

CHILD ORAL HEALTH BRIEFING

KEY MESSAGES

- Harrow has the highest proportion of children aged 5 with decay experience (39.6% PHE 2017) which continues to rise, at odds with national trends and the highest when compared to those of other London local authorities and the London average of 25.7%.
- In Harrow, 14.3% of children under the age of 5 have dental decay of the incisors, compared to 8.2% in London, mainly associated with long term bottle use and high intake of sugary drinks
- The severity of dental decay in Harrow is the highest amongst London local authorities where a 5 year old child with dental decay has on average 4.8 affected teeth
- Tooth decay (in 2017/18) remains the top cause for child non-emergency hospital admissions for children aged 5-9 years living in Harrow.
- 604.4 per 100,000 children aged 0 5 years in Harrow were admitted to hospital as a result of dental caries, compared to 325.1 per 100,000 children in England in 2015/16 – 2017/18
- Evidence concerning the effectiveness of the use of fluoride (toothpaste, rinses, varnishes) in reducing caries is strong (11-14). Thus, health promotion interventions which incorporate the regular use of fluoride have been shown to be successful in reducing dental caries. The evidence on the beneficial effects of topical fluorides is consistent and strong, based on a sizable body of evidence from randomized controlled trials. Children who start brushing with fluoride toothpastes in infancy are less likely to experience tooth decay than those who start bushing later. It also stimulates healthy dental behaviour from a young age.
- The determinants of oral diseases are known— they are the risk factors common to a number of chronic diseases: cardiovascular diseases, cancers, obesity and Type II diabetes. The risky behaviours include increased consumption of sugary food and drinks, poor oral hygiene and lack of exposure to fluorides. (8). The effects of dental caries seen in 5-year-old children are a result of accumulation of disease, which commenced in infancy and is related to feeding and weaning practices.
- Oral diseases are preventable and public health approaches should be adopted to prevent a number of chronic diseases and conditions.
- Tackling the causes of poor oral health should be in the context of improving general health to achieve sustainable improvements in the future.



BACKGROUND

Dental decay, although largely preventable through reducing sugary foods and drinks, brushing with fluoride toothpaste and by early detection, is one of the most prevalent health conditions affecting children and young people. Poor oral health has been shown to significantly affect the general health and well -being of children and families, where dental decay can lead to pain, infection, poor diet, disturbed sleep, impaired growth, time off school which can impact on a child's ability to learn and develop. Poor oral health is inextricably linked to the wider determinants of health and in particular socio economic deprivation, education and employment. A correlation between poor oral health and obesity has been evidenced in children aged 5. It is thought that this is a result of deprivation and increased consumption of sugars, both of which are known risk factors for dental caries and obesity.

Good oral health is an integral part of general health and well-being. Poor oral health can lead to difficulties in eating, sleeping and socialising, thereby affecting health related quality of life with individual and societal consequences (Figure 1). Oral health inequalities have emerged as a major public health challenge as lower income and socially disadvantaged groups experience disproportionately higher levels of oral diseases. This pattern of disadvantage mirrors that of general health.

Figure 1: Impacts of oral health

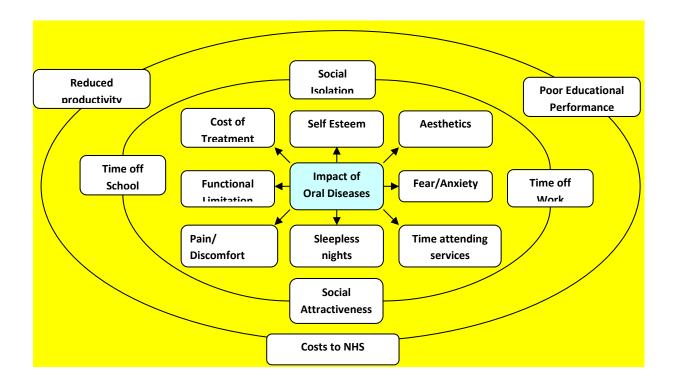




Figure 2: Determinants of oral and general health (Dahlgren and Whitehead, 1991)

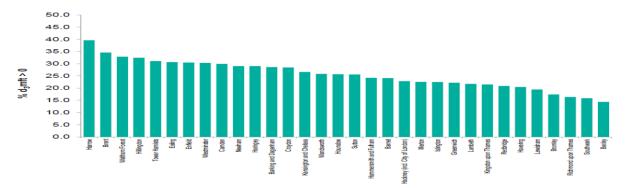


INDICATORS IN HARROW

Need

The Dental Public Health Intelligence Programme, formerly known as the National Dental Epidemiology Programme, surveys the oral health of 5 year olds in local schools every 2 years. The proportion of 5 year old children affected by dental decay is an indicator used to assess the general health and wellbeing of children. The results from this programme continue to evidence overall improvement in the proportion of 5 year old children who are free from dental disease in England. However, in Harrow the proportion of 5 year old children with one or more decayed, missing or filled teeth (d_3 mft) increased from 35.1% in 2012 to 39.6% in 2017 compared to 25.7% across London and 23.3% in England.

