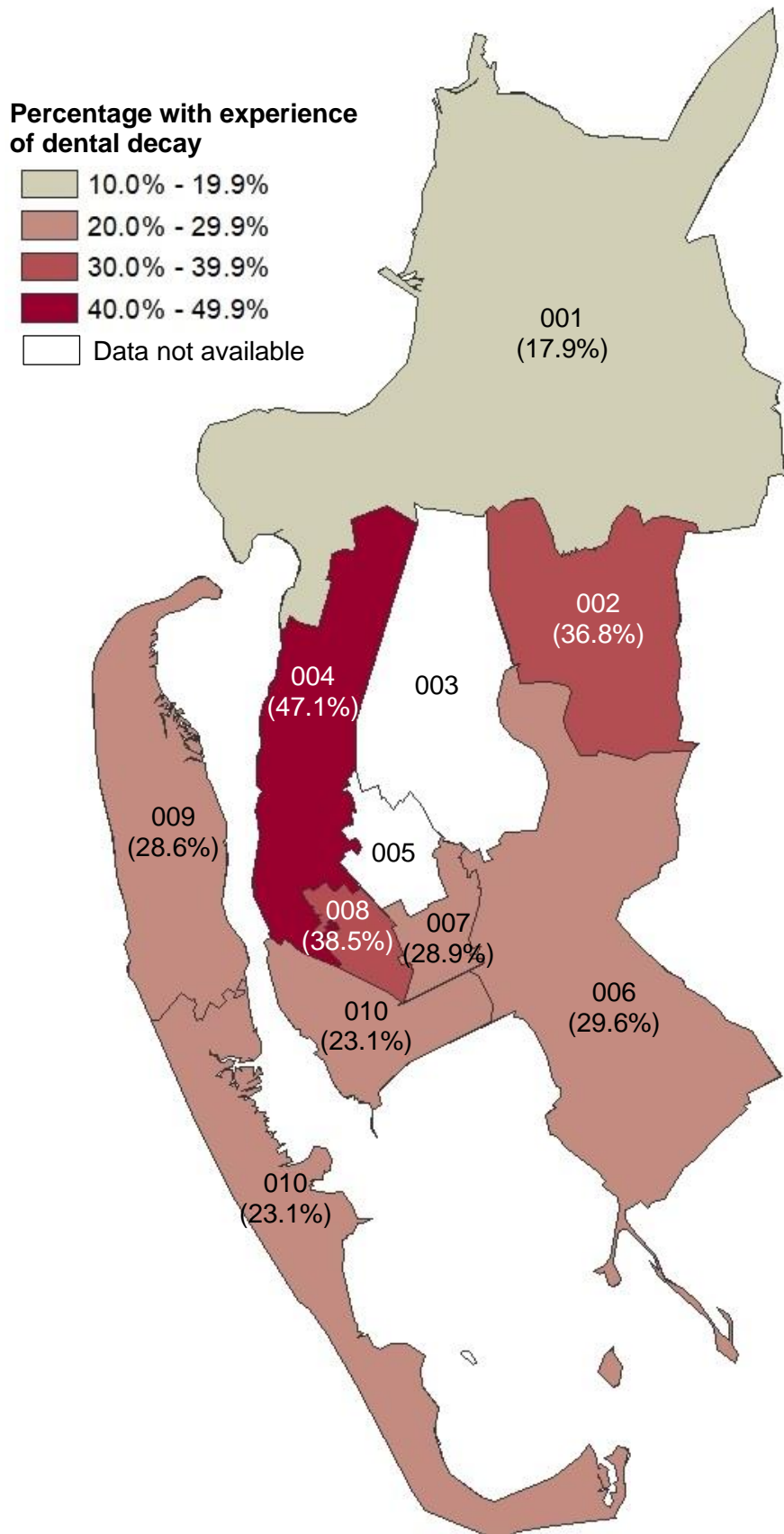


Figure 8: Prevalence of experience of dental decay in 5-year-olds in Carlisle, by middle super output area.

