



## Dental Health Profile 2017

### Introduction

**This profile provides detail about the oral health of five-year-old children in the area covered by Sunderland City Council. The data is taken from the 2017 National Dental Epidemiology Programme survey of five-year-old children. The full results are available at: <https://www.gov.uk/government/statistics/oral-health-survey-of-5-year-old-children-2017>.**

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 dental decay level in children aged five years.

In the 2017 National Dental Epidemiology Programme survey, 3,128 children were sampled in Sunderland. Parental consent to take part in the survey was provided for 1,743 (52.9%) children who were clinically examined at school by trained and calibrated examiners, who used the national standard method<sup>2</sup>.

### Summary

Generally, oral health outcomes have been improving over time. Despite these improvements, Sunderland has levels of decay in 5-year-olds that are significantly higher than the average for England.

The severity of decay in 5-year-olds in Sunderland - measured using the average number of decayed, missing or filled teeth (dmft) - is also significantly higher than the average for England.

There is wide variation in the levels and severity of tooth decay experienced by children living in different parts of the City. Wards with higher prevalence of tooth decay also tend to have higher severity of decay. Both prevalence and severity of tooth decay are strongly linked to deprivation.

Oral health outcomes for 5-year-old children living in areas which have fluoridated water are generally better than those for 5-year-old children living in similar areas without fluoridated water.

Public Health England has published evidence-based guidance about interventions that can be effective in preventing and reducing tooth decay and other oral diseases<sup>3</sup>.

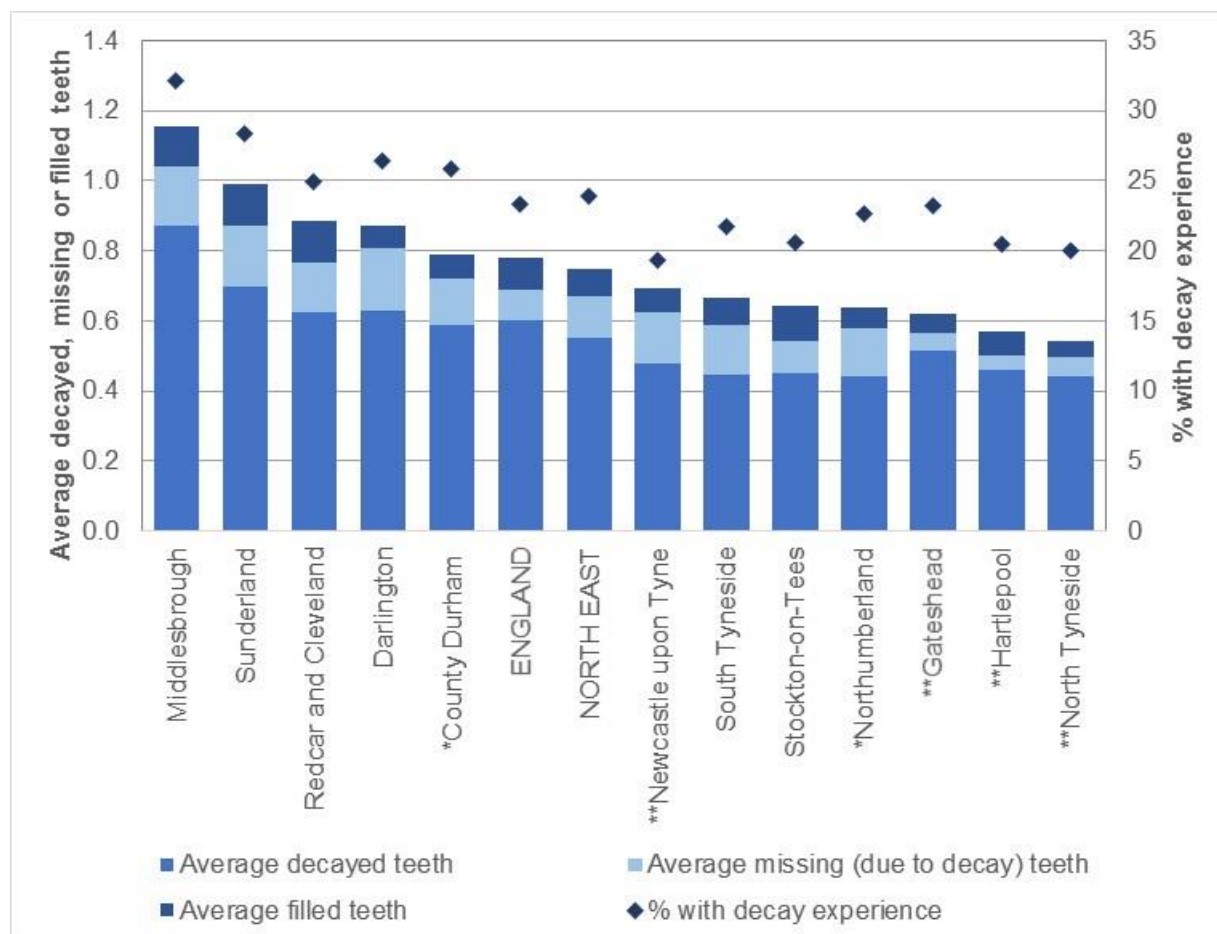
## **Dental health of five-year-old-children**

