# Guideline

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# Early Childhood Oral Health Guidelines for Child Health Professionals, 3rd Edition

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**Functional Sub group** Clinical/ Patient Services - Dental/Oral
Population Health - Health Promotion

**Summary** The aims of the Early Childhood Oral Health Guidelines are to improve the health and well-being of children in NSW by integrating oral health into general health interventions provided by Child Health Professionals. The Guidelines add value to the Child Personal Health Record, which includes basic oral health information for parents.

**Replaces Doc. No.** Early Childhood Oral Health Guidelines for Child Health Professionals, 2nd Edition [GL2009_017]

**Author Branch** Centre for Oral Health Strategy

**Branch contact**

**Applies to** Chief Executive Governed Statutory Health Corporations, Affiliated Health Organisations, Community Health Centres, Dental Schools and Clinics, Ministry of Health, Public Health Units, Public Hospitals

**Audience** Dental Professionals, Child and Family Health Professionals, Aboriginal Health Workers, Midwives

**Distributed to** Public Health System, Divisions of General Practice, Government Medical Officers, NSW Ambulance Service, Ministry of Health, Tertiary Education Institutes

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NSW GOVERNMENT Health

GUIDELINE SUMMARY

# EARLY CHILDHOOD ORAL HEALTH GUIDELINES FOR CHILD HEALTH PROFESSIONALS, 3RD EDITION

## PURPOSE

The Early Childhood Oral Health Guidelines (the Guidelines) aim to improve the health and wellbeing of children in NSW by integrating oral health into general health interventions provided by child health professionals. The Guidelines add value to the NSW Personal Health Record, which includes oral health information for parents and a requirement to "lift the lip" and check for signs of dental disease during Child Health Checks.

## KEY PRINCIPLES

The key principles of the Guidelines are that child health professionals should:

1. Advise pregnant women to visit a dentist for a dental examination and restoration of all active decay
2. Provide preventive interventions to pregnant women and to new parents/caregivers
3. Lift the lip of children aged 0-5 years to examine the upper front teeth and look for early signs of tooth decay (e.g. white or brown spots that don't brush off) and existing cavities
4. Assess child's level of risk for oral disease. Provide preventive interventions to new parents/caregivers
5. Advise parents/caregivers to reduce the frequency of sugar intake by limiting night time on-demand feeding after six months
6. Advise mothers and carers to avoid transfer of oral bacteria to their child by maintaining good oral health themselves and by not placing food, utensils, dummies or teats into their own mouths and then into their child's mouth
7. Provide dietary counselling to parents/caregivers that is specific to the child and their family and monitor compliance
8. Provide oral hygiene and fluoride advice to parents/caregivers
9. Provide information on teething to new parents/caregivers
10. Provide an oral health assessment to a child by their first birthday
11. Refer children at high risk for tooth decay to an Oral Health Call Centre, Early Childhood Oral Health Coordinator or Private Dentist
12. Advise parents to talk to their children about dental visits in a positive way
13. Provide oral health education for all child health professionals.

## USE OF THE GUIDELINE

The Guidelines provide support material for child health professionals about oral health that complements their existing expertise by:

- Providing accurate oral health information to parents of children aged 0-5 years
- Assessing levels of oral disease risk for children aged 0-5 years
- Making decisions about appropriate referrals to oral health services.

## REVISION HISTORY

| Version | Approved by | Amendment notes |
|---|---|---|
| December 2014 GL2014_020 | Deputy Secretary, Population and Public Health | Updated contact, links and resources |
| GL2009_017 October 2009 | Deputy Director General | Updated references and tabs between sections |
| GL2007_017 | Deputy Director General | New policy |

## ATTACHMENTS

1. Early Childhood Oral Health Guidelines for Child Health Professionals, 3rd Edition.

# EARLY CHILDHOOD

## Oral Health Guidelines for Child Health Professionals

*Third Edition /July 2014*


ECOH
NSW Early Childhood Oral Health

NSW GOVERNMENT Health
Centre for
Oral Health Strategy

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# Foreword



Oral Health is essential for health and wellbeing and early childhood is the time when most lifetime habits are established. It offers the greatest opportunity for prevention of disease that in turn can contribute to better health in adulthood.

The Early Childhood Oral Health Guidelines for Child Health Professionals (Guidelines) aims to improve the health and well-being of children in NSW by integrating oral health into general health interventions provided by Child Health Professionals. The Guidelines add value to the NSW Personal Health Record (or Blue Book), which includes basic oral health information for parents (Appendix A). It also complements the NSW Messages for a Healthy Mouth.

Oral Health Professionals recognise the significant knowledge and skill base that Child Health Professionals have of children's health and wellbeing. The Guidelines provide support material about oral health that complements their existing expertise by:

- providing accurate oral health information to parents of children aged 0-5 years
- assessing levels of oral disease risk for children aged 0-5 years, and
- making decisions about appropriate referrals to oral health services.

In 2007, the Guidelines were developed by a multidisciplinary group of experts, including Paediatric Dental Specialists, Dental Therapists, Dietitians and Child & Family Health Nurses. We congratulate their innovation and insight in developing a strategy that will improve equity and reduce inequalities for young children in NSW.

I am pleased to release the third editon of this important resource for Child Health Professionals.

Dr Kerry Chant
Chief Health Officer and Deputy Secretary
Population and Public Health
Ministry of Health

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# Acknowledgements

The assistance of all those who have contributed to the development of the 1st Edition of the Guidelines is gratefully acknowledged. Special thanks is also extended to the Early Childhood Oral Health Program coordinators across the state who contributed to the review of the guidelines in 2014.
A very special thank you to the Child and Family Health professionals for their great support and contributions over the recent years.

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# Executive Summary



Early childhood caries (ECC) is a serious dental condition occurring during the preschool years of a child's life when developing primary (baby) teeth are especially vulnerable. It can be a devastating condition often requiring hospitalisation and dental treatment in an operating theatre under general anaesthesia. The pain, psychological trauma, health risks, and costs associated with restoration of carious teeth for children affected by ECC can be substantial, yet it is mostly preventable.

The Early Childhood Oral Health Guidelines for Child Health Professionals (Guidelines) supports the notion that oral health is an integral component of general health. It acknowledges that Child Health Professionals, such as Paediatricians, Child and Family Health and Community Nurses, Aboriginal Health Workers, General Practitioners and Practice Nurses are often better placed than oral health professionals to access, engage with, and guide new parents about the importance of oral health because of their direct involvement through child health checks and immunisation appointments. This reinforcement will help children and their families improve their oral health and to access appropriate dental care when required.

Topics covered in the Guidelines include recognition and prevention of oral disease, oral health referral processes, and useful information on accidents and trauma, with accompanying recommendations on their management. The recommendations are supported by robust data, where such is available, and other recommendations may represent a consensus of expert opinion in Australia.

# Summary of Recommendations

1. Advise pregnant women to visit a dentist for a dental examination and restoration of all active decay.

2. Provide preventive interventions to pregnant women and to new parents/ caregivers.

3. 'Lift the Lip' of children 0-5 years to examine the upper front teeth and look for early signs of tooth decay (eg white or brown spots that don't brush off) and existing cavities.

4. Assess child's level of risk for oral disease. Provide preventive interventions to new parents/care givers.

5. Advise parents/caregivers to reduce the frequency of sugar intake by limiting night time on-demand feeding after 6 months.

6. Advise mothers and carers to avoid transfer of oral bacteria to their child by maintaining good oral health themselves and by not placing food, utensils, dummies or teats into their own mouths and then into their child's mouth.

