



Northamptonshire

Published October 2020

Oral health of 5-year-old children

This profile describes the oral health of 5-year-olds living in Northamptonshire. 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 Northamptonshire 1,921 5-year-olds (approximately 74.0% 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 Northamptonshire, other local authorities in the East Midlands and England.

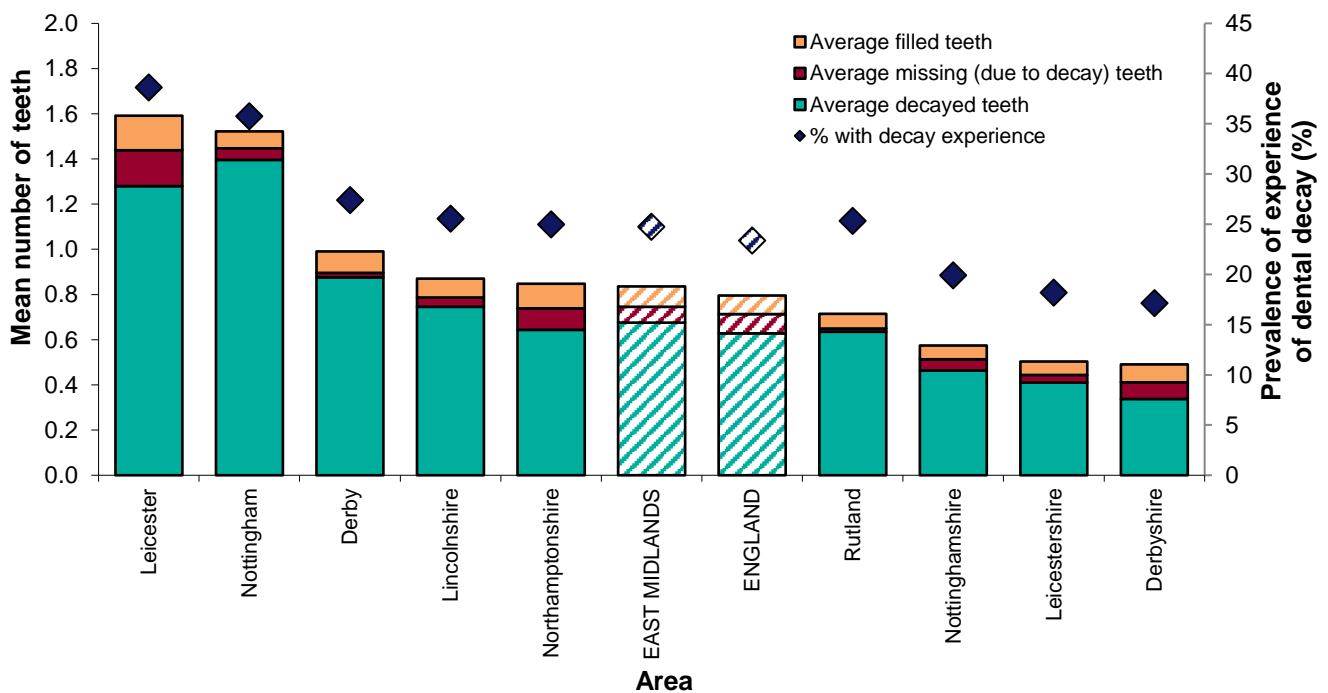


Table 1: Experience of dental decay in 5-year-olds in Northamptonshire, other local authorities in the East Midlands and England.

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)
Leicester	38.6	1.6 (1.42 – 1.76)	4.1 (3.81 – 4.44)
Nottingham	35.8	1.5 (1.11 – 1.93)	4.3 (3.45 – 5.06)
Derby	27.4	1.0 (0.55 – 1.43)	3.6 (2.45 – 4.78)
Lincolnshire	25.5	0.9 (0.78 – 0.96)	3.4 (3.16 – 3.65)
Northamptonshire	25.0	0.8 (0.76 – 0.94)	3.4 (3.15 – 3.64)
East Midlands	24.7	0.8 (0.80 – 0.88)	3.4 (3.26 – 3.49)
England	23.4	0.8 (0.78 – 0.81)	3.4 (3.36 – 3.44)
Rutland	25.3	0.7 (0.53 – 0.90)	2.8 (2.39 – 3.25)
Nottinghamshire	19.9	0.6 (0.49 – 0.65)	2.9 (2.61 – 3.16)
Leicestershire	18.2	0.5 (0.44 – 0.57)	2.8 (2.52 – 3.02)
Derbyshire	17.1	0.5 (0.41 – 0.57)	2.9 (2.56 – 3.17)

Table 2. Measures of oral health among 5-year-olds in Northamptonshire, its statistical neighbours,ⁱ the East Midlands and England.

	Northamptonshire	Statistical neighbour within East Midlands: Nottinghamshire	Statistical neighbour comparator 1: Kent	East Midlands	England
Prevalence of experience of dental decay	25.0%	19.9%	19.9%	24.7%	23.4%
Mean number of teeth with experience of dental decay	0.8	0.6	0.7	0.8	0.8
Mean number of teeth with experience of decay in those with experience of dental decay	3.4	2.9	3.3	3.4	3.4
Mean number of decayed teeth in those with experience of dental decay	2.5	2.3	2.4	2.7	2.7
Proportion with active decay	21.7%	17.3%	16.4%	21.7%	20.4%
Proportion with experience of tooth extraction ⁱⁱ	2.3%	1.6%	2.2%	1.8%	2.2%
Proportion with dental abscess	1.4%	2.0%	0.1%	1.6%	1.0%
Proportion with teeth decayed into pulp	3.3%	2.3%	2.0%	4.1%	3.3%
Proportion with decay affecting incisors ⁱⁱⁱ	4.1%	4.1%	2.4%	4.6%	5.2%
Proportion with high levels of plaque present on upper front teeth ^{iv}	0.6%	0.2%	0.2%	0.4%	1.2%