**Table 1:** The average number of decayed, missing (due to decay) or filled teeth (dmft), the proportion of children affected by dental decay and the average dmft in those children with decay experience in Sunderland compared with England and local authorities in the North East region

Local authority	Average dmft	% with decay experience	Average dmft in those with decay experience
Middlesbrough	1.2	32.1	3.6
Sunderland	1.0	28.4	3.5
Redcar and Cleveland	0.9	24.9	3.6
Darlington	0.9	26.4	3.3
County Durham*	0.8	25.8	3.1
ENGLAND	0.8	23.3	3.4
NORTH EAST	0.7	23.9	3.1
Newcastle upon Tyne**	0.7	19.3	3.6
South Tyneside	0.7	21.7	3.1
Stockton-on-Tees	0.6	20.6	3.1
Northumberland*	0.6	22.6	2.8
Gateshead**	0.6	23.2	2.7
Hartlepool**	0.6	20.5	2.8
North Tyneside**	0.5	20.0	2.7

Note: \*\* local authority water supply is fully fluoridated  
 \* local authority water supply is partly fluoridated

**Figure 1:** The average number of decayed, missing (due to decay) or filled teeth and the proportion of children with dental decay among five-year-old children in Sunderland compared with England and local authorities in the North East region



Note:

\*\* local authority water supply is fully fluoridated

\* local authority water supply is partly fluoridated

**Table 2:** A range of oral health measures in five-year-old children in Sunderland local authority compared with their statistical neighbours, the North East and England

	Sunderland	Gateshead <sup>i</sup>	Wakefield <sup>ii</sup>	NORTH EAST	ENGLAND
Average dmft	1.0	0.6	0.9	0.7	0.8
Average dmft in those with decay	3.5	2.7	3.2	3.1	3.4
% without decay	71.6	76.8	71.2	76.1	76.7
% with decay	28.4	23.2	28.8	23.9	23.3
% with active decay	22.9	21.3	23.8	20.2	20.0
% with experience of extraction <sup>iii</sup>	4.0	1.2	4.4	3.2	2.4
% with dental abscess	3.8	0.4	1.4	1.5	1.1
% with teeth decayed into pulp	5.9	2.6	6.1	3.5	3.4
% with decay affecting incisors <sup>iv</sup>	6.6	3.6	5.2	4.4	5.1
% with high levels of plaque on upper front teeth <sup>v</sup>	5.7	0.4	0.6	2.7	1.5

<sup>i</sup> Generated by the Children's Services Statistical Neighbour Benchmarking Tool<sup>4</sup>, closest demographic neighbour is Gateshead; this is "Extremely Close" and is fully fluoridated

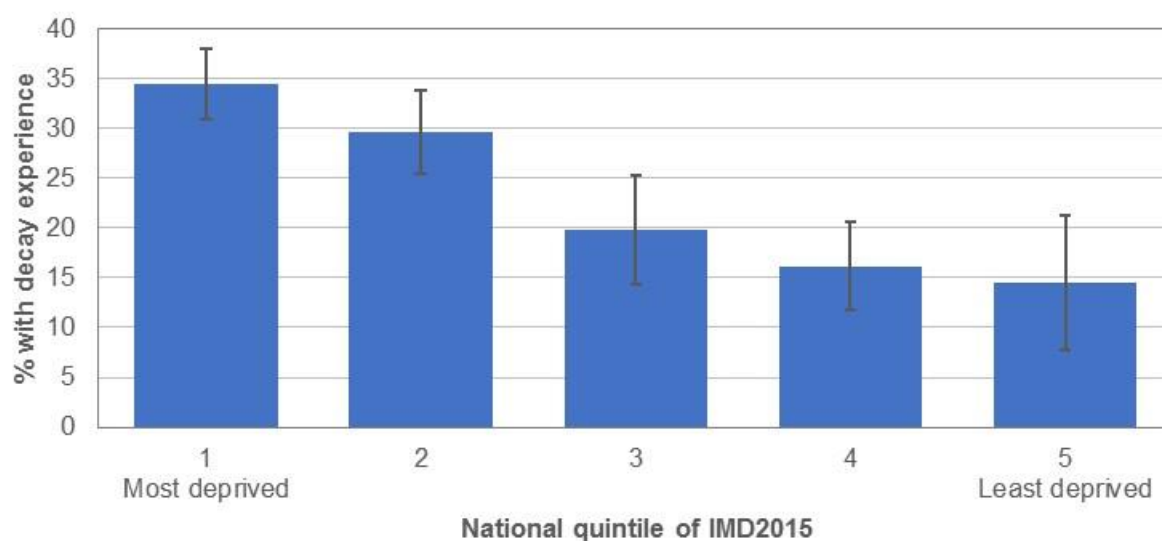
<sup>ii</sup> Generated by the Children's Services Statistical Neighbour Benchmarking Tool<sup>4</sup>, second closest demographic neighbour is Wakefield; this is "Very Close" and is not fluoridated

