

Essex Published December 2020

Oral health of 5-year-old children

This profile describes the oral health of 5-yearolds living in Essex. 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 Essex 2,519 5-year-olds (approximately 50.1% 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 Essex, other local authorities in the East of England and England.

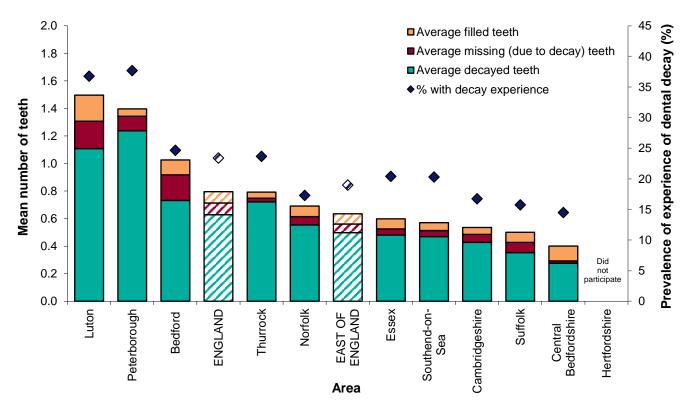


Table 1: Experience of dental decay in 5-year-olds in Essex, other local authorities in the East of England and England.

| 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) | |
|----------------------|---|---|---|--|
| Peterborough | 37.7 | 1.4 (1.05 - 1.75) | 3.7 (3.03 - 4.38) | |
| Luton | 36.8 | 1.54.1(1.16 - 1.84)(3.39 - 4.75) | | |
| Bedford | 24.7 | 1.0 (0.73 - 1.33) | 4.2 (3.40 - 4.92) | |
| Thurrock | 23.6 | 0.8 (0.53 - 1.06) | 3.3 (2.63 - 4.07) | |
| England | 23.4 | 0.8 (0.78 - 0.81) | 3.4 (3.36 - 3.44) | |
| Essex | 20.4 | 0.6 2.9 (0.54 - 0.66) (2.73 - 3.15) | | |
| Southend-on-Sea | 20.3 | 0.6 (0.34 - 0.80) | 2.8 (2.06 - 3.56) | |
| East of England | 19.0 | 0.6 (0.60 - 0.67) | 3.3 (3.21 - 3.48) | |
| Norfolk | 17.3 | 0.7 (0.60 - 0.78) | 4.0 (3.67 - 4.33) | |
| Cambridgeshire | 16.7 | 0.5 (0.44 - 0.63) | 3.2 (2.79 - 3.61) | |
| Suffolk | 15.7 | 0.5 (0.42 - 0.58) | 3.2 (2.85 - 3.52) | |
| Central Bedfordshire | 14.5 | 0.4 (0.19 - 0.61) | 2.8 (1.81 - 3.74) | |
| Hertfordshire | Did not participate | | | |

Table 2. Measures of oral health among 5-year-olds in Essex, it's statistical neighbours,ⁱ the East of England and England.

| | Essex | Statistical neighbour within East of England: Central Bedfordshire | Statistical neighbour comparator 1: Kent | East of England | England |
|--|-------|--|---|--------------------|---------|
| Prevalence of experience of dental decay | 20.4% | 14.5% | 19.9% | 19.0% | 23.4% |
| Mean number of teeth with experience of dental decay | 0.6 | 0.4 | 0.7 | 0.6 | 0.8 |
| Mean number of teeth with experience of decay in those with experience of dental decay | 2.9 | 2.8 | 3.3 | 3.3 | 3.4 |
| Mean number of decayed teeth in those with experience of dental decay | 2.3 | 1.7 | 2.4 | 2.6 | 2.7 |
| Proportion with active decay | 17.7% | 11.0% | 16.4% | 16.3% | 20.4% |
| Proportion with experience of tooth extraction ⁱⁱ | 1.4% | 0.7% | 2.2% | 1.8% | 2.2% |
| Proportion with dental abscess | 0.4% | 1.0% | 0.1% | 0.7% | 1.0% |
| Proportion with teeth decayed into pulp | 2.1% | 1.7% | 2.0% | 2.5% | 3.3% |
| Proportion with decay affecting incisors ⁱⁱⁱ | 2.2% | 3.0% | 2.4% | 3.5% | 5.2% |
| Proportion with high levels of plaque present on upper front teeth ^{iv} | 1.2% | 0.0% | 0.2% | 0.5% | 1.2% |

