Dental Health (Children and Young People)

Oral diseases can have a considerable impact on a child's general health and wellbeing. Poor oral health is associated with wider health and social care issues including poor nutrition and obesity and can affect a child's ability to eat, sleep, and play with other children[1]. Children with poor oral health may have increased school absenteeism, and decreased school performance.

Summary points

- The percentage of 3 and 5-year-olds with visually obvious dental decay in Bristol was statistically similar to the national average; 5 year-olds (2021/22): Bristol 27% (21%-34%), England 24% (23%-24%) in 2021/22; 3-year-olds (2019/20): Bristol 9% (5%-16%), England 11% (10%-11%).
- When last surveyed (in 2008/09) the proportion of 12-year-olds estimated to have visually obvious dental decay in Bristol was higher than the England average; Bristol 40% (34%-46%), England 33% (33%-34%)[2].
- Nearly a fifth of primary and secondary students did not report cleaning their teeth twice a day on the day before completing the Bristol Pupil Voice Survey. While this is comparable to previous years, it indicates there is still a role for basic oral health promotion among school age pupils and wider school communities in Bristol.
- Compared to the national average, Bristol has a higher rate of children attending NHS dental services, and a significantly higher rate of children being admitted to hospital for extraction of one or more decayed primary or permanent teeth.
- Children from Asian, Chinese and Other Ethnic Minorities, and children living in more deprived areas, are more likely to suffer from dental decay than children from White and Mixed Ethnic groups and those living in more affluent areas.
- This data illustrates the importance of tackling this issue locally to reduce health inequalities and improve long-term outcomes for children and young people.

Oral health

National Dental Surveys have been conducted in England of 3, 5- and 12-year-olds. The surveys seek to estimate the prevalence of a number of oral health indicators by checking the pupils at a random sample of mainstream schools, with the results weighted to create a more representative result. Pupil participation is voluntary, which can reduce the sample size considerably and other limitations of the methodology mean that the estimates and comparisons derived from them should be treated as approximate.

The most recent survey was of 5-year-olds (2021/22) and reported that 27% (21%-34%) of 5-year-olds in Bristol had at least one decayed, missing or filled tooth (DMFT). This is a statistically similar proportion to the national average 24% (23%-24%)[3]. It is important to note that the relatively small sample size for the dental survey in Bristol (180 children, 52% of those invited to participate) limits the reliability of the local estimate. This latest estimate is considerably higher than the 16% (10%-22%) of Bristol 5-year-olds estimated to have at least

[1] Oral health - GOV.UK (www.gov.uk)
[2] Oral health - GOV.UK (www.gov.uk)
[3] Oral health survey of 5 year old children, Office for Health Improvement and Disparities, Oral health survey of 5 year old children 2022 - GOV.UK (www.gov.uk) March 2023

one DMFT in the previous survey in 2018/19, which was lower than the England average of the time 23% (23%-24%), however the small sample size and relatively low level of pupil participation (48% in 2018/19 in Bristol) at both time points is a limitation when drawing conclusions about trends over time.

The average number of DMFT in 5-year-olds in Bristol based on the 2021/22 survey is 1.1 (0.7-1.5), statistically similar to the England average 0.8 (0.8-0.9).

More children attended NHS dental services in the previous 12 months in Bristol (52% of 0-17-year-olds) than the England average (46.9%) (June 2022, NHS Dental Statistics 2021-22)[4]. This is lower than the pre– COVID-19 pandemic level which saw 65% of 0 to 17-year-olds attending dental services in the twelve months up to June 2019 in Bristol (59.5% nationally)[5].

Other data which are unchanged:

- 9% (5%-16%) of 3-year-olds (2019/20) had tooth decay, statistically similar to the England average 11% (10%-11%).[6]
- The average number of decayed, missing or filled teeth in 12-year-olds in Bristol (2008/9) was 1.1 (0.9-1.3), higher than the national average 0.7 (0.7-0.8).[7]

The Bristol Pupil Voice Survey[8] was completed by more than 3,200 pupils across the city in 2021/22, from years 4, 6, 8 and 10. This figure represents nearly 1-in-5 of all state school pupils in those year groups in the city's schools. The survey addresses a range of health and wellbeing topics, including oral health.

In the 2021/22 Bristol Pupil Voice Survey 42% of primary pupils and 50% of secondary pupils reported that they had had teeth filled or removed. 85% of primary pupils and 90% of secondary pupils reported that they had had their teeth checked by a dentist, and 80% of primary pupils and 81% of secondary pupils reported that they had cleaned their teeth at least twice on the day before the survey.

