

**Update on Fluoridation  
Portsmouth City Council Health Overview and Scrutiny Panel**

**September 2011**

**1. Has oral health in Birmingham improved since the introduction of fluoridated water supplies?**

**1.1** In 2007-08, the average 5-year old in non-fluoridated Manchester had almost twice as many teeth affected by decay (2.4 decayed, missing or filled teeth) than the average Birmingham 5-year old (1.4 decayed, missing, filling teeth). Similarly, children in non-fluoridated Liverpool, Bradford, Blackburn and Knowsley have much more tooth decay than their Birmingham counterparts (*data from NHS dental epidemiology surveys*).

**1.2** In 2007-8, Liverpool had 27 times more children admitted to hospital for tooth extractions under general anaesthesia than in the fluoridated Heart of Birmingham Primary Care Trust, the most socially deprived PCT in the country. Social deprivation is closely linked with poor dental health. In the same year, Manchester children were 23 times more likely to go into hospital for tooth extraction than their Heart of Birmingham counterparts.

**2. What percentage of children visit the dentist on a regular basis in Portsmouth?**

The number of children (0-17 year-olds) who accessed NHS dentistry in the years 2009-10 and 2010-11 is shown in the table below.

<b>Financial Year</b>	<b>Number of Children Treated (0-17 years)</b>	<b>Population</b>	<b>% of Population Treated</b>
<b>2009/10</b>	22,395	40,130	55.8%
<b>2010/11</b>	23,671	40,170	58.9%

### **3. What dental educational initiatives have been carried out in the area?**

#### **3.1 Saving Smiles Scheme**

This initiative has been ongoing in Portsmouth nurseries and infant schools for many years. Children learn tooth brushing techniques and skills. The children engage in brushing their teeth as a group once a day at the school/nursery under the supervision of trained teachers. Resources are used to encourage good diet for both oral and general health, and this is supported by a number of other public health initiatives e.g. Healthy Pompey.

#### **3.2 Fluoride Varnish Scheme**

Fluoride varnish applications already happen in dental practice. However, it is known that children at highest risk of dental decay often do not attend regularly. One-off applications are not effective, so children who attend occasionally do not benefit. An oral health improvement programme which included fluoride varnish applications was piloted in schools in Portsmouth, Southampton and Oxfordshire in 2010. A key outcome is to direct young children into dental practices where they can regularly receive the full range of preventive care throughout their childhood. The combined learning from this has been shared across the pilot areas and more schemes are planned for Portsmouth.

#### **3.3 Social Marketing**

NHS Portsmouth has been using social marketing data and strategies to encourage more Portsmouth residents to access NHS dentistry, including families with young children. One initiative has been to use a health promotion bus which visited various sites in the city to offer basic dental advice and literature. Residents were signposted to local dental practices in the City. Further initiatives are planned which include producing and distributing resources to publicise availability of dental care in Portsmouth and the cost of dental treatment. Local dental teams are closely involved in these initiatives and are very supportive.

**4. What can be learnt from initiatives in other areas?**

- 4.1** The Department of Health has produced an evidence-based toolkit “*Delivering Better Oral Health*” which was published in 2006 and updated in 2009. All areas in the country use this as a guide to developing health promotion initiatives.
- 4.2** Key to improving dental health is the use of fluoride in interventions which includes increasing the number of children using fluoridated toothpaste and regular fluoride varnish applications for children.
- 4.3** NHS Portsmouth is using the evidence from this guide to develop oral health promotion initiatives. There is a drive to encourage more people to attend dental care regularly so they can access the full range of preventive advice and care.

**5. Can you provide evidence of the positive impact that fluoridation has had on oral health in a city that has had recently introduced this? (pls also see Q1)**

- 5.1** No new fluoridation schemes have been introduced since the 1980s.
- 5.2** The West Midlands is the most fluoridated region in the country. Within the West Midlands there are currently 3.7 million people drinking fluoridated water, which equates to about 70% of their population. Fluoridation schemes have been in operation in the West Midlands since 1964 (almost 50 years). All current schemes have been in place for at least 20 years.
- 5.3** The national dental epidemiology programme, which highlights trends in children’s dental health, has shown that the West Midlands ranks as the number one area for children’s dental health in the country.

**6. What impact did fluoridation have on the health of residents of Birmingham**

- 6.1** Dental data has shown that fluoridation has had a positive impact on children’s dental health. Routine monitoring has not demonstrated any adverse effects in Birmingham or in any other fluoridated area.
- 6.2** An article on fluoridation from Dr Jacky Chambers (Director of Public Health) and Ros Hamburger (Consultant in Dental Public Health) from the Heart of Birmingham PCT which is fluoridated, was published in the Southern Daily Echo newspaper in 2008. In the article they state:

*“Birmingham has been supplied with fluoridated water since 1964. Today, we have better children’s dental health than many comparable non-fluoridated communities.”*

*“Our own monitoring of local health trends confirms the best available scientific evidence that one part of fluoride in a million parts of water – something that occurs naturally in many places, including Uttoxeter in our own region – does not cause health problems. If it did, we would do something about it. But it doesn’t.”*

**6.3** The latest report on water fluoridation was published by the European Union Scientific Committee on Health and Environmental Risks (SCHER) in May 2011. The report can be accessed at: [http://ec.europa.eu/health/scientific\\_committees/environmental\\_risks/docs/scher\\_o\\_139.pdf](http://ec.europa.eu/health/scientific_committees/environmental_risks/docs/scher_o_139.pdf)

*“SCHER agrees that epidemiological studies do not indicate a clear link between fluoride in drinking water and cancer in general. There is no evidence from animal studies to support the link, thus fluoride cannot be classified as carcinogenic.”*

*“Limited evidence from epidemiological studies points towards other adverse health effects following systematic fluoride exposure, e.g. carcinogenicity, developmental neurotoxicity and reproductive toxicity; however the application of the general rules of the weight-of-evidence approach indicates that these observations cannot be unequivocally substantiated.”*

## **7. What are the implications for people with medical conditions that are sensitive to fluoridation?**

**7.1** There have been no published scientific reports of sensitivity to drinking fluoridated water.

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