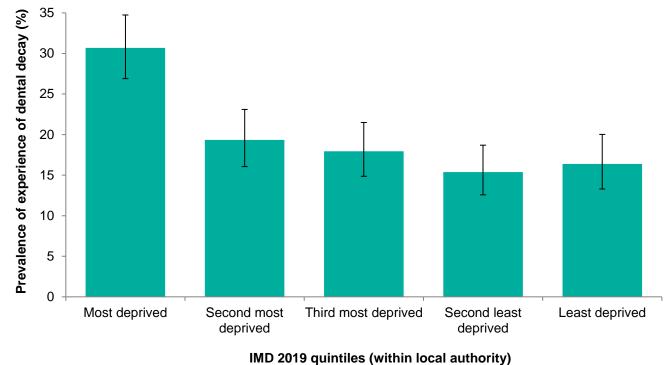
ⁱ generated by the children's services statistical neighbour benchmarking tool, the neighbour within the East of England has "Very Close" comparator characteristics and the national neighbour 1 has "Extremely Close" comparator characteristics³.

ⁱⁱ experience of extraction of one or more teeth on one or more occasions.

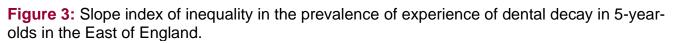
iii dental decay involving one or more surfaces of upper anterior teeth.

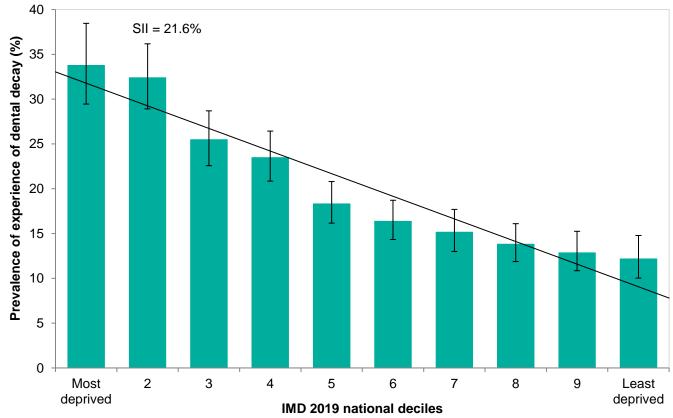
^{iv} indicative of poor tooth brushing habits.

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



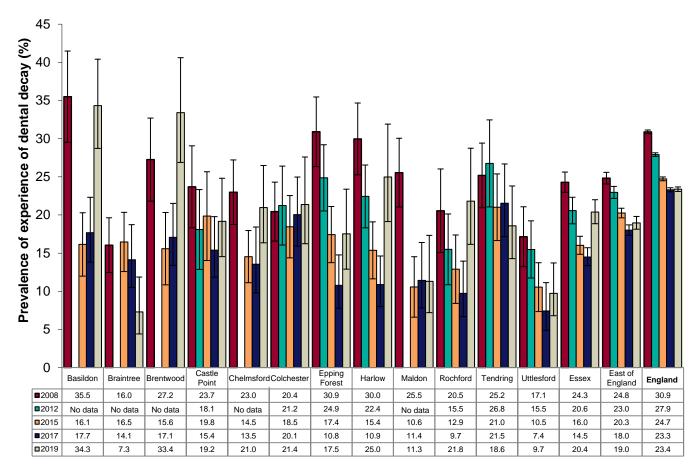
Error bars represent 95% confidence limits