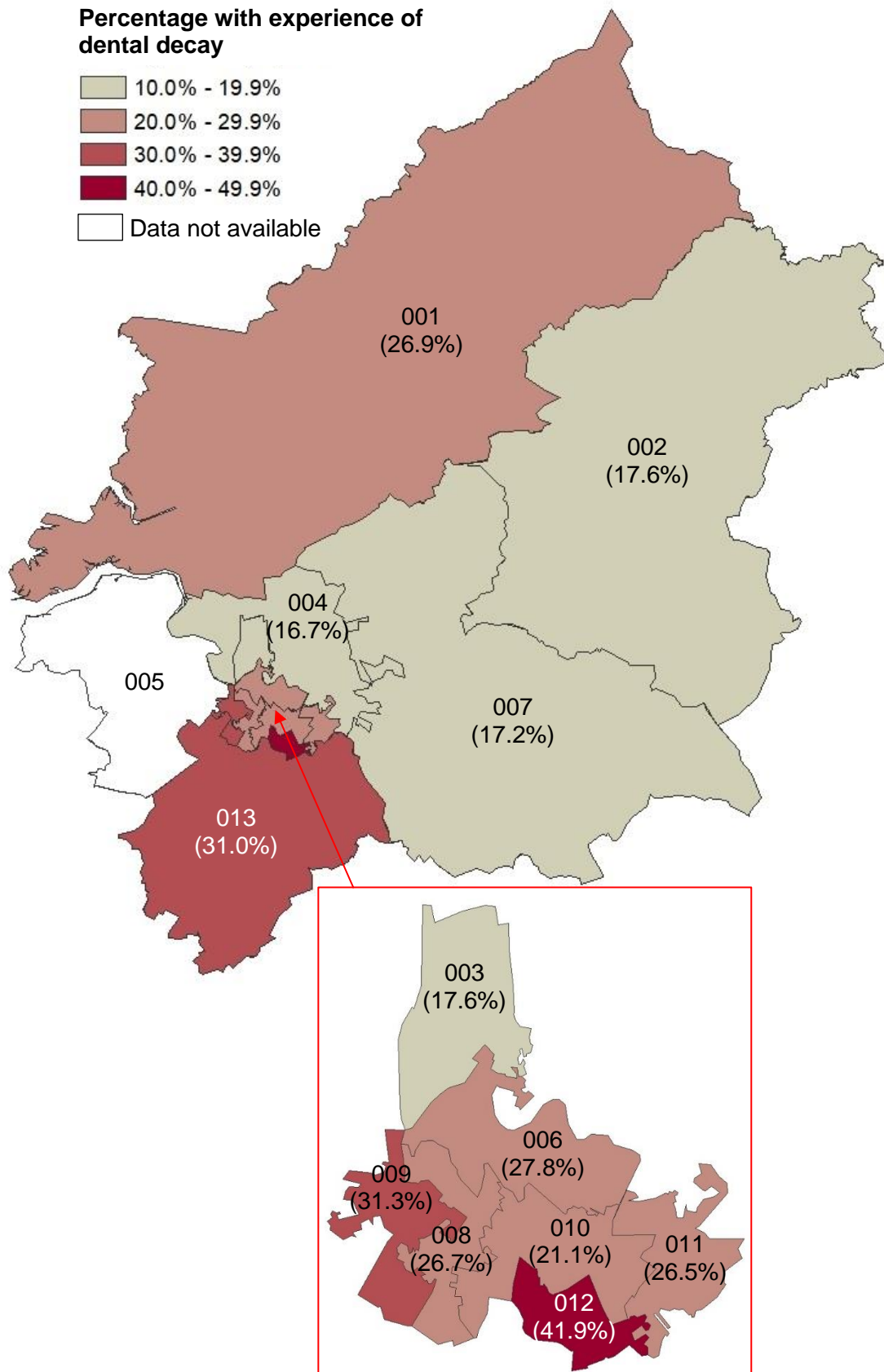


Figure 9: Prevalence of experience of dental decay in 5-year-olds in Copeland, by middle super output area.

