



# Wirral

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## 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 Wirral local authority. The full results of the 2015 National Dental Epidemiology Programme survey of five-year-old children are available at:

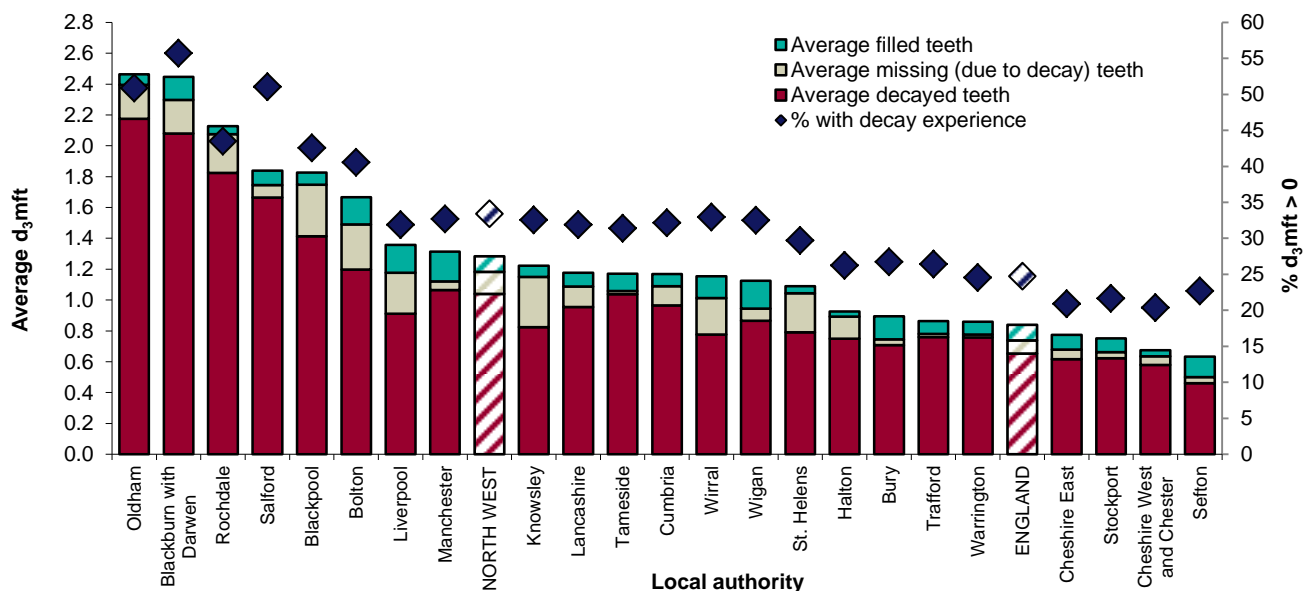
[www.nwph.net/dentalhealth](http://www.nwph.net/dentalhealth)



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 framework<sup>1</sup> one of the indicators is the proportion of children aged five-years free from dental decay.

In the 2015 National Dental Epidemiology Programme survey, 338 children were sampled in Wirral of whom 192 (57.1%) parental consent was provided to take part in the survey and were clinically examined at school by trained and calibrated examiners, who used the national standard method<sup>2</sup>.

**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 Wirral compared with England and local authorities in the North West region.



**Table 1:** The average number of decayed, missing (due to decay) or filled teeth (d<sub>3</sub>mft), the proportion of children affected by dental decay along with the average d<sub>3</sub>mft in those children with decay experience in Wirral compared with England and local authorities in the North West region.

Local authority	Average d <sub>3</sub> mft	% with decay experience	Average d <sub>3</sub> mft in those with decay experience
Oldham	2.5	50.9	4.8
Blackburn with Darwen	2.4	55.7	4.4
Rochdale	2.1	43.5	4.9
Salford	1.8	51.0	3.6
Blackpool	1.8	42.5	4.3
Bolton	1.7	40.5	4.1
Liverpool	1.4	31.8	4.3
Manchester	1.3	32.7	4.0
<b>NORTH WEST</b>	<b>1.3</b>	<b>33.4</b>	<b>3.8</b>
Knowsley	1.2	32.5	3.8
Lancashire	1.2	31.9	3.7
Tameside	1.2	31.4	3.7
Cumbria	1.2	32.2	3.6
Wirral	1.2	32.9	3.5
Wigan	1.1	32.5	3.5
St. Helens	1.1	29.7	3.7
Halton	0.9	26.2	3.6
Bury	0.9	26.7	3.4
Trafford	0.9	26.4	3.3
Warrington	0.9	24.5	3.5
<b>ENGLAND</b>	<b>0.8</b>	<b>24.7</b>	<b>3.4</b>
Cheshire East	0.8	20.9	3.7
Stockport	0.8	21.7	3.5
Cheshire West and Chester	0.7	20.3	3.3
Sefton	0.6	22.7	2.8

**Table 2:** A range of measures of oral health among five-year-olds in Wirral local authority compared with their statistical neighbours,<sup>i</sup> England and the North West.

