



Oral Health Promotion Strategy  
2014-2017:  
Pre-school children

December 2013

**This Strategy was endorsed by the Leicester City Oral Health Promotion Partnership Board on the 17<sup>th</sup>. December, 2013.**

**Membership of the Board comprises:**

- Chair: Consultant in Public Health Leicester City Council
- Vice-Chair: Chair of Local Dental Network
- NHS England Area Team: Primary Care Commissioning (NHS Dental Services)
- NHS England Area Team: Public Health Commissioner (Health Visiting & Family Nurse Partnership)
- Leicester City Clinical Commissioning Group: Children and Young People's lead
- Leicester City Council Children's services: Integrated Services Early Prevention
- Leicester City Council Children's Services: Learning Services
- Leicester City Council Children's Services: Service Transformation
- Health Education East Midlands: Workforce Development
- Healthwatch: Public and Patient Representative

**Co-opted members:**

- Consultant in Dental Public Health (Public Health England)
- Specialist in Paediatric Dentistry (Salaried Dental Services)
- Public Health Project Manager (Leicester City Council)

The aim of the Board is to support coordinated activity across Leicester City to improve oral health, reduce oral health inequalities and lay solid foundations for good oral health throughout life.

The Board was set up after the Leicester Child Poverty Commission recommended that *'the Health & Well Being Board, the NHS Commissioning Board & other partners should work actively to promote oral health ensuring access and take up of preventative dental care for all children across the city'*.

The City Mayor's Delivery Plan (2013/14) also called for a commitment to *'develop a partnership action plan to improve children's dental health'*.

Leicester's Food Plan 2014 – 2016 (currently out for consultation) has also referenced the importance of oral health within it's strategy *'oral health is associated with diet – 5 year olds within Leicester have the highest level of dental decay in England'*.

The Children and Young People's Plan has also included the improvement of oral health for children in it's revised plan from 2014 in Priority 2 (Health and Wellbeing).

## CONTENTS

## PAGE

Purpose.....	4
Introduction .....	4
Contextual Evidence .....	5
Aim .....	7
Objectives .....	7
Ambition .....	7
Rationale .....	7
Strategy.....	8
Evaluation .....	11

## Purpose

This document should be read in conjunction with the Joint Strategic Needs Assessment chapter on Oral Health, which is available at <http://www.leicester.gov.uk/your-council-services/social-care-health/jsna/jspna-reports/>.

The oral health promotion strategy outlined in the main body of this document is a strategic planning process to improve oral health of preschool children living within Leicester City. However, it is also intended that further strategies across the life-course will be attached as an appendix to this document as they are written and agreed by the Board.

While prevention is key, provision of high quality accessible dental services is also fundamental. The tackling of oral health is complex and inextricably bound up with issues of culture, lifestyle and deprivation.

## Introduction

Poor oral health, as with general health, is more common in individuals from areas of relative deprivation. The wider determinants of health such as poverty, poor housing, access to food, access to services, education and unemployment impact on oral health as they do on general health.

Non-communicable diseases (NCD) have overtaken infectious diseases as the main cause of premature death in developed countries. The four most prominent NCDs are cardiovascular diseases, diabetes, cancer and chronic obstructive pulmonary diseases. A core of modifiable risk factors is common to these diseases that account for a large proportion of the cases. These risk factors include diet and obesity, alcohol and smoking. These risk factors also account for a high proportion of oral diseases.

The impact of oral diseases on NCDs is considerable, in terms of pain and suffering, impairment of function, reduced quality of life and cost of treatment. In addition, the high level of inequalities in oral health is unacceptable. Common risk factors for NCDs including oral diseases include unhealthy diet e.g. excessive intake of sugars (including fizzy drinks), tobacco usage (either smoked or chewed) and excessive alcohol consumption. All these risk factors are shared and significantly influenced by socio-economic determinants.