7. Provide dietary counselling to parents/ caregivers that is specific to the child and their family and monitor compliance.

8. Provide oral hygiene and fluoride advice to parents/caregivers.

9. Provide information on teething to new parents/caregivers.

10. Provide an oral health assessment to a child by their first birthday.

11. Refer children at high risk for tooth decay to an Oral Health Call Centre, Early Childhood Oral Health Coordinator or private dentist.

12. Advise parents to talk to their children about dental visits in a positive way.

13. Provide oral health education for all child health professionals.

# Introduction

The mouth is the entrance to the body and reflects general health and well-being. Studies have demonstrated an association between oral infections and conditions such as: diabetes, cardiovascular disease, stroke, and adverse pregnancy outcomes. Reviews of caries risk prediction models conclude that past caries experience is the best predictor of new caries experience, and good oral health throughout infancy and early childhood contributes to better health in adulthood. The most up to date universal thinking strongly argues that 'health' should be viewed as inclusive of oral health and that an integrated, partnership approach is needed to reduce the risk of oral disease and promote oral health.

Dental caries is one of the most common of all disorders and can occur at any age after teeth erupt. A particularly damaging form, early childhood caries (ECC), is a serious dental condition occurring during the preschool years of a child's life when developing primary (baby) teeth are especially vulnerable. It can be a devastating condition often requiring hospitalisation and dental treatment in an operating theatre under general anaesthesia. The pain, psychological trauma, health risks, and costs associated with restoration of carious teeth for children affected by ECC can be substantial. In NSW 40 % of children aged 5-6 years have evidence of dental decay and yet the disease is mostly preventable.

Primary (baby) teeth are important for normal development, function and health. If children lose their baby teeth too early there can be an adverse effect on self-esteem, eating and the position of the adult teeth. The identification of children at risk of oral disease and the detection of ECC at an early age can prevent widespread destruction of the baby teeth and is critical to good oral health outcomes for children. Although oral health professionals promote the importance of good oral health at every opportunity, most have limited access to children under five years of age apart from seeing them once dental problems are already apparent, and often quite severe.

The Early Childhood Oral Health Guidelines for Child Health Professionals (Guidelines) supports the notion that oral health is an integral component of general health. The document acknowledges that Child Health Professionals, such as Paediatricians, Child and Family Health and Community Nurses, Aboriginal Health Workers and General Practitioners, are often better placed than oral health professionals to access, engage with, and guide new parents about the importance of oral health, because of their direct involvement through child health checks and immunisation appointments. This reinforcement will help children and their families improve their oral health and gain appropriate early referral and access to dental care, when required.

# Introduction



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# Recognising Early Childhood Caries (ECC)

Child Health Professionals provide advice to parents and caregivers about the growth and development of infants and children at key ages and stages of their lives. An early start in preventing tooth decay can have lifelong benefits and Child Health Professionals are in a good position to provide preventive information, early assessment, early identification and referral.

## 2.1 Clinical Evidence of ECC

ECC can occur as soon as the first tooth erupts. During the first 12 months post-eruption susceptibility of teeth to decay is high. One of the first signs of dental decay is small white lesions running along the gum line (Figure 4). At this early stage of decay it is possible to reverse the process by promoting remineralisation through use of fluoride. However, ECC is often not detected until the decay has become quite serious.

***Description of Early Childhood Caries***

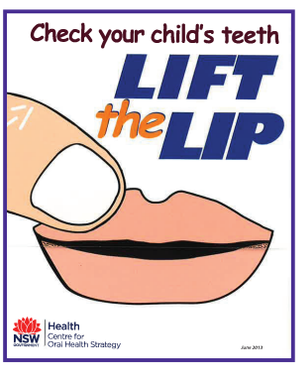
*ECC begins as white marks (lesions) or lines that progressively become larger, turning yellow or brown. These appear on the front or back smooth surfaces of the tooth near the gum line or between adjacent teeth. Upper front teeth are usually affected first followed by the first molars. Lower front teeth are typically free of decay. Over time enamel breaks down with loss of tooth structure. Signs and symptoms of ECC include tooth sensitivity, irritability, pain, infection, and facial swelling. The disease is often not detected the decay has become quite serious.*

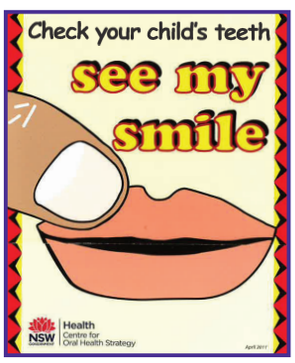
## 2.2 Lift the Lip

'Lifting the Lip' regularly to check for signs of ECC will have significant benefits for young children, especially if it is directed to children from low socio-economic backgrounds. Mouth checks are recommended during child health checks at 6-8 months, 12 months, 18 months, 2, 3 and 4 years of age. Before conducting a mouth examination explain to the parent / caregiver that:

- Baby teeth are important.
- Preventing dental decay is easier and less costly than treating it.
- The earlier that decay is detected the better the outcomes will be for the child.

Give every parent a Lift the Lip brochure at the 6-8 month child health check and encourage them to 'Lift the Lip' regularly at home to look for early signs of decay.




*Lift the Lip & See my Smile brochures*

# Recognising Early Childhood Caries



## 2.3 Oral Health Assessment

To examine the child, sit on office chairs and place them in a 'lap-to-lap' position (Figure 1).

Look for:

- the presence of plaque
- white spot lesions (especially on the upper front teeth)
- gross cavities (holes) in any teeth.

*(Gloves are required for this method).*

*Figure 1. Lap to lap position*

*Source: Westmead Hospital 2008*

Alternatively, ask a parent to 'lift the lip' while the child is having their length measured at the child health check (Figure 2).
*(No gloves are required for this method, however, gloves may be offered to parent).*

*Figure 2. Mother lifting the lip*

*Source: North Sydney Central Coast Area Health Service 2007*

A healthy mouth will have:

- Pale pink, moist gums and mucous membranes (Figure 3).
- Whitish teeth that are smooth and free of plaque.

*(Note: In dark skinned children the gums are more deeply coloured).*

*Figure 3. Healthy mouth*

*Source: ME Wener and CA Yakiwchuk 2004*

# Recognising Early Childhood Caries

*Figure 4. Stages of dental caries*

If you see this:

1. Explain the importance of regular toothbrushing.
2. Reinforce the need to make healthy diet choices, especially low sugar choices and drinking tap water.

**Healthy teeth**

If you see this:

1. Refer to an oral health service for a routine referral.(Appendix B)
2. Explain the importance of regular toothbrushing and emphasise that early decay can be reversed.
3. Reinforce the need to make healthy diet choices, especially low sugar choices and drinking tap water.

**Whitish lines along the gum**

If you see this:

1. Make an urgent referral to an oral health service (within one week).
2. Explain the importance of regular toothbrushing .
3. Reinforce the need to make healthy diet choices, especially low sugar choices and drinking tap water.

**Cavitated lesions**

If you see this:

1. Make an emergency referral to an oral health service (preferably same day).
2. Consider an antibiotic prescription. (Appendix E)

**Rampant decay**

*Source: NSW & WA Oral Health Serivice, www.mchoral.org/openwide*

# Recognising Early Childhood Caries



## Case Study 1

### Consequences of dental caries

Chantelle was brought to the dental surgery by her parents at 3 years of age because they were becoming worried about the appearance of her front teeth.

