

## **HEALTH OVERVIEW AND SCRUTINY COMMITTEE: 9 SEPTEMBER 2015**

### **REPORT OF THE DIRECTOR OF PUBLIC HEALTH**

#### **ORAL HEALTH OF FIVE YEAR OLDS**

##### **Purpose of report**

1. The purpose of this report is to provide the Committee with an overview of child oral health in Leicestershire and an update on public health activity around oral health promotion and oral health survey.

##### **Policy Framework and Previous Decisions**

2. Commissioning of oral health promotion activity and the local component of the national dental public health epidemiological survey are statutory responsibilities for Local Authorities.
3. A key priority within the Leicestershire Health and Wellbeing Strategy is “getting it right from childhood” by giving children the best start in life. Prevention of tooth decay is one of the key outcome measures in the action plan for assessing achievement of this strategy.

##### **Background**

###### **National context**

4. Oral health is an essential part of a person’s overall health and wellbeing and has been improving for both adults and children across England. However, recent data shows that dental caries (one of the most common dental diseases) is the most common reason for children to be admitted to hospital, with nearly 26,000 admissions last year in England, mostly for extraction of teeth under general anaesthetic.
5. Tooth decay can lead to pain and sepsis (a common and potentially life-threatening condition triggered by an infection), limitations in food choices and days lost from school and work (Murphy, 2013). Dental caries can occur at any age but can occur more frequently in earlier years of life particularly in lower socio-economic groups. It is therefore important for good oral health as well as dietary behaviours to be established in the formative years of life (Murphy, 2013).

6. As with other diseases, the greatest burden of poor oral health tends to be upon disadvantaged and socially marginalised populations. A major factor in the development of dental caries is the frequent intake of refined sugar, which also contributes to the development of other health problems such as obesity. Dental caries is therefore a major predictor of poor diet.

### Leicestershire context

7. The health of children in Leicestershire is generally similar to, or better than, the England average. A key priority within the Leicestershire Health and Wellbeing Strategy is 'getting it right from childhood' by giving children the best start in life. Ensuring that children have good oral health is an important contributor to this aim.
8. However, key populations within Leicestershire are at risk of poor oral health due to poor diet and nutrition and poor oral hygiene. There are socio-demographic differences in oral health across Leicestershire. Data from the oral health survey of five year old children in 2012, and 3 year old children in 2013 showed, that the prevalence and severity of tooth decay in some areas of Leicestershire County (Blaby, Charnwood and Northwest Leicestershire) were significantly higher than the England average.

### Three year olds

9. In Leicestershire 18.6% of three year old children have experience of obvious dental decay (caries), having one or more teeth that were decayed to dentinal level, extracted or filled because of caries (%d3mft>0) compared to 11.7% in England. This is the second highest percentage throughout the East Midlands behind Leicester only.
10. However the tooth decay found in these three year olds overall is less severe than that seen nationally. Across Leicestershire, for three year olds with any decay, an average of 2.09 teeth are affected, compared to 3.08 nationally.
11. In the districts the picture is largely similar. Blaby and Charnwood both have a higher proportion of three year olds affected by tooth decay than the national average (25% and 29% compared to 11.7% for England). However in both districts the severity is much lower than found nationally. None of the other districts are significantly different to the national average in terms of the percentage and the severity of tooth decay among three year olds affected.
12. The table below shows data for three year olds and compares Leicestershire to the England average. Several other lower tier Local Authorities within Leicestershire were added for further comparison.

**Table 1: Oral health survey of three year old children 2013 Data Table Leicestershire**

	% d3mft > 0 (average % of children with some decayed, filled or missing teeth)	Mean d3mft > 0 (average number of affected teeth where there is some decayed, filled or missing teeth)
Blaby	25.14	1.61
Charnwood	29.3	2.23
Harborough	13.16	1.6
Hinckley and Bosworth	17.31	2.76
Melton	14.49	2.11
North West Leicestershire	14.52	2.39
Oadby and Wigston	13.32	2.15
Leicestershire	18.6	2.09
England	11.7	3.08

Based on fewer than 30 volunteers

#### Five Year olds

13. In Leicestershire 37.1% of five year old children had experience of some dental decay (caries) in the 2011/12 national survey compared to 27.9% in England. Of those with some decay, the average number of teeth affected in England was 3.38, compared to 2.56 in Leicestershire. Within Leicestershire there is variation in decay amongst five year olds with North West Leicestershire having the highest level of decay and prevalence (41.6%) after Leicester, when compared to the England average (27.9%).
14. The table below shows data for five year olds and compares Leicestershire to the England average, and several other lower tier Local Authorities within Leicestershire for further comparison.