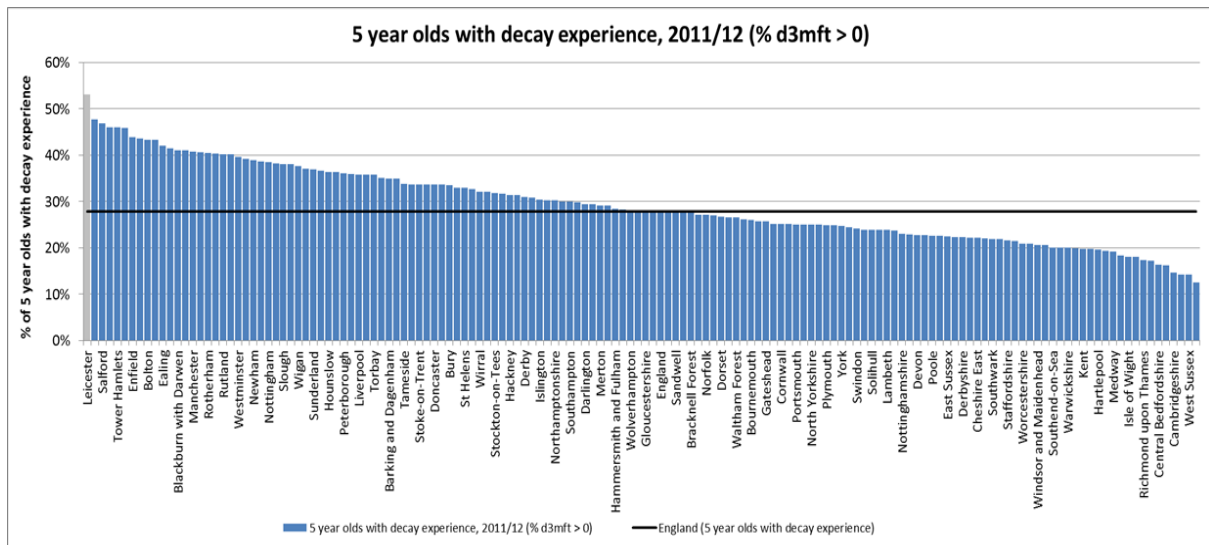
Health promotion strategies can be aimed at the whole population and at specific groups or individuals at risk of disease. The risk of suffering from many chronic diseases can be reduced by action to reduce smoking prevalence and alcohol consumption as well as improvement in diets. These approaches will impact on the prevalence and severity of oral diseases too. In addition, the use of fluoride will reduce the prevalence of tooth decay.

This first strategy focuses on preschool children with the ethos of giving every child the best start in life. The strategy will use both the whole population and the risk approach to health promotion and will attempt to address some of the common risk factors as well as fluoride for disease prevention.

## Contextual Evidence

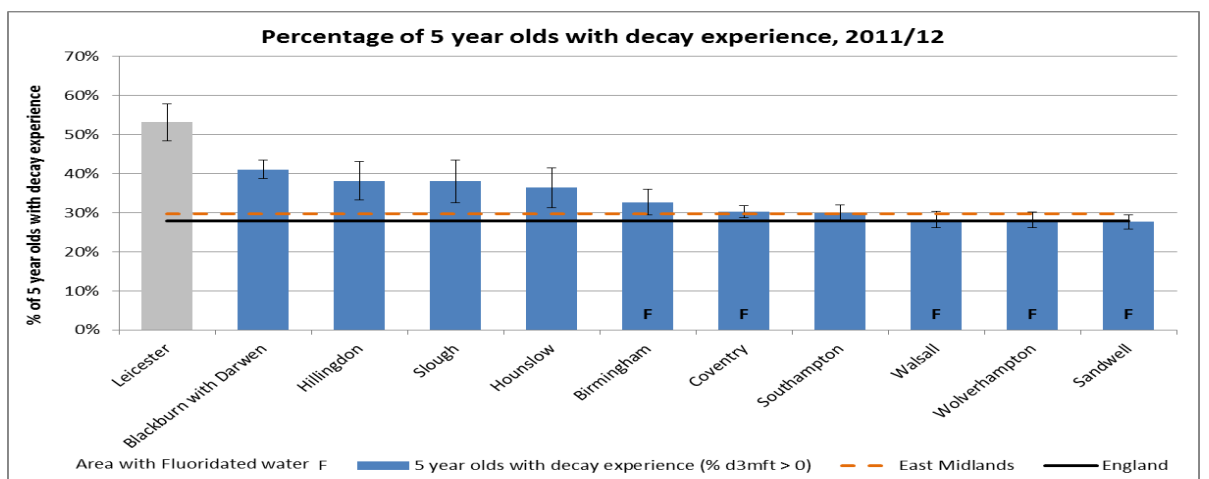
- Five year old children living in Leicester have the highest experience of dental decay observed in England.
- The 2012 results show an increase in the proportion of children with dental decay in Leicester from 48.7% in 2008 to 53.2% in 2012, equating to a percentage point increase of 4.5%.
- At age 5, children normally have 20 primary teeth. On average, 5 year old children in Leicester with dental decay had just under 4 teeth (3.88) that were decayed, missing or filled.
- The average number of decayed, missing or filled teeth in the whole sample taken in Leicester (including the 46.8% who were decay free) was 2.06. This was more than double the national rate of 0.94.