She is the third of four children. Her older brother and sister both suffered early loss of primary teeth because they "came through bad". Chantelle's mother thinks that her children have inherited "soft teeth" from their father who had dentures by the age of 25.

This is Chantelle's first visit to the dentist. Clinical examination revealed rampant caries and chronic abscesses on an upper front tooth and a lower back tooth.

*Interactive treatment planning*

*Mackie IC & Blinkhorn AS, ISBN 1 898274 07 X*

During interview, her mother revealed that Chantelle was a poor eater and a restless sleeper. At bedtime her mother was busy with her baby brother so she gave Chantelle a bottle of milk in bed to help her settle. She believed that this would assist her "soft" teeth by providing her with more calcium and also give her much needed nutrition since she didn't eat a lot at tea time.

Chantelle was treated under general anaesthesia; all 10 upper teeth and four lower molar teeth were extracted.

At the first post-operative appointment the family diet was discussed in depth and the following practical advice was given:

1. stop the bottle completely
2. use full strength (1,000 ppm) fluoride toothpaste and brush twice a day, morning and evening
3. stop having lollies during the day (eat them once a day, straight after a meal)
4. drink less fizzy drinks and only drink them at meal times
5. drink chilled tap water between meals.

Once the painful abscessed teeth were removed Chantelle was able to eat a more balanced diet. Within two months she had gained two kilograms. The whole family now attends the dental clinic regularly for preventive advice. Her younger brother is no longer having a bottle of milk at night.

# Recognising Early Childhood Caries

## 2.4 Contributing factors

Consideration of socio-environmental risk factors is based on the premise that not all children are equally likely to develop oral health problems and the majority of decay is concentrated in a small percentage of children. For example, a child who lives in a community with no fluoridated public water supply may have an increased risk of dental caries. On the other hand, if that child's parents regularly brush the child's teeth with fluoride toothpaste then the child's risk of dental caries will be reduced.

### Risk factors for early childhood caries (ECC)

*Physical*

- Previous caries experience
- White spot lesions, caviated lesions
- Special health needs
- Gastric reflux
- High bacteria count (*mutans streptococci*)
- Variations / defects in tooth enamel

*Behavioural*

- Frequent exposure to between-meal sugars / cariogenic food (including bottle / sippy cup containing juice or carbonated beverage)
- Visible plaque on anterior teeth / inadequate oral hygiene

*Socio-environmental*

- Non-fluoridated water supply
- Poor family oral health
- Poverty / Centrelink Card holder
- High parental levels of bacteria (*mutans streptococci*)
- Maternal smoking

*Disease or treatment related*

- Frequent intake of sugared medications
- Reduced saliva flow from medication or irradiation

*Source: Adapted from Casamassino P, Bright futures in practice: Oral Health Arlington, VA. National Centre for Education in Maternal & Child Health.*

***Note:*** *By the time a child reaches 4 years of age, if they have risk factors and no preventive action has been taken, they will most likely have tooth decay in their front upper primary teeth and in their primary molar teeth that erupt between 1-3 years of age.*

## 2.5 Referral

Based on results of the 'lift the lip' mouth inspection and the oral health risk assessment, a decision is made about whether the child is at low or high risk for oral disease. If minor concerns are identified, discuss oral health with parents and reassess the child at the next scheduled health check or sooner. Discussions can include practical and developmentally appropriate advice about home oral health care for the child and the family (Appendix C).

A referral to a dental professional is recommended when an oral health problem is identified or when a child is assessed as being at high risk for oral disease based on behavioural and/or socio-environmental factors. The Oral Health Advice Form (Appendix B) may be used for referrals to public oral health clinics but Local Health District (LHD) protocol and procedures may also apply. Early Childhood Oral Health Coordinators in each Local Heatlh District can provide further advice about oral health referrals for children aged 0-5 years. Alternately, parents may phone the LHD oral health call centre directly (Appendix E).

*"Risk assessment is an estimation of the likelihood that an event will occur in the future".*
***Ramos Gomez et al.***

# Recognising Early Childhood Caries



## 2.6 Tips for managing child behaviour

Every Child Health Professional plays an important role in behaviour guidance. Communication skills are very important and effective communication techniques include listening, tone of voice, facial expression and body language.

To establish and maintain a good relationship with the child:

- Use a soft voice, and speak slowly.
- Take some time to explain what you plan to do.
- Demonstrate with a doll or teddy (tell, show, do).
- Give positive feedback at each step.
- Use toys or other props to distract the child with talk, or even silliness, while you work.
- Praise the child.

Most children can be managed using traditional behaviour management techniques. Factors that may contribute to non-compliance include:

- A child with a developmental delay, physical or mental disability, and or acute/chronic disease.
- Fear transmitted from parents.
- A previous unpleasant medical or dental experience.
- Dysfunctional parenting practices.

Some children with autism spectrum disorders, medically compromising conditions or extremely anxious, may be very sensitive to sensory stimulation and touch. They may need to be approached slowly using low light and in quiet settings. Careful interviewing and involvement of parents and caregivers will help predict the strategies most likely to be successful.

*"The most important tool you have is your own genuine concern and caring for the children and their families."*

***First Smiles: Dental Health Begins at Birth***

# Recognising Early Childhood Caries

## 2.7 Summary

| Guideline | Who | Where | When | How |
|---|---|---|---|---|
| 'Lift the Lip' of children 0-5 years to examine the upper front teeth and look for early signs of tooth decay (eg white or brown spots that don't brush off) and existing cavities | Child Health Professionals<br>Oral Health Professionals,<br>Parents | Child health checks<br>Dental clinics<br>Home visits<br>Home | 6-8 months,<br>12 months,<br>18 months, 2, 3 and 4 years of age | Lap to lap position<br>Written information (eg Lift the Lip & See my Smile pamphlets) |
| Assess child's level of risk for oral disease | Child Health Professionals | Child health checks<br>Home visits | | Using the Oral Health Advice form. (Appendix D) and Figure 4. |
| Refer to an Oral Health Call Centre, Early Childhood Oral Health Coordinator or private dentist | Child Health Professionals | Child health checks | As soon as a problem is identified | Oral Health Advice Form |
| Advise parents to talk to their children about dental visits in a positive way | Child Health Professionals | Child health checks | Once a dental appointment has been made | Verbal advice |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# Preventing Early Childhood Caries



## 3.1 Transmission

Children are not born with cavity-causing bacteria; the bacteria can be transmitted from birth onwards, usually from their mother or primary caregiver by placing food, utensils, dummies or teats into their own mouths and then into their child's mouth. **Therefore, pregnant women should visit a dentist for a dental examination and restoration of all active dental decay.** Anticipatory oral health guidance (planning ahead) should be provided to pregnant women, new parents, and other primary caregivers. By brushing their own teeth daily with fluoridated toothpaste, parents and caregivers can help prevent or reduce tooth decay in both themselves and their children.

## 3.2 First Visit to the Dentist

A common question that new parents ask is "When should my child first visit a dentist?" Ideally this should occur by their first birthday, although for children at low risk for dental caries a 'lift the lip' assessment by a child health professional with training in oral health and anticipatory guidance may be sufficient until the child reaches two years of age. Children assessed as being at high risk for dental caries, should be referred immediately to a public oral health clinic for early intervention. (Appendix B). **Advise all parents to talk to their child about the dental visit in a positive way.**

## 3.3 Feeding and Eating Practices

The most recent data provide no evidence to suggest that breastfeeding or its duration are independent risk factors for ECC. Given the proven health benefits of breastfeeding and the lack of consistent evidence linking breastfeeding to the development of ECC, health professionals should support current Australian Paediatric Association recommendations for breastfeeding, which align with the World Health Organisation.