**Table 2: Oral health survey of five year old children 2012 Data Table Leicestershire**

	% d3mft > 0 (average % of children with some decayed, filled or missing teeth)	Mean d3mft > 0 (average number of affected teeth where there is some decayed, filled or missing teeth)
Blaby	39.3%	2.46
Charnwood	38.4%	2.41
Harborough	33.5%	2.26
Hinckley and Bosworth	34.7%	2.94
Melton	35.1%	2.51
North West Leicestershire	41.6%	2.68
Oadby and Wigston	35.4%	2.35
Leicester	53.2%	3.88
Leicestershire	37.1%	2.56
England	27.9%	3.38

## **Local actions**

15. On 1 April 2015 responsibility for commissioning oral health promotion and the annual oral health epidemiological survey transferred to local authorities from NHS England. A new oral health promotion contract commenced on 1 August 2015. Deliverables from this contract are detailed in paragraphs 16, and 21 – 25 below.
16. The provision of the epidemiological survey also commenced on the 1 August 2015. The survey population group is set nationally and the 2015/16 survey will focus on the oral health of older people. It is expected that in future years the focus of the survey will return to children.

## **The oral health promotion programme**

17. Historically the level of oral health promotion resource and activity has been particularly low. NHS England commissioned a low level of oral health promotion activity for Leicestershire amounting to one day of an oral health promotor's time. From summer 2014 in the run up to taking over the contract public health staff developed a plan to ensure a greater focus on oral health. It was felt appropriate to work largely on prevention of tooth decay in under-fives given the results of the 2012 and 2013 surveys and to get this work underway. The plan includes establishing a range of routine evidence based oral health promotion activities, using current data and information to inform areas and groups to focus on. Alongside this is work to gain a greater understanding of oral health need and behaviours in Leicestershire so that future work can be more effectively targeted.
18. Given the results of the surveys showing that Leicestershire has high levels of childhood tooth decay, some additional funding has been secured to take this work forward. Funding for the plan has come from:-
  - (a) Transfer of the recurrent funding for oral health promotion and epidemiological services from NHS England in 2015;
  - (b) Additional non-recurrent funding in 2013/4 from NHS England used to procure oral health promotion materials, resources and targeted work;
  - (c) Additional non-recurrent funding for 2015 from NHS England to support the oral health promotion pathway for children who have been referred for tooth removal under general anaesthetic, fluoride varnish project and insight research work;(d) Funding from the public health grant to support and increase in oral health promotion capacity.

The various strands of this plan are outlined below.

## **Understanding oral health need and behaviours in Leicestershire**

19. A regional oral health needs assessment has been undertaken by Public Health England and the Local Area Team of NHS England. This includes Leicestershire and is due to be published in autumn 2015.
20. Local insight research is being commissioned to investigate the high levels of dental decay in parts of Leicestershire identified through the National Survey. This research

will help officers to understand oral health behaviours, particularly in areas of high decay, and explore which oral health promotion interventions are likely to be most effective in our communities. This will be used to tailor Leicestershire's oral health promotion strategy for children.

### **Universal oral health promotion for young children**

21. Parents of every child born in Leicestershire receive a copy of "My personal child health record" commonly known as "the red book". New oral health promotion pages have been included with evidence-based information and advice for parents regarding their children's oral health. The materials have been developed through social marketing techniques in collaboration with Leicester City Council and are branded 'Healthy Teeth, Happy Smiles'.
22. From 2015 Health Visitors are providing "my first toothbrush and toothpaste" pack for every child at the 4 month contact (7000 packs a year). This will be done as part of an oral health promotion discussion with parents to enable proactive and positive oral health and dietary behaviours. The Standard Operating Framework for health visitors and school nurses has been revised to include oral health and the appropriate messages to impart at key stages, e.g. discouraging prolonged bottle use, visiting a dentist, encouraging the uptake of fluoride varnish when the child turns 3 years old, encouraging water drinking and discouraging the consumption of sugary drinks and foods. This is supported by the "Healthy teeth happy smiles" materials.
23. The oral health promotion service will work with pre-school providers to establish supervised tooth brushing for all children in their setting (at least 80 nurseries and 70 pre-schools). They will also deliver health promotion events and training for professionals and dental practice staff throughout the year (30 per year).
24. The oral health promotion service will continue to distribute oral health promotion materials to families through a variety of settings including children's centres, at key times in the year (e.g. during National Smile Month).
25. During National Smile Month (May/June 2015) the Public Health Department worked with libraries and children's centres to engage families around oral health in their children. This included oral health topic 'wiggly readers' sessions in libraries, bottle swaps (swapping bottles with rubber teats for free flow cups) and distribution of toothbrush and toothpaste packs. Interviews with BBC Radio Leicester were used to spread oral health messages to a wider audience.

### **Targeted oral health promotion support**

26. A Development Officer post has been supplemented to deliver an oral health promotion activity as part of the Active Bean Club programme. This involves working with a number of pre-school settings across Leicestershire in 2015-16 to:-
  - (a) raise the issue and importance of oral health;
  - (b) cascade the training to suit the establishment needs;
  - (c) provide oral health sample materials;
  - (d) signpost to other oral health promotion resources;

- (e) assist in supporting local initiatives such as bottle, cup and tooth brush swaps;
- (f) promoting supervised tooth brushing and assisting in getting these programmes underway within the settings the development officer is working with.

27. The Public Health Department is working with the Leicestershire and Lincolnshire Local Area Team of NHS England on a project to ensure that families of children under five who have teeth extracted under a general anaesthetic will receive intensive oral health advice and support to prevent further dental decay and subsequent extractions for the child and their siblings.
28. Arrangements are being made to provide toothbrush and toothpaste packs to be distributed in food banks in order to ensure that families most in need still have access to these products.

### **Dentistry**

29. Dental practices are also a key resource in promoting good oral health and encouraging parents to take their children to the dentist from the time their first milk teeth arrive is an essential message. Dentists are paid on a banding system with three treatment bands where band 1 payments cover a range of mainly prevention related treatments and advice and in the case of children application of fluoride varnish. From the age of three, children should be offered fluoride varnish application at least twice a year. This is free of charge for children on the NHS and known to be an effective preventative treatment. The Public Health Department will be working closely with NHS England who holds the contracts with dentists to ensure this is offered more widely.

### **Workforce development**

30. Continuing Professional Development events on oral health have been held for dental practices across Leicestershire in 2015. These were used to promote the latest evidence based toolkit for prevention. Training events for dental practice staff will continue as part of the new oral health promotion service.
31. From early 2015 frontline healthcare staff (health visitors and school nurses) and other professionals working with families with young children (including children's centre staff) have been given training in oral health promotion in order to ensure consistent and high quality information and advice is given to all parents of young children. These will continue on a rolling programme.

### **Resource Implications**

32. There are no additional resource implications to those outlined in paragraph 20.

### **Conclusions**

33. Oral health is variable across Leicestershire with 37% children having some dental decay by the age of five.
34. Responsibility for commissioning oral health promotion activity and the national dental health survey transferred to Leicestershire County Council from NHS England

in April 2015. This has provided an opportunity to give an increased focus to oral health and to utilise additional resource provided from NHS England to sustain a more integrated and developed oral health promotion service.

35. A new and extended oral health promotion service has been commissioned and commenced on 1 August 2015. Activity will include a range of universal and targeted approaches including direct work with children and families and training of frontline staff that come into contact with children.
36. The next dental health survey is of older adults in extra care housing and this will shortly be underway.

### **Background papers**

See: Dental Public Health Intelligence Programme Survey results:  
<http://www.nwph.net/dentalhealth/>

### **Circulation under the Local Issues Alert Procedure**

None.

### **Officers to Contact**

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### **List of Appendices**

None.

### **Relevant Impact Assessments**

#### **Equality and Human Rights Implications**

37. No impact assessments have been undertaken.

#### **Crime and Disorder Implications**

None.

#### **Environmental Implications**

None.

## Partnership Working and associated issues

38. Leicestershire County Council Public Health have worked collaboratively with a range of partners including the Leicester, Leicestershire and Rutland Oral Health Partnership Board, Health Visiting teams, childcare settings and children's centres.

## Risk Assessment

Table 3

	I	L	RAG (after mitigation)	mitigation
Oral health promotion contract has limited impact on oral health in young children	Red	Amber	Green	<ul style="list-style-type: none"><li>• Service specification is based on guidance from Public Health England on Commissioning Better Oral Health. Evidence-based interventions such as supervised tooth brushing and information and advice have been included.</li><li>• Contract will be performance managed against key indicators</li><li>• Insight work being undertaken with local families to ensure co-produced interventions.</li></ul>