**Figure 1: 5 year olds with decay experience, 2011/12**

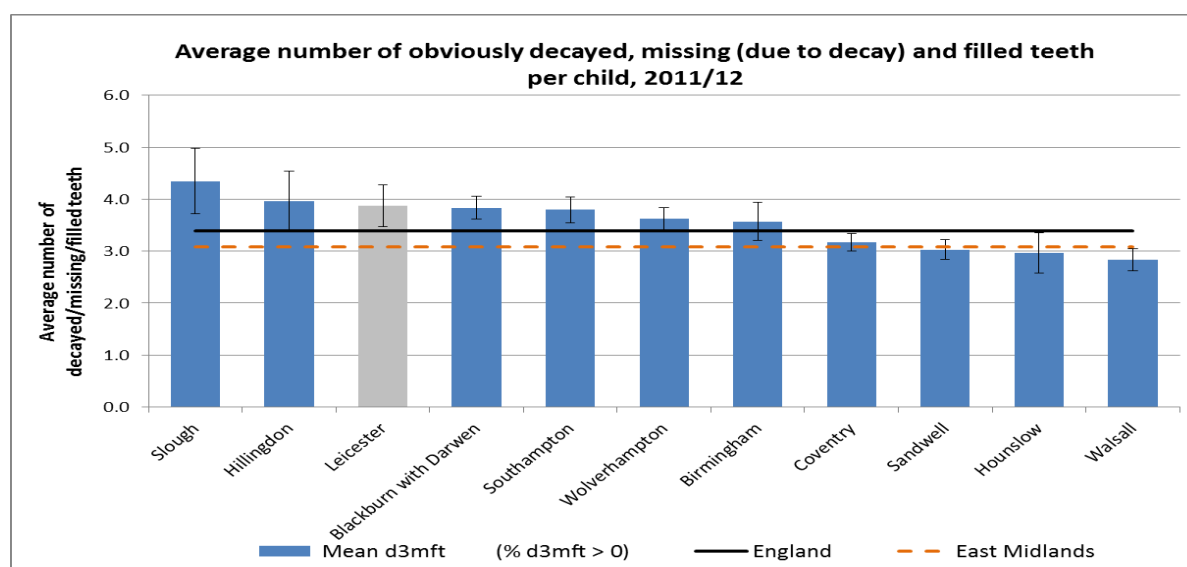


When comparing the results against local authority comparators in terms of population and deprivation, the results reveal wide variation in the amount and severity of dental decay: the areas with poorer oral health tend to be those where the public water supplies are not fluoridated.

**Figure 2: Amount of dental decay in 5 year olds local authority comparators, 2011/12**



**Figure 3: Severity of dental decay in 5 year olds, 2011/12**



The most common oral diseases, tooth decay and periodontal (gum) disease can cause pain and infection as well as eventual tooth loss. This discomfort often results in lost sleep and disruption to family life, leading to time off work and school. Acute dental infection can cause swelling and severe pain. Extensive treatment can still be stressful, especially for the very young. This can lead to children being referred to hospital for dental extractions under general anaesthesia (GA). Such procedures expose children to unnecessary risk of complications which should be prevented.