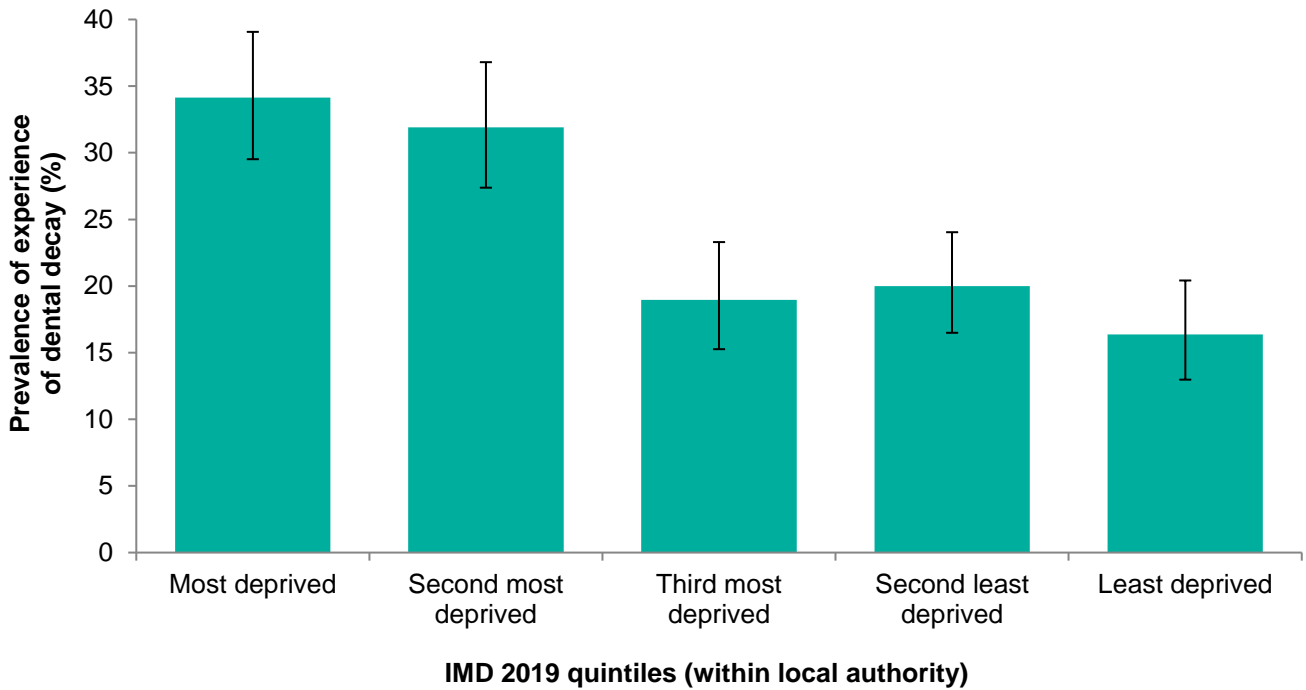
ⁱ generated by the children's services statistical neighbour benchmarking tool, the neighbour within the East Midlands has "very close" comparator characteristics and the national neighbour 1 has "very close" comparator characteristics³.

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.

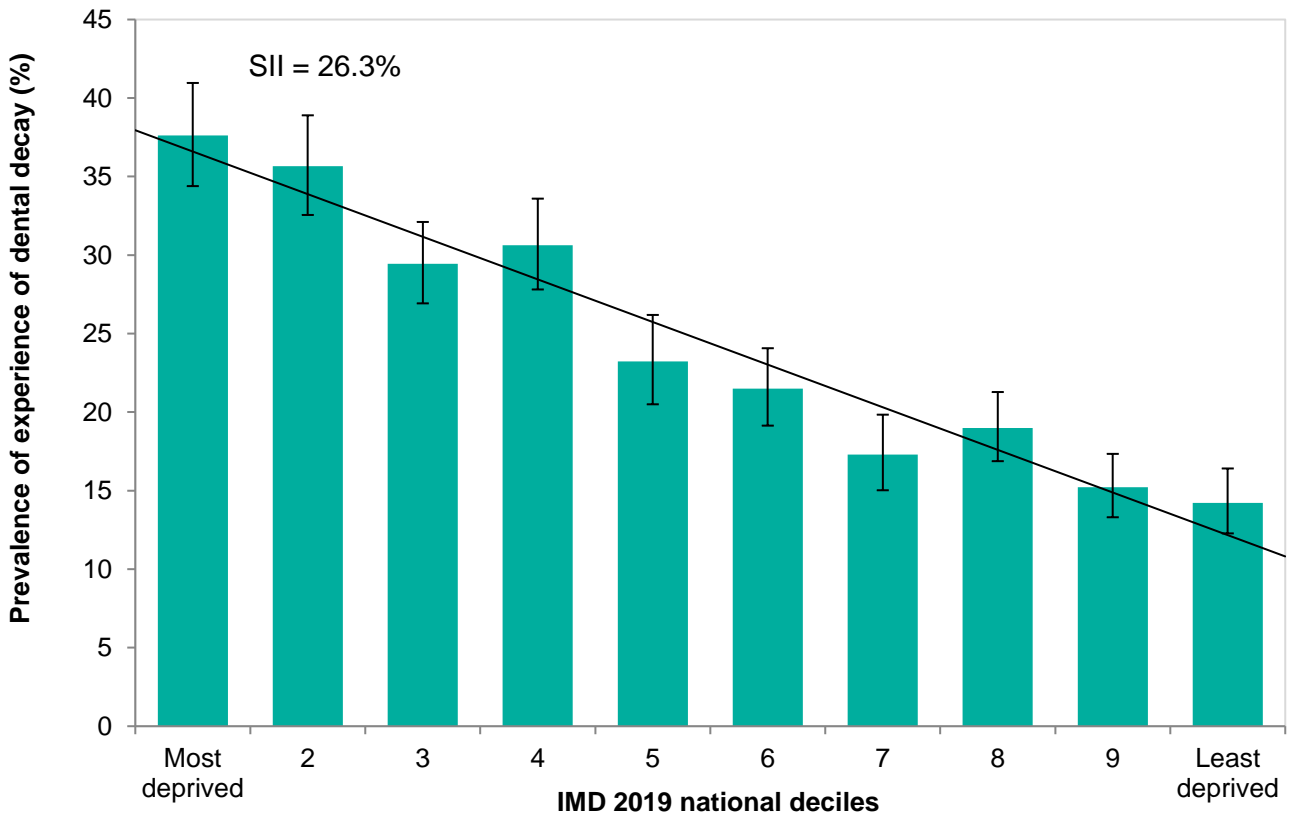
^{iv} indicative of poor tooth brushing habits.