<sup>iii</sup> Experience of extraction of one or more teeth on one or more occasions. The majority of children attending hospital for extractions have general anaesthetic for this procedure.

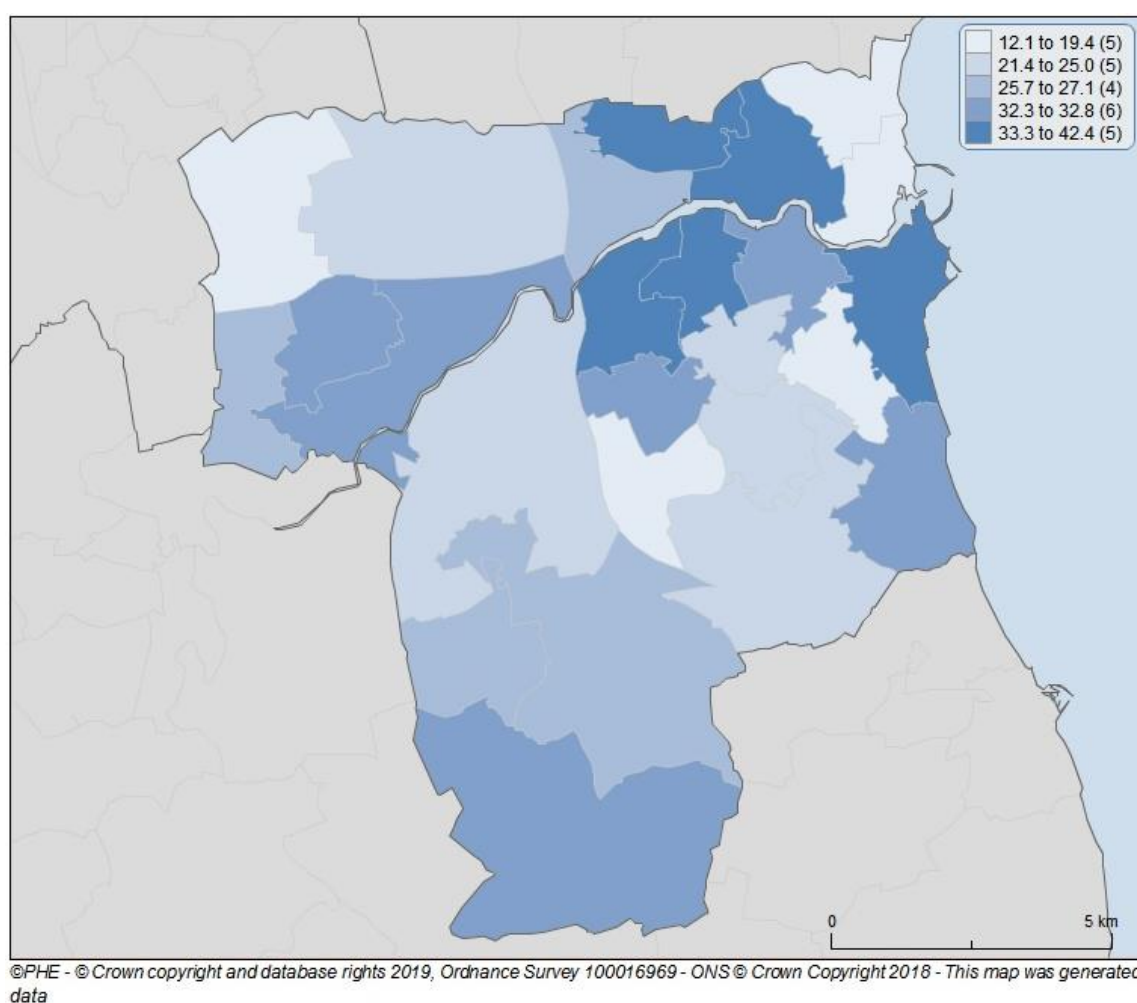
<sup>iv</sup> Decay involving one or more surfaces of the upper anterior teeth. This pattern of decay is often linked with long term use of a feeding bottle with sugar-containing drinks.