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

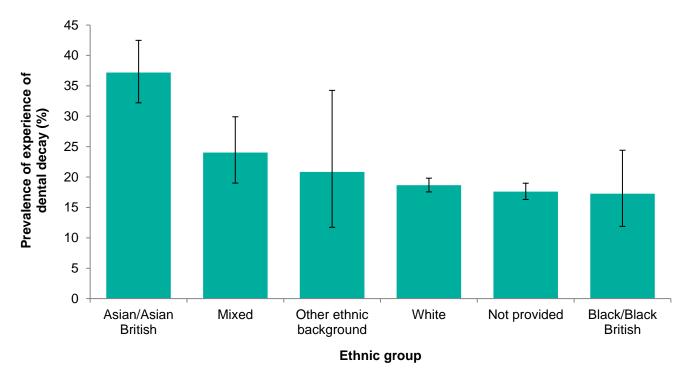


Error bars represent 95% confidence limits

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

| Ethnic group | Number of 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 (%) |
|-------------------------|--|---|---|--|
| Asian/Asian British | 336 | 37.2 | 4.2 (3.59 - 4.75) | 12.8 |
| Mixed | 233 | 24.0 | 4.4 (3.54 - 5.28) | 8.6 |
| Other ethnic background | 48 | 20.8 | 4.4 (2.37 - 6.43) | 6.3 |
| White | 4,546 | 18.7 | 3.4 (3.17 - 3.56) | 2.8 |
| Not provided | 3,118 | 17.6 | 3.1 (2.84 - 3.26) | 3.2 |
| Black/Black British | 139 | 17.3 | 3.3 (2.24 - 4.43) | 3.6 |
| East of England | 8,420 | 19.0 | 3.3 (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

Figure 6: Prevalence of experience of dental decay in 5-year-olds in Essex, by lower-tier local authority, 2019.

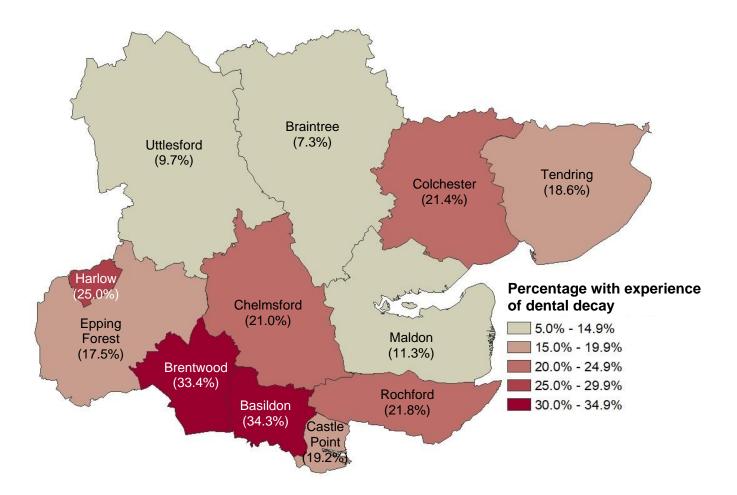


Figure 7: Prevalence of experience of dental decay in 5-year-olds in Brentwood, by middle layer super output area, 2019.

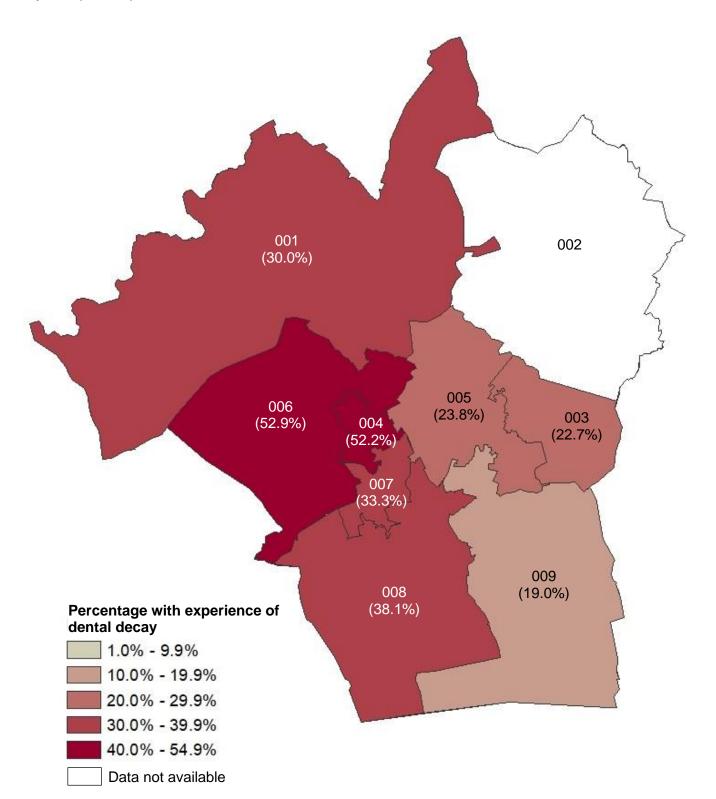


Figure 8: Prevalence of experience of dental decay in 5-year-olds in Castle Point, by ward, 2017.

