# Oral Health Promotion Strategy 2016-21

Review date: Summer 2020











This strategy has been developed by the Oral Health Promotion Strategy development group comprising representatives from each local authority, Public Health England and NHS England and endorsed by the West of England Public Health Partnership.









# **Contents**

Vision	3
Introduction	3
What are we striving to achieve?	3
Rationale for an area wide strategy	5
Purpose of the strategy	5
Background	6
What is good oral health?	6
Promoting good oral health throughout life	6
Risk factors for poor oral health	7
High sugar consumption	7
Exposure to fluoride	8
The impact of poor oral health	8
Populations at risk of poor oral health	9
Children and young people	9
Adults	11
Older people	11
Reducing inequalities in oral health	12
Policy context	13
Where are we now?	14
What are we currently delivering?	14
Achieving the Strategic Priorities	15
Promote oral health through healthier food and drink choices	16
Promote oral health by improving levels of oral hygiene	18
Improve population exposure to fluoride	19
Improve early detection, and treatment, of oral disease	20
Reduce inequalities in oral health	21
Working together to achieve the strategic priorities	23
Partnership working	23
Appendices: Local authority oral health profiles	25
References	26
Glossary	29

#### **Vision**

The vision of this oral health promotion strategy is to **improve the oral health** of all people living in Bristol, Bath and North East Somerset, North Somerset and South Gloucestershire. It aspires to promote the best available oral health across the life course, reduce oral health inequalities and lay solid foundations for good oral health throughout life.

Oral health is defined by the World Health Organisation as "a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity." (1).

Oral health promotion can be considered as any planned effort to build supportive public policies, create supportive environments, strengthen community action, develop personal skills or re-orientate health and social services in the pursuit of oral health goals (2). This is further defined locally as preventing tooth decay. Tooth decay leads to destruction of the tooth surface, which in turn leads to holes, tooth loss, pain and infection.

There is are shared risk factors for both tooth decay and poor oral health and the major risk factors that cause major disease in our population. These risk factors include a diet high in sugar, smoking and alcohol consumption (3).

#### Introduction

#### What are we striving to achieve?

This strategy aims to improve oral health and reduce inequalities by endorsing five strategic priorities, each of which is supported by three objectives (Table 1). Evidence based recommendations published by the National Institute of Health and Care Excellence (NICE) <u>Oral health: local authorities and partners</u> (4) underpin the strategic priorities as does guidance from Public Health England <u>Improving oral health: anevidence informed toolkit for local authorities</u> (5) and <u>Local authorities improving oral health: commissioning better oral health for children and young people</u> (6).

The strategy provides a clear framework to support local delivery plans to direct oral health promotion activity. A template delivery plan accompanies this strategy that sets out the evidence based interventions required to meet the objectives. Each local authority will develop a delivery plan specific to the needs of their population that will be embedded across the council. Objectives will be prioritised in each local authority's delivery plan, according to population need and available resources.

Direction for this strategy is drawn from a robust evidence base of what works to improve oral health alongside local specialist knowledge on oral health needs, drawn from needs assessments (7, 8) and information on current oral health promotion activity across the four local areas. Underpinning development of the strategy are the core principles of promoting health; development of healthy public policy, creating supportive environments, developing personal skills, strengthening community action and preventive health programmes.

Risk factors for poor oral health are common to many diseases so it is important to embed oral health promotion across a range of public health programme areas, whilst maintaining and improving specific oral health promotion activities. This will require alignment of a range of health and wellbeing strategies and policies, to ensure oral health promotion becomes an integrated component of almost all health and social care programmes, services and needs assessments.

Tab	le 1	Strategic approach to improving oral he	alth
What we aim to		Objectives: How can we do it?	Who can do it?
Promote oral health through healthier food and drink choices	1	Promote oral health by making healthier choices easier though multi-stranded approaches to promote healthier food and drink choices and reduce sugar intake.	Local authorities
	2	Commission interventions that encourage and support breastfeeding and healthy complementary feeding (weaning)	Local authorities
	3	Promote healthier food and drink choices that are lower in sugar in settings that the local authority reaches e.g. leisure, education, social and residential care and local food outlets.	Local authorities
Promote oral health by improving levels of oral hygiene	4	Commission supervised tooth brushing programmes for pre-school and primary school children at high risk of poor oral health	Local authorities Dental professionals
	5	Train front line staff to provide demonstrations on how to clean teeth among those at high risk of poor oral health	Local authorities Dental professionals
	6*	Commission programmes that provide free toothbrushes and toothpaste to all pre-school and primary school children, prioritising targeted interventions for those at high risk of poor oral health	Local authorities NHS England Dental professionals
Improve population exposure to fluoride	7	Promote the use of fluoride toothpaste among those at high risk of poor oral health	Local authorities Dental professionals
	8*	Commission programmes that provide free toothbrushes and toothpaste to pre-school and primary school children, prioritising targeted interventions for those at high risk or poor oral health	Local authorities NHS England CCGs
	9	Commission fluoride varnishing programmes for young children in areas with high rates of tooth decay	Local authorities Dental professionals
Improve early detection, and treatment, of oral diseases	10	Maximise all opportunities for signposting to local NHS dental services	Local authorities CCGs
	11	Promote the benefits of visiting a dentist throughout the life course	Local authorities Dental professionals CCGs
	12	Raise awareness of eligibility for free check-ups, prioritising those at high risk or poor oral health	Local authorities NHS England
Reduce inequalities in oral health	13	Look for opportunities to embed oral health promotion within all health and wellbeing policies, strategies and commissioning.	Local authorities NHS England CCGs
	14	Promote oral health among vulnerable groups; young children, people with diabetes, people who smoke, consume high quantities of alcohol or use drugs, people with learning disability, the elderly and other locally identified vulnerable groups	Local authorities NHS England CCGs
	15	Equip the wider health and social care workforce with the knowledge and skills to recognise the link with neglect and complex social circumstances and ensure provision of care for those at high risk of poor oral health.	Local authorities NHS England Dental professionals CCGs

<sup>\*</sup>Both of these strategic priorities can be supported by achieving this same objective

#### Rationale for an area wide strategy

The principles of oral health promotion are similar across all populations; though each local authority area will prioritise oral health promotion activity according to the needs of their local population.

The West of England Public Health Partnership Oral Health Promotion Steering group brings together public and dental public health expertise in various organisations and roles; oral health leads in each local authority, Public Health England and NHS England ensuring a collaborative approach to strategy development.

An area wide joint strategic approach will provide coherence, enabling efficient utilisation of expertise, resources and where necessary may include joint commissioning. Resources include oral health promoters and frontline health and social care staff. This approach will encourage equity in the provision of prevention programmes; sharing of innovative best practice; peer review; and facilitate evaluation of strategy implementation and supporting delivery plans.

#### **Purpose of the strategy**

This strategy provides overarching direction for promoting oral health for the four local authority areas. It provides a framework for the development of a generic delivery plan that aligns evidence based recommendations to strategic priorities across the life course. The template delivery plan will provide a range of options from which each local authority will prioritise oral health promotion interventions according to the needs of their local population. Each local authority will develop a delivery plan specific to their population, which will support the area wide strategy. Measures of success, by outputs as well as outcomes, will be generic to all areas enabling comparison and the capacity to share approaches adopted to improve oral health.