	Wirral local authority	Statistical neighbour within North West: Sefton local authority	Statistical neighbour comparator 1: Sefton local authority	North West	England
Average d <sub>3</sub> mft	1.2	0.6	0.6	1.3	0.8
% without decay experience	67.1%	77.3%	77.3%	66.6%	75.2%
% with decay experience	32.9%	22.7%	22.7%	33.4%	24.7%
Average d <sub>3</sub> mft in those with decay experience	3.5	2.8	2.8	3.8	3.4
% with active decay	26.6%	18.1%	18.1%	30.6%	21.5%
% with experience of extraction <sup>ii</sup>	6.7%	1.0%	1.0%	3.6%	2.5%
% with dental abscess	3.1%	0.7%	0.7%	2.3%	1.4%
% with teeth decayed into pulp	6.0%	4.9%	4.9%	6.3%	3.6%
% with decay affecting incisors <sup>iii</sup>	7.2%	4.7%	4.7%	8.5%	5.6%
% with high levels of plaque present on upper front teeth <sup>iv</sup>	0.0%	0.5%	0.5%	0.8%	1.7%

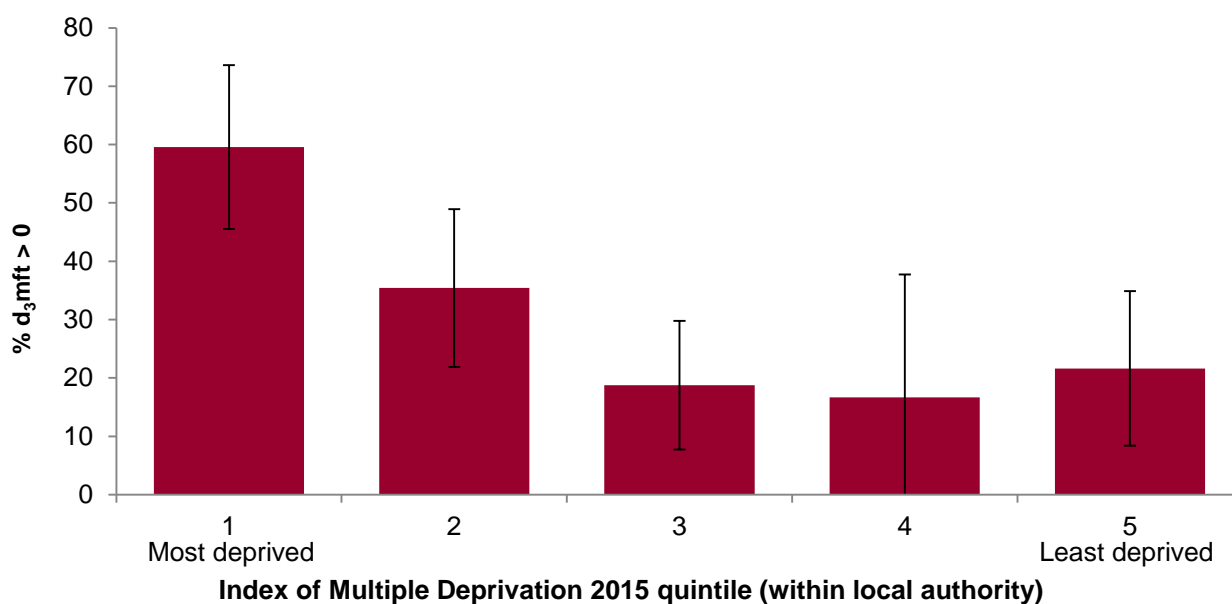
<sup>i</sup> generated by the Children's services statistical neighbour benchmarking tool, within the North West the comparator is "very close" and comparator 1 is "very close"<sup>3</sup>.

<sup>ii</sup> 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.

<sup>iii</sup> decay 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.

<sup>iv</sup> indicative of a non-brusher.

**Figure 2:** Prevalence of decay by Index of Multiple Deprivation 2015 quintiles for Wirral local authority (including 95% confidence limits shown as black bars).



## Summary

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

The prevalence of decay that is related to long term bottle use is higher than the national level. This suggests that action to discourage long term bottle use and sugary drinks consumption will be needed if oral health levels are to be improved.

If further local analysis is required, contact your local PHE Dental Epidemiology Coordinator: Dr Gill Davies, [gill.davies@phe.gov.uk](mailto:gill.davies@phe.gov.uk)

The small sample sizes in some areas mean it is not possible to provide information at ward level. Future surveys can be commissioned to provide samples large enough to facilitate local analysis.

In 2016 PHE published 'Commissioning High Quality Information to Support Oral Health Improvement: A toolkit about dental epidemiology for local authorities, commissioners and partners' to support commissioning of oral health surveys<sup>4</sup>.

## References

1. Public Health England (2014). Public Health Outcomes Framework [Online]. Available at: [www.gov.uk/government/collections/public-health-outcomes-framework](http://www.gov.uk/government/collections/public-health-outcomes-framework) [Accessed 11 August 2016].
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](http://www.gov.uk/government/publications/local-authority-interactive-tool-lait) [Accessed 15 February 2017].
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: [www.nwph.net/dentalhealth/2016DentalEpidemiologytoolkit/Commissioning%20High%20Quality%20Information%20to%20Support%20Oral%20Health%20Improvement.pdf](http://www.nwph.net/dentalhealth/2016DentalEpidemiologytoolkit/Commissioning%20High%20Quality%20Information%20to%20Support%20Oral%20Health%20Improvement.pdf)

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Please send any enquiries to [DentalPHIntelligence@phe.gov.uk](mailto:DentalPHIntelligence@phe.gov.uk)

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