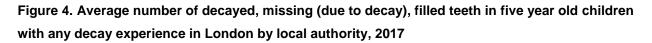
Figure 3. The percentage of five year old children with decay experience (d3mft>0) in London lowertire local authority areas, 2017

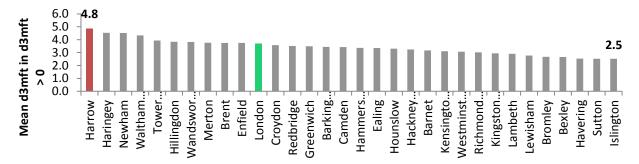


Source Public Health England, National Dental Epidemiology Programme for England, Oral Health Survey of five-yearold children 2017



The average number of affected teeth and therefore the severity of decay in these children with decay experience in Harrow is 4.8, the highest in comparison to other London local authorities.

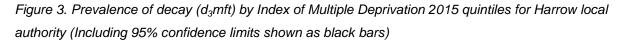


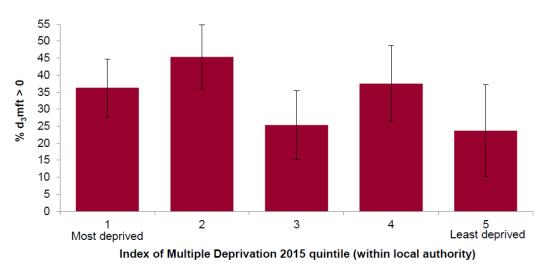


Source Public Health England, National Dental Epidemiology Programme for England, Oral Health Survey of five-yearold children 2017

Deprivation and Inequality

Children from more deprived backgrounds are known to be at a greater risk of dental decay. Harrow is ranked 203rd out of 354 districts in England where the 1st is the most deprived. Within the borough there are pockets of deprivation. Data from 2015 evidences that there is a higher prevalence of d3mft amongst children is these deprived populations.



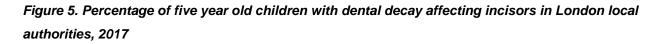


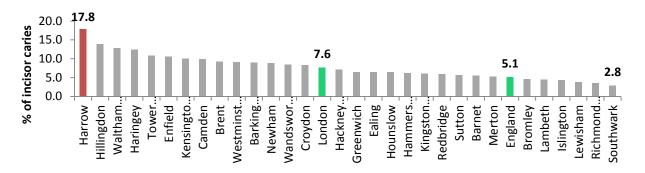
Source Public Health England. Dental Health Profile: Harrow local authority. 2017



Impact of Sugar Intake

Dental decay affecting the incisors is often rapid and extensive and is usually associated with prolonged bottle use in infants and a high dietary intake of free sugars. In 2015, 14.3% of children under the age of 5 had dental decay of the incisors in Harrow. The prevalence in Harrow continues to rise, and is currently the worst in London. In 2018, 17.8% of children in Harrow under the age of 5 had this form of caries, compared with 7.6% in London and 5.1% in England.





Source Public Health England, National Dental Epidemiology Programme for England, Oral Health Survey of five-yearold children 2017

Accident and Emergency Attendances

Accident and Emergency attendances in children aged 0 -4 years within Harrow is significantly worse than the England average. In 2017/18 the local value was 765.0 per 1,000 compared to 619.0 per 1,000 in England. The burden of poor oral health on healthcare services is evident within Harrow where 604.4 per 100,000 children aged 0 - 5 years were admitted to hospital as a result of dental caries. Comparatively the England average within this age range was 325.1 per 100,000 children.1

Tooth extraction

Teeth are often extracted as a result of dental decay and especially in young children. Tooth decay (in 2017/18) remains the top cause for child non-emergency hospital admissions for children aged 5-9 years living in Harrow.

Data on the number of hospital episodes of children (0-19 years of age) for the extraction of one or more teeth in 2017/18 evidences that Harrow has a higher rate of tooth extraction in children than England and London. In 2017/18 there were 373 finished consultant episodes (FCEs) for Harrow

¹ Public Health England. *Harrow Child Health Profile*. 2019.



children 0-19 years for hospital dental extractions of which 125 FCEs were for 0-5 year olds and 138 FCEs for 6-10 year olds.

Although no assumptions can be made about the method of anaesthesia provided, it is highly likely that the majority of these cases involved the use of general anaesthetic. General anaesthetic is associated with potential side effects such as nausea, dizziness and in very rare cases may result in death. Additionally, tooth extraction under general anaesthetic may be a traumatic experience for children and may result in increased dental anxieties and impact on a child's future engagement with dentists.

The percentage of children with hospital episodes for extraction of teeth in 2017/18, as a percentage of all 0-19 year olds in Harrow, was 0.6%, higher than in England (0.5%).²

School attendance

It is estimated that a school aged child (aged 6 – 17 years) misses 5 school days on average for every tooth extraction carried out under General Anaesthetic. This may then impact on a child's performance at school and educational achievement.

PREVENTION INITIATIVES IN HARROW

Public Health Harrow have addressed oral health promotion on both a strategic and an operational level and proactively seek funding opportunities in order to initiate oral health campaigns and training.

