

## **Central Bedfordshire**

Published December 2020

## Oral health of 5-year-old children

This profile describes the oral health of 5-yearolds living in Central Bedfordshire. It uses data from the National Dental Epidemiology Programme 2019 survey of 5-year-old children<sup>1</sup>.

The profile is designed to help local government and health services improve the oral health and wellbeing of children and tackle health inequalities.



In Central Bedfordshire 270 5-year-olds (approximately 67.7% of those sampled) were examined at school by trained and calibrated examiners using the national standard method<sup>2</sup>.

**Figure 1:** Prevalence of experience of dental decay and mean number of teeth with experience of dental decay in 5-year-olds in Central Bedfordshire, other local authorities in the East of England and England.

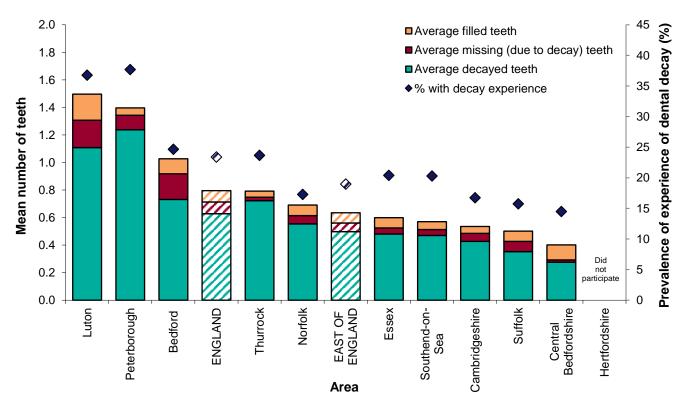


 Table 1: Experience of dental decay in 5-year-olds in Central Bedfordshire, other local authorities in the East of England and England.

| Local authority      | Prevalence of<br>experience of<br>dental decay<br>(%) | Mean number of teeth<br>with experience of<br>dental decay in all<br>examined children<br>n (95% confidence<br>intervals) | Mean number of teeth<br>with experience of<br>dental decay in children<br>with any decay<br>experience<br>n (95% confidence<br>intervals) |  |
|----------------------|---|---|---|--|
| Peterborough         | 37.7  | 1.4<br>(1.05 - 1.75)  | 3.7<br>(3.03 - 4.38)  |  |
| Luton                | 36.8  | 1.5<br>(1.16 - 1.84)  | 4.1<br>(3.39 - 4.75)  |  |
| Bedford              | 24.7  | 1.0<br>(0.73 - 1.33)  | 4.2<br>(3.40 - 4.92)  |  |
| Thurrock             | 23.6  | 0.8<br>(0.53 - 1.06)  | 3.3<br>(2.63 - 4.07)  |  |
| England              | 23.4  | 0.8<br>(0.78 - 0.81)  | 3.4<br>(3.36 - 3.44)  |  |
| Essex                | 20.4  | 0.6<br>(0.54 - 0.66)  | 2.9<br>(2.73 - 3.15)  |  |
| Southend-on-Sea      | 20.3  | 0.6<br>(0.34 - 0.80)  | 2.8<br>(2.06 - 3.56)  |  |
| East of England      | 19.0  | 0.6<br>(0.60 - 0.67)  | 3.3<br>(3.21 - 3.48)  |  |
| Norfolk              | 17.3  | 0.7<br>(0.60 - 0.78)  | 4.0<br>(3.67 - 4.33)  |  |
| Cambridgeshire       | 16.7  | 0.5<br>(0.44 - 0.63)  | 3.2<br>(2.79 - 3.61)  |  |
| Suffolk              | 15.7  | 0.5<br>(0.42 - 0.58)  | 3.2<br>(2.85 - 3.52)  |  |
| Central Bedfordshire | 14.5  | 0.4<br>(0.19 - 0.61)  | 2.8<br>(1.81 - 3.74)  |  |
| Hertfordshire        | Did not participate                                   |   |   |  |

**Table 2.** Measures of oral health among 5-year-olds in Central Bedfordshire, it's statistical neighbours,<sup>i</sup> the East of England and England.

