Promoting the Oral Health of Pre-School Children
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Aim and Objectives</td>
<td>5</td>
</tr>
<tr>
<td>Happy Smiles Tooth Brushing Programme</td>
<td>6</td>
</tr>
<tr>
<td>Happy Smiles - Healthy Snacks!</td>
<td>11</td>
</tr>
<tr>
<td>Happy Smiles Education Programme</td>
<td>14</td>
</tr>
<tr>
<td>Monitoring</td>
<td>16</td>
</tr>
<tr>
<td>Appendix</td>
<td></td>
</tr>
</tbody>
</table>
Welcome to the Happy Smiles Programme

As with many health problems such as heart disease and obesity, poor oral health is largely determined by lifestyle choices. Therefore providing children and their parents with the appropriate information and skills to develop good oral health habits and a healthy diet in childhood will have a positive impact on the reduction of levels of dental disease.

Due to the on-going success of evidence based fluoride delivery programmes to improve the oral health of pre-school children, the Oral Health teams and the Community Dental Services in Northern Ireland have joined forces to produce the Happy Smiles Programme to ensure consistency throughout Northern Ireland.

The recent UK Children’s Dental Health Survey 2013 results show a dramatic improvement in the oral health of 5 year olds in Northern Ireland. The proportion of 5 year old children affected by dental decay has dropped from 61% in 2003 to 40% in 2013. This improvement reflects the positive impact of the daily tooth brushing schemes aimed at children most at risk of developing tooth decay, including those schemes delivered in pre-school facilities.

“Effective daily tooth brushing with the recommended fluoride toothpaste is the best way of preventing dental decay and gum disease. In addition to tooth brushing twice daily the frequency and amount of sugars should be reduced and restricted to mealtime’s only.”

Dental Disease is one of the most common diseases of childhood. The Oral Health Strategy for Northern Ireland aims to improve quality of life for all by:

- Improving the oral health of the population in Northern Ireland by using evidence based approach.
• Reducing the inequalities in oral health within our society

• Preventing tooth decay in children, particularly those from a disadvantaged background. ³

“What we eat can play a critical role in determining our health, whatever our age. The eating patterns established in the first few years of life influence our health during childhood and adulthood. Encouraging good nutrition during the early years of life is therefore an investment in the health of our population for years to come”⁴.

Nursery education lays the foundation for future learning. The pre-school experience outside the home provides a safe, stimulating, enjoyable environment with the companionship of other children under the guidance and supervision of trained staff. These staff working directly with children and their parents can have a positive influence on oral health by reinforcing good oral hygiene messages and healthy eating. By promoting the correct oral health practices amongst children at an early age in this positive environment we can reduce dental disease by encouraging children to:

• Brush teeth and gums twice a day with the recommended fluoride toothpaste, especially last thing at night.

• Reduce the frequency of sugary foods and drinks, especially between meals

• Visit the dentist for regular check-ups at least once a year.

The Happy Smiles Programme must be approved by the facilities Board of Governors or Management Committee.

The Happy Smiles Oral Health programme has been developed by the NI Oral Health Development Group and HSC Trust Community Dental Service teams. It has been designed to enable staff in pre-school facilities to deliver the programme following initial training by the Oral Health Team. Resources to implement the programme will be provided by the team and their continuing role will be to monitor and evaluate the effectiveness of the Happy Smiles Programme each year.

Some positive outcomes from facilities which have used a similar programme include:-

“Parents are pleased tooth brushing is carried out at their child’s playgroup, this helps the routine at home”

“Healthy snacks in our facilities have resulted in parents reporting that children are eating more fruit at home, having vegetable soup and drinking milk or water not flavoured juice.”

“Parents have commented on the positive effects of dental schemes in the pre-school facilities”

References:
1 Child Dental Health Survey (2013) http://www.hscic.gov.uk/catalogue/PUB17137
Aim

The aim of the Happy Smiles evidence based programme is to improve the oral health of pre-school children.

Objectives

1. To support and encourage pre-school staff through training, to promote the oral and general health of the children through day to day practice in their pre-school facilities.

2. To provide the necessary resources to enable pre-school staff to implement and maintain a daily oral health initiatives within their pre-school facilities.

3. To provide parents/guardians with written information to inform them of the Happy Smiles Programme and good oral health practices in the home.

The three main elements of the Happy Smiles Programme:

1. “Happy Smiles Tooth brushing Programme”.
2. “Happy Smiles - Healthy Snacks”
3. “Happy Smiles Education Programme”.

