



Blackburn with Darwen

Published April 2021

Oral health of 5-year-old children

This profile describes the oral health of 5-year-olds living in Blackburn with Darwen. 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 Blackburn with Darwen 210 5-year-olds (approximately 48.0% 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 Blackburn with Darwen, other local authorities in the North West and England.

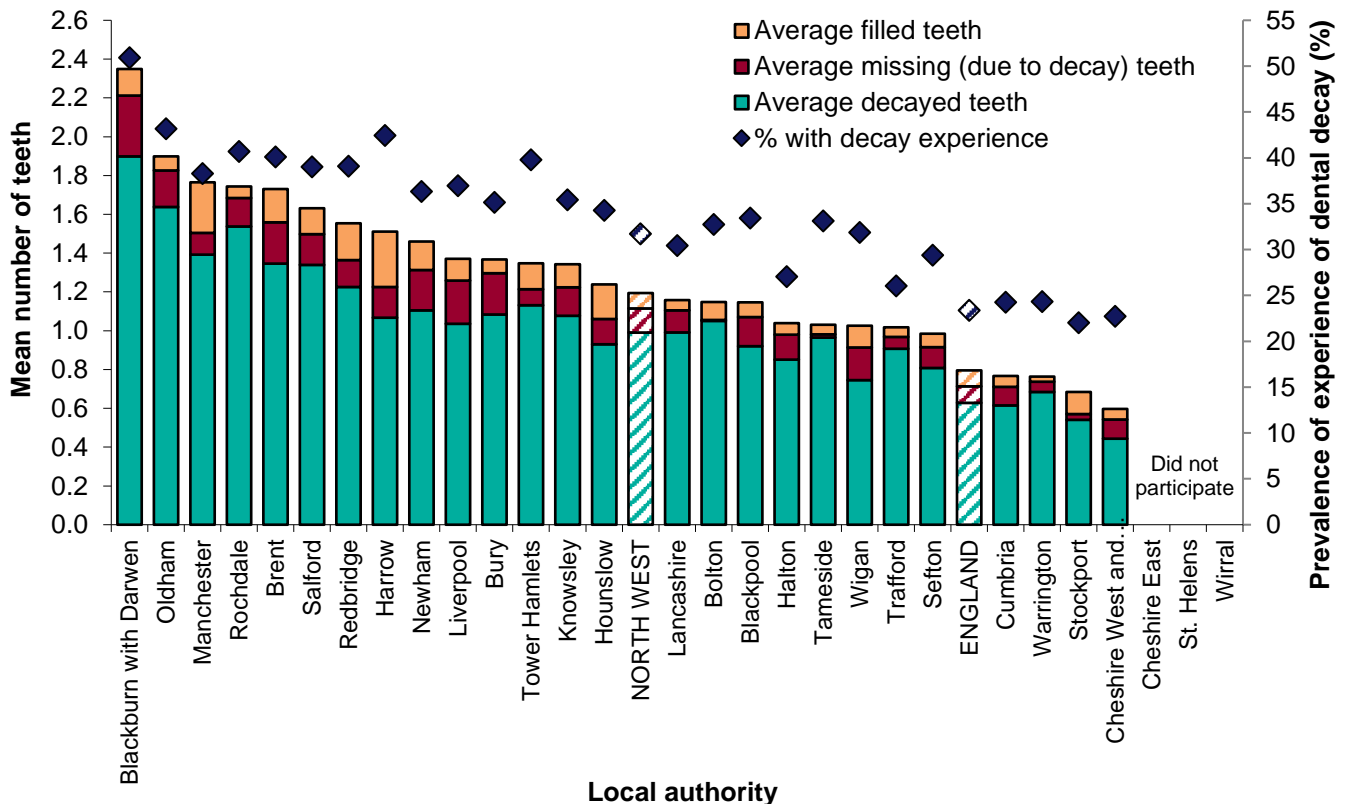


Table 1: Experience of dental decay in 5-year-olds in Blackburn with Darwen, other local authorities in the North West and England.