To deliver the five strategic priorities, the document will adopt the following principles:

- The strategy will enable development of local delivery plans that are updated annually
- The priorities are designed to be achievable within current or planned public health programmes by embedding oral health in local delivery plans

Delivery will be supported by the West of England Public Health Partnership, who provide the following enablers

- Local leadership from the local authority public health teams
- Dental public health input from Public Health England to support strategy development and the creation of local area delivery plans
- NHS England Dental Commissioners and the Local Professional Network (LPN) expert advice and where possible, alignment of service facing actions with the strategy
- via the oral health steering group; sharing of local expertise, knowledge of best practice and joint reflection on progress towards the agreed strategic priorities

# **Background**

#### What is good oral health?

Oral health refers to the health of people's teeth, gums, supporting bone and soft tissues of the mouth, tongue and lips. Good oral health is the ability to eat, speak, and socialise without active disease, discomfort or embarrassment. Having poor oral health can exacerbate existing health conditions and impact on people's mental well-being due the experience of pain and limitations in communicating or socialising (9). Poor oral health can be an indicator of neglect or difficult social circumstances. Good oral health has a significant part to play in maintaining good overall health and well-being.

#### Promoting good oral health throughout life

Promotion of good oral health is a fundamental need across the whole life course. Good oral health is essential to enable individuals to communicate effectively and enjoy a wide range of foods. Good oral health improves overall quality of life, self-esteem and social confidence and is an important component of general health and wellbeing. Maintaining good oral health during childhood provides a strong foundation for good oral health in adulthood. Despite general improvements in oral health in the last thirty years, dental caries is still a major public health problem and the most common chronic childhood disease, even though it is almost entirely preventable.

Different stages of people's lives bring different oral health challenges. It is important that oral health promotion interventions are designed to address changes in need. A life course approach to identifying need and appropriate timing of promotion of good oral health is summarised in Figure 1 below and described in more detail in the following paragraphs.

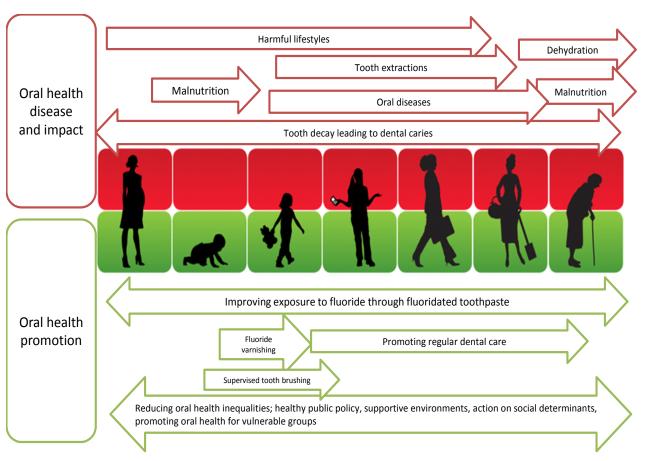


Figure 1. A life course approach to promoting oral health

## Risk factors for poor oral health

Poor oral hygiene from poor tooth brushing, insufficient exposure to fluoride and consumption of a diet that is high in sugar are the main direct risk factors for an individual's poor oral health.

The circumstances in which people live and work have a profound effect on their health and wellbeing, including their oral health. The causes of oral diseases, and related inequalities, are therefore mainly social and environmental (10).

Action is needed to tackle underlying causes of health inequalities. Creating healthier public policies, supportive environments, strengthening community action, developing personal skills and the reorientation of health services towards prevention will improve oral health.

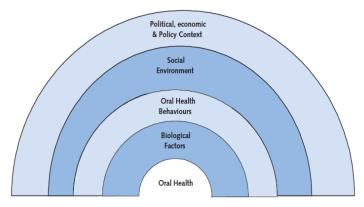


Figure 2. Determinants of poor oral health

Source: Choosing better oral health: an oral health plan for England

Contributory factors to poor oral health are shared by other major public health concerns; risk factors for obesity include consumption of food and drink high in sugar, while tobacco use and alcohol consumption are risk factors for gum disease and oral cancer. There is a two way relationship between gum disease and Type 2 diabetes and an association between human papilloma virus and oral cancer among young people (7, 8). A common risk factor approach can be applied to the promotion of general health and well-being that supports good oral health for people throughout their life (6, 10, 11). For example reducing sugar consumption will have a positive impact on tooth decay and obesity, stopping smoking will reduce oral and lung cancer, gum disease and cardiovascular disease.

#### **High sugar consumption**

The Scientific Advisory Committee on Nutrition (SACN) advises that 'free sugars' in food and drink should contribute no more than 5% of dietary energy. This is about 30g (about 7 teaspoons) of free sugars for anyone aged eleven or older (12) The current average consumption of free sugars are at least twice the recent 5% recommendation, and three time the 5% value in children aged 11-18. The main sources of our daily intake of free sugars are table sugar, preserves and confectionary (up to 27%); soft drinks, fruit juices and other non-alcoholic drinks (up to 25%) and; biscuits, buns and cakes (up to 20%) (12).

Consumption (frequency and quantity) of free sugars is associated with greater risk of tooth decay (dental caries). Tooth decay develops when acid dissolves the enamel surface and the layer under this, dentin; the acid is produced when sugars (mainly sucrose) in food and drink react with bacteria in the dental biofilm (plaque). Tooth erosion develops when acids either consumed in soft drinks, carbonated beverages and

1

<sup>&</sup>lt;sup>1</sup> 'free sugars' includes all monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus sugars present in honey, syrups and unsweetened fruit juices. Lactose (milk sugar), when naturally present in milk and sugars contained within the cellular structure of foods (such as fruits and vegetables) are excluded.

fruit juices or gastric reflux entering the mouth wears away the enamel on teeth. The SACN report concludes that reducing consumption of free sugars will help to reduce the risk of dental caries, as well as reducing the risk of diabetes, cardiovascular disease and obesity throughout life (12).

#### **Exposure to fluoride**

Increasing population exposure to fluoride is also a key factor for improving oral health and reducing tooth decay (14). The main source of fluoride for most people is in toothpaste. Fluoridation of publicly provided drinking water is a safe and effective means of enabling community wide exposure to fluoride used in some areas. Water is not artificially fluoridated in the four local authority areas covered by this strategy and would not be proposed without a full consideration of the technical feasibility, cost effectiveness and public consultation. Public Health England has published a Fluoridation Toolkit (13) which provides a comprehensive review of the statutory basis for water fluoridation and the steps required by Local Authorities wishing to request fluoridation of their water supplies. A review of the toolkit should be a priority in the first year delivery plan to enable the West of England Partnership Local authorities to consider the implications and take an informed stance on community water fluoridation.

#### The impact of poor oral health

It is well established that poor oral health impacts significantly on people's physical and mental health, illustrated in Figure 3. The effects of poor oral health are evident across the life course and described in the following sections.

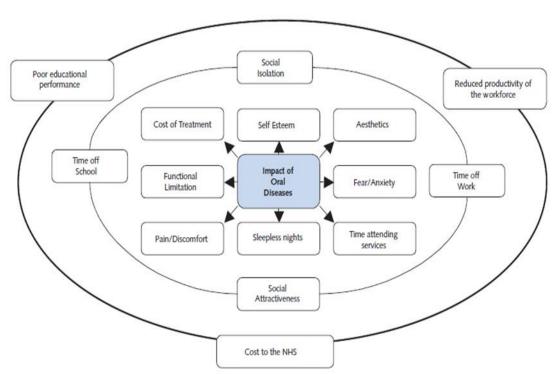


Figure 3. Impact of oral disease on physical and mental health

Source: Choosing Better Oral Health. Department of Health, 2005 (11).

## Populations at risk of poor oral health

Everyone, across their life course, benefits from good oral health. It is important that universal approaches support and reach the whole population whilst ensuring targeted interventions reach those at higher risk of poor oral health. Children and adults living in deprived communities consistently have poorer levels of oral health than people in more affluent communities (7, 10, 11, 15). The prevalence of tooth decay, tooth loss, oral cancer and periodontal disease all follow the social gradient. Anyone dependent on others for their care is vulnerable to poor oral health.