The causes of poor oral health include:

- **Poor diet and nutrition:** High intake of sugar, fizzy and acidic drinks
- **Poor oral hygiene:** Failure of self-care e.g. regular tooth brushing and flossing
- **Fluoride:** The lack of exposure to fluoride
- **Tobacco and alcohol:** Smoking increases the risk of periodontal disease and is one of the main causes of oral cancer. Smoking combined with alcohol can lead to a 30 times greater risk of oral cancer. Smokeless tobacco also increases the risk of oral cancer
- **Injury:** The health of teeth can be compromised by traumatic injury. Those who play contact sport are at particular risk

Poor oral health occurs more often in vulnerable groups, as evidenced below:

- Leicester is the 20<sup>th</sup>. most deprived local authority in the country with 35.3% of children and young people between 0-19 years living in poverty. Studies show that those from lower socio-economic groups are likely to have the highest levels of dental decay and consequently worse oral health.
- Epidemiological data has shown that the prevalence of dental decay is also much higher in Asian heritage children. This is of particular relevance to Leicester City with a high BME population.

Further points of note:

- Children looked after can miss out on dental check-ups and treatment because they are often relocated.
- People with disabilities and complex health needs are at greater risk of dental disease. It is important that preventative work and access to services are appropriate for this group of vulnerable people.

In 2009, the National Institute for Health and Clinical Excellence (NICE) recognised dental neglect as a type of child neglect. The recommendations relate to two types of dental neglect:

- persistent failure by parents/carers to obtain dental treatment for a child's dental decay
- the possibility of child maltreatment or oral injury

The consequence of untreated dental diseases for children can be significant. Not only do many children affected experience pain and discomfort, they can lose sleep, confidence and it can restrict their play activities and affect their readiness for nursery and school.

### Aim

The aim of this strategy is to support coordinated activity across Leicester City to improve oral health, reduce oral health inequalities and lay solid foundations for good oral health throughout life.

### Objectives

- Optimising exposure to fluoride
- Gain multi-partnership support in order for **everyone** to play a role in improving oral health
- Improve preventive and routine dental attendance
- Improve parental skills on caring for children's oral health

### Ambition

**A 10% increase in the proportion of 5 year olds in Leicester with no signs of dental disease by 2019**

#### Why is this outcome important?

Dental health is widely used as an 'indicative measure' of children's general health. It has also been included as an indicator within the Public Health Outcomes Framework. Dental decay is almost totally preventable but it accounts for significant pain and discomfort to the child and to absence from school.

### Rationale

The improvement in oral health for preschool children living in Leicester City involves the contributions from a wide range of agencies and groups, and is not the sole responsibility of one single organisation. The strategy should therefore adopt a multi-sectored strategic approach directed at both local and national levels.

Any intervention considered should be tailored to each sector of the community being served. It has been recommended that oral health education programmes should focus on the prenatal and early post-natal period as women tend to be more susceptible to public health messages. This in turn could help to ensure that healthy behaviours are established in early childhood. Every community living in Leicester City should be targeted to receive appropriate oral health education, as low levels of knowledge rather than negative attitudes may be putting them at high risk.

Water fluoridation is a very cost effective method for reducing the risk of caries especially within deprived communities. There are no water fluoridation schemes in Leicester City and the feasibility of this should be investigated in the longer term. In the short term, the wide distribution of fluoride toothpastes on a regular basis has been considered. The cost of toothpaste can be a barrier for low income communities and therefore the removal of VAT may be advantageous. The provision of low cost and affordable toothbrushes and toothpastes can also be stocked for sale at Children's Centres, along with supervised tooth brushing sessions at Early Years settings.

It has been reported that decay prevalence is higher in young children who brush their own teeth than those where an adult helps and therefore encouraging supervision by an adult until the child has the manual dexterity to brush effectively is encouraged. Supervised tooth brushing sessions at Children's Centres and Early Years settings are recommended for implementation.

Facilitating access to early and regular dental care is as crucial as providing a greater availability of non-pharmacological techniques for anxious preschool children in order to reduce the demand and requirement for dental General Anaesthesia (GA). Referral guidelines should be formalised in order to reduce referrals for GA and this should be monitored closely. Furthermore, professionally applied topical fluoride varnish applications should be encouraged for all preschool children.

All front line staff have ready access to parents/carers with preschool children and are therefore an ideal group to collaborate with. The need to recognise oral health within mainstream health and care policies is vital as a common risk factor approach to disease prevention could provide a more effective means to promoting oral health.