<sup>v</sup> Indicative of a non-brusher.

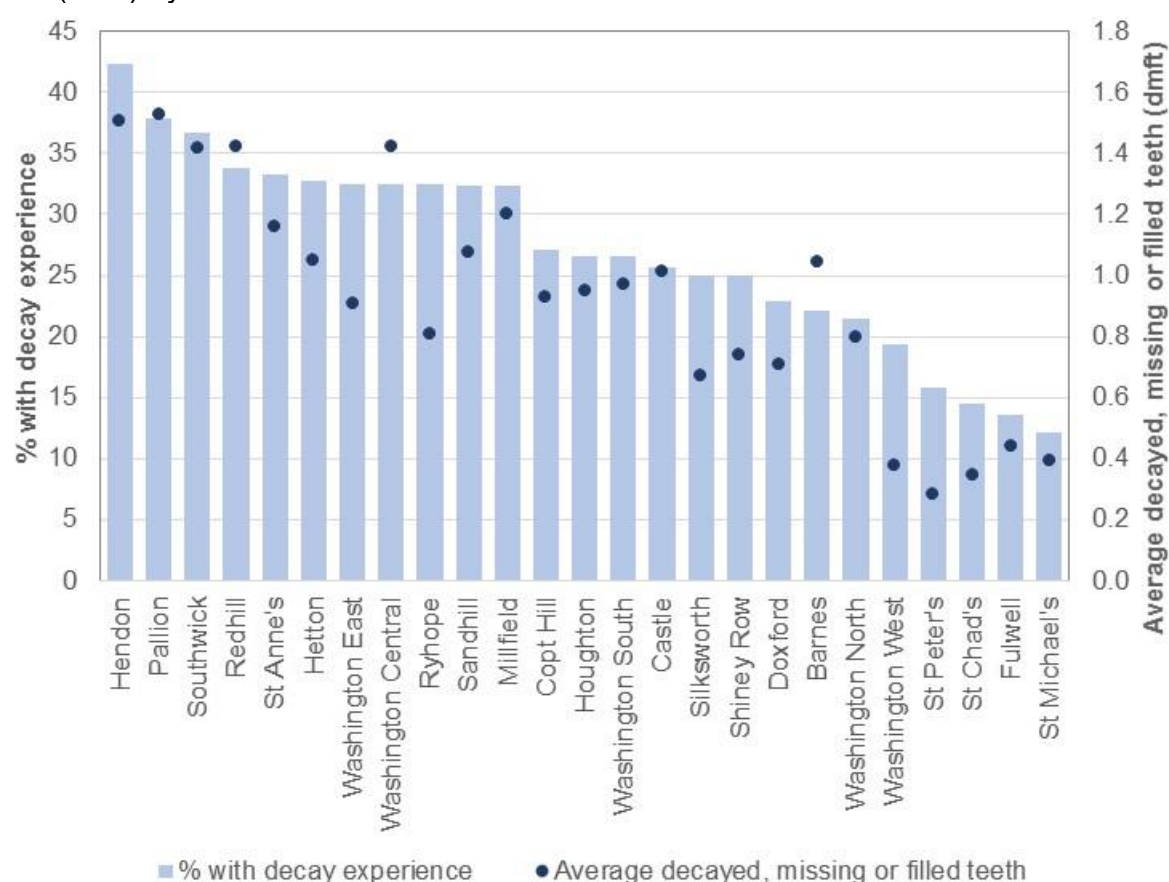
**Figure 2:** Prevalence of decay by Index of Multiple Deprivation 2015 national quintile for Sunderland (with 95% confidence intervals shown as black bars)



**Figure 3:** Map showing prevalence of decay by ward in Sunderland



**Figure 4:** Prevalence of decay and average number of decayed, missing or filled teeth (dmft) by ward in Sunderland



## References

1. Public Health Outcomes Framework. Public Health England, 2014. Available at: <https://www.gov.uk/government/collections/public-health-outcomes-framework>.
2. Pine, C.M., Pitts, N.B., Nugent, Z.J. 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* 1997; 14 (Supplement 1), 18-29.
3. [Delivering better oral health: an evidence-based toolkit for prevention \(Third edition\)](#). Public Health England and Department of Health, March 2017.
4. Children's Services Statistical Neighbour Benchmarking Tool in Local Authority Interactive Tool. Department for Education, February 2020. Available at: <https://www.gov.uk/government/publications/local-authority-interactive-tool-lait>.

If further local analysis of the survey data is required, please contact PHE North East and ask for the Consultant in Dental Public Health who will be able to help.