| 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) |
|-----------------------|--|--|---|
| Blackburn with Darwen | 50.9 | 2.3 (1.87 - 2.82) | 4.6 (3.94 - 5.29) |
| Oldham | 43.2 | 1.9 (1.45 - 2.34) | 4.4 (3.63 - 5.16) |
| Rochdale | 40.7 | 1.7 (1.30 - 2.19) | 4.3 (3.64 - 4.93) |
| Salford | 39.0 | 1.6 (1.25 - 2.01) | 4.2 (3.48 - 4.88) |
| Manchester | 38.3 | 1.8 (1.43 - 2.10) | 4.6 (3.98 - 5.24) |
| Liverpool | 37.0 | 1.4 (1.05 - 1.69) | 3.7 (3.09 - 4.33) |
| Knowsley | 35.4 | 1.3 (0.93 - 1.75) | 3.8 (2.94 - 4.63) |
| Bury | 35.2 | 1.4 (1.07 - 1.66) | 3.9 (3.35 - 4.44) |
| Blackpool | 33.4 | 1.1 (0.74 - 1.56) | 3.4 (2.50 - 4.35) |
| Tameside | 33.1 | 1.0 (0.75 - 1.31) | 3.1 (2.52 - 3.71) |
| Bolton | 32.7 | 1.1 (0.84 - 1.45) | 3.5 (2.83 - 4.18) |
| Wigan | 31.9 | 1.0 (0.79 - 1.26) | 3.2 (2.70 - 3.74) |
| NORTH WEST | 31.7 | 1.2 (1.14 - 1.25) | 3.8 (3.65 - 3.89) |
| Lancashire | 30.4 | 1.2 (1.06 - 1.25) | 3.8 (3.59 - 4.02) |
| Sefton | 29.4 | 1.0 (0.67 - 1.30) | 3.4 (2.61 - 4.10) |
| Halton | 27.0 | 1.0 (0.72 - 1.36) | 3.8 (3.01 - 4.67) |

| 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) |
|---------------------------|--|--|---|
| Trafford | 26.0 | 1.0 (0.72 - 1.32) | 3.9 (3.05 - 4.77) |
| Warrington | 24.3 | 0.8 (0.52 - 1.01) | 3.1 (2.43 - 3.85) |
| Cumbria | 24.2 | 0.8 (0.67 - 0.86) | 3.2 (2.89 - 3.43) |
| ENGLAND | 23.4 | 0.8 (0.78 - 0.81) | 3.4 (3.36 - 3.44) |
| Cheshire West and Chester | 22.7 | 0.6 (0.41 - 0.78) | 2.6 (2.07 - 3.19) |
| Stockport | 22.0 | 0.7 (0.43 - 0.94) | 3.1 (2.21 - 3.99) |
| Cheshire East | Did Not Participate | | |
| St. Helens | Did Not Participate | | |
| Wirral | Did Not Participate | | |

Table 2. Measures of oral health among 5-year-olds in Blackburn with Darwen, its statistical neighbours,ⁱ the North West and England.

| | Blackburn with Darwen | Statistical neighbour within North West: Bolton | Statistical neighbour comparator 1: Walsall | North West | England |
|--|-----------------------|---|---|------------|---------|
| Prevalence of experience of dental decay | 50.9% | 32.7% | 27.1% | 31.7% | 23.4% |
| Mean number of teeth with experience of dental decay | 2.3 | 1.1 | 0.8 | 1.2 | 0.8 |
| Mean number of teeth with experience of decay in those with experience of dental decay | 4.6 | 3.5 | 2.9 | 3.8 | 3.4 |
| Mean number of decayed teeth in those with experience of dental decay | 3.5 | 3.3 | 2.4 | 3.0 | 2.7 |
| Proportion with active decay | 47.7% | 32.3% | 23.8% | 29.0% | 20.4% |
| Proportion with experience of tooth extraction ⁱⁱ | 5.3% | 0.4% | 1.6% | 2.9% | 2.2% |
| Proportion with dental abscess | 1.3% | 0.0% | 0.1% | 1.2% | 1.0% |
| Proportion with teeth decayed into pulp | 10.6% | 4.4% | 3.0% | 5.5% | 3.3% |
| Proportion with decay affecting incisors ⁱⁱⁱ | 14.0% | 7.4% | 5.8% | 7.7% | 5.2% |
| Proportion with high levels of plaque present on upper front teeth ^{iv} | 4.6% | 0.0% | 1.2% | 2.2% | 1.2% |