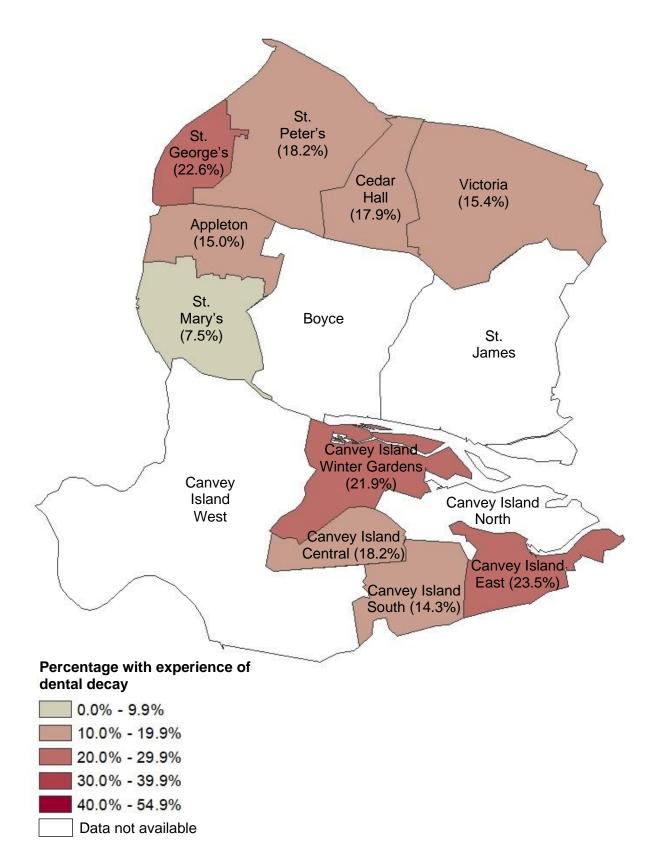


Figure 9: Prevalence of experience of dental decay in 5-year-olds in Harlow, by ward, 2017.

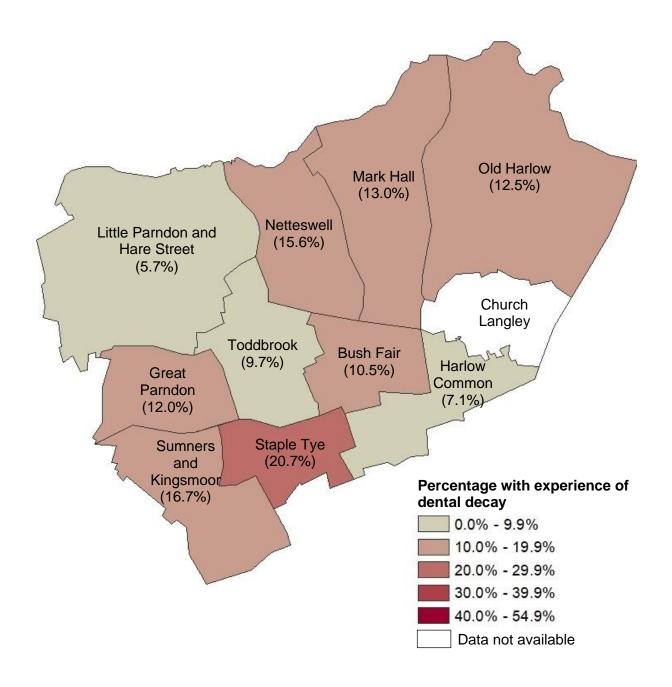
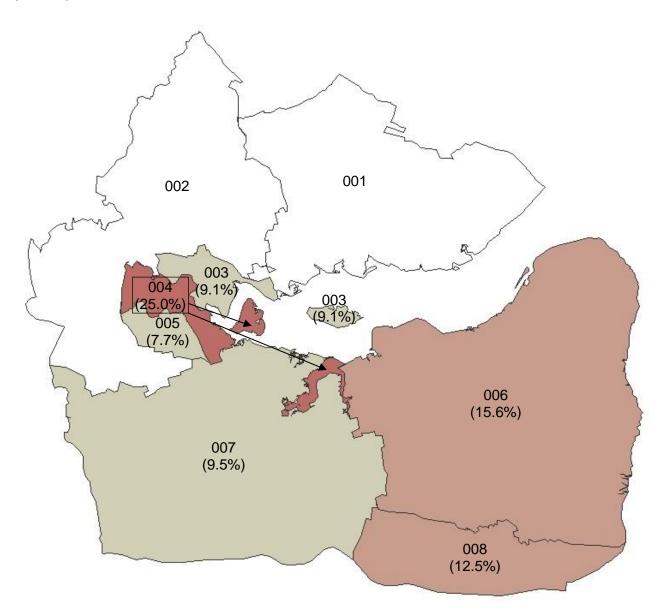


Figure 10: Prevalence of experience of dental decay in 5-year-olds in Maldon, by middle layer super output area, 2017.