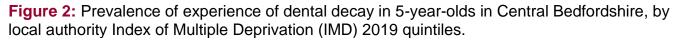
|  | Central<br>Bedfordshire | Statistical<br>neighbour within<br>East of England:<br>Essex | Statistical<br>neighbour<br>comparator 1:<br>Hampshire | East of<br>England | England |
|--|-------------------------|--|--|--------------------|---------|
| Prevalence of<br>experience of dental<br>decay   | 14.5%                   | 20.4%  | 14.0%  | 19.0%              | 23.4%   |
| Mean number of teeth<br>with experience of<br>dental decay   | 0.4                     | 0.6  | 0.4  | 0.6                | 0.8     |
| Mean number of teeth<br>with experience of<br>decay in those with<br>experience of dental<br>decay | 2.8                     | 2.9  | 2.9  | 3.3                | 3.4     |
| Mean number of<br>decayed teeth in<br>those with experience<br>of dental decay                     | 1.7                     | 2.3  | 2.0  | 2.6                | 2.7     |
| Proportion with active decay   | 11.0%                   | 17.7%  | 10.9%  | 16.3%              | 20.4%   |
| Proportion with<br>experience of tooth<br>extraction <sup>ii</sup>                                 | 0.7%                    | 1.4%   | 1.5%   | 1.8%               | 2.2%    |
| Proportion with dental abscess   | 1.0%                    | 0.4%   | 0.6%   | 0.7%               | 1.0%    |
| Proportion with teeth decayed into pulp  | 1.7%                    | 2.1%   | 1.7%   | 2.5%               | 3.3%    |
| Proportion with decay affecting incisors <sup>iii</sup>  | 3.0%                    | 2.2%   | 2.4%   | 3.5%               | 5.2%    |
| Proportion with high<br>levels of plaque present<br>on upper front teeth <sup>iv</sup>             | 0.0%                    | 1.2%   | 1.1%   | 0.5%               | 1.2%    |

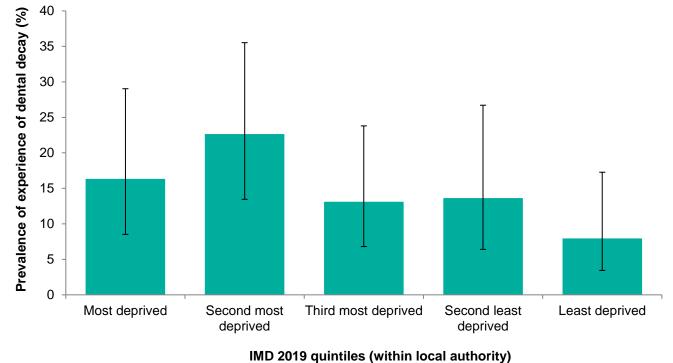
<sup>i</sup> generated by the children's services statistical neighbour benchmarking tool, the neighbour within the East of England has "Very Close" comparator characteristics and the national neighbour 1 has "Extremely Close" comparator characteristics<sup>3</sup>.

<sup>ii</sup> experience of extraction of one or more teeth on one or more occasions.

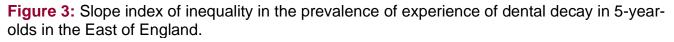
iii dental decay involving one or more surfaces of upper anterior teeth.

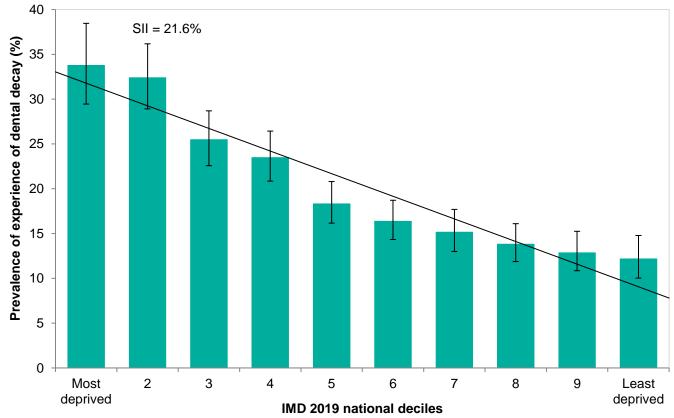
<sup>iv</sup> indicative of poor tooth brushing habits.