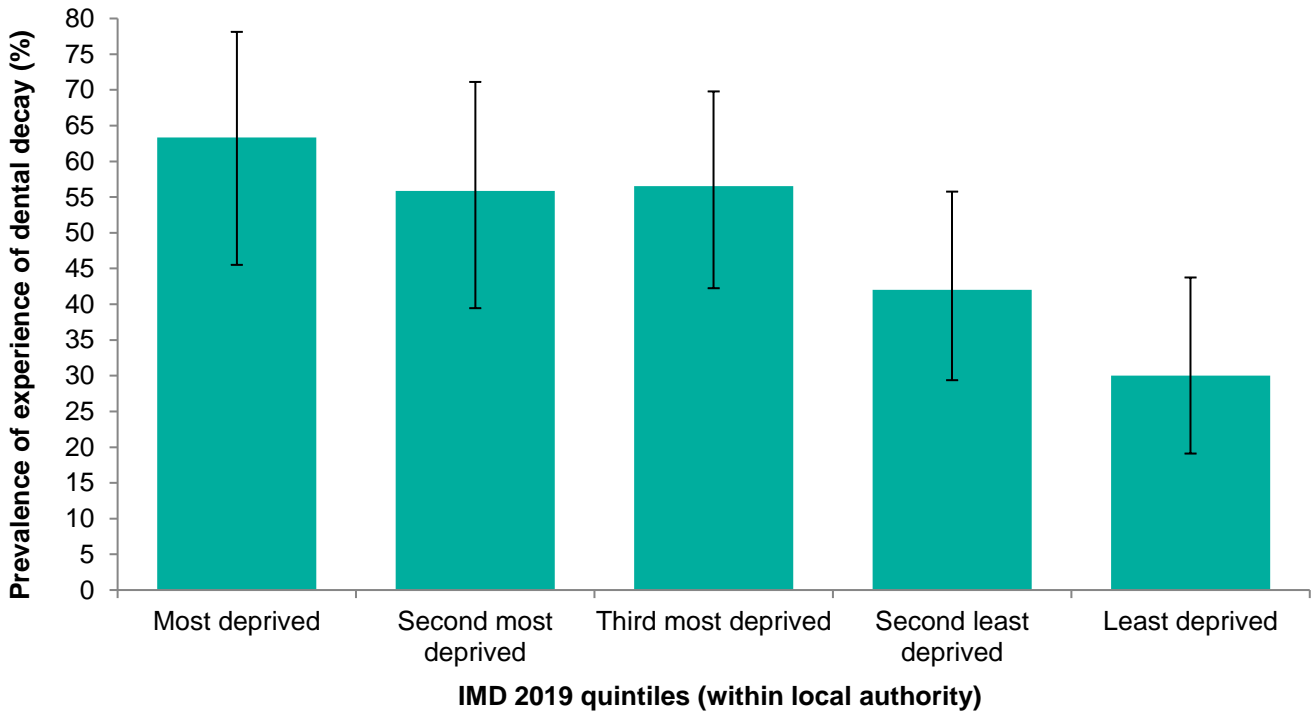
ⁱ generated by the children's services statistical neighbour benchmarking tool, the neighbour within the North West has "Close" comparator characteristics and the national neighbour 1 has "Close" comparator characteristics³.

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.

