



Dental health of five-year-old children

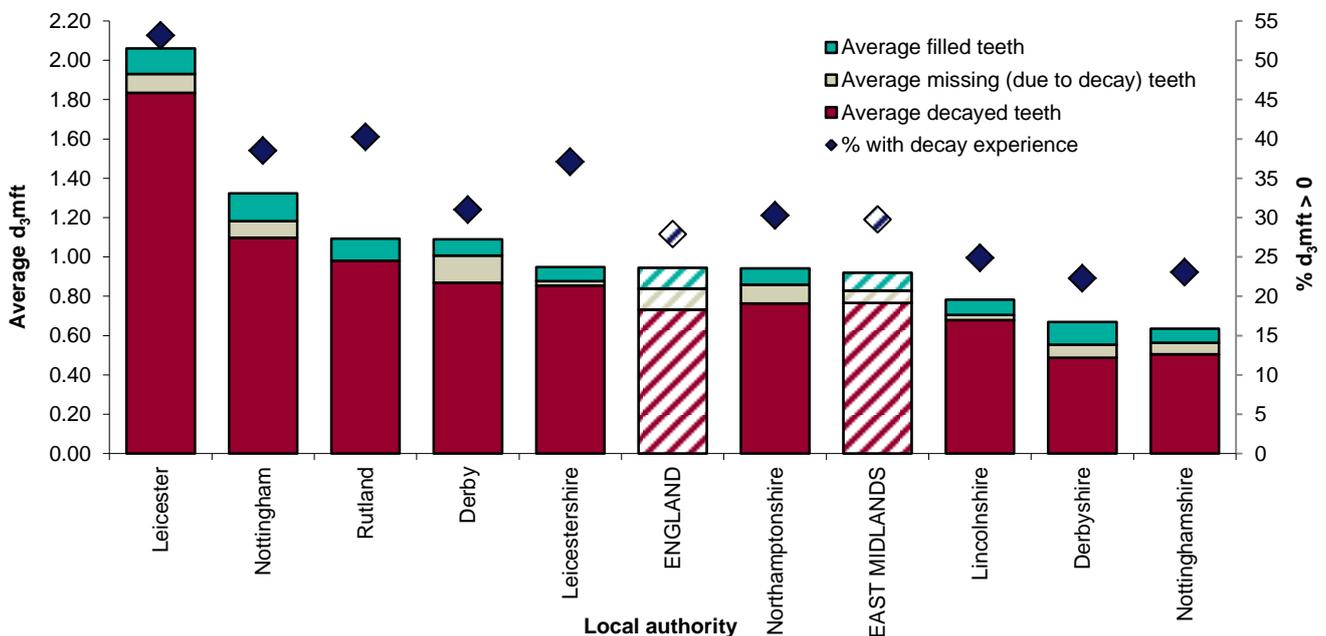
This report provides detail about the oral health of five-year-old children in the area covered by Rutland local authority. The full results of the 2012 National Dental Epidemiology Programme survey of five-year-old children are available at www.nwph.net/dentalhealth

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The level of dental decay in five-year-old children is a useful indicator of the success of a range of programmes and services that aim to improve the general health and wellbeing of young children. In the public health outcomes framework¹ one of the indicators is the dental decay level in children aged five years.

In the 2012 survey, 232 children were sampled in Rutland of whom 173 (75%) consented to take part in the survey and were clinically examined at school by trained and calibrated examiners, who used the national standard methodology.²

Figure 1. The average number of decayed, extracted or filled teeth (d_3mft) and the proportion of children affected by dental decay ($\% d_3mft > 0$) among five-year-old children in Rutland compared with England and the rest of the local authorities in the East Midlands region.



Rutland local authority

Table 1. The average number of decayed, missing (due to decay) or filled teeth (d₃mft), the proportion of children affected by dental decay, along with the average d₃mft in those children with decay experience in Rutland compared with England and the rest of the local authorities in the East Midlands region.

Local authority	Average d ₃ mft	% with decay experience	Average d ₃ mft in those with decay experience
Leicester	2.06	53.2	3.88
Nottingham	1.32	38.5	3.44
Rutland	1.09	40.3	2.71
Derby	1.09	31.0	3.52
Leicestershire	0.95	37.1	2.56
ENGLAND	0.94	27.9	3.38
Northamptonshire	0.94	30.3	3.11
EAST MIDLANDS	0.92	29.8	3.09
Lincolnshire	0.78	24.9	3.15
Derbyshire	0.67	22.3	3.01
Nottinghamshire	0.64	23.0	2.76

Rutland local authority

Table 2. A range of measures of disease among five-year-olds in Rutland local authority compared with their statistical neighbour,ⁱ England and the rest of the East Midlands.