In summary, vulnerable groups at higher risk or poor oral health include:

- the old and frail, people living alone or in residential care
- people that are socially isolated such as Gypsies and Travellers, the homeless and prisoners
- people with mental health conditions, dementia
- people who consume high quantities of alcohol, are drug users or smokers
- anyone who has a chronic medical condition
- children of parents with the above risk factors and children in care
- children and adults living in deprived communities
- children and adults with a learning disability

#### Children and young people

Children living in poverty experience poorer oral health. Children living in poverty often consume a diet high in sugar and of poorer nutritional quality. In some local authority areas, the number of children and the proportion living in poverty are expected to increase significantly over the coming decade. Looked after children are at high risk of poorer oral health and some may experience erratic and irregular access to dental services as they move between carers (15).

Children (and adults) with a learning disability are also at high risk of poor oral health due to their reliance on carers for support with their oral health needs and access to dental services. Children in special support schools have slightly lower levels of tooth decay than children in mainstream schools but are more likely to have their teeth extracted. Twice as many five year old children at special support schools have had one or more teeth extracted due to decay compared to children in mainstream schools (6% and 3% respectively) (16).

For too many children, tooth extraction necessitated by dental decay can carry risks to health associated with invasive procedures and general anaesthesia. Tooth extraction under general anaesthesia is the largest cause of admission to hospital for children aged five to nine years (15). About one third of children suffer from dental disease. Locally, the burden of poor oral health varies across the four local authorities. The standard indicator for measuring oral health of children is the proportion of children aged 5 with decayed or missing teeth, which is a proxy for prevalence of tooth decay among children and depicted in Table 2, alongside two further indicators of the burden of oral disease among children. Further information, analysis and interpretation is available in the 2015 South West Oral Health Needs Assessment (7, 8)

Table 2 The burden of childhood dental disease

	Bath and North East Somerset	Bristol	North Somerset	South Gloucestershire	England average
Proportion (%) of five year old children with decay experience (d3mft>0) <sup>2</sup>	20.1	25.1	30	22.2	27.9
Proportion (%) of five year old children with one or more teeth extracted <sup>3</sup>	1.24	3.5	2.71	Not available	3.07
Proportion (%) of twelve year old children with decay experience (d3mft>0) <sup>4</sup>	27.3	39.8	33.9	29.3	33.4

Source: PHE (2015) Oral health Needs Assessment (7, 17)

Population averages mask inequalities in oral health within local authority areas. Although data are not collated at ward level, it is known that the prevalence of dental decay varies considerably among populations, with those living in deprivation experiencing higher prevalence of tooth decay.

Vulnerable young people, such as those with learning difficulties, long term medical conditions or in contact with the criminal justice system are more likely to experience poor oral health outcomes. Vulnerable young people remain a higher risk group of poor oral health outcomes due to associated lifestyle risks. In Bristol, a recent survey of young people accessing services of the Youth Offending Team, shows that the proportion of young people who report having a dentist (74%) or having visited a dentist within the last six months (39%) has decreased between 2014 and 2016 (18).

Preventing dental decay is crucial in children, as the burden of disease lasts a lifetime. Untreated dental decay in children can affect a child's general health and wellbeing. Pain and discomfort linked to oral disease can lead to difficulties in eating and sleeping. Poor oral health in children is associated with a failure to thrive as well as affecting a child's confidence to socialise with other children. Children suffering poor oral health may not gain full benefit of their education as poor oral health contributes to 'school readiness'. Increased absenteeism due to poor oral health has been linked to decreased educational performance (7,15).

10

<sup>&</sup>lt;sup>2</sup> Decayed, missing teeth or filled teeth (d3mft>0) from a 2011/12 survey by the National Dental Epidemiology Programme

<sup>&</sup>lt;sup>3</sup> Percentage of five year old children with one or more teeth extracted due to dental decay (%Mt >0) by Upper Tier Local Authority Area from a 2011/12 survey of the National Dental Epidemiology Programme

<sup>&</sup>lt;sup>4</sup> Decayed, missing or filled teeth (d3mft>0) from a 2010 survey by the National Dental Epidemiology Programme

#### **Adults**

As with children, adults living in deprivation experience poorer oral health outcomes. In adults, poor oral health can lead to oral pain, premature tooth loss, a dry mouth and sleep deprivation. Experiences of pain and discomfort, difficulties communicating and eating, affect general physical and mental wellbeing. Such limitations can place a significant burden on the individual to function effectively at work. National surveys suggest most adults perceive their dental health as good or very good, though the South West is slightly lower than the national average with around six in ten adults having positive perceptions of their dental health. About one in three adults report pain as a common problem and report difficulties in sleeping, eating, smiling or cleaning teeth. One in five adults said they experienced psychological discomfort due to poor dental and oral health (7).

People who use tobacco or consume high quantities of alcohol are at higher risk of developing oral disease, as are people who have diabetes, are older and living with cognitive or physical morbidities. Oropharyngeal cancer has been linked to the human papilloma virus which can transmitted by oral sex. Promoting safe sex among young people and adults is important in reducing this risk.

Oral cancer (a term used to encompass a number of different types of cancer of the mouth) makes up 2% of all cancer cases and 1% of all cancer deaths in the UK. Around 2,100 people died of oral cancer in 2012 in the UK, equivalent to around six people every day. Whilst the incidence of new cases of oral cancer is relatively low, rates are increasing and the number of people dying as a result of oral cancer has increased by around 10% in the last decade (31, 32). Diagnosis of oral cancer is usually late because people can ignore symptoms: public awareness of oral cancer is low. Most sufferers die in first 2-3 years after diagnosis, with only about half of people with oral cancer surviving 5 years (31). Oral cancer is strongly related to socio-economic deprivation, with the highest rates occurring in the most disadvantaged groups (33). This pattern is independent of lifestyle behaviours. Oral cancer is more common in older adults (age 60+), although numbers are increasing in younger adults. Oral cancer is more common in men and people who chew tobacco, have excessive alcohol intake and smoke (34, 35).

Risk factors such as smoking, high alcohol and sugar consumption play a significant role in the major diseases of burden to the population; obesity, respiratory and cardio vascular disease. These risk factors also contribute to poor oral health (3,7,11). There are many opportunities for embedding oral health education within health improvement interventions that tackle the main causes of ill health. For example, smoking cessation programmes could highlight the benefits to oral health as well as general health, of stopping smoking. There are also opportunities for improving access to health promoting interventions, including dentists, by improving referral mechanisms between dentists, public health programmes and primary care.

#### Older people

The burden of oral disease and its impact on the general health of older people is considerable, particularly in terms of tooth loss, tooth decay, periodontal diseases, dry mouth and oral cancer. In older adults, poor oral hygiene is compounded by limitations of mobility, eyesight, communication and difficulties in self-care. The use of multiple medications can inhibit the production of saliva which helps to prevent decay and gum disease. Dry mouth, receding gums, loose teeth, or poorly fitted dentures impact on a person's ability to maintain sufficient saliva and chew, thus increasing the risk of dehydration, malnutrition and infection. Adults living with dementia may experience additional difficulties in maintaining good oral hygiene, if they rely on their carers for help with routine oral hygiene. Complex clinical needs and poor oral health can both exacerbate each other (19).

The UK population is ageing, with the proportion of people aged 65 and over expected to increase over the coming decade, for some areas this is more profound than others. Older people in 2020 will exhibit a broad range of dependence. They will largely continue living in their own homes, with nursing and care homes

providing accommodation for those most frail or with specific health and care needs. Disparity in disposable income and thus the affordability of oral health care will broaden. It is anticipated that an increasing proportion of older people will continue to retain their adult teeth, which are often heavily restored and more complex to maintain than dentures. Ensuring access to appropriate oral healthcare for the more vulnerable older people will continue to be an issue for health and social care services. Further information on the oral health of older people can be found in 'What is known about oral health of older people in England and Wales' (19).