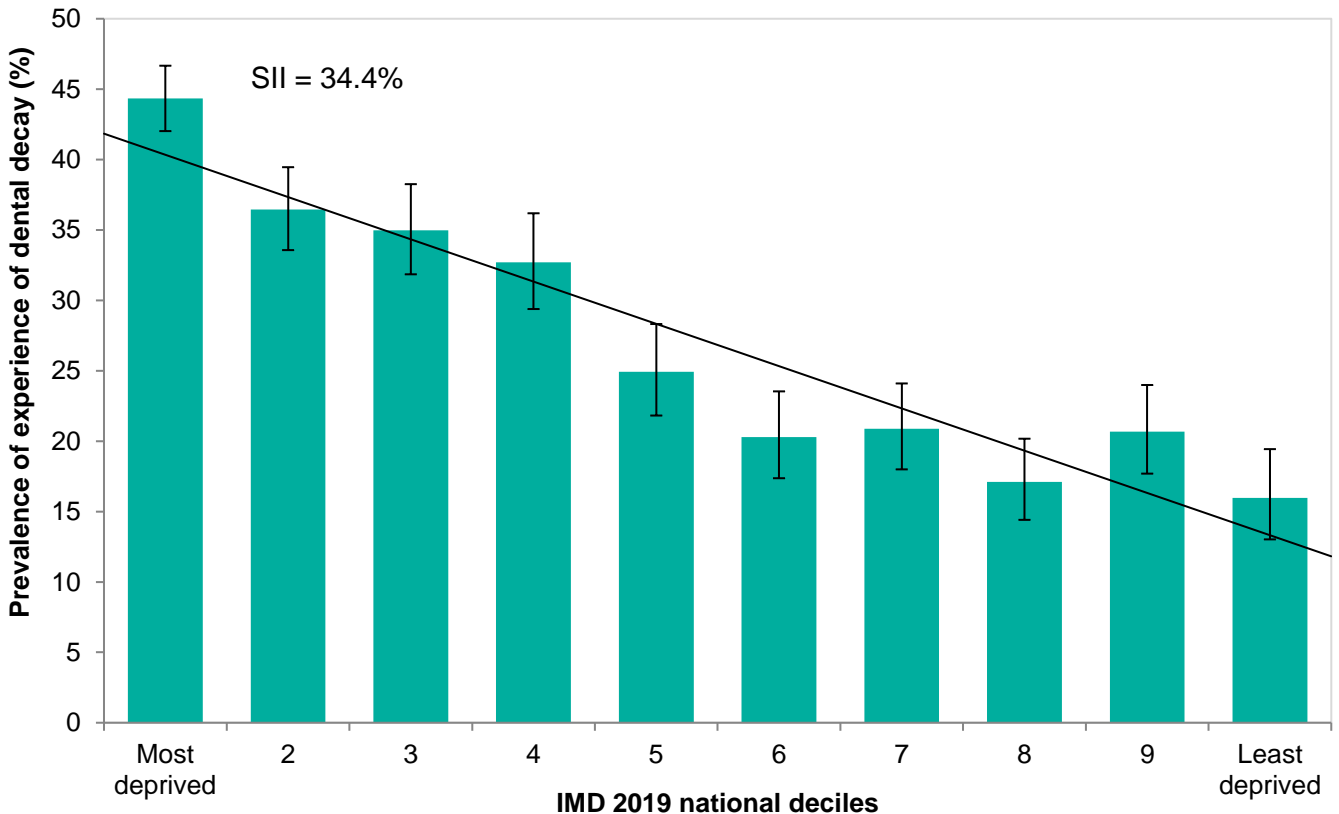
^{iv} indicative of poor tooth brushing habits.