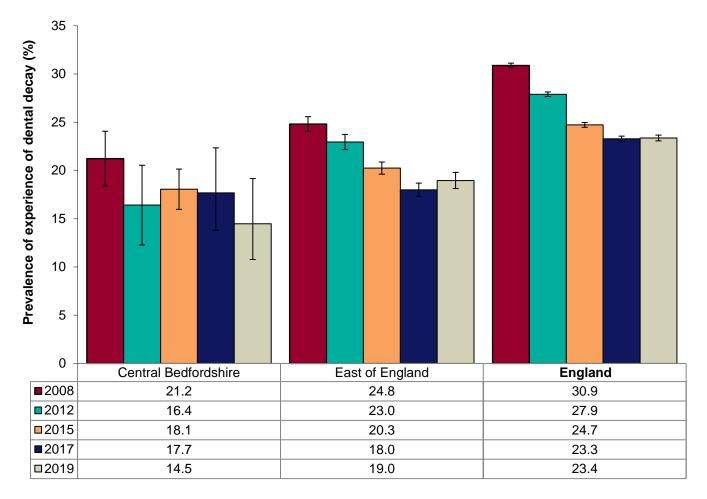
Error bars represent 95% confidence limits





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**Figure 4:** Prevalence of experience of dental decay in 5-year-olds in Central Bedfordshire, the East of England and England, by year.

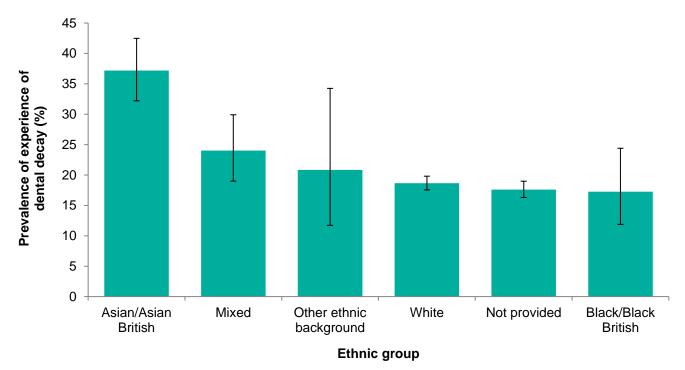


Error bars represent 95% confidence limits

Table 3: Experience of dental decay in 5-year-olds in the East of England, by ethnic group.

| Ethnic group            | Number of<br>children<br>examined<br>(N) | Prevalence of<br>experience of<br>dental decay<br>(%) | Mean number of teeth<br>with experience of<br>dental decay among<br>children with any<br>experience of dental<br>decay n (95% CI) | Prevalence of<br>dental decay<br>affecting incisors<br>(%) |
|-------------------------|--|---|---|--|
| Asian/Asian<br>British  | 336                                      | 37.2  | 4.2<br>(3.59 - 4.75)  | 12.8   |
| Mixed                   | 233                                      | 24.0  | 4.4<br>(3.54 - 5.28)  | 8.6  |
| Other ethnic background | 48                                       | 20.8  | 4.4<br>(2.37 - 6.43)  | 6.3  |
| White                   | 4,546                                    | 18.7  | 3.4<br>(3.17 - 3.56)  | 2.8  |
| Not provided            | 3,118                                    | 17.6  | 3.1<br>(2.84 - 3.26)  | 3.2  |
| Black/Black<br>British  | 139                                      | 17.3  | 3.3<br>(2.24 - 4.43)  | 3.6  |
| East of England         | 8,420                                    | 19.0  | 3.3<br>(3.21 - 3.48)  | 3.5  |

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



Error bars represent 95% confidence limits

## Summary

In Central Bedfordshire average levels of dental decay are lower than the average for England.

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 surveys<sup>4</sup>.

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 years<sup>5</sup>.

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].

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More information is available at www.gov.uk/government/collections/oral-health Please send any enquiries to DentalPHIntelligence@phe.gov.uk

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