Children who use a bottle, not only at mealtimes, but also to go to sleep and for comfort at other times during the day, have a significantly higher risk of developing ECC. Good oral hygiene practices, including reducing the frequency and consumption of sugar-containing foods and drinks, should be promoted from the time of eruption of the first tooth.

### Description of night bottle-feeding effect

*Prolonged tooth contact with milk, juice or any other carbohydrate-containing beverage while children are sleeping is one of the major causes of ECC.*

*As a child lies down to sleep with the bottle, the teat rests against the palate. When asleep, less saliva is produced and there is also less swallowing, allowing the liquid to remain in the mouth and pool around the teeth.*

*Decay producing bacteria converts the carbohydrate in the drink to acid. When this acid builds up on an unprotected tooth surface, it dissolves the minerals in the enamel, creating holes and weak spots (decay).*

# Preventing Early Childhood Caries

## 3.4 Introducing a Cup

As part of physiological and social development, children need to learn how to use a cup. A cup can be introduced, with appropriate advice about content and usage, at six months of age in preparation for weaning from the bottle at around 12 months. **Prolonged bottle use can cause poor appetite for food and prevent the child from getting all of their daily essential nutrients.** There is a risk of iron deficiency if milk is consumed over and above the child's daily needs. In some cases, when bottles are demanded through the night, overeating and excessive weight gain can occur.


## 3.5 Diet

Sugars are a major component of our daily diet. Children average nearly seven intakes of food per day, many of which are snacks rich in added sugars. **Although there are many risk factors for tooth decay, the local effect of dietary sugars has a fundamental role in the disease.**

Snacking is important for infants and young children because they have limited stomach capacity and therefore need to eat small amounts of food frequently to meet their nutritional requirements. For this reason, it is important that snacks consist mostly of healthy foods with high nutritional value, such as cheese, vegetable sticks, fresh fruit, yoghurt, custard, wholegrain sandwiches and soups. **Processed snack foods high in added sugars should not form a regular part of a young child's energy intake.**

- Encourage children to drink tap water from an early age (boil water for children under 12 months) and especially between meals.
- Stress the importance of food choices to meet a child's daily dietary needs.
- Reduced fat milk, yoghurt and cheese products are recommended for children 2 years and older.
- Emphasise the need to restrict the frequency of consumption of sugary foods and sweet drinks.
- Limit sweetened drinks to occasional meal-times only.
- Eating whole fruit is preferable to drinking fruit juice.
- Sticky sweet foods as honey on a baby's dummy can cause tooth decay.

# Preventing Early Childhood Caries



## Case Study 2

### Dietary advice

Jany's family lived in a refugee camp for over 4 years during which time there was a severely limited water supply and few toothbrushes available. They have only been in Australia for 9 months.

Jany presented at age 3 with decay in 4 of his upper front teeth and two lower back teeth. He was in no pain but, due to his young age, he was placed on a waiting list for general anaesthesia.

With the aid of an interpreter, the dental clinician discovered that Jany consumed up to 2 litres of milk over 24 hours and liked to go to sleep drinking a bottle.

Since being in Australia, he has developed a liking for sweet foods and eats a lot of chocolates, biscuits, and drinks fizzy drinks.

The dental clinician made an appointment for the family with a dietitian.

The dietitian discussed the dietary changes due to the family's refugee experiences and moving to a different country and the increased risk this posed to their oral health and general health.

Jany's mother had not been given any oral health information in her country of origin and found the information of great interest. She was also very surprised to learn that it was safe to drink tap water and that it did not need to be boiled first.

They discussed strategies for improving Jany's diet and his mother agreed to:

- Only offer milk at meal times and in a cup.
- Wean Jany from the night time bottle by replacing milk with warm water.
- Brush his teeth twice a day with a fluoride toothpaste, in the morning and the evening.

At the follow up visit, the family had made good progress with making changes to Jany's diet. The dietician praised their efforts and reinforced the need for them to sustain the changes. She then suggested some further changes to the family's diet that would also help to prevent future tooth decay. The family agreed to:

- Limit the amount of sweet foods and drinks consumed and eat them only with, or immediately after, a meal.
- Drink only (or mostly) tap water in between meals.
- Eat a greater variety of food, including cheese and fruit.

The family continue to attend periodic preventive oral health appointments while Jany waits for the general anaesthetic to restore his compromised teeth. Over time he is becoming less fearful of the dental environment and the dental clinician has been able to place temporary fillings in some of his decayed teeth and apply fluoride products to other teeth. There is some hope that Jany may be able to be treated comprehensively in the dental chair.

## *3.6 Sugar-free medicines*

Children often take medicines in a pleasant tasting syrup form as it improves compliance. Some children have to take medicines several times per day during the day and night for long periods of time. The cariogenic potential of paediatric liquid medications is due to high concentration of fermentable carbohydrates and their acidogenicity. Health professionals should specify "sugar free" for syrups and suspensions on their pharmacy scripts. If a sugar free product is unavailable, advise extra preventive care (e.g. Rinsing with water after medications and regular supervised tooth brushing and flossing, especially at night).

# Preventing Early Childhood Caries

## 3.7 Summary

| Guideline | Who | Where | When | How |
|---|---|---|---|---|
| Advise pregnant women to visit a dentist for a dental examination and restoration of all active decay | Maternal and perinatal child health professionals<br>General Practitioners & Practice Nurses | Maternity visits | At each visit | Verbal advice<br>Written information<br>(eg. Having a Baby by NSW Health) |
| Advise mothers and carers to avoid transfer of oral bacteria to their child by maintaining good oral health themselves and by not placing food, utensils, dummies or teats into their own mouths and then into their child's mouth | Child Health Professionals | Child health checks<br>Home visits | At first visit and reinforce at further visits, as required | Verbal advice |
| Advise parents to:<br>• reduce the frequency of sugar intake by limiting night time on-demand feeding after 6 months<br>• restrict bottles to meal times and remove them from the child when they finish feeding<br>• introduce a cup at around 6 months<br>• wean children from the bottle at around 12 months of age<br>• review night time breast-feeding patterns after 12 months of age | Child Health Professionals | Child health checks<br>Home visit | 6-8 months,<br>12 months,<br>18 months,<br>2, 3 and<br>4 years of age | Verbal advice |
| • Provide dietary counselling that is specific to the child and family and monitor compliance<br>• Advise parents to use sugar-free forms of non-prescription medicines | Child Health Professionals | Child health checks<br>Home visits | 6-8 months,<br>12 months,<br>18 months,<br>2, 3 and<br>4 years of age | Verbal advice |

# Preventing Early Childhood Caries



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# Oral Hygiene

## 4.1 Fluoride Therapy

"Fluoridation of drinking water remains the most effective and socially equitable means of achieving community wide exposure to the caries prevention effects of fluoride."

**NH&MRC Public Statement** 2007.

Fluoride plays a key role in the prevention of dental caries. The most efficient and cost effective way of reducing the prevalence of dental caries is by adjusting fluoride levels in public water supplies. There is strong evidence from studies conducted over many years of the efficacy and safety of fluoridation and it has been shown to have a particularly beneficial effect on children from low socio-economic backgrounds.