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



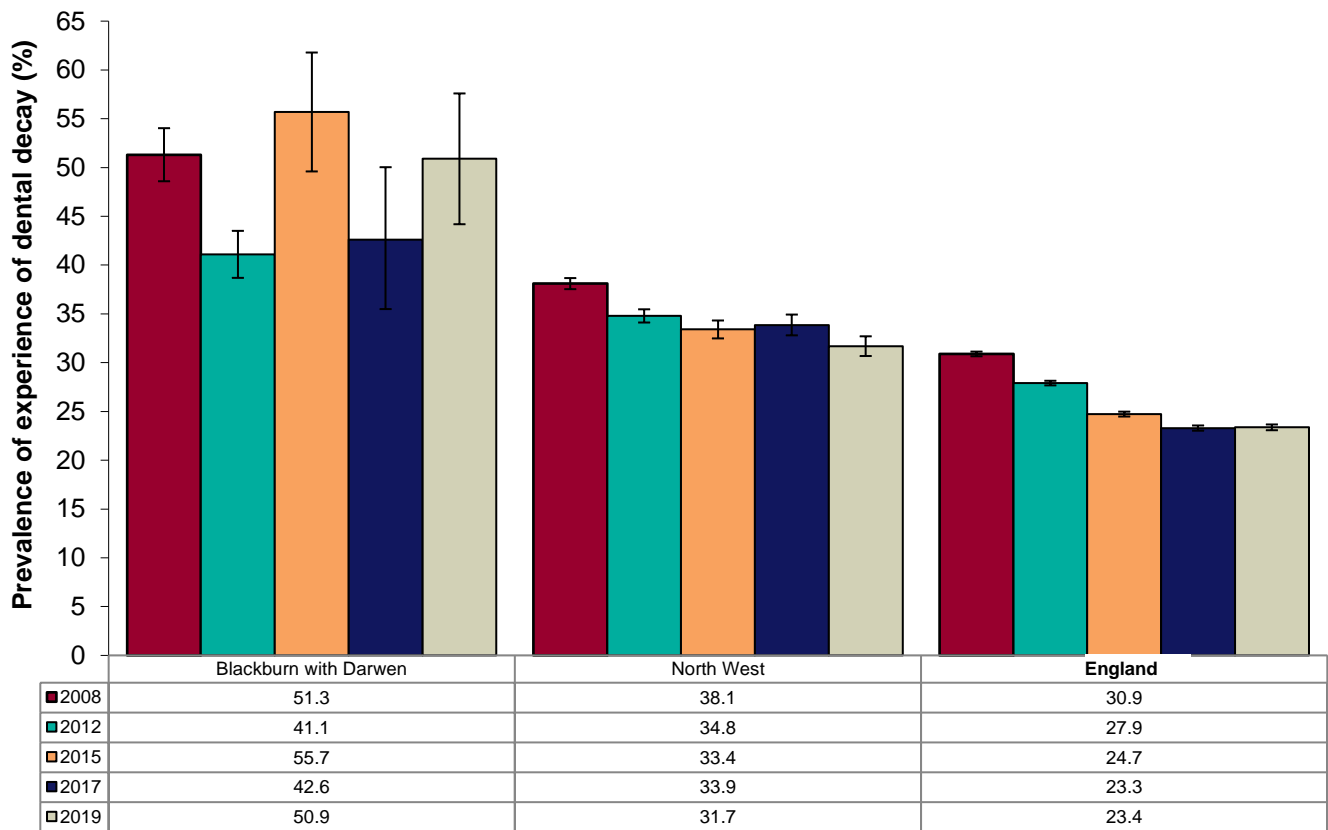
Error bars represent 95% confidence limits

Figure 3: Slope index of inequality in the prevalence of experience of dental decay in 5-year-olds in the North West.



Error bars represent 95% confidence limits

Figure 4: Prevalence of experience of dental decay in 5-year-olds in Blackburn with Darwen, the North West and England, by year.