Compared to the previous survey in 2019[9] a significantly lower proportion of primary and secondary school pupils reported that they had had teeth filled or removed in the latest survey, but a less positive finding is that the proportion reporting that they had had their teeth checked by a dentist has also declined since the previous survey. The proportion reporting that they cleaned their teeth two or more times during the previous day was relatively similar in 2019 and 2021/22.

[4] NHS Dental Statistics, 2021-22: NHS Dental Statistics for England, 2021-22, Annual Report - NDRS (digital.nhs.uk)
[5] NHS Dental Statistics for England Dashboard: Dentistry - NHS Digital
[6] Oral health survey of 3-year-old children, via PHE Child health profiles, February 2022
[7] Oral Health Profile (the 2008/09 survey has not yet been repeated): https://www.gov.uk/government/collections/oral-health
[8] Bristol Pupil Voice Survey, 2022, Bristol City Council: https://www.bristol.gov.uk/web/bristol-healthy-schools/topics/data-and-research
[9] Bristol Pupil Voice Survey, 2019, Bristol City Council: https://www.bristol.gov.uk/web/bristol-healthy-schools/topics/data-and-research

There are currently 506 dentists with NHS activity in NHS Bristol, North Somerset, and South Gloucestershire CCG area[10]. This equates to 52 dentists per 100,000 population, which is higher than the England average of 43 per 100,000 population.

Tooth extractions

In 2020/21, 0.23% (n=250)[11] of Bristol children and young people (0-19 years) were recorded as admitted to hospital for extraction of at least one decayed primary or permanent tooth (Figure 1). Although this proportion is significantly higher than the England average of 0.17%, it is the third lowest among the Core Cities. Figure 2 illustrates that the percentage of 11-19-year-olds undergoing extractions in Bristol is comparable with the England average. In contrast, the proportion of children aged 0-5 and 6-10 years is considerably higher than the England average. Tooth extraction is most prevalent amongst children aged between 6-10 years old. In Bristol, extractions occurred in 0.41% of 6-10-year-olds; higher than the England average (0.26%) in 2020/21.

Figure 3 illustrates that the number of hospital admissions for extraction of one or more primary or permanent teeth in children (0-19 years) has decreased by 64.5% in 2020/21. This may be due to the continued impact of the COVID-19 pandemic on non-COVID related hospital episodes, rather than a reduction in need or demand.

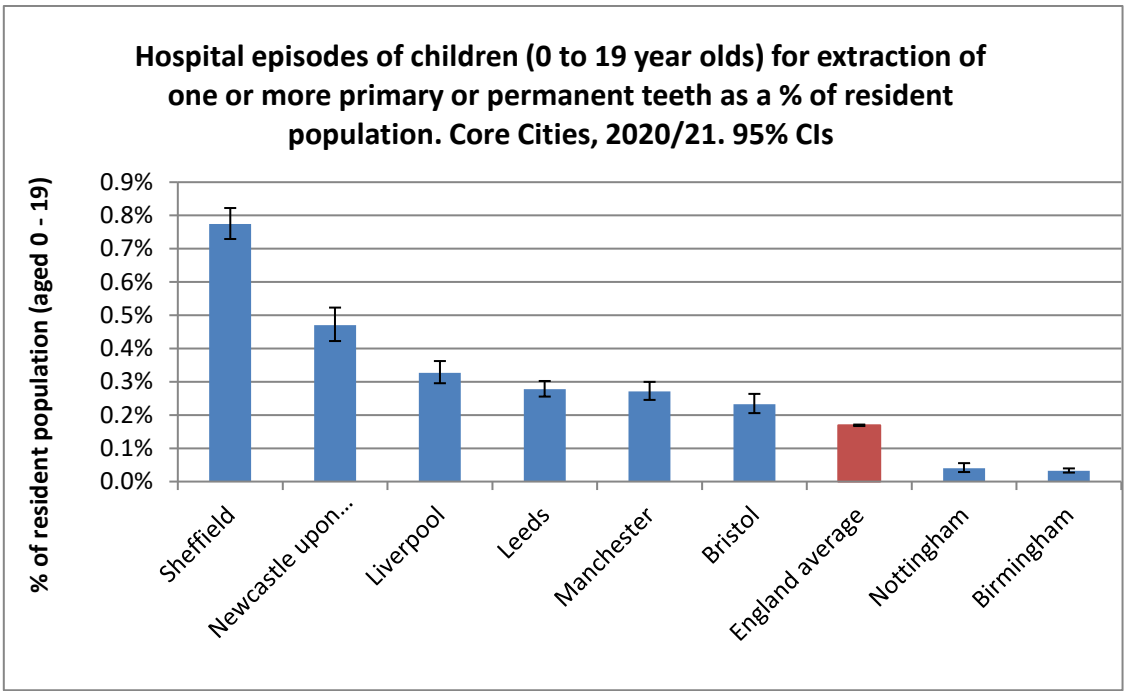

Figure 1 Finished Consultant Episodes (FCEs) for children and adolescents aged 0-19 for hospital dental extractions during 2020/21. Source: Dental Public Health Team, Office for Health Improvement & Disparities (OHID), Hospital tooth extractions of 0 to 19 year olds - GOV.UK (www.gov.uk)