The National Institute of Health and Care Excellence are expected to issue public health guidance Oral health for adults in care homes (20) in July 2016 with quality standards for Oral health promotion in the community (21) expected to follow in December 2016. The guidance will outline standards to maintain and improve oral health, ensure timely access to dental treatment for adults in nursing and residential care homes and will guide activities undertaken by local authorities and general dental practices to improve oral health, including community-based activities. The guidance and standards will particularly focus on people whose economic, social, environmental circumstances or lifestyle place them at high risk of poor oral health or make it difficult for them to use dental services. The guidance will also assist with planning and implementation of oral health promotion initiatives and support Healthwatch who are responsible for monitoring the quality of care for older people.

#### Reducing inequalities in oral health

Across the four local authorities there are some stark differences in oral health outcomes (22) (Appendix 1). The association of poor oral health with deprivation is strong within each local authority area. For example, children living in the most deprived wards are much more likely to have three or more decayed or missing teeth at five years old than children living in the least deprived wards.

People who are at high risk of poor oral health require more intensive prevention activities, to provide them with opportunities for better oral health. Promoting activities that improve people's oral health the life course, whilst adopting the principle of universal proportionalism, will reduce inequalities in oral health (23). Interventions to promote good oral health in individuals and communities need to be complemented by addressing the wider determinants of health in order to tackle the inequalities in oral health. Examples include; action on sugar (including application of the sugar tax), reducing alcohol mis-use and improving access to services. Accessing routine and urgent dental care is particularly important for those at high risk of poor oral health.

The delivery plan that accompanies this strategy sets universal and targeted actions to achieve the strategic priorities.

# **Policy context**

Since 2013, the design and commissioning of oral health promotion is the responsibility of local authorities whilst NHS England commissions the delivery of dental health treatment services. Statutory requirements of local authorities include assessing the oral health needs, developing oral health strategies and the commissioning of oral health improvement programmes. Government have made a commitment to improve oral health by including indicators related to tooth decay in five year old children in the Public Health Outcomes Framework 2013-16 (24) and in the Children and Young People's Health Outcomes Framework (25). Key partnerships between NHS England, local authorities, primary care, voluntary sector and community organisations are required to improve oral health.

The National Institute for Health and Care Excellence provide evidenced based recommendations (4) for the development of local area oral health strategies and Public Health England provide guidance in the form of toolkits (5,6) to improve people's oral health. These documents underpin this strategy and the accompanying delivery plan.

Director of Public Health reports, Joint Strategic Needs Assessments and Health and Wellbeing Strategies across the four local areas consistently support improving population health, based firmly on the principles of the Marmot report, "Fair Society, Healthy Lives" (23). This includes emphasis on the importance of giving every child the best start in life, enabling all people to maximise their capabilities, ensuring a healthy standard of living for all and strengthening the role and impact of ill-health prevention.

Improvements in oral health across Bristol, North Somerset, South Gloucestershire and Bath and North East Somerset will be achieved through Health and Wellbeing Strategies that focus on population health, based on the above principles adopting 'upstream' or universal interventions. In addition, targeted oral health programmes require commissioning on the basis of populations at high risk of poor oral health within each local authority.

#### Where are we now?

Oral diseases are largely preventable and more people experience good oral health today than ever before, though marked inequalities persist. The greatest impact has been made by social, economic and environmental factors alongside the widespread use of fluoride toothpaste. However, a polarisation in disease experience is occurring, with poor oral health becoming more concentrated in economically and socially deprived populations and vulnerable groups.

Oral health outcomes, such as the proportion of children experiencing tooth decay, tooth extraction and access to dental care are summarised in the oral health profiles for each local authority area, in Appendix 1 (and 22). Dental health profiles of five year old children also provide an overview of oral health needs of children living within each local authority (17). Detailed descriptions of oral health needs, for each local authority, are illustrated in the 2015 South West Oral Health Needs Assessment (7). The National Institute of Health and Care Excellence recommend that each local authority should include a chapter on oral health in its Joint Strategic Needs Assessment.

## What are we currently delivering?

A small team of oral health promoters provides oral health education across the four local authority areas, delivered by a single provider. Their work is predominantly based on a reactive and historical model of delivery, targeting known and expressed need. Need is often identified by the oral health promoters, the setting (e.g. residential home, school or community group) or dentists who are familiar with local needs. Examples of their work include:

<u>Education sessions in small groups</u>, for family support workers, (Sure Start) Children's Centres, young parent groups, early years and school settings. Audiences reached include children, parents and health and education staff.

<u>Training of residential and nursing home staff</u> using guidance and materials from the Scottish Caring for Smiles programme. Care homes are selected further to domiciliary visits by dentists who highlight oral health education needs of care homes.

This work is complemented by limited oral health promotion within health educational, community health and social care services, such as oral health promotion delivery by health visitors to parents of children aged 6 -18 months using the 'Brushing for Life' packs.

Good and innovative practice is evident, although there is notable variation in the amount of oral health promotion activity reaching different population groups. Although the provision of free toothbrushes and toothpaste occurs, allocated supplies are utilised within the first few months of the financial year and the procedures for allocation are unclear.

Potential areas for development include adopting a strategic approach with targeted delivery plans alongside measures of process outputs and outcomes with greater emphasis on training health and social care staff who work directly with different population groups. By embedding oral health promotion in the day to day work of health and social care staff the benefits of targeted oral health promotion activity with specific groups can be maximised.

# **Achieving the Strategic Priorities**

The overall approach of the strategy is universal action supported by targeted interventions for those at high risk of poor oral health. The five strategic priorities encompass upstream determinants and downstream interventions that will promote good oral health (Table 1). Together, they advocate an integrated approach, embedding oral health promotion within existing health, social and community policies and programmes. They provide a basis for realignment of currently commissioned activity to include and promote good oral health. Each priority is linked to three objectives that support the strategic priorities and some objectives address more than one priority. Reducing inequalities in oral health are an integrated part of the first four priorities as well as being a stand-alone priority that addresses the wider determinants of poor oral health.

A template delivery plan supports this strategy, providing detailed description of interventions, with examples, of how each objective can be met. Each local authority can develop their delivery plan based on this template. Each local authority delivery plan will prioritise objectives to be met based on the needs of their populations.

This section describes the rationale for each priority and provides case studies showing how these objectives are currently being addressed locally as well as illustrating how the objectives could be further met. Interventions to date have been based on experience of what appears to work with increasing familiarity of the evidence base. However, planning interventions to meet the objectives for this strategy should be based on the current and evolving evidence base. There are many resources available that summarise best practice, quality standards and the evidence of effectiveness. These resources are referred to throughout this strategy and are referenced in the template delivery plan.

# Promote oral health through healthier food and drink choices *Objectives*

- 1. Promote oral health by making healthier choices easier though multi-stranded approaches to promote healthier food and drink choices and reduce sugar intake.
- 2. Commission interventions that encourage and support breastfeeding and healthy complementary feeding (weaning)
- 3. Promote healthier food and drink choices that are lower in sugar in settings that the local authority reaches e.g. leisure, education, social and residential care and local food outlets.