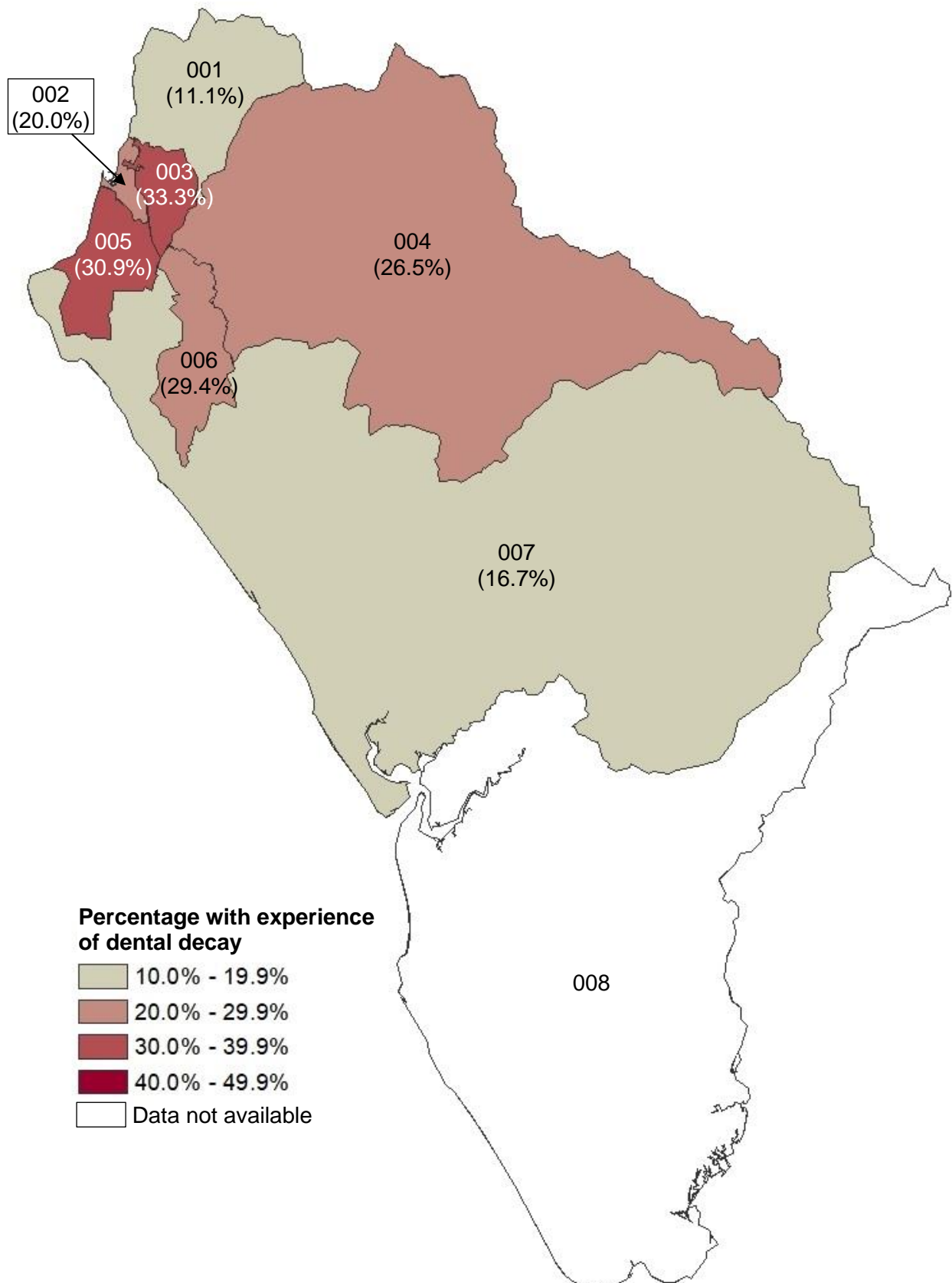
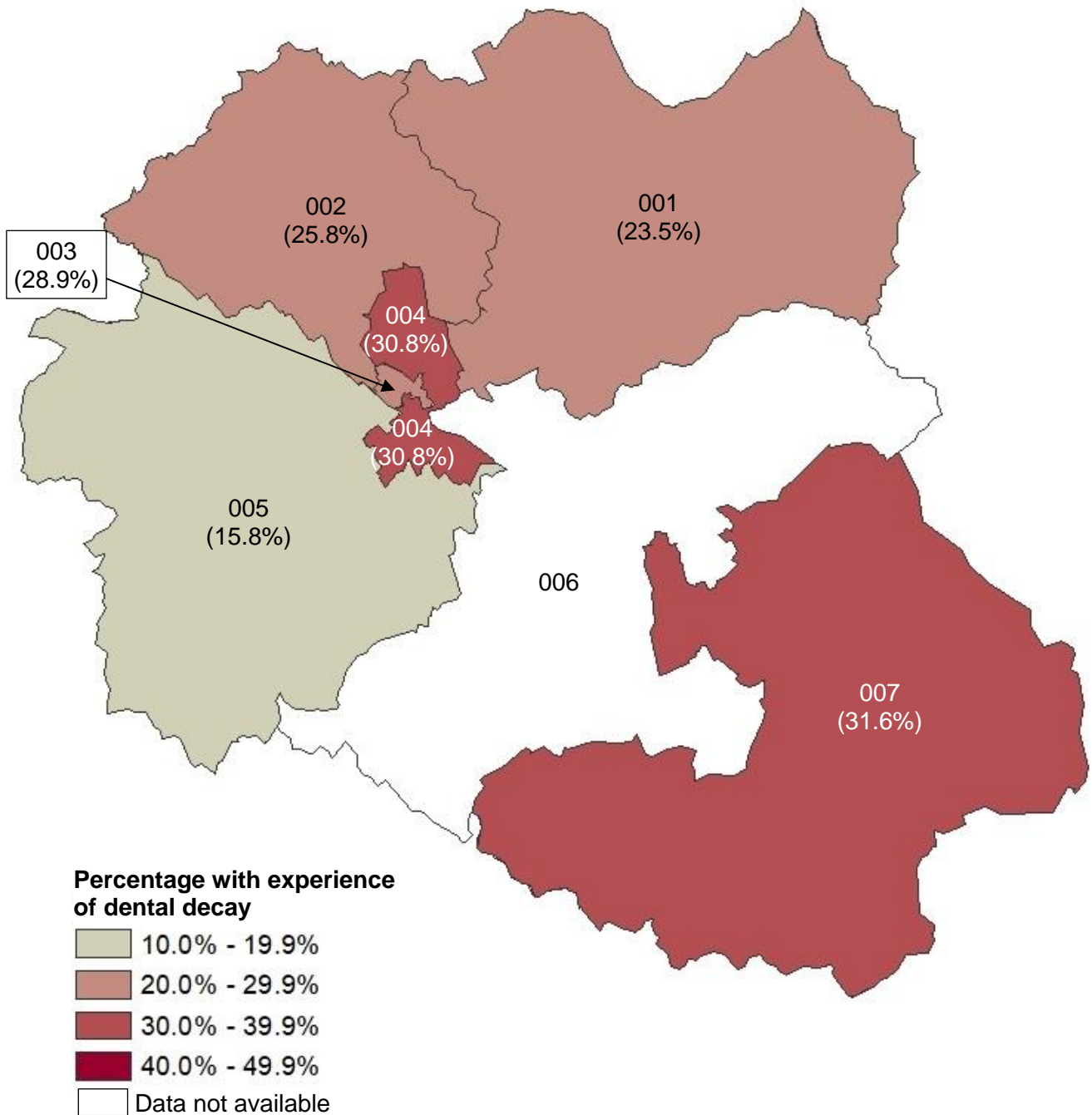


Figure 10: Prevalence of experience of dental decay in 5-year-olds in Eden, by middle super output area.



Summary

In Cumbria average levels of dental decay are similar to the average for England, however, within Cumbria there are areas where there are higher than average levels of experience of dental decay. At lower-tier local authority level, children living in Barrow-in-Furness have the highest levels of experience of dental decay. Within Cumbria, the highest levels of experience of dental decay are clustered around the MSOAs of Barrow-in-Furness 004 and Carlisle 012.

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

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