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



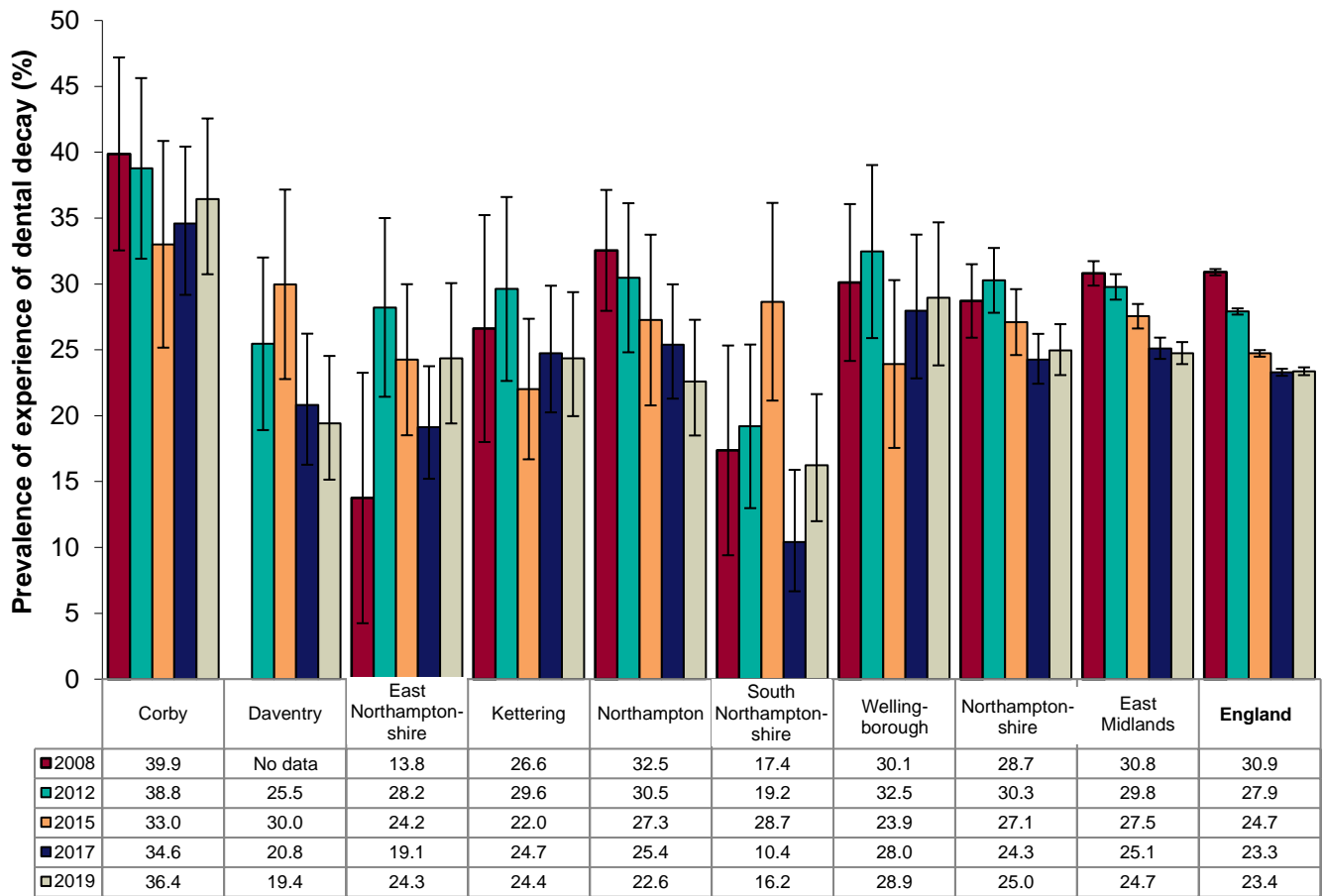
Error bars represent 95% confidence limits