There is very strong evidence supporting breastfeeding as the best nutrition for babies up to one year. Breastfeeding has been shown to support the development of fewer malocclusions (26). Tooth brushing should be supervised by parents/carers with fluoridated toothpaste (not less than 1,350ppm fluoride) as soon as teeth start to emerge. Sugar should not be added to complementary (weaning) food or drink and free flowing cups, as opposed to bottle teats or beakers with non-drip valve, should replace a bottle at around one year of age (27). Provision of healthy low sugar food and drink in all establishments that care for children is a key public health role that can support advice given to parents and is a component of Ofsteds new Common Inspection Framework (28).

Interventions by local authorities and other local organisations have the potential to improve oral heath by supporting health behaviours that can help people maintain a healthy diet. They also have a range of legislative and policy leavers and third sector and community initiatives that can shape food environments.

Local authorities should ensure all public services promote breastfeeding and oral health by providing a choice of sugar-free food, drinks (water or milk) and snacks (including fresh fruit) including vending machines, on all sites. This includes services based in premises wholly or partly owned, hired or funded by the public sector such as: leisure centres, community or drop-in centres, nurseries and children's centres, services provided during pregnancy and for new parents and schools and food banks. Local authorities can review other 'levers' that address oral health and the wider social determinants of health, for example, local planning decisions for fast food outlets.

Some examples of innovative practice are illustrated in the case studies below.

#### Case study ~ Making drinking water more attractive and easier for children

Bristol early years team capitalised on the city's 2015 European Green Capital momentum and the brand awareness and popularity among children and families of 'Shaun the Sheep'. They commissioned durable, re-useable water bottles with 'Shaun the Sheep' images and provided these free of charge at local authority run café's in Bristol, alongside easy to refill taps. Distribution of bottles was accompanied by oral and general health messages promoting drinking of water instead of sugar sweetened drinks.

#### Case study ~ Healthy food and drink in schools

The Director of Public Health Award Programme of Bath and North East Somerset (BaNES) recognises achievement of programmes that support healthy eating and promote consumption of plain drinking water. In BaNES all commissioned healthy eating programmes promote sugar swaps and healthy snacks. Materials are sourced from NHS Start4life and Change4life.

#### Case study ~ complementary feeding workshops

Health visiting teams and Children's Centres in Bristol offer advice to parents on weaning their infants. The introduction of solid food is a key time to promote good oral health so complementary feeding (weaning)

interventions are used to promote oral health, ensuring clear and consistent messages are used. Parents appreciate advice so they can make informed choices to give their children the best start in life.

Patchway Children's Centre in South Gloucestershire also deliver complementary feeding sessions, integrated with the 'Baby and Me' course. Evaluation shows that this course is well attended and improves parents knowledge and confidence identifying signs that their baby is ready to be introduced to solid food and which foods to avoid.

#### Case study~ supporting breast feeding

In North Somerset, Café mamma (Mothers Advocating Mother's Milk Association) provides peer support for breastfeeding mothers in Portishead, Pill and surrounding areas. The group was established by local mums and community midwives in 2005, and has continued to grow and help local breastfeeding mums ever since. The group provides support for local breastfeeding mothers through a helpline, a weekly drop in café, a facebook group and website. Results of a recent evaluation of the Mamma Facebook site suggests the social media group provides an additional level of support on top of the face-to-face support provided by the weekly café. Peer supporters also run a monthly antenatal 'bumps' session to promote the benefits of breastfeeding to expectant parents.

#### Achieving change ~ local shops promoting oral health

Local authorities could explore the possibility of linking with local organisations in other sectors (for example, local shops and supermarkets) to promote oral health for consumers through healthier food choices. This could be part of a broader approach to promoting health and well-being among consumers.

#### Achieving change~ improving workplace health

Local authorities could explore avenues to promote oral health with adults in work as part of a broader strategy to promote workplace health and well-being, via policies and work plans.

# Promote oral health by improving levels of oral hygiene Objectives

- 4. Commission supervised tooth brushing programmes for pre-school and primary school children at high risk of poor oral health
- 5. Train front line staff to provide demonstrations on how to clean teeth among those at high risk of poor oral health
- 6. Commission programmes that provide free toothbrushes and toothpaste to all preschool and primary school children, prioritising targeted interventions among those at high risk of poor oral health.

Local authorities and health and wellbeing commissioning partners should use information from the oral health needs assessment to identify areas where children are at high risk of poor oral health and consider commissioning supervised tooth brushing schemes for early years settings (including Children's Centres) in areas where children are experiencing high rates of tooth decay or extraction.

Providing oral hygiene promotion to vulnerable groups including older people is a key component of ensuring a holistic approach to healthy lifestyles and maintaining independence. Specific oral health advice and support are essential for children in special schools and looked after children. Amongst older people, good oral health will protect against debilitating oral disease and decrease the risk of Type 2 diabetes as well as protecting against the economic impact of poor oral health.

Provision of high quality and setting and group specific training will be a core part of interventions to achieve these objectives.

#### Case study ~ Promoting and enabling tooth brushing among young children

In Bath and North East Somerset (BaNES) the Director of Public Health award has recognised the production and use of 'activity cards' for early year's settings. These set out suggested adult led activities for young children such as dentist role play and using the provided giant teeth and toothbrush set to show children how to brush teeth.

#### Case study ~ Promoting oral hygiene with families using dental health sacks

Two pre-schools in South Gloucestershire have developed a dental health sack for children to take home and share with their family. The contents include books (fiction and non-fiction), model teeth, giant toothbrushes, games and a puzzle. Evaluation indicates that the sacks have helped parents talk to their children about teeth. The sacks continue to be taken home by children in these settings.

#### Case study ~ Promoting oral hygiene in community settings using a dental health resource box

Early years settings and community groups can borrow a dental health box from one of five libraries in South Gloucestershire. Contents include a giant teeth model and brushes, tabards, puzzles, games, giant timer and a folder with supporting information and suggested activities. Practitioners are asked to complete an evaluation form after using the box. The results from early years settings indicate that practitioners find the box both fun and helpful in exploring dental health with children.

#### Achieving change ~ through review of community health and social care specifications

Local authorities could consider reviewing community health and social care service specifications to ensure that oral health in included in needs assessments and daily care plans of dependent adults. This activity would also contribute to objective 13 'Look for opportunities to embed oral health promotion within all health and wellbeing policies, strategies and commissioning'.

# Improve population exposure to fluoride Objectives

- 7. Promote the use of fluoride toothpaste among those at high risk of poor oral health
- 8. Commission programmes that provide free toothbrushes and toothpaste to pre-school and primary school children, prioritising targeted interventions for those at high risk or poor oral health
- 9. Commission fluoride varnishing programmes for young children in areas with high rates of tooth decay

Local authorities can consider commissioning a community-based fluoride varnish programme for nurseries as part of early years services for children aged three years and older. Such programmes should provide at least two applications of fluoride varnish a year. If a supervised tooth brushing scheme is not feasible for a vulnerable population then it is particularly relevant to consider fluoride varnishing for those most in need.

There is strong evidence that brushing at least twice daily with a fluoridated toothpaste (1,350-1,500ppm fluoride), prevents tooth decay and gum disease. For children age 7 and over and adults who are more vulnerable to poor oral health, using a fluoride mouth rinse daily in addition to brushing is advised. Children and adults at higher risk of dental caries may benefit from further professional application of fluoride such as varnish and toothpastes with higher concentrations of fluoride. Oral health programmes in other parts of the UK have demonstrated success in programme implementation of supervised tooth brushing and fluoride varnishing, as well as in oral health outcomes.

#### Case study ~ community based tooth brushing and fluoride varnishing schemes

Nationally, there are examples of the fluoride-varnishing programmes that have been implemented with success. Some of these activities are illustrated by informative case studies on the shared learning database of the National Institute for Health and Care Excellence website (29). Further examples are highlighted in the Scottish 'ChildSmile' and the Welsh oral health programmes. This good practice could be used to consider the feasibility of local schemes for those at high risk of poor oral health outcomes.