The use of fluoride toothpaste for the prevention and control of dental caries is documented to be both safe and highly effective in the prevention of caries. Many young children may eat or inadvertently swallow toothpaste so it is important for parents to store it where it is out of reach and to supervise its use carefully. Drinking water (especially fluoridated tapwater) is also beneficial for rinsing food particles from the mouth and reducing the level of acids in the mouth. When children cannot brush after eating, offer them a drink of water to rinse their mouths of food debris. This practice should not replace regular toothbrushing with fluoride toothpaste.

In contrast to the evidence on the effectiveness of water fluoridation and fluoride toothpaste, fluoride supplements (drops and tablets) have been quite varied in their effectiveness and have been associated with an increased risk of dental fluorosis in the permanent teeth. **Fluoride supplements in the form of drops or tablets are no longer recommended and should not be used.**

## Case Study 3

### Water fluoridation

Fluoridation of public water supplies has improved the dental health of people in NSW since it was first introduced in 1955. In that time Australia has gone from having amongst the worst teeth in the world to having the best. Fluoridated water has been the major contributor to this improvement.

In NSW 96% of the population on town water supply have access to fluoridated water and those that don't are at greater risk of having tooth decay.

A Sydney University research project, the Blue Mountains Study (1993–2003), showed more than a 73% reduction in tooth decay in the decade following the introduction of fluoridated water. This applied to both 5-6 year old and 12 year old children and represents a major improvement in the oral health of the community. A factor that is often forgotten is that fluoridated water improves the dental health of adults as well.

NSW has a longstanding policy to assist communities to fluoridate their public water supplies by giving local councils the funds to purchase the capital equipment.

***Tank water***

For people who are on tank water, the best advice is to brush their teeth with regular (adult) fluoride toothpaste after breakfast and before bed. This applies to the whole family - including children from 12 months old, because there is no fluoride in the water.

***Bottled water***

Bottled water is a better choice than carbonated soft drinks and juices but fluoridated tap water is best. Fluoridated bottled water may become more common following recent Australian standards approval.

# Oral Hygiene



## 4.2 Toothbrushing

Parents and caregivers are advised to keep their own teeth and gums healthy through regular brushing with fluoride toothpaste. Bacteria from parents' mouths can pass over to their child's mouth on dummies, teats, spoons and bottles. Children who brush twice a day with fluoride toothpaste have better oral health than those who brush less frequently. Adult supervision with toothbrushing is necessary up untill 7 years of age.

### Infants

As soon as the first teeth appear, parents should clean the teeth using a soft moist cloth or a soft baby toothbrush if the baby accepts it. From 12 months of age, use a small, soft toothbrush without toothpaste. Guidelines about when to introduce fluoride toothpaste should be varied for children who do not consume fluoridated water or who are at elevated risk of developing caries. **Check with a dental professional if you are unsure about what to advise.**

### Toddlers

From 18 months of age, use a small, soft toothbrush and a small pea size amount of fluoride toothpaste.

**Children should spit out toothpaste after brushing but not rinse.** Toothpastes with reduced levels of fluoride are recommended for children under six years of age who are not at high risk for dental decay.

Toothbrushing skills should be taught to children of all ages (Appendix F). The easiest way to brush a child's teeth is to:

- Stand behind them.
- Support their head with one hand and hold the toothbrush with the other.
- Look directly into the child's mouth or into a mirror to see where to brush (Figure 7).

Children learn by imitating others. If parents are having problems brushing their children's teeth, advise parents to brush their own teeth while their children brush theirs.

Inform parents that toothbrushes are made of hard plastic and can hurt a child if used incorrectly or with too much force.

*Figure 5: Cleaning baby's teeth with a cloth*

*Source: Westmead Hospital 2008*

*Figure 6: Supervised toothbrushing*

*Source: Westmead Hospital 2008*

*Figure 7: Learning by imitation*

*Source: www. istockphoto.com*

# Oral Hygiene

## 4.3 Summary

| Guideline | Who | Where | When | How |
|---|---|---|---|---|
| Advise parents to:<br>• Clean babies teeth with a clean moist soft cloth, as soon as the first teeth appear.<br>• Introduce a child sized soft bristled toothbrush, without toothpaste, as soon as possible and no later than 12 months of age<br>• Clean children's teeth twice a day with a small pea-sized amount of low fluoride toothpaste and a child sized soft bristled toothbrush, from around 18 months of age. Children should spit out, not swallow and not rinse.<br>• Introduce fluoride toothpaste earlier if children are at high risk for dental decay (check with a dental professional if unsure of advice).<br>• Allow children to do some of the toothbrushing themselves from around 3 years of age.<br>• Help children under 8 years of age to brush their teeth, especially when they are using fluoride toothpaste.<br>• Offer children a drink of water to rinse their mouths after eating, if a toothbrush is not available.<br>• Floss between children's teeth as soon as two teeth contact each other.<br>• Drink tap water because fluoridated drinking water is the most effective and efficient way of preventing dental caries.<br>• Do not use fluoride supplements – they are not recommended. | Child Health Professionals | Child health checks<br><br>Home visit | 6-8 months, 12 months, 18 months, 2, 3 and 4 years of age | Verbal advice<br>Written information (eg. toothbrushing poster) |

# Oral Hygiene




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Section 5

# Preventive Interventions

## 5.1 Anticipatory Guidance

Parents beliefs and attitudes towards oral health affects the way they practice oral health for their children. Evidence suggests that starting preventive interventions in infancy is crucial to preventing dental disease. Anticipatory guidance refers to practical and developmentally appropriate information that is given to parents and caregivers about what to expect during their child's current and approaching developmental phase.

Child health professionals can provide parents with information to promote oral health and to help them to prevent dental decay in their children. Topics for discussion during well child health checks are age specific and may include teething, appropriate use of bottle, nutritious drinks and snacks, brushing teeth, prevention of trauma, and dental visits. Because the bacteria that cause dental caries can be transmitted easily from mother to infant, anticipatory guidance should be provided to pregnant women, new parents, and other primary caregivers. Advice should be modified based on the oral health risk assessment and in response to the needs of the family.

## 5.2 Motivational Interviewing

Another technique for engaging parents in preventive practices is to undertake parent-centred brief counselling, otherwise known as motivational interviewing. Steps described by Ramos Gomez et al. include:

- establish rapport/trust
- ask questions to help parents identify the problem and listen to what they say
- encourage parents and prepare them for change by discussing the hurdles that may interfere with action
- respond to resistance and prepare them for the inevitable bumps along the road
- schedule a follow up appointment.

# Preventive Interventions



## 5.3 Summary

| Guideline | Who | Where | When | How |
|---|---|---|---|---|
| Provide Preventive Interventions to pregnant women | Maternal and perinatal child health professionals<br>General Practitioners & Practice Nurses | Maternity visits | At each visit | Verbal advice<br>Written information (eg. Having a Baby, by NSW Health) |
| Provide Preventive Interventions to new parents/caregivers | Child Health Professionals | Child health checks<br>Home visits | 6-8 months,<br>12 months,<br>18 months, 2, 3 and 4 years of age | Verbal advice<br>Written information<br>Lift the Lip and See my Smile brochures and Appendix C |


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Section 6

# Professional Education

Oral health education for child health professionals is available to supplement and reinforce the information covered in these guidelines, including:

- An overview of the scope and causes of early childhood caries.
- How to recognise different stages of dental caries.
- How to position a parent/caregiver and infant/toddler to complete a preventive oral health assessment.
- Advice about providing anticipatory guidance during pregnancy and at child health checks.
- How to brush children's teeth, wean from the bottle and encourage healthy eating habits.