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



Error bars represent 95% confidence limits

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

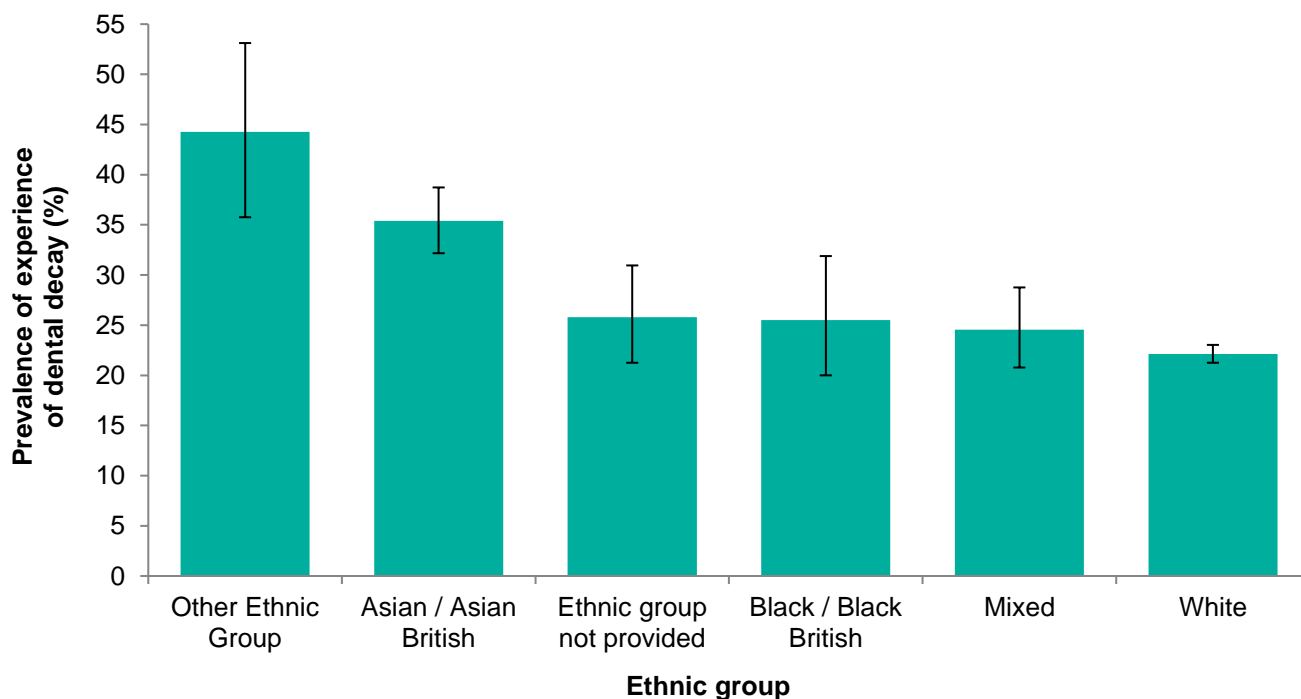


Error bars represent 95% confidence limits

Table 3: Experience of dental decay in 5-year-olds in the East 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	122	44.3	4.6 (3.67 – 5.59)	12.3
Asian/Asian British	814	35.4	3.9 (3.53 – 4.27)	11.5
Not provided	310	25.8	3.3 (2.73 – 3.80)	5.2
Black/Black British	204	25.5	3.6 (2.84 – 4.36)	7.4
Mixed	444	24.5	2.9 (2.38 – 3.34)	3.8
White	8,355	22.1	3.2 (3.10 - 3.35)	3.5
East Midlands	10,249	24.7	3.4 (3.26 – 3.49)	4.6