# Improve early detection, and treatment, of oral disease Objectives

- 10. Maximise all opportunities for signposting to local NHS dental services
- 11. Promote the benefits of visiting a dentist throughout the life course
- 12. Raise awareness of eligibility for free check-ups, prioritising those at high risk or poor oral health

Local authorities could consider allowing people time off work to go to the dentist without losing pay (as is common practice for GP appointments). They could also make information available to staff about local dental services and national guidelines on oral health. The information could be part of all health promotion events, in leaflets and posters and on noticeboards and the intranet. It could include details of: the links between diet, alcohol and tobacco use and oral health; effective oral hygiene techniques, including the use of fluoride products and tooth brushing techniques, the benefits of visiting the dentist and regular checkups, eligibility for reduced-cost or free treatment; and how to obtain appropriate forms (for example, for people receiving certain benefits, including pregnancy and maternity benefits). Local authorities can also advocate workplace environments that promote oral health though healthier food and drink choices.

#### Case Study ~ promoting visits to the dentist through letters sent to parents

Local authorities regularly send letters to the parents of primary school children regarding the National Child Measurement Programme. In Bristol, a brief reminder to visit a dentist has been included in the letter to parents.

#### Case study ~ embedding oral health promotion in commissioned services

The re-commissioning children's health services for Bristol and South Gloucestershire is taking place in 2015 – 17, providing a unique opportunity to ensure oral health promotion is an integral consideration. The draft service specification was reviewed and comment made to ensure the inclusion of the full breadth of oral health promotion.

#### Achieving change ~ promotion of dental care to the working population

Local authorities have a wide reach to businesses and organisations. They could utilise their communication channels to encourage the adult working population to access dental care, if necessary supporting that during work time. For example, in Bristol the council could reach over 30,000 people by email, encouraging them to visit a dentist.

#### Achieving change ~ promotion of free dental care to those eligible

Many people are eligible for free dental care, including under 18's, pregnant women and people on low income. There are many contact points for these people with health, education and community services. Ensuring they receive oral health promotion and encouragement to regularly attend a dentist is vital to promoting good oral health across the life course.

# Reduce inequalities in oral health Objectives

- 13. Look for opportunities to embed oral health promotion within all health and wellbeing policies, strategies and commissioning.
- 14. Promote oral health among vulnerable groups; young children, people with diabetes, people who smoke, consume high quantities of alcohol or use drugs, people with learning disability, the elderly and other locally identified vulnerable groups.
- 15. Equip the wider health and social care workforce with the knowledge and skills to recognise the link with neglect and complex social circumstances and ensure provision of care for those at high risk of poor oral health.

Local authorities can ensure all health and wellbeing and disease prevention policies for adults, children and young people (including local government health and social care policies and strategies) include advice and information about oral health. This should be based on the 'advice for patients' in <u>Delivering better oral health</u> (5). Examples are included in table 3 below:

Table 3. Examples of policy areas for inclusion of oral health promotion, by population group

Group at risk of poor oral health	Policy and work stream areas that oral health can be included
Children and young people	Nutrition; breastfeeding and complementary feeding practices.  Nutrition and wellbeing of looked after babies, children and young people (including care leavers). Local child and young person safeguarding policies  Child obesity  Local food, drink and snack policies in a range of settings, including nurseries and children's centres, private and voluntary providers of childcare services (including child minding services)  Primary and secondary education  Care delivered at home, providers of care services offered to children and young people in their own home  Sexual health and health programmes targeted specifically at young people.
Children, young people and adults with learning disability and other locally identified vulnerable groups	Policies, work plans and tools specific to the service provision for these groups, such as health checklists, can incorporate the promotion of good oral health
Adults, including vulnerable adults	Sexual health policies, health and social care assessments, nutrition and health and wellbeing and care delivered at home.  Local food, drink and snack policies in a range of settings, including drop-in centres, lunch clubs, leisure centres and food banks.  Consider in local adult safeguarding policies.  Commissioning documents that specify how adult care services are offered in someone's own home.
Older people	Health, social care and social inclusion policies should reference the need to promote oral health.  Evidence based quality standards on oral health care should be promoted within, residential and care home settings and by the home carer services that meet the need of older people living in their own homes.

Equipping the wider health and social care workforce is essential to promote good oral health. This can be achieved by commissioning regular, training for frontline health and social care staff working with groups at high risk of poor oral health. This should be based on the prevention toolkit <u>Delivering better oral health</u> (5). The aim is to ensure frontline staff can meet the oral health needs of children, young people and adults.

#### Case Study ~ Smokers motivation to quit increased by poor oral health

Smokers often report better smelling breath as a key motivational factor to stopping smoking. Smoking cessation programmes often illustrate the impact of smoking on oral health by talking to smokers about the impact of smoking on discolouration of teeth, gum disease and the increased risk of oral cancer. Health improvement teams could ensure oral health promotion is a key part of smoking cessation activity.

#### Case study ~ oral health promotion for vulnerable groups

The area wide oral health team provide health promotion material and support oral health champions in the Salvation Army homeless shelters in Bristol and traveller sites in Bath. This has included training at other points of contact for travellers, for example Wellspring Healthy Living Centre and Lawrence Weston. The oral health promotion team are a designated oral health contact for vulnerable groups and contribute to the South West travellers' conference.

#### Achieving change ~ whole school approaches

Many schools embrace 'whole school approaches' to a variety of health and wellbeing issues. Both primary and secondary schools can benefit from training of staff on how to promote oral health within their settings. These activities are currently incorporated into the Healthy Schools programme in Bristol.

#### Achieving change ~ whole school programmes

For some primary schools, where the community of children are known to have high rates of dental decay, this could include specific educational activities for children and families or managed activities, such as supervised tooth brushing or school fluoride varnishing schemes. Some areas in the UK have carried out these activities with high success in the prevention of dental caries.

#### Achieving change ~ improving health visitor contact points

Health visitors have a number of contact points with children and families. Introducing, or ensuring a contact point to provide specific advice about complementary feeding (weaning), when an infant is six to nine months old, would enable support and advice on healthy eating and drinking and tooth brushing to be given.

#### Achieving change ~ providing comprehensive oral health training for front line staff

The evidence base suggests that providing guidance on how to deliver oral health promotion is insufficient, and that specific oral health promotion training of front line staff is key to improving the oral health of vulnerable groups. Such training would need to be tailored to the needs of the people reached by the front lines staff as oral health needs vary among high risk groups.

# Working together to achieve the strategic priorities

In a complex arena of differing organisational responsibilities, this section outlines expectations on 'who does what' - enabling multi agency partnership working to achieve the vision of improving oral health for all people.

This strategy and the accompanying delivery plan aim to provide a framework from which each of our local authority areas will prioritise realistic achievable objectives to support oral health promotion targeted to population needs, whilst maintaining the important role of universal oral health promotion activity. Each local authority area will also select realistic objectives based on desired outcomes, resources available and the relevance to local strategic direction. Historical funding levels for oral health promotion have been low and any proposed changes will need careful prioritisation with due consideration of resources available. Consideration may need to be given to the potential for collaborative commissioning.

# Partnership working

Local authorities have an important role to play in the promotion of good oral health. Health and education programmes as well as social care services managed by local authorities reach much of the population. Partnership working is key to the success of improving the oral health of the population. Local authorities, NHS England, dentists and dental care professional will need to align their efforts to broaden the reach of oral health promotion within communities. This will include commissioning of services and programme management to achieve the strategic goals by implementing the objectives of this strategy. Support should be sought from Health and Well-Being Boards for each local authority area.