The education is evaluated by collecting:

- Feedback from participants on their ability to integrate an oral health assessment and anticipatory guidance into their daily practice.
- The number of referrals received by public oral health services from child health professionals.
- The percentage of appropriate referrals.

## 6.1 Summary

| Guideline | Who | Where | When | How |
|---|---|---|---|---|
| Provide oral health education for all child health professionals | LHD Oral Health Professionals | Community centres, other locations | Annually, or as required | Education package provided to AHS oral health professionals |
| Attend oral health education | Child Health Professionals | Community centres, other locations | Annually, or as required | In person, Tele health, E-learning, regular newletter updates |

# Additional Information



## 7.1 Teething

Teething, the emergence of the first primary (baby) teeth through a baby's gums, is a normal part of every child's development. Teething can begin as early as 3 months and continue until a child is 3 years of age. The first teeth to appear are usually the bottom two front teeth, typically between the ages of 4-7 months, although it is not unusual for teeth to appear as late as 12-14 months of age.

Whenever teething begins, parents may notice that their child seems to drool more and wants to chew on things. For some babies teething is painless; others may experience brief periods of irritability. The gums may appear red and swollen and, if pressed, may feel hard and pointed.

Giving the baby something to chew on, such as a clean chilled teething ring, toothbrush or clean moist face cloth, or rubbing their gums with a clean finger can help to relieve symptoms. If advising teething gels for sore gums be certain that the product is safe, effective, alcohol and sugar-free, and does not contain aspirin.

***Note:*** *Teething does not cause fevers or diarhhorea. If a child has these symptoms, investigate other possible causes and treat as you would at any other time.*

## 7.2 Natal and Neonatal Teeth

Natal teeth are present at birth and in most cases are the normal primary (baby) incisor (front) teeth erupting early. A neonatal tooth is one that erupts within 30 days of birth. These teeth may be mobile because at such a young age there is very little root formed.

If the teeth are not too mobile no treatment is indicated as they will become firm with time. If the tooth is excessively mobile it may be shed spontaneously or may require referral to an oral health professional. The establishment of satisfactory breast/bottle feeding is probably the most important consideration when deciding whether to extract the tooth or not.

If extraction is considered in the first weeks of life it is important to make sure there is no neonatal jaundice present due to potential for interference with blood clotting.

Babies with posterior (back) natal teeth should be referred to oral health services for further investigation, as they may be associated with syndromes or other diseases.

*Figure 8: Natal tooth*

*Source: Widmer R, 2006*

## 7.3 Eruption Cysts

Eruption cysts appear as follicular enlargements just prior to eruption (Figure 8). They may be blue-black in colour, are usually painless and require no treatment unless there is infection present.

*Figure 9: Eruption Cyst*

*Source: Widmer R, 2006*

# Additional Information



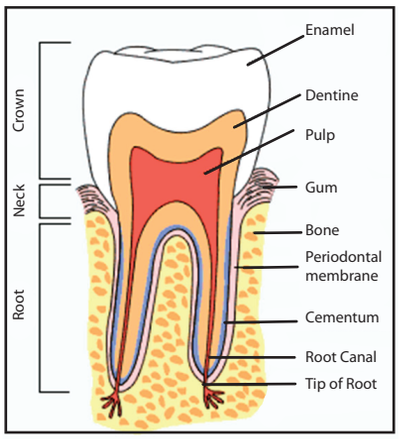
## 7.4 Tooth Structure

This drawing of a healthy molar tooth cut in half lengthways (Figure 10) shows the layers of the tooth and the internal structure, as well as how the tooth relates to the gum and surrounding jaw bone.

The crown is the part of the tooth that is visible above the gum (gingiva). The neck is the region of the tooth that is at the gum line, between the root and the crown. The root is the region of the tooth that is below the gum.

Some teeth have only one root, for example, incisors and canine (eye) teeth, whereas molar teeth have 2 or 3 roots per tooth.

*Figure 10: Tooth Structure*




*Source: www. mydr.com.au*

## 7.5 Dental Trauma

In the management of any dental trauma, the health professional needs to follow a logical sequence in order to estimate the extent of the injury and to make an accurate diagnosis.

### Dislodged (avulsed) teeth

The sequence that should be followed when a tooth is knocked out of its socket is:

1. Remain calm and try to find the tooth. A dentist or dental therapist will want to see the tooth and/or the tooth fragment(s). It is important to know whether the tooth or tooth fragment(s) have been inhaled. **Inhaled teeth are a medical emergency and the child must be taken immediately to the Emergency Department of a Hospital for a check-up and a possible chest x-ray.**

2. If it is a **primary (baby) tooth** do not put it back in the socket because it could damage the underlying developing adult tooth. **Children aged 0-4 years of age are more likely to have baby teeth than permanent (adult) teeth.** If there is any doubt about whether it is a baby tooth or an adult tooth, put the tooth in milk and take the child to a dentist immediately.

3. If the tooth is an **adult tooth,** place the tooth back into the socket immediately. If this is not possible, place it in milk or saline (e.g. contact lens solution) immediately to avoid dehydrating and damaging the delicate cells on the root. **Do not rinse or scrub dirt off the tooth.** The dentist will do this if necessary. **Do not allow the tooth to remain dry at any stage.** Get to a dentist or the Emergency Department of a Children's Hospital as soon as possible.

# Additional Information



### Displaced tooth (knocked out of alignment)

If a **baby** tooth has been displaced from its normal position in a labial (outward) or palatal (inward) direction contact the dentist or dental therapist immediately. If the child can bite normally with no interference then no treatment is necessary apart from reassurance, a soft diet and to swab the area with chlorhexidine mouthwash. If the tooth interferes with the bite, extraction may be necessary.

### Soft tissue injuries

If a child has a mouth or lip injury (Figure 11) stop any bleeding to the soft tissues by applying pressure. Deep cuts to the tongue, lips or cheeks will require suturing by the dentist. If there is any associated dental injury always look for tooth fragments that may be lodged in the lips or the cheek tissues.

*Figure 11: Soft tissue injury*

*Source: Cameron & Widmer 2003*

### Broken or chipped tooth

If a tooth is chipped or fractured (Figure 12), contact the dentist or dental therapist immediately. Find the broken tooth fragment, place it in milk and take it to the dental clinic.

The dentist or dental therapist may reattach the fragment or may choose to protect the chipped tooth from further damage by placing a tooth coloured filling material.

*Figure 12: Broken or chipped tooth*

*Source: Cameron & Widmer 2003*

### Protection from sports injuries (older children and adults)

It is always better to prevent an injury than to repair one. Mouthguards are recommended for all types of contact sports. They help protect the teeth and soft tissues and the earlier a child begins to wear one, the easier it becomes to get used to it.

The most dangerous sports are those with a risk of falls or of head contact with other players or equipment including rugby, league, baseball, basketball, soccer, hockey, and skateboarding. Although mouthguards may be purchased over the counter, a custom-fitted mouth guard made by a dentist offers the most effective protection.