There is also a need to ensure that the under-served population groups are fully integrated into the community health strategy with active involvement stimulating a sense of belonging and community spirit, thereby increasing social capital within a community.

## Strategy

The oral health promotion strategy for preschool children living in Leicester City is structured around the five principles of the Jakarta Charter (World Health Organisation 1997):

### 1. Promote social responsibility for health

- Investigate the feasibility for water fluoridation
- Encourage advertisements for healthy foods
- Campaign for the removal of VAT on fluoride toothpastes



- Lobby for more retail outlets to provide total sweet free checkouts (especially at toddler eye level)
- Ensure oral health input into infant feeding guidelines
- Introduce dietary guidelines on reducing sugar consumption for preschool children
- Encourage the increase in the provision of fluoride varnish applications from three years of age
- Raise awareness of dental neglect within child protection

## **2. Increase investments for health development**

- Ensure oral health promotion messages are consistent and evidence based
- Conduct oral health workshops for all front line staff including early years settings
- Incorporate oral health input into early years training programmes provided in the City
- Develop educational oral health programmes for parenting classes
- Use social marketing methods to promote oral health messages within a range of settings
- Provide training to the local dental profession on non-pharmacological behaviour management techniques for preschool children
- Increase local dental profession's awareness/understanding of oral health issues affecting different sectors of the community
- Ensure local dental profession receive training in Delivering Better Oral Health
- Develop general health promoting knowledge and skills of the dental team
- Establish an accreditation process for early years settings that offer healthy food/snack policies and daily supervised tooth brushing
- Establish an accreditation process for NHS dental practices providing a child friendly preventative focus

## **3. Consolidate and expand partnerships for health**

- Develop networks to facilitate oral health promotion within general health promotion
- Develop multiple access points to NHS dentistry through building effective links with all (multi-agency) front line staff
- Ensure the provision of oral health information and signposting to all pregnant women by midwives
- Introduce oral health advice at four month developmental check by health visitors – distribute toothbrushes and toothpastes at this universal contact
- Build relationships between accredited NHS dental services and Neighbourhood Advisory Boards, Children's Centres and early years settings
- Ensure data sharing agreements in place to identify and target those at high risk for dental decay

- Ensure the oral health needs of newly arrived children in the City are identified and met through collaborative working
- Ensure that a whole family approach to dental decay prevention is provided when one child has required a dental extraction under general anaesthesia
- Enhance involvement of midwives, family nurse partnerships, looked after children nurses, community nurses, community development workers, health visitors, school nurses, children centres staff, family support workers, early years staff (including childminders), foster carers, educational staff, community pharmacists and voluntary sector workers in promoting oral health
- Fully utilise the skill mix in the dental profession
- Encourage the prescribing, dispensing and sale of sugar-free medication to all pre-school children (particularly those on long term medication)
- Work intensively with those at higher risk of dental decay using a multi-agency approach

#### **4. Increase community capacity and empower the individual**

- Build community interest in oral health
- Strengthen and develop strong community, commercial, voluntary, health and care partnerships
- Support and promote Breastfeeding Friendly Places in the City
- Introduce supervised tooth brushing sessions at Children's Centres and Early Years settings
- Expand interpreter services for non-English speaking parents/carers
- Ensure that the design of specific oral health resource packages are informed by community (including faith groups) participation and involvement
- Ensure that every child in the City receives an oral health promotional resource pack which includes a free toothbrush, toothpaste and leaflet at 4 months (to include weaning/drinking cups), 1 year, 2 years and 5 years
- Ensure that community and family support schemes tackle family lifestyle issues that could affect the health of the unborn and preschool child e.g. a household where parents use tobacco, take drugs, misuse alcohol
- Provide toothbrushes and toothpastes in food parcels distributed under the aegis of Leicester City Council to families with pre-school children

#### **5. Secure an infrastructure for health promotion**

- NHS England Area Team (Lincolnshire and Leicestershire) and Leicester City Council to work closely with other key organisations to ensure a coordinated and consistent approach towards improving oral health
- Ensure information on accessing NHS dentistry is easily available to all sectors of the community including new residents to the City

