Oral health
Welcome

• Housekeeping
• Icebreaker
• Impact of poor oral health
• Picture of oral health
• Action plan review
Icebreaker

• Introductions
• What does oral health mean to you?
Background

• Oral health is important for general health and wellbeing.

• Tooth decay is the most common oral disease affecting children and young people in England, yet it is largely preventable.

• Tooth decay is the most common reason for hospital admission in children five to nine years old.

• Almost 28% of five year olds still had tooth decay in 2012.
Oral health disease

• The main dental diseases: caries (decay) and periodontal (gum) disease are largely preventable

• Impacts of these diseases: pain, time off work/school, affect people’s self confidence and ability to function socially
Dental caries

Dental decay

- Plaque bacteria feed on sugar and produce acid as an excretory product. This process only takes minutes but lasts for between 20 minutes – 2 hours.

- Acid dissolves minerals from the enamel of the tooth. This process is called Demineralisation.

- Saliva neutralises the acid and replaces the lost minerals if there is sufficient time to allow this to happen. This process is called Remineralisation.
Dietary sugars and decay disease

**Total Sugars**

**Intrinsic Sugars**

*Not causing dental decay*

‘Sugars forming an integral part of certain unprocessed foodstuffs, ie enclosed in the cell, the most important being whole fruits and vegetables’

**Extrinsic Sugars**

*Causing dental decay*

‘Sugars not located within the cellular structure of a food. Includes fruit juice and honey and ‘added sugars’ which comprise recipe and table sugar’
What about sugar?

UK sugar intake 2008/09 – 2010/11

% Total Energy

1.5 - 3 years  4 -10 years  11 - 18 years  19 -64 years  65+ years

Male  Female  Both

Altogether better
Main contributors to sugar intakes in the UK

Children aged 4 to 18 years

- yoghurt, fromage frais, ice cream and other dairy desserts
- soft drinks
- fruit juice
- sugar and chocolate confectionery
- preserves and sweet spreads
- breakfast cereals
- biscuits, buns, cakes, pastries and puddings
- table sugar
- other*

Adults aged 19 to 64 years

- yoghurt, fromage frais, ice cream and other dairy desserts
- soft drinks
- fruit juice
- sugar and chocolate confectionery
- preserves and sweet spreads
- breakfast cereals
- biscuits, buns, cakes, pastries and puddings
- table sugar
- other*
- alcoholic drinks

*other includes savoury sauces, baked beans, soups, powdered beverages and other minor sources

Altogether better
Recent scientific research has shown a link between poor oral health and other conditions such as heart and lung disease.

Aspiration pneumonia in the frail older population can be reduced by approximately 40% by improving their oral care.
Questions?

• In Bishop Auckland General Hospital how many children had teeth extracted under general anaesthetic in 2014?
  • 447

• In 1 day at a local hospital, What was the total number of teeth extracted during that day from children (approx. 16 children seen in a day)
  • 128
Oral health diseases

Periodontal disease
  – Gingivitis
  – Periodontitis

Altogether better
What is oral hygiene?

• The effective removal of plaque (a soft, sticky film composed mainly of bacteria) and debris to ensure that the tissues of the mouth are maintained in a healthy condition.

• Removing plaque reduces the risk of both caries (decay) and periodontal (gum) disease
**Children Under 3**

- A smear of fluoride toothpaste containing at least 1000ppm
- If the child is classed as being ‘at high risk’ of tooth decay – i.e. previous decay, family history or special needs then a smear of 1350-1500ppm toothpaste

**Children Over 3**

- A pea sized amount of fluoride toothpaste containing 1350-1500ppm

To get the full benefit from fluoride toothpaste, the mouth should not be rinsed after brushing – spit out any excess

*Altogether better*
…and importantly

• Dental decay is **preventable**
  – Plaque + sugar = acid + frequency = tooth decay

• Periodontal (gum) disease is **preventable**
Oral cancer

• Mouth cancer is twice as common in women than men
  • NO: Twice as common in men
• Mouth cancer also claims more lives per year than cervical and testicular cancer combined
  • YES
• Those who smoke and drink to excess put themselves at risk by up to 10 times
  • NO: 30X
• More than half of cases in the UK are linked to a poor diet
  • YES
• More than 2,000 people lose their life to mouth cancer in the UK every year
  • YES
• Early detection for mouth cancer results in a survival outcome of 75%
  • NO: survival rate is 90%
Reducing the risk

• Quit smoking
• Cut down on alcohol
• Visit the dentist at least once a year
• Look out of any changes in your mouth and report anything that hasn’t cleared up within three week
• A good diet, rich in vitamins A, C and E provides protection against the development of mouth cancer

Altogether better
Impact of oral diseases

• Time off school: poor educational performance
• Time off work: reduced productivity of the workforce
• Social isolation/Aesthetics/attractiveness
• Cost of treatment (person & to the NHS)
• Fear/anxiety
• Negative effect on general health
Impact of poor oral health

- Pain/discomfort
- Disruptive, challenging, self-injurious behaviours
- Infection
- Sleepless nights
- Limitation of eating (choice of foods, enjoyment, avoidance of social situations, weight loss)
- Limitation of speech and communication
- Unpleasant dental treatment
- Risks of GA
- Low self-esteem and dignity
Groups at risk of poor oral health

• People whose economic, social, environmental circumstances or lifestyle place them at high risk of poor oral health or make it difficult for them to access dental services.