Improving oral health requires embedding oral health promotion within a wide range of health and social care strategy, policy, programme design and delivery mechanisms, key areas are outlined below.

#### Local authorities

Local authorities can support this strategy by implementing the recommendations of <u>Oral Health: Local authorities and partners</u> (4) many of which underpin this strategy and are detailed in the interventions of the delivery plan. Key responsibilities include

- Ensure oral health is considered as a key component of the Health and Well Being Strategy for example, through broader goals such as reducing health inequalities, Giving every child the best start in life and by improving the quality of life for adults and older people.
- Ensure oral health needs of local populations are articulated in chapters of each local authority Joint Strategic Needs Assessment.
- Ensure all service specifications include training for frontline health and social care staff on oral health promotion
- Ensure all health and social care service specifications maximise opportunities to promote oral health.

#### Local authorities, NHS England and Clinical Commissioning groups

Policy and strategy development and the commissioning of services of often developed in collaboration among organisations. Key areas for partnership working include:

- Review all health and well-being and disease prevention policies for opportunities to include oral health promotion through integrated activities
- Ensure all jointly commissioned service specifications include oral health promotion
- Commission training for all frontline health & social care staff working with high risk groups
- Consider commissioning tailored services for vulnerable groups
- Review all early years' services to provide oral health information, advice and services including tailored advice for high risk groups
- Encourage & support breastfeeding
- Raise awareness of oral health by working with occupational health and human resources of all public sector employers

#### NHS England, Dentists and dental care professionals

Dental teams in general practice can support this strategy by implementing the recommendations of Delivering better oral health (5) and <u>Oral health promotion: general dental practice</u> (30) as well as working with local authorities to implement specific objectives within this strategy. Co-benefits of referral to dentists and from dentists to other public health programmes can be realised.

NHS England will have a key role in encouraging best practice by dentists to support improvement in oral health. The guidance can assist general dental practice in aligning activity that supports oral health promotion as well providing further context for the oral health promotion delivery plan that accompanies this strategy.

# Appendices: Local authority oral health profiles

Public Health England (July 2015). Oral health profiles for 2014 for each Local authority will be inserted as a pdf document, they are accessed online at <a href="http://www.swpho.nhs.uk/resource/item.aspx?RID=114720">http://www.swpho.nhs.uk/resource/item.aspx?RID=114720</a>

#### References

- 1. World Health Organisation (2014) *Oral Health: definition.* Accessed online January 28<sup>th</sup> 2016 at <a href="http://www.who.int/topics/oral\_health/en/">http://www.who.int/topics/oral\_health/en/</a>.
- 2. Sprod A J, Anderson R, Treasure E T (1996). *Effective oral health promotion: literature review.* Cardiff: Dental Public Health Unit, Health Promotion Wales. Technical report: 20, 1996.
- 3. World Health Organization (2003). *Diet, Nutrition and the Prevention of Chronic Diseases. Report of a Joint WHO/FAO Expert Consultation.* WHO Technical Report Series: 916, 2003b.
- 4. National Institute for Health and Care Excellence (2014) *Oral Health: local authorities and partners.*Public health guidance: approaches for local authorities and their partners to improve the oral health of their communities (PH55). Published: 22 October 2014. Accessed online 12th December 2015 at <a href="https://www.nice.org.uk/guidance/ph55/resources">www.nice.org.uk/guidance/ph55/resources</a>
- Public Health England (2014) Delivering better oral health: an evidence-based toolkit for prevention.
   Third edition. Accessed online Jan 2015 at
   <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/367563/DBOHv320140CTMainDocument\_3.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/367563/DBOHv320140CTMainDocument\_3.pdf</a>
- Public Health England (2014) Local authorities improving oral health: commissioning better oral health for children and young people. An evidence-informed toolkit for local authorities. Accessed online December 2015 at <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/321503/CBOHMaind-ocumentJUNE2014.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/321503/CBOHMaind-ocumentJUNE2014.pdf</a>
- 7. Public Health England (2015) *Oral Health Needs Assessment: Full report Part 1, Oral health status and need incl. Bath and North East Somerset, Bristol, North Somerset and South Gloucestershire.*Accessed online 12th December 2015 at <a href="https://www.swpho.nhs.uk/resource/item.aspx?RID=114721">www.swpho.nhs.uk/resource/item.aspx?RID=114721</a>
- 8. Public Health England (2015) Oral Health Needs Assessment: Oral Health Needs Assessment Full Report Part 2: Access and service provision incl. Bath and North East Somerset, Bristol, North Somerset and South Gloucestershire. Accessed online 12th December 2015 at <a href="http://www.swpho.nhs.uk/resource/item.aspx?RID=114722">http://www.swpho.nhs.uk/resource/item.aspx?RID=114722</a>
- 9. NHS Information Centre (2009) *Executive Summary: Adult Dental Health Survey 2009*. Accessed online 12<sup>th</sup> December 2015 at: <a href="www.hscic.gov.uk/catalogue/PUB01086/adul-dent-heal-surv-summ-them-exec-2009-rep2.pdf">www.hscic.gov.uk/catalogue/PUB01086/adul-dent-heal-surv-summ-them-exec-2009-rep2.pdf</a>
- 10. World Health Organisation (2008) Commission on Social Determinants of Health. *Closing the gap in a generation: health equity through action on social determinants of health.* Accessed online at <a href="http://apps.who.int/iris/bitstream/10665/43943/1/9789241563703\_eng.pdf">http://apps.who.int/iris/bitstream/10665/43943/1/9789241563703\_eng.pdf</a>
- 11. Department of Health (2005) Choosing Better Oral Health: An Oral Health Plan for England.

  Accessed on line at
  <a href="http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod\_consum\_dh/groups/dh\_digitalassets/@dh/@en/documents/digitalasset/dh\_4123253.pdf">http://www.dh.gov.uk/prod\_consum\_dh/groups/dh\_digitalassets/@dh/@en/documents/digitalasset/dh\_4123253.pdf</a>
- 12. Public Health England (2015) Why 5%? An explanation of the Scientific Advisory Committee on Nutrition's recommendations about sugar and health, in the context of current intakes of free sugars, other dietary recommendations and the changes in dietary habits needed to reduce consumption of free sugars to 5% of dietary intake. Public Health England 2015. Accessed online at <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/489906/Why\_5\_">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/489906/Why\_5\_</a>—
  <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/489906/Why\_5\_">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/489906/Why\_5\_</a>—
  <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/489906/Why\_5\_</a>—
  <a href="https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment\_data/file/489906/Why\_5\_</a>
  <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/489906/Why\_5\_</a>
  <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/489906/Why\_5\_</a>
  <a href="https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment\_data/file/489906/Why\_5\_</a>
  <a href="https://www.gov.uk/government/uploads/system/uploads/system/uploads/system/uploads/system/uploads/system/uploads/system/uploads/s
- 13. Public Health England (2014) Water fluoridation Health monitoring report for England 2014

  Executive summary. Accessed online at <a href="https://www.gov.uk/government/publications/water-fluoridation-health-monitoring-report-for-england-2014">www.gov.uk/government/publications/water-fluoridation-health-monitoring-report-for-england-2014</a>
- 14. Public Health England (2016) *Improving oral health: a community water fluoridation toolkit for local authorities.* Accessed online at