*Note: In the weeks or months following the dental injury, if you notice any unusual red or swollen gums in the child's mouth, or dark spots or colour change on the child's tooth, make an appointment to see a dentist or dental therapist as soon as possible.*

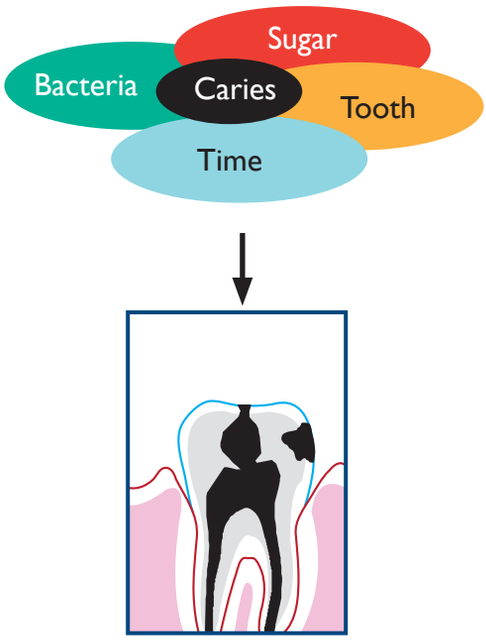
# Additional Information



## 7.6 Aetiology of Dental Caries (Tooth Decay)

Tooth decay requires the simultaneous presence of three factors: plaque bacteria, sugar, and a vulnerable tooth surface (Figure 12). Although several bacteria found in the mouth can cause tooth decay, the primary disease agent appears to be Streptococcus mutans. The sugars used by the bacteria are simple sugars such as glucose, sucrose, and lactose that are converted into lactic acid. When this acid builds up on an unprotected tooth surface, it dissolves the minerals in the enamel, creating holes and weak spots (cavities). As the decay spreads inward into the middle layer (the dentine), the tooth becomes more sensitive to temperature and touch. When the decay reaches the centre of the tooth (the pulp), the resulting inflammation (pulpitis) produces a toothache.

*Figure 13: Aetiology of dental caries*




*Source: http://www.mchoralhealth.org/openwide*

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# Glossary of Dental Terms



| | |
|---|---|
| **Acidogenicity** | The ability to produce acid. Acidogenic bacteria are closely associated with the initiation and progression of caries. |
| **Anticipatory guidance** | The process of planning ahead by providing practical, developmentally appropriate health information about children to their parents in anticipation of significant physical, emotional and psychological milestones. |
| **Cavity** | A hole or weak spot in the tooth surface caused by decay. |
| **Child health checks** | Regular monitoring of a child's growth and development by a health professional. |
| **Child health professional** | Any general health professional who works with children, including General Practitioners; Paediatricians, Child & Family Health Nurses, Aboriginal Health Workers, Families First Officers, Midwives, others as identified. |
| **Demineralisation** | Loss of minerals from the tooth surface due to the absence of acids in the mouth. |
| **Dental health professional** | Any dental professional, including General Dentists, Paediatric Dentists and Dental Therapists, Oral Health Therapists and Dental Hygienists. |
| **Dental Caries** | The medical term for tooth decay. |
| **Dentine** | The middle layer of a tooth, which makes up most of the tooth's mass. |
| **Early Childhood Caries (ECC)** | The term used to describe the form of dental caries. A transmissible bacterial disease that affects the baby teeth of preschool aged children. Previously may have been called "baby bottle decay" or "nursing caries". |
| **Enamel** | The hard, outermost surface of a tooth. |
| **Fluoride** | The tasteless soluble form of the natural element fluorine that is used in fluoridated water, fluoride toothpastes, and fluoride products applied directly to teeth to prevent decay. |
| **Fluorosis** | A"mottled"enamel condition that results from the intake of too much fluoride during the period of tooth development, usually from birth to approximately 6-8 years of age. |
| **Plaque** | A soft, sticky, colourless film of germs that forms on teeth. Plaque makes the acids that cause tooth decay. |
| **Pulp** | The tissue in the middle of a tooth containing blood vessels and nerves. |
| **Fissure Sealant** | A thin plastic substance that is painted over the chewing surfaces of teeth as a protective coating. |

# Appendices

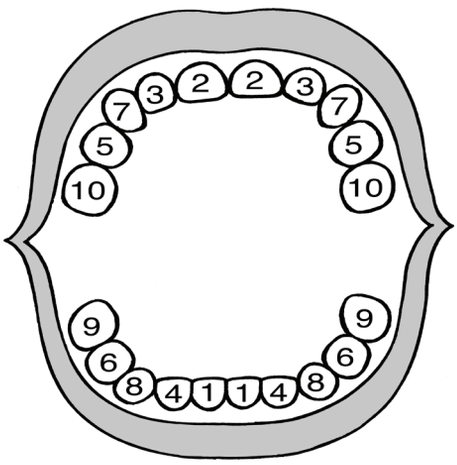


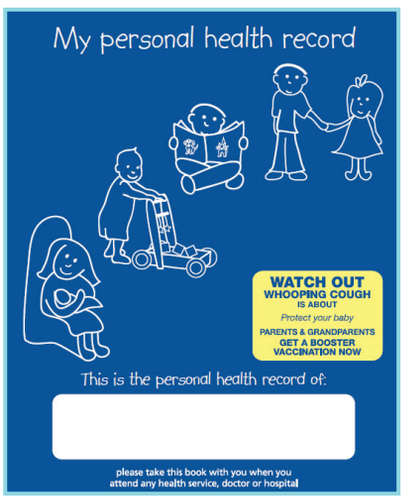
## APPENDIX A: Oral health information, personal health record

### Your child's teeth – keeping them healthy

Healthy teeth are important for general health and speech development. Most dental problems can be prevented. Early identification of children at risk of dental disease, and early detection of the disease, can prevent widespread destruction of the teeth and expensive dental treatment in a hospital under general anaesthesia. By answering the dental questions in this book, you can help to identify any potential problems and learn how to care for your child's teeth properly.

### When do babies' teeth come through?




| Usual eruption order | Name of tooth | Approx. age at eruption |
|---|---|---|
| 1,2,3,4 | Incisors | 6-12 months |
| 5,6 | Baby first molars | 12-20+ months |
| 7,8 | Canines | 18-24 months |
| 9,10 | Baby second molars | 24-30 months |

*The above average ages are only a guide. There is no need for concern in your child's teeth come through either before or after these ages.*

# Appendices



## APPENDIX A: Oral health information, personal health record

### *Bottles and Dummies*

Breast milk is best for your baby. If your child is not breastfeeding:

- Put only breast milk or formula or water in your baby's bottle.
- Always hold your baby when feeding and remove the bottle when they have had enough to drink.
- Putting your baby to bed with a bottle can cause tooth decay.
- Honey, glycerine, condensed milk or other sticky sweet foods or liquids on your baby's dummy can cause tooth decay.
- From 6 months of age most children can learn to use a cup with practice – at around 12 months of age replace bottles with cups.

### *Teething*

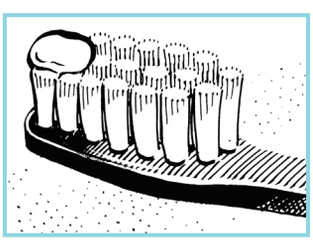
- If your child is uncomfortable when teething, offer a teething ring or cold wash cloth.
- If there are other symptoms, consult a Doctor or a Child and Family Health Nurse.

### *Food and Drink*

- Offer healthy food for meals and snacks from around 6 months of age.
- Leave baby foods unsweetened.
- Tap water (boiled till 12 months of age) is the best drink in-between meals and at bedtime.
- Keep treats, sweet snacks, and sweet fizzy drinks for special occasions only.