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



Error bars represent 95% confidence limits

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

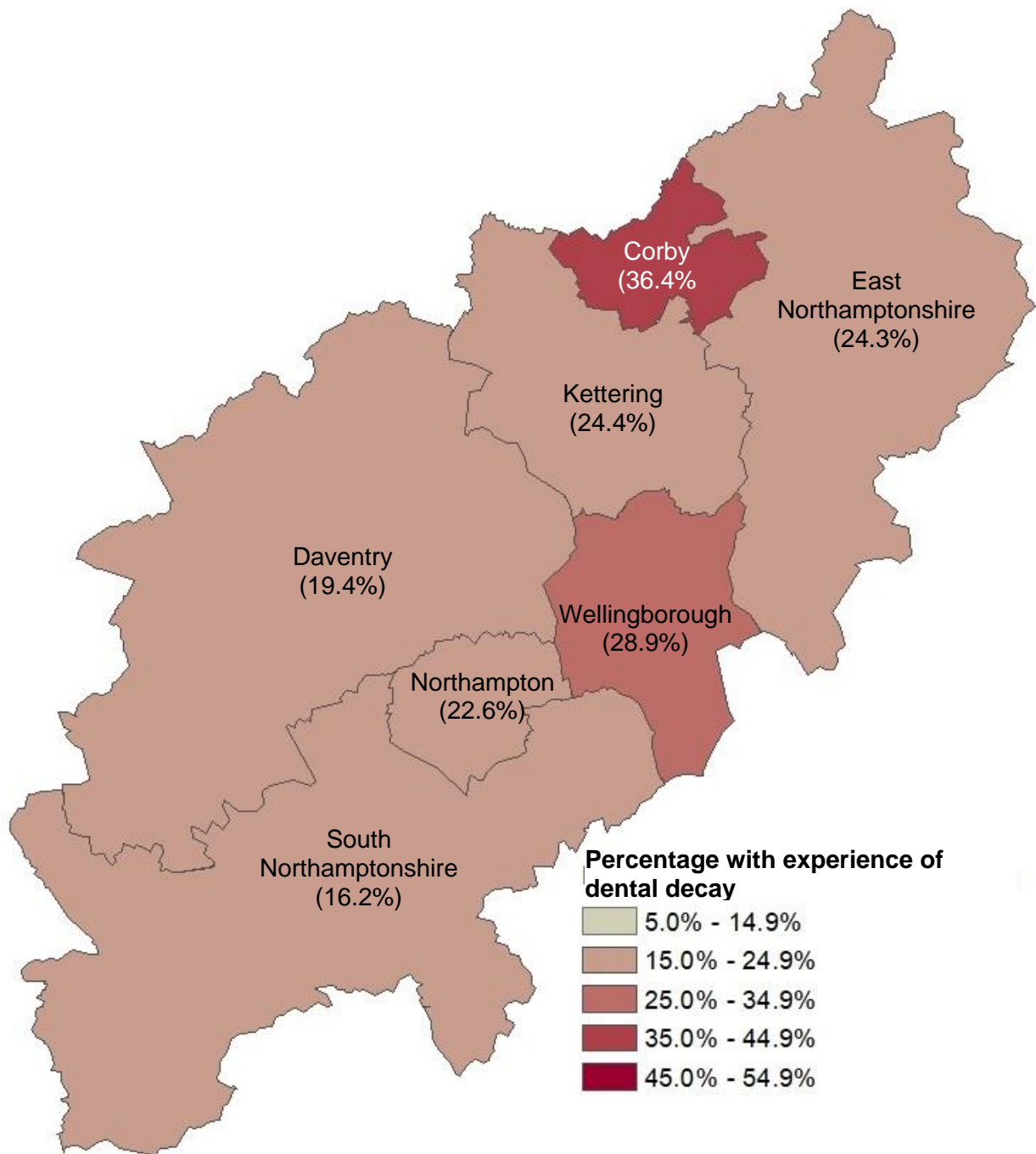


Figure 7: Prevalence of experience of dental decay in 5-year-olds in Corby by ward.

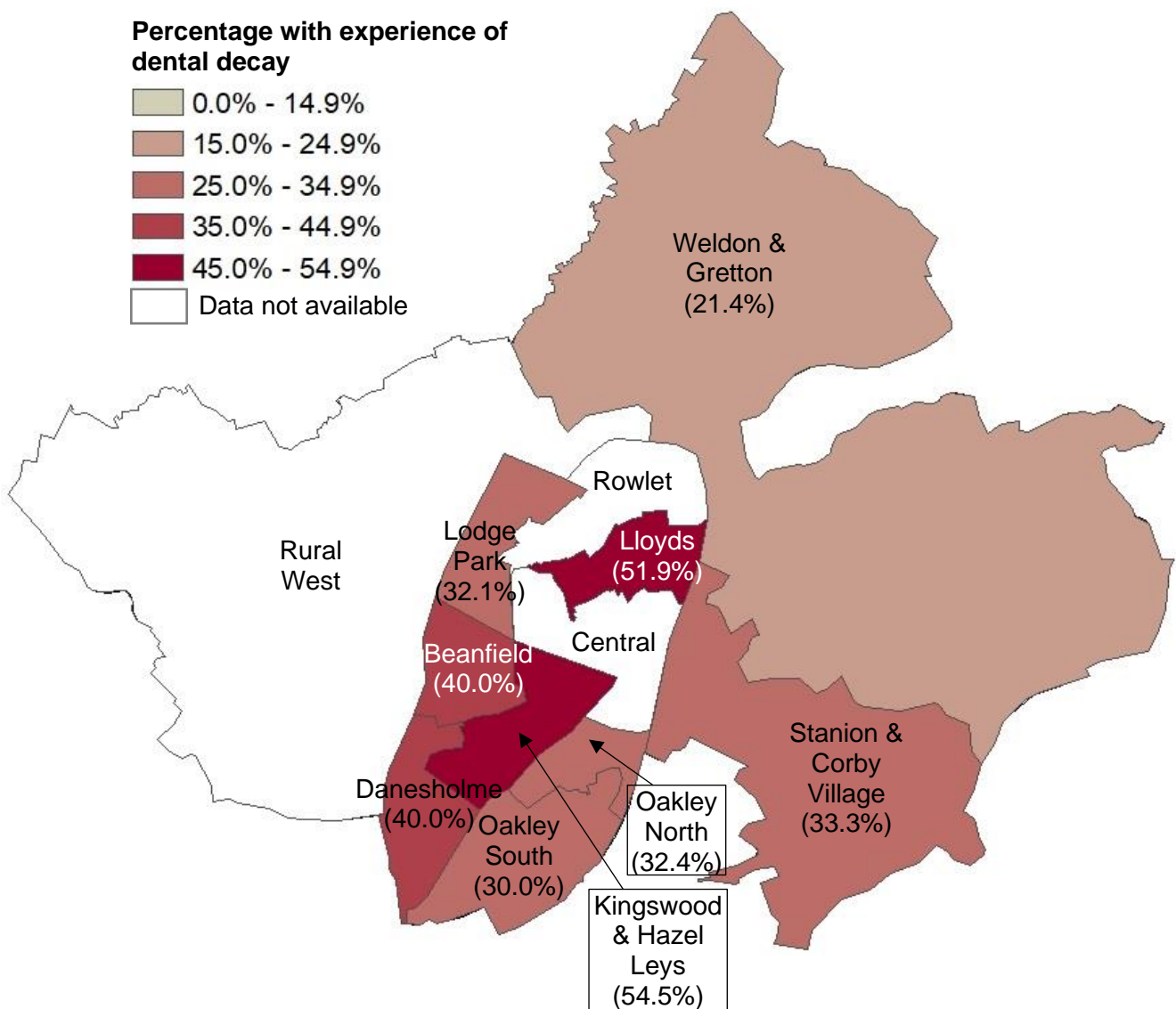


Figure 8: Prevalence of experience of dental decay in 5-year-olds in Daventry by ward.