[10] NHS Dental Statistics, 2021-22 NHS Dental Statistics for England - 2020-21 Annual Report - NDRS (digital.nhs.uk)
[11] Hospital tooth extractions of 0 to 19 year olds 2021 - GOV.UK (www.gov.uk)

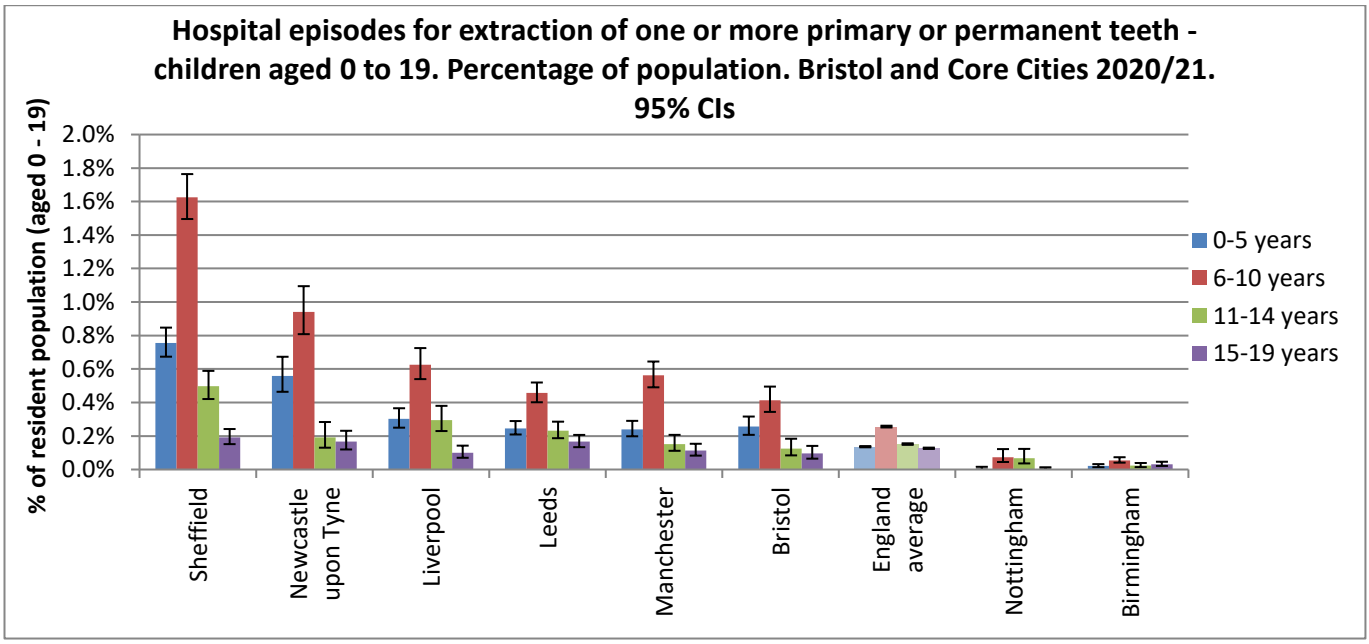

Figure 2: Finished Consultant Episodes (FCEs) for children and adolescents aged 0-19 for hospital dental extractions during 2020/21, by age group. Source: Dental Public Health Team, Office for Health Improvement & Disparities (OHID), Hospital tooth extractions of 0 to 19 year olds - GOV.UK (www.gov.uk)