• who are homeless or frequently move, such as traveler communities
• who are socially isolated or excluded
• who are older and frail
• who have physical or mental disabilities
• who are from a lower socioeconomic group
• who live in a disadvantaged area who smoke or misuse substances (including alcohol)
• who have a poor diet from some black, Asian and minority ethnic groups for example, people of South Asian origin
• who are, or who have been, in care
### Public Health Profiles

#### Inequalities

**Overview**

- **Area type**: County & UA
- **Areas grouped by**: Region
- **Region**: North East
- **Benchmark**: England

**Search results for decay**

- Primary Care Trust: 2
- Region: 1
- District & UA: 2
- CCG: 2
- Ambulance Trust: 2

**Search for an area**

- Compared with benchmark:
  - Better
  - Similar
  - Worse
  - Longer
  - Shorter

**Export table as image**

**Show me the profiles these indicators are from**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Period</th>
<th>England</th>
<th>North East region</th>
<th>County Durham</th>
<th>Darlington</th>
<th>Edinburgh</th>
<th>Havering</th>
<th>Medway</th>
<th>Newcastle upon Tyne</th>
<th>North Tyneside</th>
<th>Northumberland</th>
<th>North Yorkshire</th>
<th>South Yorkshire</th>
<th>Stockton-on-Tees</th>
<th>Sunderland</th>
</tr>
</thead>
<tbody>
<tr>
<td>CYP: Tooth decay in children aged 5</td>
<td>2011/12</td>
<td>1.02</td>
<td>0.83</td>
<td>1.20</td>
<td>0.72</td>
<td>0.56</td>
<td>1.71</td>
<td>0.75</td>
<td>0.83</td>
<td>0.92</td>
<td>0.88</td>
<td>1.12</td>
<td>1.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with one or more decayed, missing or filled teeth</td>
<td>2011/12</td>
<td>27.9</td>
<td>26.7</td>
<td>26.4</td>
<td>25.8</td>
<td>19.6</td>
<td>41.5</td>
<td>22.6</td>
<td>29.3</td>
<td>27.6</td>
<td>35.9</td>
<td>27.7</td>
<td>31.9</td>
<td>36.9</td>
<td></td>
</tr>
<tr>
<td>Hospital admissions for dental caries (1-4 years)</td>
<td>2012/13</td>
<td>302.0</td>
<td>368.5</td>
<td>141.9</td>
<td>429.6</td>
<td>151.0</td>
<td>540.3</td>
<td>620.1</td>
<td>400.5</td>
<td>518.9</td>
<td>536.7</td>
<td>264.8</td>
<td>430.7</td>
<td>162.7</td>
<td></td>
</tr>
<tr>
<td>CYP: Proportion of five year old children free from dental decay</td>
<td>2014/16</td>
<td>75.2</td>
<td>73.0</td>
<td>84.9</td>
<td>84.6</td>
<td>78.2</td>
<td>84.6</td>
<td>81.2</td>
<td>77.5</td>
<td>74.3</td>
<td>72.9</td>
<td>74.0</td>
<td>74.7</td>
<td>59.9</td>
<td></td>
</tr>
</tbody>
</table>
The picture of oral health in County Durham
Inequalities

• Data from 5 year olds dental survey

\[ \text{dmft} \geq 0 \]

• Chester Le Street South 6%
• Nevilles Cross 11%
• Hordon 38%
• Coundon 51%
• Woodhouse Close 61%

• Significant local variation!
NICE: Oral health: local authorities and partners

- 21 recommendations
- Settings based approach
Oral health is “everyone’s business”

We can all be responsible for:

1. Ensuring that all health, social care, education and voluntary sector group workers acknowledge that oral health is everyone’s business, not just the responsibility of the dental profession.
   
   **NICE 55 recommendation is:**
   
   – To ensure frontline health and social care staff can give advice on the impact of oral health.
   
   – To commission training for health and social care staff working with children, young people and adults at high risk of poor oral health.

2. Helping our community to achieve and maintain good oral health e.g. via health care plans for children and adults with special needs.

3. Referring patients to a dentist where appropriate.

*Altogether better*
Local government association guidance

LGA’s ideas for success include:

- A locally tailored oral health strategy
- Promote local leadership and advocacy
- Ensure a life course approach
- Universal approaches where possible with targeted support for those that need it
Life course approach

- Children
- Those with poor physical/mental health
- Older adults
  - Health and social care
  - Dementia
Oral health of 3 year olds

- Dental public health epidemiology programme – oral health survey of 3 year olds showed that 12% of 3 year old children had tooth decay.

- Among those with decayed, missing or filled teeth the average dmft was 3.07.

- There are variations in dmft across the country, and again there are variations locally.
Oral health survey of five-year-old and 12-year-old children attending special support schools survey, 2014

- PHE Epidemiology oral survey
- 22% of the sample had experienced dental decay
- On average these children had 3 teeth affected that were either decayed, missing or filled.
- Those children who experienced decay had more teeth affected on average than children from mainstream schools.
Fluoride

- Fluoride has made an enormous contribution to the decline in dental caries over the past 60 years.

- There is compelling evidence that fluoride is effective in reducing decay and that water fluoridation is the most effective way of using fluoride to reduce decay.

- Other fluoride interventions, such as fluoride toothpaste and fluoride varnish, are also important, effective ways of reducing tooth decay.
Supervised tooth-brushing

Evidence suggest that teacher-supervised tooth-brushing can reduce decay by 30-39%

Supervised tooth-brushing can establish lifelong habits
Fluoride Varnish

Evidence shows fluoride varnish can reduce decay in deprived areas by around 40%
Workshop

Review each of the settings
1 Actions – are they fit for purpose?
2 Who should lead?
3 Who can help?
4 What can you do?
5 What, if anything, is missing?
• Is there a key issue?
• What can we do about it?