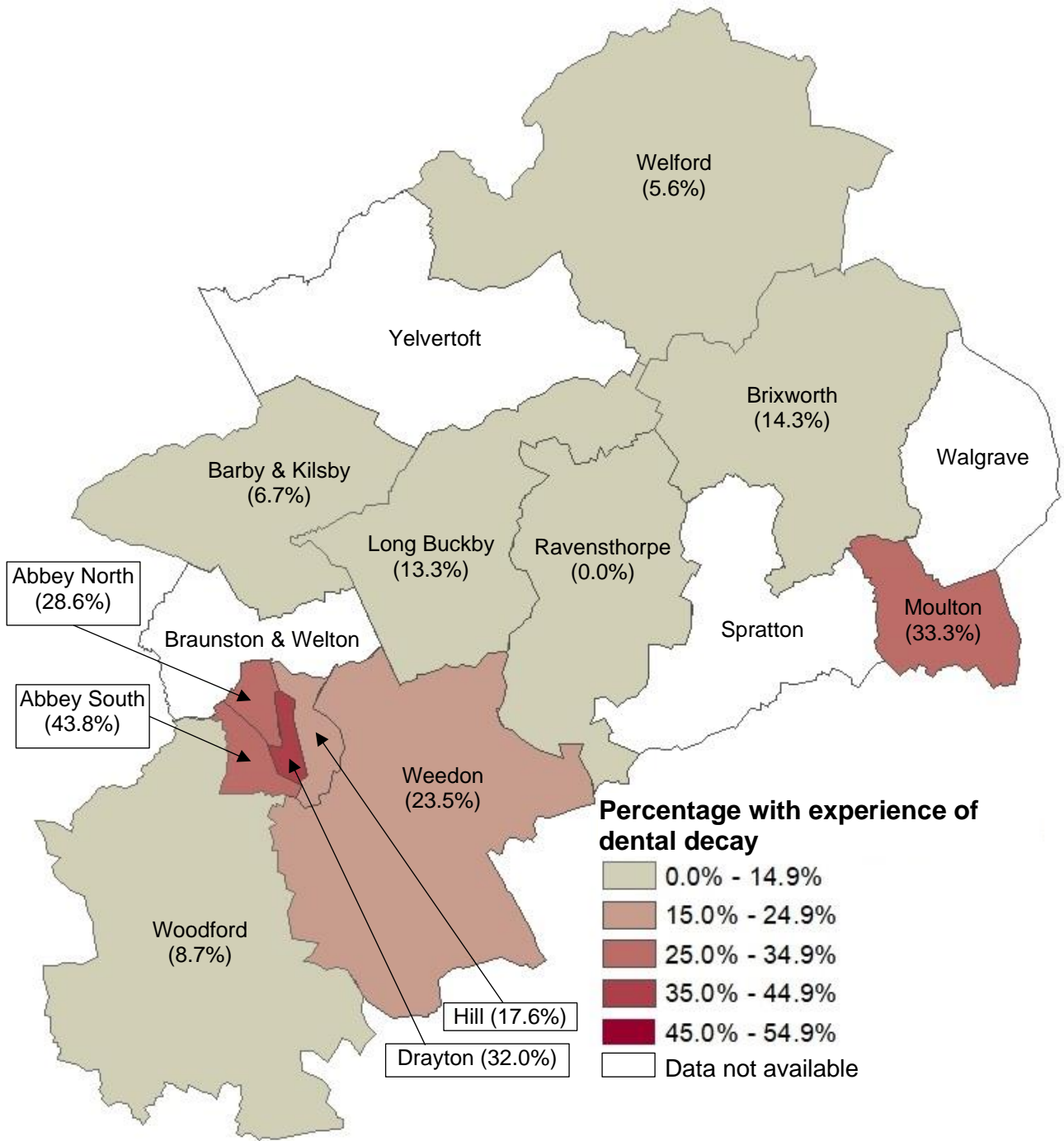


Figure 9: Prevalence of experience of dental decay in 5-year-olds in East Northamptonshire by middle layer super output area.