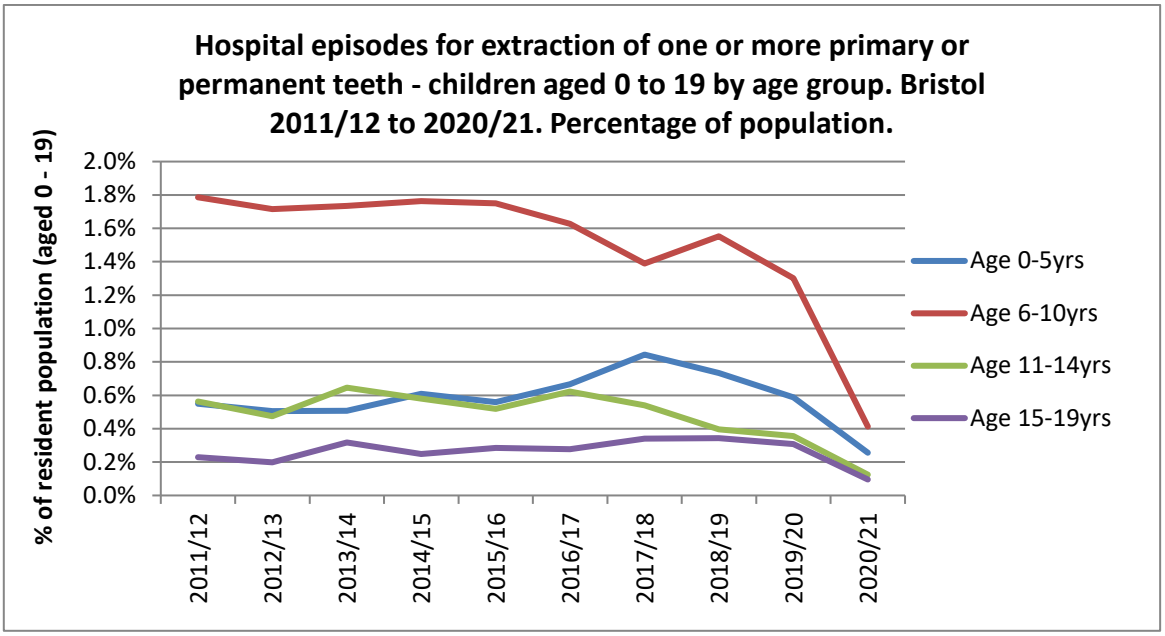

Figure 3: Finished Consultant Episodes (FCEs) for children and adolescents aged 0-19 for hospital dental extractions during 2011-2021. Source: Dental Public Health Team, Office for Health Improvement & Disparities (OHID), Hospital tooth extractions of 0 to 19 year olds - GOV.UK (www.gov.uk)

Equalities data:

Nationally 5-year-old children from Asian, Chinese, and Other ethnic minorities have more decayed, filled, or missing teeth than children from White and mixed ethnic groups[12] Nationally 63.1% of Asian Chinese children (aged 5 years) were free from dental decay, compared to the average of 76.6%.

The percentage of children free from dental decay is lower for children living in the most deprived areas in England. In Bristol, local data (covering Bristol, South Gloucestershire and North Somerset using Bristol Dental Hospital records) show that tooth extraction rates (under general anaesthetic) are around 3 times higher in the most deprived wards compared to the least deprived wards[13].

Further data/links/consultations:

- Public Health England Oral Health Profile: https://fingertips.org.uk/child-health-profiles
- Dental Public Health Intelligence Programme: https://www.gov.uk/publications/hospital-tooth-extractions-of-0-to-19-year-olds
- NHS Dental Statistics: NHS Dental Statistics for England 2020/21 Annual Report - NHS Digital
- Oral Health Profile: https://www.gov.uk/government/collections/oral-health
- NHS England and NHS Improvement: South West Oral Health Needs Assessment - January 2021

Covid-19 impact:

Dental Public Health research on The impact of the COVID-19 pandemic on oral health inequalities and access to oral healthcare in England shows that oral health inequalities in England are widening[14]. Key findings from the research are:

- People living in more deprived areas have been more severely affected by the suspension of oral health promotion programmes and reduced access to dental care.
- Navigating changes to systems for accessing NHS dental care has also been more problematic for people who were already experiencing disadvantage.
- Since the phased resumption of dental services following a cease of face-to-face dentistry in March 2020 to limit the transmission of COVID-19, NHS general dental service use modestly recovered amongst adults but not children by October 2020.

In Bristol, 52% of 0-17 year-olds attended NHS dental services in the twelve months up to June 2022 (46.9% nationally) (June 2022, NHS Dental Statistics 2021-22), which is still below the pre-pandemic level of attendance of 65% of 0–17 year-olds attending dental services in Bristol in the twelve months up to June 2019 (59.5% nationally)[15]

Date updated: July 2023 **Next update due:** February 2024

[12] Public Health England Oral Health Profile: https://fingertips.phe.org.uk/profile/child-health-profiles
[13] British Dental Journal, volume 224, February 2018. Neighbourhood incidence rate of paediatric dental extractions under general anaesthetic in South West England
[14] British Dental Journal, volume 232 no. 2, January 2022. The impact of the COVID-19 pandemic on oral health inequalities and access to oral healthcare in England
[15] NHS Dental Statistics for England Dashboard: Dentistry - NHS Digital