Aim and Objectives
The ‘Happy Smiles’ Tooth brushing Programme has been designed to support a daily supervised tooth brushing routine in pre-school facilities. A similar tooth brushing programme has been on-going in selected pre-school facilities for a number of years throughout Northern Ireland. Teaching staff have reported on how much the children enjoy the programme and when fully established the ease of its overall implementation. They have also reported on positive comments received from parents on the impact these programmes are having at home.

The programme supports the work already being carried out in the home. Parents are encouraged to continue brushing their children’s teeth twice a day, with the emphasis on ensuring that teeth are brushed properly last thing at night before putting their child/children to bed.

Research shows there is strong evidence that tooth brushing twice daily with the correct level of fluoride toothpaste can help prevent tooth decay.

(Delivering Better Oral Health: an evidence based toolkit for prevention. DoH 2014)
1. Facilities will be contacted and invited to take part or continue to take part in the programme each new school year. Application form Appendix 1.

Training for staff will be provided, which will include:

- Supervised Tooth Brushing Techniques (Groups / Individual)
- Infection Control Guidelines

2. All resources necessary will be provided either at the beginning of each new year or at the beginning of each new term.

3. The programme is available for all children, whether they attend on a full time or part time basis.

4. Parental/Guardian permission is essential for each child participating in the programme. Multiple permission forms e.g. photos, tooth brushing are acceptable, although, each signed permission form must be retained for inspection if and when requested (permission form Appendix 2). It will be the responsibility of staff in the facility to ensure that only those children whose parents have signed a permission slip will be able to participate.

5. A designated leader within each facility will be agreed and be responsible to oversee the programme throughout the year.

6. Evaluation of the programme will be carried out periodically.

7. Standards must be adhered to as specified in the guidelines (Appendix 3 & 4) – Best practice advice for nurseries and childcare settings - HSC Public Health Agency.
Tooth Brushing - Best Practice

The supervisor and the children should wash their hands before and after the tooth brushing session.

The child (under supervision) is responsible for collecting the toothbrush from the storage system. Discretion should be used if a child requires special assistance.

Toothpaste should be dispensed following the appropriate methods (An example of a template - Appendix 5)

Tooth brushing at the sink

- Tooth brushing takes place at the identified sink area.
- Ideally no more than two children should be permitted to each available sink.
- The children should be closely supervised at all times.
- The children should be encouraged to spit excess toothpaste into the sink. See Appendix 3 & 4 Guidelines for infection control & tooth brushing routines – these should be laminated and displayed where the tooth brushing takes place
- Under supervision each child should rinse their own toothbrush under cold running water.
- Under supervision each child should shake their toothbrush to remove excess water and returned to the storage system.
- At all times the supervisor is responsible for the control of the running tap.
- Paper towels should be used to mop up all visible drips on the storage system.
- The supervisor is responsible for rinsing sinks after tooth brushing is completed they should then wash their hands.
Tooth brushing at the children’s desk or other location

- Tooth brushing takes place at an identified dry area.

- A larger number of children can take part together e.g. group of 4 or 6

- The children should be closely supervised at all times.

- Children may be seated or standing while tooth brushing takes place.

- After tooth brushing is completed, children should spit excess toothpaste into either a disposable tissue, paper towel or a cup.

- All tissues, paper towels or cups must be disposed of immediately after use in a waste bag.

- Toothbrushes should be returned to the storage system by each child and taken to an identified sink area by the supervisor, who is responsible for rinsing under cold running water and shaking access water off each individual toothbrush and then return to the storage system.

- Paper towels should be used to mop up all visible drips on the storage system.
Resources

(Resources may vary according to availability in each Trust)

TOOTHPASTE
Children under 3 use a smear of 1000ppmf
Children over 3 use a pea size of 1450ppmf

TOOTH BRUSHES
Tooth brushes provided are appropriate for the age of the child

STORAGE SYSTEMS
The storage systems supplied comply with current infection control guidelines
Good nutrition is essential during childhood, as it is a time of rapid growth, development and activity. This is also a vital time for healthy tooth development and prevention of decay. General eating habits and patterns are formed in the first few years of life. Pre-school providers therefore have a key role to play in introducing children to a wide variety of foods and establishing a pattern of regular meals and healthy snacks. (Nutrition Matters for the Early Years - Guidance for feeding under-fives in the childcare setting. Public Health Agency.)

Happy Smiles - Healthy Snacks aims to promote healthy mid-morning/afternoon snacks in pre-school facilities on a daily basis to reduce the frequency of sugar intake and increase access to fruit, vegetables, milk or water. Please see suggested snacks on page 12.