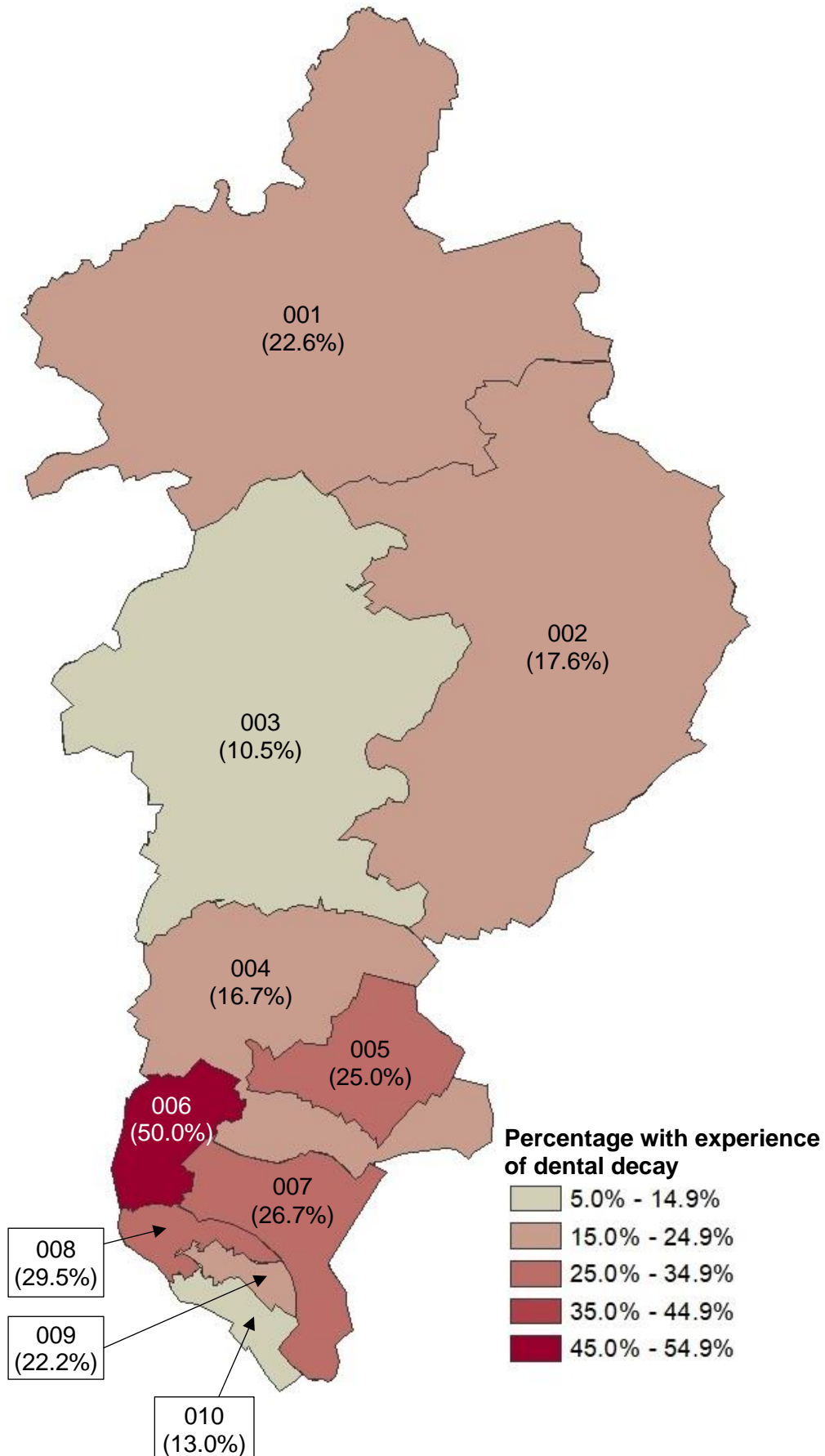


Figure 10: Prevalence of experience of dental decay in 5-year-olds in Kettering by middle layer super output area.