Percentage with experience of dental decay

| 0.0% - 9.9% |
|--------------------|
| 10.0% - 19.9% |
| 20.0% - 29.9% |
| 30.0% - 39.9% |
| 40.0% - 54.9% |
| Data not available |

Figure 11: Prevalence of experience of dental decay in 5-year-olds in Rochford, by middle layer super output area, 2017.

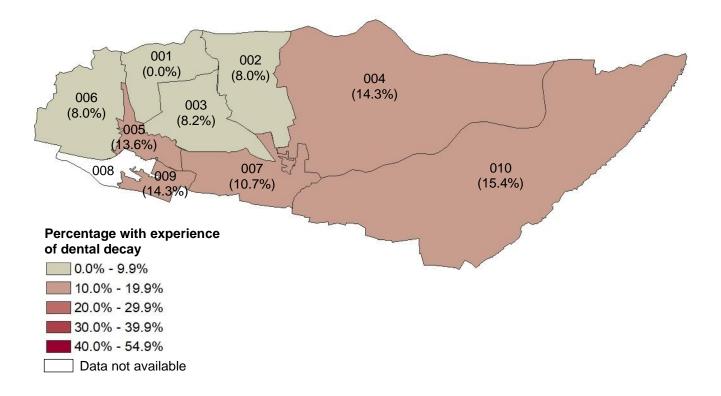
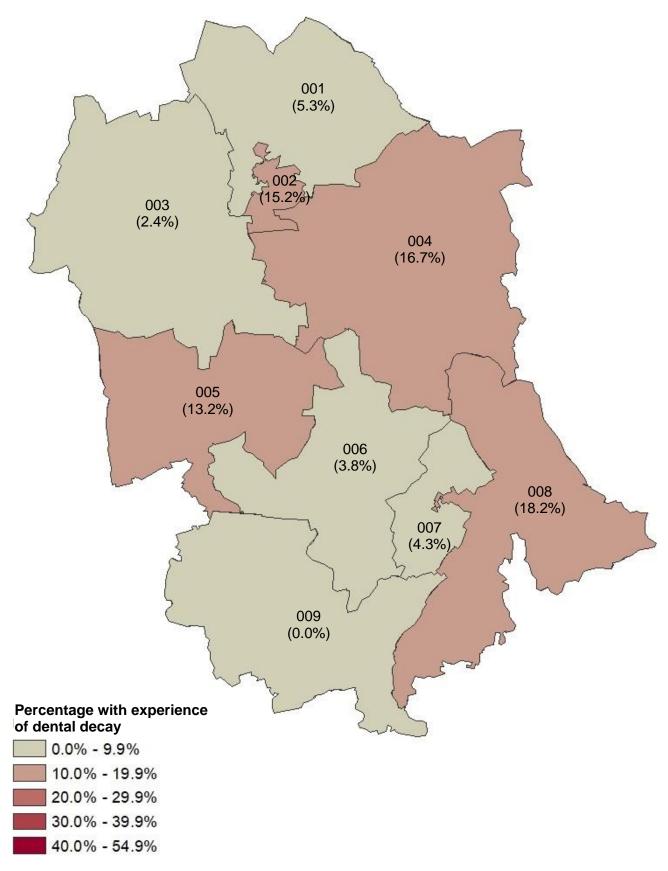


Figure 12: Prevalence of experience of dental decay in 5-year-olds in Uttlesford, by middle layer super output area, 2019.



Summary

In Essex average levels of dental decay are lower than the average for England, however, within Essex there are areas where there are higher than average levels of experience of dental decay. At lower-tier local authority level, children living in Brentwood and Basildon have the highest levels of experience of dental decay. Within Brentwood, the highest levels of experience of dental decay are clustered around the middle super output areas of Brentwood 004 and 006.

The small sample sizes in some areas mean 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 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

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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/attachme nt_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

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