- https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/507915/Fluoridation\_ Toolkit - Publications gateway version 20160304.pdf
- 15. Faculty of Dental Surgery, Royal College of Surgeons England (January 2015) *The State of Children's Oral Health in England*. Accessed online at <a href="https://www.rcseng.ac.uk/fds/policy/documents/fds-report-on-the-state-of-childrens-oral-health">www.rcseng.ac.uk/fds/policy/documents/fds-report-on-the-state-of-childrens-oral-health</a>
- 16. A Public Health England (2015) Survey: Dental public health epidemiology programme, oral health survey of children in special support schools 2014. Accessed online 12th December 2015 at www.gov.uk/government/news/new-oral-health-survey-of-children-in-special-schools
- 17. Public Health England (2013) National Dental Epidemiology Programme for England: *Survey of five year old children 2012. A report on the prevalence and severity of dental decay.* Accessed online 12th December 2015 at <a href="https://www.nwph.net/dentalhealth/survey-results5.aspx?id=1">www.nwph.net/dentalhealth/survey-results5.aspx?id=1</a>
- 18. Public Health Bristol Intelligence Unit (2016) *Bristol Youth Offending Team: Health survey* responses ~ Update to January 2016; Dental registrations, Physical health & neurodevelopmental concerns. A report of the Public Health Bristol Intelligence Team.
- 19. Public Health England (2015) What is Known About the Oral Health of Older People in England and Wales. A review of oral health surveys of older people. Published December 2015, Public Health England. Accessed online at <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/489756/What\_is\_known\_about\_the\_oral\_health\_of\_older\_people.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/489756/What\_is\_known\_about\_the\_oral\_health\_of\_older\_people.pdf</a>
- [Expected publication July 2016] National Institute of Health and Care Excellence. Oral health for adults in care homes. Accessed online at <a href="https://www.nice.org.uk/guidance/indevelopment/gid-phg62">https://www.nice.org.uk/guidance/indevelopment/gid-phg62</a>
- 21. [Expected publication December 2016] National Institute of Health and Care Excellence. *Oral health promotion in the community*. Accessed online at <a href="https://www.nice.org.uk/guidance/indevelopment/gid-qs10009">https://www.nice.org.uk/guidance/indevelopment/gid-qs10009</a>
- 22. Public Health England (2015) Report: Oral Health Profiles of Bath and North East Somerset, Bristol, North Somerset and South Gloucestershire. Accessed online at <a href="http://www.swpho.nhs.uk/resource/item.aspx?RID=114720">http://www.swpho.nhs.uk/resource/item.aspx?RID=114720</a>
- 23. Marmot (2010) The Marmot Review: Fair Society, Healthy Lives: A strategic review of health inequalities in England post 2010. Accessed online December 2015 at <a href="http://www.local.gov.uk/health/-/journal\_content/56/10180/3510094/ARTICLE">http://www.local.gov.uk/health/-/journal\_content/56/10180/3510094/ARTICLE</a>

- 24. Public Health England (2013) The Public Health Outcomes Framework. Accessed online at <a href="http://www.phoutcomes.info/">http://www.phoutcomes.info/</a>
- 25. Department of Health (2013) *Improving Children and Young People's Health Outcomes: a system wide response.* Accessed online at <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/214928/9328-TSO-2900598-DH-SystemWideResponse.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/214928/9328-TSO-2900598-DH-SystemWideResponse.pdf</a>
- 26. Victora CG, Bahl R, Barros AJ et al (2016) Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect Lancet Volume 387, No. 10017, p475–490, 30 January 2016. Accessed online at <a href="http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)01024-7/fulltext?rss%3Dyes">http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)01024-7/fulltext?rss%3Dyes</a>
- 27. British Dietetic Association Policy Statement (2015) 'Introducing a Cup to an infant's diet' Accessed online January 30th 2016 at <a href="https://www.bda.uk.com/improvinghealth/healthprofessionals/introducing\_a\_cup\_to\_an\_infants\_diet">https://www.bda.uk.com/improvinghealth/healthprofessionals/introducing\_a\_cup\_to\_an\_infants\_diet</a>
- 28. Ofsted (2015) Common inspection framework: education, skills and early years from September 2015. Accessed online at <a href="https://www.gov.uk/government/publications/common-inspection-framework-education-skills-and-early-years-from-september-2015">https://www.gov.uk/government/publications/common-inspection-framework-education-skills-and-early-years-from-september-2015</a>
- 29. National Institute of Health and Care Excellence. Oral and dental health: local practice (shared learning). Accessed online at <a href="https://www.nice.org.uk/localpracticeresources/service-delivery-organisation-and-staffing/oral-health">https://www.nice.org.uk/localpracticeresources/service-delivery-organisation-and-staffing/oral-health</a>
- 30. National Institute of Clinical Excellence. *Public health guidance: Oral health promotion: general dental practice [NG30]* Published December 2015 Accessed online on at <a href="https://www.nice.org.uk/quidance/indevelopment/gid-phg60">www.nice.org.uk/quidance/indevelopment/gid-phg60</a>
- 31. Cancer Research. Oral cancer key facts. 2014. Accessed online 11th December 2015 at <a href="http://publications.cancerresearchuk.org/cancerstats/stats\_mouth/oralkeyfacts.html">http://publications.cancerresearchuk.org/cancerstats/stats\_mouth/oralkeyfacts.html</a>.
- 32. Warnakulasuriya S. (2009) Causes of oral cancer an appraisal of controversies. *British Dental Journal*. 2009; 207:471 475.
- 33. Cancer Research UK (2014) UK oral cancer incidence statistics. 2014. Accessed December 2015 online at http://info.cancerresearchuk.org/cancerstats/types/oral/incidence/?a=5441
- 34. Downer M (2007). Public Health Aspects of Oral Diseases and Disorders 'Oral Cancer' In Pine C, Harris R. Community Oral Health 2nd edition. Surrey: Quintessence.2007.
- 35. Race Equality Foundation (2103). Oral health and access to dental services for people from black and minority ethnic groups. 2013. [Accessed online at http://www.better health.org.uk/sites/default/files/briefings/downloads/health\_briefing\_29%20(1)\_0.pdf

# **Glossary**

**Populations at high risk of poor oral health** The term 'high-risk groups' refers to groups in which high levels of oral disease are seen, compared with the national average. It includes 'vulnerable 'populations that may have relatively low levels of disease but for whom poor oral health has more serious consequences. Examples include: people living in relative social deprivation, people who are homeless, traveller communities and older people who are frail but living independently in the community.

People at high risk of poor oral health generally, but not always, live in areas that are described as socially and economically disadvantaged. Local authorities (and other agencies) define disadvantaged areas in a variety of ways. An example is the government's Index of Multiple Deprivation 2010 (ID 2010). This combines economic, social and housing indicators to produce a single deprivation score. See 'Indices of English deprivation 2010' Department for Communities and Local Government (2011).

*Free sugars* includes all monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus sugars present in honey, syrups and unsweetened fruit juices. Lactose (milk sugar), when naturally present in milk and sugars contained within the cellular structure of foods (such as fruits and vegetables) are excluded.

*Oral health* refers to the health of people's teeth, gums, supporting bone and soft tissues of the mouth, tongue and lips. Oral health is 'a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity."(WHO 2014).

*Oral health promotion* is any planned effort to build supportive public policies, create supportive environments, strengthen community action, develop personal skills or re-orientate health and social services in the pursuit of oral health goals (adapted from Sprod,1996).

**Tooth decay** develops when acid dissolves the enamel surface and the layer under this, dentin; the acid is produced when sugars (mainly sucrose) in food and drink react with bacteria in the dental biofilm (plaque).

**Tooth erosion** develops when acids either consumed in soft drinks, carbonated beverages and fruit juices or gastric reflux entering the mouth wears away the enamel on teeth

Universal approaches are interventions that aim to support and reach the whole population

**Targeted approaches** are interventions may be distinct from, or an adaptation of a universal approach. For example, an oral health home visiting service provided by a health visitor for all new parents may be adapted to meet the needs of young parents living in a disadvantaged area. The resulting service may offer longer visits and provide parents with more detail about other health services.