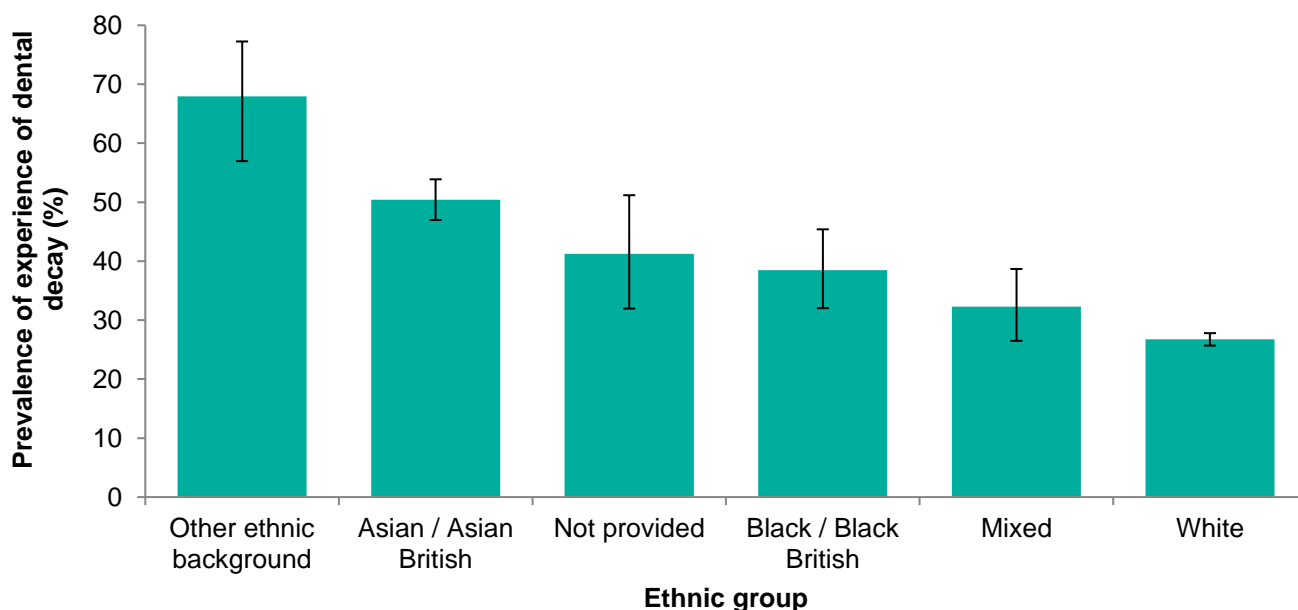


Error bars represent 95% confidence limits

Table 3: Experience of dental decay in 5-year-olds in the North West, 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 (%) |
|-------------------------|---------------------------------|--|--|---|
| Other ethnic background | 78 | 67.9 | 5.0 (4.05 - 5.98) | 30.8 |
| Asian / Asian British | 803 | 50.4 | 4.7 (4.39 - 5.07) | 20.0 |
| Not provided | 97 | 41.2 | 3.8 (2.59 - 4.96) | 9.3 |
| Black / Black British | 200 | 38.5 | 3.9 (3.25 - 4.62) | 12.5 |
| Mixed | 223 | 32.3 | 3.4 (2.74 - 4.10) | 9.0 |
| White | 6,753 | 26.7 | 3.4 (3.25 - 3.51) | 4.9 |
| North West | 8,154 | 31.7 | 3.8 (3.65 - 3.89) | 7.7 |

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



Error bars represent 95% confidence limits

Table 4: Prevalence and severity of experience of dental decay in 5-year-olds in Blackburn with Darwen, by locality.

| Locality | Prevalence of experience of dental decay (%) | Mean number of teeth with experience of dental decay in all examined children n (95% CI) | Mean number of teeth with experience of dental decay in children with any decay experience n (95% CI) |
|----------------|--|--|---|
| East | 63.6 | 3.2 (1.67 - 4.69) | 5.0 (3.23 - 6.77) |
| West | 52.6 | 2.0 (1.48 - 2.60) | 3.9 (3.11 - 4.65) |
| North | 45.2 | 2.8 (1.58 - 4.09) | 6.3 (4.44 - 8.09) |
| Darwen & Rural | 32.7 | 1.1 (0.48 - 1.73) | 3.4 (2.00 - 4.75) |

Summary

In Blackburn with Darwen average levels of dental decay are higher than the average for England. Within Blackburn with Darwen, the highest levels of experience of dental decay are clustered around the East and West localities.

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 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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