Benefits of Healthy Snacks for Children

It is important that young children eat frequently throughout the day to ensure that their calorie and nutrient needs are met. The provision of healthy and nutritious breaks such as fruit/vegetables and milk or water has a number of benefits:

- Children learn the benefits of eating healthy snacks
- Children will be encouraged to eat at least one portion of fruit/vegetables per day
- It encourages the development of lifelong healthy eating patterns
- Can help prevent obesity
- It contributes to improved concentration and better learning
- It encourages a better appetite for lunch/main meals
- Suitable snacks and drinks will help to prevent tooth decay
- Decreased wastage of food at mealtime
Suggested Snacks

During break times the following snacks are acceptable:

- Pieces of fresh fruit - e.g. sliced or chopped apples, bananas, pears, kiwi fruit, grapes and other seasonal fruits are healthy snacks for small children. Dried fruit is not recommended as a between meals snack as it contains concentrated sugar and may cause tooth decay.

- Raw vegetables - e.g. carrot, cucumber, celery can be sliced up or cut into sticks and are handy nibbles.

- Toast or bread - wheaten, wholemeal, white, granary, potato bread, soda bread, pitta bread, bread rolls, plain scones, rice cakes or breadsticks. These should not be covered in sugary spreads such as jam, honey or chocolate spread.

- Sandwiches - suitable fillings include banana, spreading cheese, egg, tomato, tuna and lean meat such as ham, chicken or turkey.

- Natural yoghurt or plain fromage frais - chopped fruit can be added to plain unsweetened yoghurt e.g. banana, apple, and mandarin orange. Fruit tinned in its own juice rather than syrup can also be used.

- Weetabix, Ready brek, Puffed wheat, Cornflakes or Rice Crispies.

- Milk and water. Water should be unflavoured.

Children with special dietary needs

Parents should be able to provide a diet sheet about their child’s specific dietary needs which has been prepared by a registered dietitian.
• There must be a written break time food policy, which should be part of an overall school health policy. You may wish to display the policy.

• The criteria must be approved by the Board of Governors/Management Committee.

• The policy should be implemented in partnership with parents/guardians. All parents/guardians must be informed in writing of the pre-schools intention to adopt a healthy breaks policy and the benefits of it for the children.

• Specific dietary requirements should be accommodated. In such cases parents/guardians should be able to supply a copy of the child’s diet plan, which may provide recommendations about suitable snacks. If in doubt you should consult a local Registered Dietitian*

*Your Community Dental Clinic will be able to put you in touch with a local trust Registered Dietitian.

The criteria will be assessed periodically.

This will be carried out by the oral health staff.
The Happy Smiles Education Programme is designed to be a pleasant and fun experience that fits into the universal programme of Pre-school education.

The educational element of the Happy Smiles Education Programme should fit in with day to day practice. However, we recommend that the programme you decide to implement, should meet the aims, objectives and criteria set out below.

As the NICCEA document “Curricular Guidance for Pre-School Education” points out, children of this age learn through a variety of play activities and other relevant experiences. The thematic approach to planning such learning opportunities, using a range of activities such as stories, rhymes, music and drama is proposed. The exploration of the issues surrounding dental health lends themselves very well to such an approach.

**Aims and Objectives**

The aim of the Happy Smiles Education Programme is to enable pre-school staff to educate the children, regarding the main causes of tooth decay and how it can be prevented.

By the end of the programme, the children will be aware that:

- They should brush their teeth twice a day with fluoride toothpaste, especially last thing at night.
- All Snacks between meals should be healthy and low in sugar or sugar free. Milk and water are the recommended drinks between meals to help prevent tooth decay.
- They should visit their dentist for regular check-ups.

The Happy Smiles Education Programme should be implemented throughout the year.

Parents /guardians/carers play a very important role in the oral health of their children; therefore parents should be aware that their children are taking part in the Happy Smiles Education Programme.

Oral health Information and parent leaflets are included in this programme the leaflets available are:

- Happy Smiles Programme
- Happy Smiles – Top tips for tooth brushing
- Happy Smiles – Healthy Eating for Healthy teeth
Play Activities Based On Oral Health Issues

Dental health - Tooth Brushing - Healthy Eating - Visiting The Dentist

Physical Development

Develop manual dexterity and hand/eye co-ordination through tooth brushing skills, storage of toothbrushes, cutting fruit and vegetables at snack time etc.

Fine motor skills can be developed by using jigsaw puzzles and other resources on a dental nutrition theme.

Personal Social and Emotional Development

Taking part in play, taking turns at being the dentist, dental nurse and patient.

Become familiar with dental instruments, equipment, associated sounds.

Develop and express feelings/emotions through stories, rhymes, music and drama.

Discuss the importance of brushing

Taking part in tooth brushing activities.

Discuss healthy eating

Choosing and preparing healthy snacks/drinks that are safe for teeth.

The World Around Us

Discuss functions of teeth and what causes teeth to decay

Develop awareness of space e.g. layout of dental surgery, waiting room.