- Ensure access to NHS dentistry is equitable throughout Leicester City
- Investigate appropriate incentives to encourage and support preventive approach to treating preschool children
- Dental attendance to be encouraged by Health Visitors at the 4-month visit
- Ensure that every child in the City attends a dental practice before their first birthday
- Amend the child health record (red book) to include dental questions
- Consider the cost-effectiveness of dental screening at early years settings in order to maximise uptake of services as a result
- Establish and maintain a single point of contact or dental 'portal' e.g. dental helpline
- Explore flexible models of service provision that match the needs of the population e.g. mobile units
- Investigate direct access to dental therapists, dental hygienists and dental nurses
- Ensure an improvement in the patient's experience of NHS dental services

## Evaluation

This strategy should form the basis by which oral health promotion interventions could be planned and outcomes measured. It could act as a basis of comparison across interventions, contributing to a knowledge base on effectiveness whilst assisting in the utilisation of limited resources.

The interventions selected have been based upon the evidence base, what is culturally appropriate and what is possible within the available resources. Both clinical outcomes as well as impact on oral health related quality of life measures need to be evaluated. It is essential that the evaluation developed is in accordance with the nature of each specific intervention.

It should be noted that there is currently little evidence on how best to evaluate oral health promotion interventions. The evaluation of oral health promotion is a complex and difficult task which has been generally underfunded and neglected. The World Health Organisation (1998) recommends that at least 10% of resources be allocated to the evaluation of interventions.

Process evaluation will be required throughout each intervention although assessment of the interventions as a whole will be required at completion. A core element of the implementation arrangements will be monitoring performance of the strategy to ensure progress and improvement and where necessary, to make adjustments.

### **Output Measures**

1. Number of front line staff (broken down by occupation) attending oral health training sessions.
2. Proportion of pregnant women attending a dental practice during pregnancy.

3. Number of parents/carers provided with oral health advice during attendance at parenting sessions.
4. Number of oral health parenting sessions provided.
5. Number of Healthy teeth, Happy smiles resource packs sold at Children's Centres.
6. Proportion of eligible children provided with an oral health promotional resource pack at 4 months, 1 year, 2 years and 5 years.
7. Proportion of children engaged with daily supervised toothbrushing sessions at early years settings.
8. Proportion of early years settings accredited with Leicester City's Healthy Teeth, Happy Smiles programme.
9. Proportion of dental practices gaining Leicester City's Healthy Teeth, Happy Smiles accreditation.
10. Number of parents/carers consenting to their children having fluoride varnish applications.
11. Proportion of 3-5 years olds receiving a fluoride varnish application in a community setting.
12. Proportion of 3-5 year olds who have received a fluoride varnish application in a community setting who then receive regular fluoride varnish applications in a clinical setting.
13. Proportion of children at 1, 2, 3, 4 and 5 years completing dental treatment.
14. Proportion of children at 3, 4 and 5 years receiving regular fluoride varnish applications (2-4 times a year).
15. Number of children (under 5 years) requiring extractions of decayed teeth under general anaesthesia.
16. Number of children (under 5 years) requiring a repeat extraction of decayed teeth under general anaesthesia.
17. Number of children (under 5 years) whose siblings have required extractions of decayed teeth under general anaesthesia.
18. Number of Common Assessment Frameworks raised due to dental concern.
19. Proportionate increase in retail outlets providing total sweet free check outs.

In order to deliver on the strategy, additional resources may be required. It is important that oral health receives fair consideration with other priorities when additional funding becomes available either locally or nationally over the lifetime of

this strategy. There also remains the issue of funding for oral health within established programmes for preschool children and opportunities to access external funding should also be exploited.

To achieve the goals set out within this strategy, it is necessary to facilitate the engagement of all partners in order to promote oral health improvement and acknowledge a shared responsibility to address oral health. The principal emphasis on oral health education should continue to be laid upon four key areas: diet, oral hygiene, water fluoridation and dental attendance.

Although oral health has dramatically improved overall in the last 20 years, oral health inequalities have widened with the most stark oral health inequalities being found in dental caries levels amongst preschool children.

Any restructuring of dental services must therefore ensure that young children are given the highest priority for care. However, these actions alone cannot hope to result in meeting the objectives and a population-based strategy is therefore essential. Only one measure can provide such a dramatic improvement in dental health on a community basis and that is water fluoridation, which will benefit the whole population.