Early Years Intervention

Training

Harrow adopts the principles of Making Every Contact Count (MECC) in promoting oral health. MECC is an evidence-based approach that utilises brief daily interventions opportunistically to support individuals to make positive changes to their health and well-being. Several initiatives have been set up in Harrow in order to deliver oral health information and advice to Professionals that work with children and families on a daily basis. Public health trained over 110 professionals

² Public Health England. *Dental Public Health Intelligence Programme. Hospital episode statistics: Extractions data, 0 – 19 years olds, 2011 – 12 to 2017 – 18*. Available at: www.nwph.net/dentalhealth



across Health visiting, early years practitioners, early support children centre staff, school nursing, childminders and voluntary and community sector organisations that work with children and families.

Healthy Teeth Harrow was set up in September 2017 and is supported by Health Education North West London and based on evidence from NICE and guidance from Public Health England. It is an intervention aimed at enhancing the knowledge, skills and confidence of the early years workforce in delivering oral health advice, in order to improve child oral health and tackle oral health. inequalities. Following a detailed evaluation of the programme, we found that there was an impact in the knowledge and skills gained to deliver the right advice and information to families on good oral health practices. As part of the project we also trained 7 oral health champions using the "Train the Trainer" method, whereby Oral Health Champions can train the wider workforce, ensuring sustainability of the initiative.

Results from the survey questionnaire and focus group demonstrated that participants had enhanced knowledge, skills and confidence in delivering dental health advice post training

There were positive changes in factual knowledge from baseline to follow-up on the following parameters:

- Knowledge on the maximum daily amount of sugar for a child aged 4-6 years (baseline 64.2% to 81.8% at follow-up)
- Knowledge on the concentration and amount of tooth paste (baseline 56.76% to 84.9% at follow-up)
- 3. Knowledge on tooth brushing advice (baseline 56.7% to 84.9% at follow-up)
- 4. Knowledge on dental visits by the age of 1 (27.1% at baseline to 64.1% at follow-up)

There were significant changes in skills and confidence of the workforce in 4 domains communication, diet and tooth brushing advice and signposting dental services

The intervention was acceptable with positive feedback on the training programme and the accompanying resource packs.

Health visitors and school nurses offer workshops in schools as part of delivering health promotion. As part of this they give out free bruising packs to children as an incentive to encourage children to



take home and brush their teeth. Current evidence suggests that breastfeeding up to 12 months of age is associated with a decreased risk of tooth decay. Harrow is a fully accredited UNICEF baby

friendly community, and holds free drop in sessions run by trained volunteer breastfeeding peer supporters designed to promote and support breastfeeding.

The Smiley Bright programme, delivered by the children's centres, is regularly run and part of the children's centre timetable of activities. Information is delivered in interactive ways through visual information and songs and workshops are held on topics such as saying goodbye to the dummy and bottle, supporting early dental visits and drinking water rather than juice. The lead is trained as Healthy Teeth Harrow Oral Health Champion at level 2 and able to deliver sessions to other professionals as one of the 7 oral health champions.



Case Study Children's Centre: Hillview and Cedar's Hub

One of the Oral Health Champions based at the Hillview and Cedar's Hub has been actively promoting dental health in early years settings across Harrow. The Oral Health Champion trained 13 members of staff on dental health at the Staff Away Day in April 2018. They have subsequently organised Smiley Bright Session for parents to discuss dental health across 8 Children's Centres in Harrow. They have also developed posters to signpost parents to local NHS dental services



School Engagement

Several schools within Harrow are registered with the Healthy Schools London (HSL) awards programme, to support their pupils to be healthier. Schools are awarded Bronze, Silver, and Gold awards based on the level of the schools actions to achieve and maintain good health and wellbeing amongst the pupils. 95% of Harrow schools are registered with HSL of which 11 gold, 20 silver and 32 bronze awards have been achieved.

Public health are overseeing the Healthy pupil capital fund by using the Sugar Tax Levy in order to making water more accessible to pupils in schools, through the introduction of water fountains in turn detracting young people from sugary drinks.



FURTHER INITIATIVES

In February 2019 Harrow supported the Fizz Free February campaign in order to encourage children to reduce their consumption of free sugars.

Across Harrow the Change4Life campaigns are promoted, supporting parents to make healthier choices for their children.

RECOMMENDATIONS

In order to ensure sustainability of Healthy Teeth Harrow and have a significant impact, it is recommended that the Oral Health Champions should provide training on a regular basis to the early years workforce.

Harrow public health will re-instate the oral health steering group made up of strategic partners to support a co-ordinated approach to reducing tooth decay in the borough. Members of this will include the dental oral health consultant from PHE, School nursing, Health visiting, Early years, Public health, Local dental committee (LDC) members and children's centres

An Oral Health Stakeholder Event is recommended where professionals from a wide range of sectors are invited in order to raise awareness of child oral health and promote Harrow's current initiatives.

Engagement with key stakeholders in delivering messages on child oral health will ensure that consistent evidence-based information is delivered to the population.

Harrow has a newly commissioned health visiting service which includes two additional checks in addition to the 5 mandated checks, at 4-5months and 3- 4 years of age. These additional checks should include oral health promotion.