	Rutland local authority	Statistical neighbour: Herefordshire local authority	East Midlands	England
Average d ₃ mft	1.09	1.10	0.92	0.94
% with decay experience	40.3%	33.6%	29.8%	27.9%
Average d ₃ mft in those with decay experience	2.71	3.28	3.09	3.38
% with active decay	39.2%	31.2%	27.3%	24.5%
% with experience of extraction ⁱⁱ	0.0%	3.2%	2.0%	3.1%
% with dental abscess	0.6%	1.1%	1.8%	1.7%
% with teeth decayed into pulp	1.8%	1.4%	3.6%	4.4%
% with ECC ⁱⁱⁱ	5.3%	5.1%	5.6%	6.3%
% with high levels of plaque present on upper front teeth ^{iv}	1.7%	2.9%	1.1%	1.7%

ⁱ Generated by the Chartered Institute of Public Finance and Accountancy (CIPFA) Nearest Neighbours Model, post April 2009, comparator 1.³

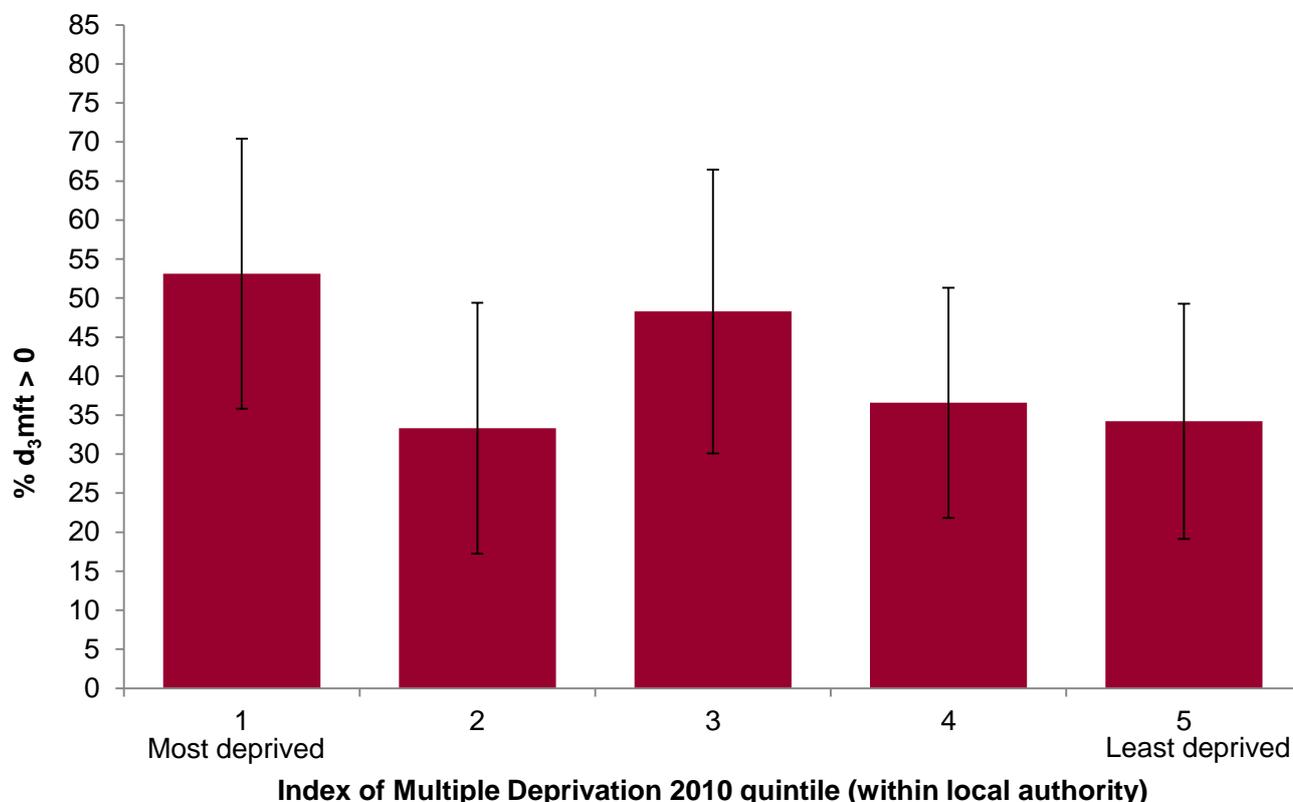
ⁱⁱ Experience of extraction of one or more teeth on one or more occasions. The majority of children attending hospital for extractions have general anaesthetics for these procedures.

ⁱⁱⁱ Early childhood caries – the definition selected was ‘caries involving one or more surfaces of upper anterior teeth’. This pattern of decay is often linked with long term use of a feeding bottle with sugar-containing drinks.

^{iv} Indicative of a non-brusher.

Rutland local authority

Figure 2. Prevalence of caries by Index of Multiple Deprivation 2010 quintiles for Rutland local authority (including 95% confidence limits shown as black bars).



In summary, Rutland local authority has levels of decay that are higher than the average for England.

If further local analysis is required, contact the relevant PHE centre and ask for the consultant in dental public health, who will be able to help.

The small sample sizes in some areas mean it is not possible to provide information at ward level. Future surveys can be commissioned to be conducted at the appropriate sample size to allow such analysis.

In spring 2014 PHE provided a guide for commissioners of oral health improvement programmes, called “Local authorities improving oral health: Commissioning better oral health for children and young people”.⁴

References

1. Public Health England (2014). Public Health Outcomes Framework [Online]. Available at: www.gov.uk/government/collections/public-health-outcomes-framework [Accessed 15 January 2014].
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. The Chartered Institute of Public Finance and Accountancy (2011), Nearest Neighbours Model Update [Online]. Available at: www.cipfastats.net/resources/nearestneighbours [Accessed 15 January 2014].
4. Public Health England (2014). Local authorities improving oral health: Commissioning better oral health for children and young people [Online]. Available at: www.gov.uk/government/publications/improving-oral-health-an-evidence-informed-toolkit-for-local-authorities

More information is available at www.nwph.net/dentalhealth Please send any enquiries to KITNorthWest@phe.gov.uk

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