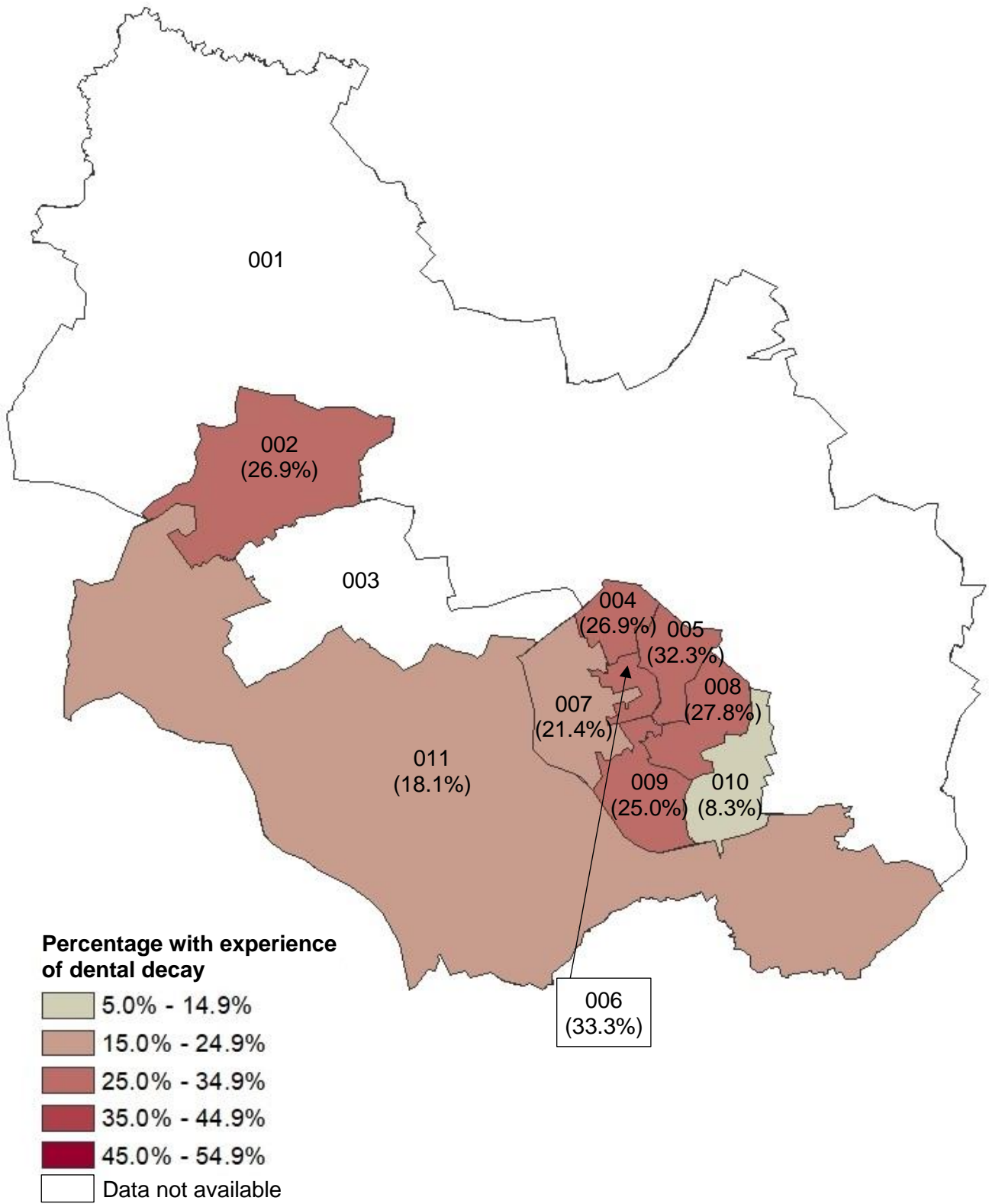
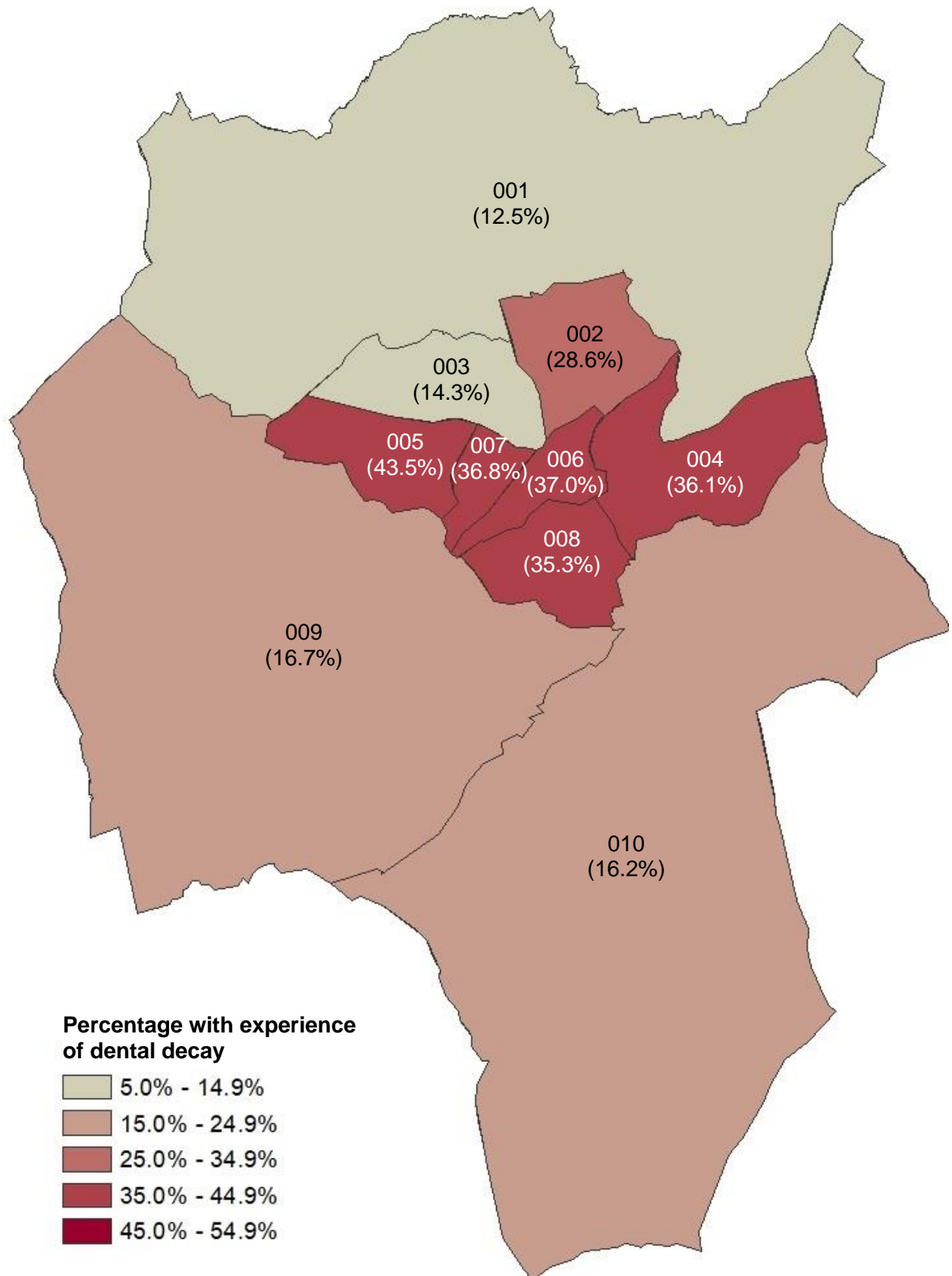


Figure 11: Prevalence of experience of dental decay in 5-year-olds in Wellingborough by middle layer super output area.



Summary

In Northamptonshire average levels of dental decay are higher than the average for England. Within Northamptonshire there are areas where there are higher than average levels of experience of dental decay. At lower-tier local authority level, children living in Corby have the highest levels of experience of dental decay. Within Corby, the highest levels of experience of dental decay are clustered around the Lloyds and Kingswood & Hazel Leys wards.

The small sample sizes in some areas mean it is not possible to provide information at all 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

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
Please send any enquiries to DentalPHIntelligence@phe.gov.uk

PHE publications gateway number: GW-1530

© Crown Copyright, 2020. You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence