

## SCRUTINY PANEL

14 April 2016

### ORAL HEALTH PROMOTION & THE NATIONAL DENTAL SURVEY 2012

#### Report of the Director of Public Health

Strategic Aim:	Meeting the health and wellbeing needs of the community	
Cabinet Member(s) Responsible:	Mr R Clifton, Portfolio Holder for Health and Adult Social Care  Mr R Foster, Portfolio Holder for Safeguarding Children and Young People	
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#### DECISION RECOMMENDATIONS

That the Panel:

1. Notes the findings and actions identified in the attached report;
2. Endorses the approach taken to development of the action plan and engagement with community partners and settings in promoting good oral health;
3. Makes suggestions for any further actions.

#### 1 PURPOSE OF THE REPORT

- 1.1 To inform the Panel on the findings of the National Dental Health Survey 2012 on oral health of five year olds in Rutland and the actions taken to better understand the reasons for the levels of tooth decay amongst children in Rutland.
- 1.2 To set out the proposed actions for developing targeted oral health promotion in Rutland.

#### 2 BACKGROUND

- 2.1 Oral health is an integral part of a person's overall health and wellbeing and has been improving for both adults and children. However, recent data shows that dental caries is the most common reason for children to be admitted to hospital; with nearly 26,000 admissions last year<sup>1</sup>. The most common dental diseases are dental caries (decay) and periodontal (gum) disease. Dental decay can progress to causing severe pain and sepsis. Toothache may result in time off work; times

lost in school, sleepless nights and have a general impact on the individual's ability to function.

2.1.1 There is a direct relationship with material deprivation and oral health, and although the number of people accessing NHS dentistry has been increasing since 2008 (NHS England) many vulnerable groups receive limited support in terms of treatment, care and prevention.

2.1.2 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 risk factor for poor diet.

## 2.2 Dental Public Health Intelligence Programme Dental Surveys

2.2.1 The Dental Public Health Intelligence Programme (DPHIP) is a national programme of dental surveys co-ordinated by Public Health England (PHE). DPHIP surveys are conducted annually, usually over academic years and are carried out on randomised stratified samples or wider surveys e.g. census surveys, subject to additional samples being commissioned.

2.2.2 Rutland County Council has procured Community Dental Service CIC to undertake surveys on the Council's behalf, as part of a joint specification with Leicestershire County and Leicester City local authorities. This commenced in August 2015.

2.2.3 The surveys undertaken for 2012 and 2013 both focused on children: the 2012 on five year olds and the 2013 on three year olds. The data from these indicated the need for further work on children's oral health in Rutland, and this is detailed below.

2.2.4 The current survey work for 2015-16 is related to older people in extra care housing. The surveys are conducted according to a national standard protocol and examiners are trained and calibrated to a national standard. The findings of this survey will be published nationally (to allow for comparison between areas) in Summer 2017.

## 3 RUTLAND'S RESULTS OF THE 2012 AND 2013 SURVEYS

3.1 Rutland is a healthy place. Most measures indicate good general health and life expectancy is higher than the national average. Levels of socio-economic deprivation in Rutland are amongst the lowest in the country.

3.2 Oral health is integral to overall health. Data from the three year olds and five year olds oral health surveys has shown levels of tooth decay in Rutland to be higher than the national average. In England, 27.9% of five-year old children had experience of some dental decay (caries) in the 2011/12 national survey. This compares to 40.3% in Rutland. Of those children that had some decay, the average number of teeth affected in England was 3.38, compared to 2.71 in Rutland. Appendix A contains the data tables for both surveys.

3.3 Further analysis of the data was requested and undertaken by Public Health England Knowledge and Information Team on Rutland's behalf and showed that

levels of tooth decay are not uniform within Rutland. Forty-six percent of 5 year olds in Rutland were included in the sample. The wards in which children aged 5 had more than 50% decayed, missing or filled teeth were Uppingham and combined wards of Exton, Langham and Whissendine. (These were combined in the analysis to preserve anonymity of the survey). Appendix B shows a map of indicating levels of decay of five year olds.

- 3.4 Given that dental decay is usually associated with higher levels of deprivation and tooth decay in Rutland is higher than would therefore be expected it is important to ascertain what the reasons for this might be, to gain a greater understanding and to identify the most appropriate actions to tackle the problem.

#### **4 ORAL HEALTH INSIGHT WORK**

- 4.1 Rutland County Council received specific funding from Public Health England to commission a project to gather insight into what the reasons for the higher levels of tooth decay might be, and to ascertain whether there are modifiable risk factors that we can address, such as dietary habits, oral hygiene practices, beliefs, knowledge or attitudes that are different to other, lower prevalence areas.

- 4.2 In addition, some routine activity ran concurrently with work to improve data and intelligence. This included: training for health visitors and children's centre staff; promotion of oral health messages by health visitors; and information in 'the red book' personal child health record' given to all new parents with information targeting messages at key stages of child development. Dental practices in the county have also been able to access training on delivering better oral health in line with national guidance.

- 4.3 The Oral Health Insight work commenced in September and involved three components:

- A desk exercise examining the statistics relating to poor oral health in the area and a review of wider practice to promote children's oral health.
- Consultations with stakeholders including pre-school childcare /childminders/ nursery staff, dental staff, children's centre staff and the health visiting team.
- Engagement with parents of children under 5 to try and ascertain why rates of tooth decay are so high, and in particular the behaviours that underpin the problem.

#### **4.4 Findings**

##### **4.4.1 Professionals – awareness and recognition**

- i) Amongst the childcare providers, most were not aware of the higher incidence of dental decay in Rutland when compared with the national average. Most were surprised by this. They had expected that with the area being affluent and rural, parents would be conscientious about looking after their children's teeth.
- ii) A small number of childcare workers were not surprised when we made them aware of the higher incidence of decay. Interestingly,

these tended to be those that worked in settings where parents brought in their children's drinks, snacks and lunch.

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*"The snacks they bring are lot more chocolate-based and sweet-based, a lot of them seem to have the juice, whereas years ago you used to have more milk."*

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- iii) All settings/ professionals said they would be happy to help out with future oral health initiatives, with some feeling they should do more.
- iv) Having had some time to consider the higher incidence of dental decay in Rutland, most felt that parents in the area did not lack the knowledge to promote good oral health for their children. Busy lives for parents were seen as a driver for unhealthy options, with sugary drinks and snacks being viewed as an easy option.

#### 4.4.2 Issues to Explore

A number of issues emerged that were identified by the consultees as worth exploring further with parents. These were:

- i) Awareness of free sugars in drinks and snacks, including so called 'healthy snacks' like dried fruit
- ii) Using sweets as rewards for good behaviour and to assist parents with busy lives
- iii) How often juice is given to children and why it is given instead of milk and water
- iv) The time children had for their teeth to recover from them coming into contact with sugar
- v) The availability of dental places and experiences in finding one
- vi) When parents take their children to the dentist for the first time

#### 4.4.3 Engagement with parents

- i) Engagement with parents involved face-to-face surveys with 84 parents and in-depth conversations with 35 parents.
- ii) Parents who participated were generally interested in oral health, aware of most (but not all) of the issues relating to good oral health practice, motivated to take action on them and felt confident they had all the information and advice they needed to do so.
- iii) All of the parents knew about brushing twice a day and described how they supervised brushing, with the vast majority finishing brushing to make sure their children's teeth were clean. A lot did this

in spite of their children's reluctance to brush, with a significant proportion having to battle to get it done.

- iv) Parents did not appear aware of the need to give children a break from sugar and to follow guidance recommending limiting sugar intake to four times a day. During the depth conversations we also discovered many would exceed this limit as result of their children grazing on snacks throughout the day or having drinks with sugar in them.
- v) Another issue parents did not appear to be aware of was when to take their children to the dentist for the first time. On the basis of this work we would conclude that a child going to the dentist when their first tooth appears is more down to luck than awareness.
- vi) Many stakeholders and parents believed it was tricky to find a dentist, yet in reality most people interviewed did have an NHS Dentist. More promotion of the availability of places is required.
- vii) A significant proportion of parents gave their children a drink of milk in bed after brushing. This was an issue which most parents knew was not recommended, but still did at a time when it is important to them to settle down their children and get them to sleep.

4.4.4 In light of the findings from the conversations with parents, a range of factors that encourage or discourage both desired and problem behaviours have been identified. With this behavioural analysis in mind, there are number of things that will be considered that incentivise desired behaviour and dis-incentivise problem behaviours in relation to children's oral health. These might include:

- i) Raise awareness of the risks of frequent snacking and grazing
- ii) Encourage parents to set a time for snacks (avoid grazing throughout the day)
- iii) Promote messages that children's teeth need plenty of time between food and juice drinks
- iv) Show how five-a-day and good oral health can work in practice
- v) Give hints and tips on how to make brushing fun
- vi) Promote availability of free fluoride varnish from dentists
- vii) Highlight that children will drink milk or water if other options aren't available
- viii) Encourage parents to only offer water/milk on demand
- ix) Highlight other routines apart from grazing
- x) Raise awareness of the need for a dental check-up once their first tooth appears

- xi) Highlight availability of dental places in the area
- xii) Give parents advice on 'other ways to get their child to sleep' (apart from a bottle in bed after brushing)
- xiii) Raise awareness of risk of some 'healthy food', e.g. dried fruit
- xiv) Question the importance of drinking *something* (where child resists water or milk)
- xv) Raise awareness of consequences of tooth decay

4.4.5 The full report on oral health insight for Rutland is available on request.

## 4.5 Next Steps

- 4.5.1 A small internal working group has been established to develop an action plan to address children's oral health, taking into account the findings of the insight work. The plan will include the following recommended areas:
- 4.5.2 Harnessing existing community assets - work with locally-based organisations/settings (Children's Centres, other childcare providers) and a range of staff (Health Visitors, Community Nursery Nurses, Dentists) who are in touch with parents of young children. Most are already aware and convinced by the importance of promoting good oral health and are willing to help take action to prevent tooth decay in the future. They represent key assets that can be mobilised or further built on.
- 4.5.3 Training for staff and parents - a training package will be developed to help improve knowledge and support staff and volunteers to communicate with parents of young children about oral health. Oral health promotion training for staff, and sessions for parents delivered in settings have been well received and this needs to be rolled out more widely with regular refreshing. It should go beyond a focus on brushing and pick up on key issues that have emerged in Rutland e.g. snacking / grazing, drinks with free sugar and getting to the Dentist when the first tooth appears. Training will incorporate an element of behaviour change and simple motivational interviewing techniques to empower staff to hold conversations with parents. This is similar to the 'Making Every Contact Count Training' offered to front line staff in some parts of the country. Many parents also spoke about 'battles' over cleaning teeth. Training and supporting staff to provide supervised tooth-brushing in pre-school settings would help make tooth-brushing more fun and instil it as a routine for the children.
- 4.5.4 Adapting and providing promotional materials - Rutland has access to the Healthy Teeth Happy Smiles materials that are used elsewhere across Leicester and Leicestershire. In general they cover many of the issues highlighted in the Insight work and some (with very minor amendment) would be appropriate to use more widely in Rutland. Further supplies will be printed and circulated more widely to community settings to support the work of frontline staff in encouraging parents to adopt good oral health behaviours. Additionally providing health visitors with a 'first toothbrush and toothpaste pack' to give to a parent at the four month contact would provide a good opportunity for the health visitor to raise the issue of oral

health and evidence from elsewhere shows this to be effective and that parents recall this.

- 4.5.5 Developing new resource materials and loan equipment – a resource and briefing pack will be developed to ensure that all stakeholders understand the key messages, the role they have to play, and the materials available to support them. Briefing packs have proved very important in ensuring public health campaigns are effective, particularly when it's been necessary to encourage a range of stakeholders to be communicating consistent messages. Materials should include a focus on key issues highlighted from the insight work e.g. giving children's teeth time to recover after snacks and drinks (other than water), to discourage grazing, teeth friendly snacks. Consideration will also be given to the logistics of providing a resource library of teaching materials and equipment that could be used by a range of pre-school and school settings in promoting oral health.
- 4.5.6 Single contact point for finding a dentist - making it easier for parents to find a dentist to see their child will help support the drive to get children to a check-up once their first tooth appears, attending a dentist regularly and provision of fluoride varnish on a twice yearly basis. NHS Choices does provide information on availability, but there is sometimes a lag in the information getting updated.
- 4.5.7 A detailed action plan including timescales and responsibilities for each aspect of work is in the process of being developed by the working group who will also be responsible for ensuring effective roll-out.
- 4.5.8 Updates on the action plan and progress made on addressing children's oral health will be taken to Health & Wellbeing Board.

#### 4.6 Measuring impact of the oral health programme

- 4.6.1 A number of indicators will be used to assess progress. These will include both outcome and output measures:
- i) Use of annual, national survey data on the numbers of decayed, missing and filled teeth, where a drop in prevalence would indicate a positive outcome.
  - ii) The numbers of community and health professionals (e.g. school nurses, health visitors, teachers, children centre staff, nursery assistants, dental nurses) trained in delivering oral health promotion.
  - iii) The numbers children involved in oral health programmes. e.g. depending on the actions agreed for the plan numbers might include number of supervised tooth brushing programmes offered and number of children involved.
  - iv) Public awareness/ knowledge of oral health promotion messages

- 4.6.2 Whilst it is important to measure the impact that will be made by this work, it is important to recognise that there may be limitations on this with potentially new cohorts of families being surveyed each time.

## **5 ORGANISATIONAL IMPLICATIONS**

- 5.1 The 2012 Health and Social Care Act conferred responsibility for oral and general health improvement to local authorities and specifically requiring them to provide or commission oral health promotion programmes to improve the health of the local population and to provide or secure oral surveys.
- 5.2 Given the findings of the 2012 survey identifying higher than average numbers of five year olds in Rutland to have tooth decay it is the responsibility of Rutland County Council to take action to reverse this position. This report outlines what has been done to date and proposals for further work.

## **6 FINANCIAL IMPLICATIONS**

- 6.1 Rutland County Council applied for and received non-recurrent funding from Public Health England to undertake the insight work and to implement recommendations for oral health promotion for this.
- 6.2 Future oral health promotion work, not subsumed within this action plan, will continue to be funded from the Public Health Grant.

## **7 CONCLUSION AND SUMMARY**

- 7.1 Further analysis of the survey data and insight work has identified areas where levels of tooth decay were higher and some behaviours that would go some way to explaining why this should be the case.
- 7.2 This intelligence is being used to help shape an action plan which will involve a wide range of professionals and community organisations who are well placed to promote good oral health with children and their parents and carers.

## **8 BACKGROUND PAPERS**

- 8.1 Dental health of five year old children – Rutland – Dental Health Profile. Public Health England – available at: <http://www.nwph.net/dentalhealth/5yearoldprofiles/East%20Midlands/Rutland%20LA%20Dental%20Profile%205yr%202012.pdf>

## **9 APPENDICES**

- 9.1 Appendix A -Data Tables from the 2013 Three Year Olds Survey and 2012 Five Year Olds Survey
- 9.2 Appendix B - Map of decay experience of five year olds in Rutland

A Large Print or Braille Version of this Report is available upon request – Contact 01572 722577. (18pt)



## Appendix A. Data Tables from the 2013 Three Year Olds Survey and 2012 Five Year Olds Survey

The data tables below show data for both three and five year olds and compare Rutland to the England average, and several other local areas for further comparison.

### Oral health survey of three-year-old children 2013 Data Table Rutland<sup>1</sup>

	<b>% pop with decay</b>	<b>mean d3mft</b>	<b>% d3mft &gt; 0</b>	<b>Mean d3mft &gt; 0</b>
Rutland	46.4	0.33	14.9	2.22
Leicestershire	16.0	0.39	18.6	2.09
East Midlands	9.1	0.45	15.8	2.85
England	8.1	0.36	11.7	3.08

Based on fewer than 30 children with decayed teeth

### Oral health survey of five year-old children 2012 Data Table Rutland<sup>2</sup>

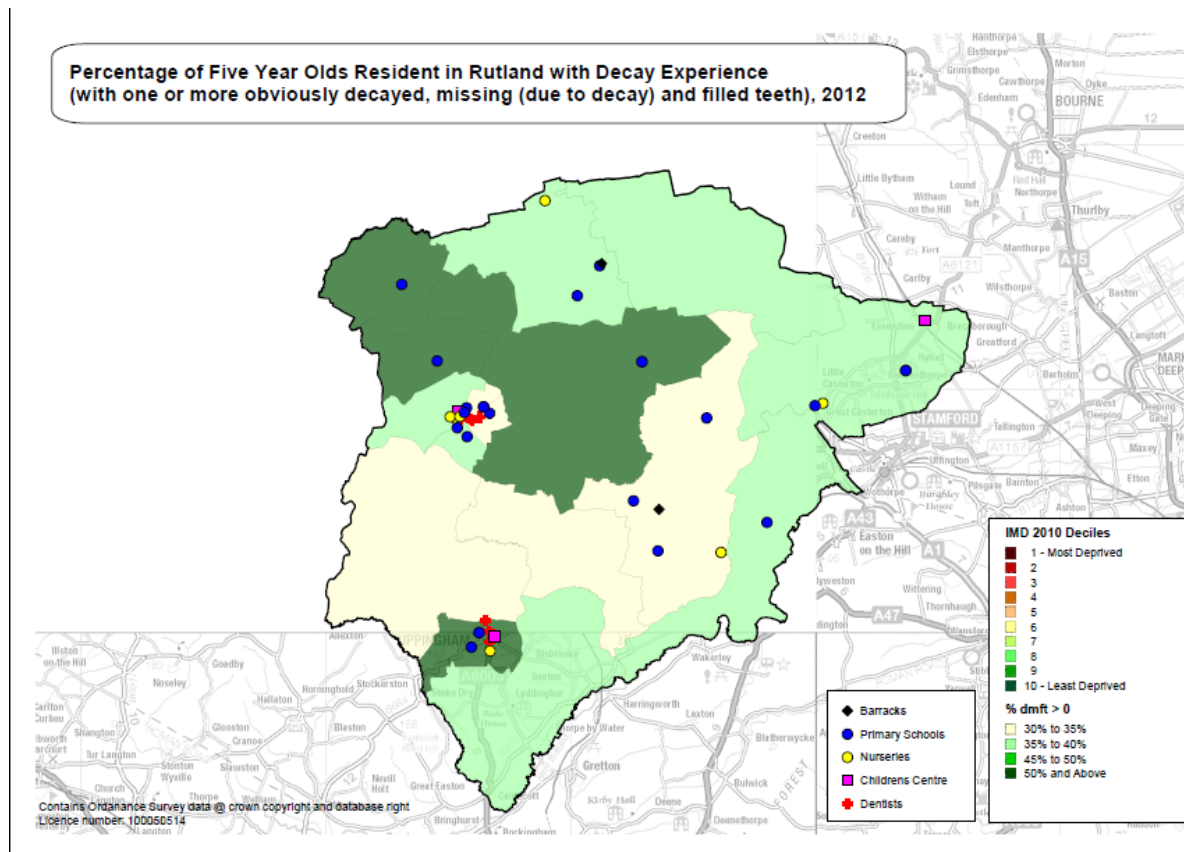
	<b>% pop</b>	<b>mean d3mft</b>	<b>% d3mft &gt; 0</b>	<b>Mean d3mft &gt; 0</b>
Rutland	46	1.09	40.3%	2.71
Leicester	10	2.06	53.2%	3.88
Leicestershire	20	0.95	37.1%	2.56
England	21	0.94	27.9%	3.38

<sup>1</sup> Public Health England. National Dental Epidemiology Programme for England: Oral health survey of three-year-old children 2013. A report on the prevalence and severity of dental decay. 2014

<sup>2</sup> Public Health England. National Dental Epidemiology Programme for England: Oral Health Survey of Five-Year-Old Children 2012. A report on the Prevalence and Severity of Dental Decay. 2013

## Appendix B. Map of decay experience of five year olds in Rutland

Percentage of five year olds resident in Rutland with decay experience (with one or more obviously decayed, missing (due to decay) and filled teeth) 2012



The areas shaded dark green have levels of decay 50% and higher. It should be noted that these figures are combined to protect patient identifiable information and therefore not all areas shaded dark green may have very high levels of tooth decay.