Recognise and use dentist and dental nurse uniforms in role play.

Know and use positional and directional words e.g. up, down, backwards and forwards.

The Arts

Talk about colour and shape of different fruit, vegetables and fruit drinks

Use fruit and vegetables to make happy faces.

Make posters about snacks using pictures of good/bad food.

Colour/paint activity sheets on visiting the dentist, healthy eating and tooth brushing.

Dental health issues can be explored through the use of music and drama.
Language Development

Become familiar with names of staff, dentist, dental nurse, receptionist and hygienist

Learn names of furniture and instruments, dental chair, light, hand piece and mirror

Listen to others.

Take part in role play e.g. dentist, dental nurse, patient.

Explore dental health issues through the use of stories, music and drama.

Early Mathematical Experiences

Understand one-to-one relationships e.g. one toothbrush to one person, one appointment card to one person etc.

Learn set times e.g. snack times, meal times, time to brush teeth.

Discuss visiting the dentist every six months

Discuss healthy eating message e.g. five pieces of fruit or vegetables each day.

Sort, match and count different types/colours of fruit/vegetables and toothbrushes etc.

Size and shape of fruit – cutting and slicing portions – halves, quarters etc.
The Happy Smiles Programme is an oral health award scheme for pre-school facilities. All pre-school facilities will be contacted annually and invited to participate in the programme. Application form Appendix 1.

Monitoring of the various elements of the programme will be carried out throughout the year by a member of the Oral health team. Towards the end of the year the facility will be asked to complete a monitoring questionnaire on all elements of the programme. The feedback from this questionnaire will be essential for us to evaluate the programme and ensure all elements have been successfully achieved. A sample copy of the questionnaire can be found on page 18.
Happy Smiles Monitoring Questionnaire

Name of facility _______________________________ Please circle day Nursery/Playgroup/Nursery Class

Address __________________________________________________________________________  Postcode ____________________

Telephone _______________________________ E-mail ________________________________________________________________

- Have all your staff received the Happy Smiles Programme Training?    Yes □  No □
- Are parents/guardian aware of the Happy Smiles Programme?                    Yes □  No □

Please comment __________________________________________________________________________________________________

If your facility is currently implementing elements of the Happy Smiles Programme we would appreciate if you would take time to answer the questions below

**Toothbrushing Programme Currently Implementing**

If no please comment

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<td>1. Do you have a signed parent/guardian agreement for each child who is participating?</td>
<td>Yes □  No □</td>
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<tr>
<td>2. Where do the children toothbrush?</td>
<td>At a sink □  At their desk □  Other ________</td>
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<tr>
<td>3. Is each child’s toothbrush and toothpaste labelled?</td>
<td>Yes □  No □</td>
</tr>
<tr>
<td>4. How is each child’s toothbrush and toothpaste stored?</td>
<td>Toothbrush rack □  Cup □  Other ______________</td>
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<td>5. Where are the tooth brushes stored?</td>
<td>Please Comment ____________________________________________</td>
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<td>6. What is the recommended amount of toothpaste –</td>
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<td>a) for a 3 year old child_______________  b) for under 3 year old child______________</td>
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<td>7. Do the children rinse with water after toothbrushing?</td>
<td>Yes □  No □</td>
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<tr>
<td>8. Do you use a separate tube of toothpaste for each child?</td>
<td>Yes □  No □</td>
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If no, how does your staff distribute the toothpaste onto the child’s toothbrush?

Plate □  Disposable towel/paper sheet □  other ____________________________________________
9. Have you encountered any difficulty implementing this programme?  Yes □  No □
   Please comment ________________________________________________________________
   __________________________________________________________________________

10. Did you receive enough support from the Community Dental Service?  Yes □  No □
   Please comment ________________________________________________________________
   __________________________________________________________________________

Healthy Snacks  Currently Implementing  Yes □  No □
   If yes, please give examples of food and drinks provided for breaktime on a daily basis
   __________________________________________________________________________
   __________________________________________________________________________
   If no, please comment ________________________________________________________
   __________________________________________________________________________

Education Programme  Currently Implementing  Yes □  No □
   Please provide examples of how your facility incorporates play activities based on oral health issues.
   __________________________________________________________________________
   __________________________________________________________________________

11. Do you intend to take part in the Happy Smiles Programme next year?  Yes □  No □
   If yes please give an indication of the number of children likely to participate next year
   □ under 3 years of age  □ over 3 years of age
   If no, please comment ________________________________________________________
   __________________________________________________________________________

We would welcome your comments and suggestions on how to improve this programme
   __________________________________________________________________________
   __________________________________________________________________________

Thank you for taking the time to complete this questionnaire.

Please return in the envelope provided before ______________