### *Toothbrushing Tips*

- Keep your own teeth and gums clean and healthy. Germs from your mouth can pass over to your baby's mouth on dummies, bottles and spoons.
- As soon as the first teeth appear, clean them using a child sized soft toothbrush, but not with toothpaste.
- From 18 months of age clean their teeth twice a day with a small pea-sized amount of low fluoride toothpaste and a child sized soft toothbrush. Children should spit out, but not swallow, and not rinse.
- Toothpaste may be introduced earlier, based on the advice of either a health professional with training in oral health or an oral health professional.
- An adult should apply toothpaste for children under 6 years of age and store toothpaste out of reach of children.
- From around 3 years of age children can do some of the toothbrushing themselves, but they still need an adult's help to brush their teeth until they are around 7 to 8 years of age.
- Watch for early signs of tooth decay-white or brown spots that don't brush off. Seek professional advice as soon as possible .
- Make sure your child has an oral health risk assessment by their first birthday-this can be conducted by a health professional with training in oral health or by an oral health professional .



## APPENDIX B: Oral Health Advice Form

# Oral Health Advice Form

**Fax No:** *(write your LHD number)* **MRN:**

**CHILD'S DETAILS**

**Family Name:** _____ **First Name:** _____

**Address:** _____

**Child's Medicare No:** _____ Date of Birth: _____

**Interpreter required:** ☐ **Yes** ☐ **No** **If yes, which language**

**Aboriginal and /or Torres Strait Islander:** ☐ **Yes** ☐ **No**

**PARENT/GUARDIAN DETAILS**

**Name:** _____

**Relationship to child:**

**Mobile Phone No:** _____ **Hm/Wk Phone No:** _____

**I give consent for the Public Oral Health Service to use this information.**

**Signature:** _____ **Date:** _____

☐ **Parent chooses to go privately (please obtain parental consent to forward this form to oral health services for de-identified Lift the Lip reporting purposes only)**

| **Oral Health Assessment** *(tick boxes)* | **Action** |
|---|---|
| ☐ Trauma or facial swelling | 1. Immediate transfer to Dental Call Centre *(dental call centre phone number)* |
| ☐ White spot demineralisation | Refer to: Early Childhood Oral Health Coordinator **Phone:** **Fax:** **Email:** *(write your own relavant information)* |
| ☐ Cavitated lesions *(holes)* | |
| ☐ Family requires oral health support | |
| ☐ Frequent snacking *(especially high sugar intake)* | 1. Discuss with parent and record findings<br>2. Re-assess at next scheduled health check |
| ☐ Child takes a bottle to bed *(or uses at will by day)* | |
| ☐ Special health needs / frequent medications | |
| ☐ Visible plaque | |

**REFERRED BY** (Print name and title): _____

Phone No: _____ Fax No: _____

Email: _____

Postal Address *(if required for feedback)*: _____

**ADDITIONAL INFORMATION** _____

_____

*Centre for Oral Health Strategy NSW Nov 2008*

## APPENDIX C: Anticipatory guidance for parents/caregivers

| Child's Age | Health tip |
|---|---|
| **Prenatal** | **Do you (parent) have a toothbrush and fluoride toothpaste?** Keep your own teeth and gums healthy. Have a dental check-up and, if necessary, treatment before your baby is born. Brushing your teeth with fluoride toothpaste will help prevent tooth decay. Remember to also brush your tongue. |
| **6 – 8 month health check** | **Do you (parent) have a toothbrush and fluoride toothpaste?** Germs cause cavities. These germs can spread from your mouth to your baby's teeth. **A healthy mouth for you and your child starts with you – Brush, floss, and get regular dental check-ups.** Start caring for your baby's new teeth. As they come in, wash them daily with a clean damp cloth or very soft small toothbrush. Check your baby's teeth and gums often – '**lift the lip**'. Watch for changes in your baby's teeth - white, brown or black spots. **Introduce a training cup.** If you put your baby into bed with a bottle, fill it with **water only**. Milk or juice sticks to the baby's teeth at night and can cause cavities. |
| **12 month health check** | **Do you (parent) have a toothbrush and fluoride toothpaste?** For your child a small soft toothbrush can now be used, but not with fluoride toothpaste. Check your baby's teeth and gums often – '**lift the lip'**. Watch for changes in your baby's teeth – white, brown or black spots. Ask the nurse or doctor to check your baby's teeth and help you find a dentist or dental therapist if necessary. **Start to wean from the bottle.** |
| **18 months health check** | **Do you and your child have a toothbrush and fluoride toothpaste?** Use a small soft toothbrush and a small pea size amount of toothpaste. Brush your child's teeth **twice a day. Floss your child's teeth as soon as any two teeth are in contact with each other.** If you have not already taken your baby to a dentist or dental therapist, talk to your doctor or child & family health nurse and ask for help in finding a dentist or dental therapist. **No more bottles.** |
| **2 year health check** | **Brush your child's teeth twice a day.** Use a small soft toothbrush and a small pea size amount of fluoride toothpaste. Floss your child's teeth as soon as any two teeth are in contact with each other. Offer your child healthy food everyday, limit sugary snacks and juice. If you haven't already done so, make an appointment for your child to see the dentist or dental therapist. If you need help in finding a dentist or dental therapist, ask your doctor or child & family health nurse. |
| **3 year health check** | **Do you and your child have a toothbrush and fluoride toothpaste?** Help your child brush their teeth **at least twice a day**. Use a small soft toothbrush and a pea size amount of toothpaste. Healthy teeth help your child chew and speak. Cavities are painful and need immediate treatment. Offer your child two or three healthy snacks a day. Make an appointment for your child to see the dentist or dental therapist. |
| **4 year health check** | **Do you and your child have a toothbrush and fluoride toothpaste?** Help your child brush their teeth **at least twice a day**. Check to make sure teeth are brushed well. Use a small soft toothbrush and a pea size amount of toothpaste. Floss your child's teeth daily. **All children need a dental check up before they start school. Make an appointment for your child to see the dentist or dental therapist.** Toothache can cause missed days from school and can affect your child's ability to concentrate and enjoy school. Healthy teeth help your child chew and speak. Reinforce good eating and brushing habits. |

*Source: Adapted from Oral Health Tips for Parent / Caregiver: Kids Get Care web site at:. www.metrokc.gov/health/kgc*

# Appendices



## APPENDIX D: Frequently asked questions

### 1. Pregnancy

Q ***Can oral health have an effect on pregnancy?***

A Yes, growing evidence suggests a link between gum disease and premature, underweight births. Pregnant women who have gum disease may be more likely to have a baby that is born too early and too small.

Q ***What can I do to make sure I have good oral health during pregn***ancy?

A The best advice for pregnant women is to visit a dentist for a dental examination and restoration of all active decay.

Q ***What can I do to prevent oral problems from developing during pregnancy?***

A During pregnancy teeth and gums need special attention. Regular tooth brushing with a fluoridated toothpaste and flossing daily will help reduce dental problems.

### 2. Bottles, dummies and thumb sucking

Q ***When should bottle-feeding be stopped?***

A There is general agreement that a good time to stop using a bottle is around one year of age.

Q ***How can I settle my child to sleep without giving them a bottle?***

A Try holding, rocking, reading, singing or rubbing their back.

***Q*** ***How can I stop the bottle altogether?***

A Weaning from the bottle can follow two paths. The first is to stop the bottle suddenly – a 'cold turkey' approach. If this is too hard, the second method is to gradually reduce use of the bottle and replace it by offering a cup . Another way that has worked for many parents is to get the child to post their bottles to a friend or neighbour that has a newborn baby. You will need to prepare the child for this by saying that now they are grown up they no longer need a bottle as much as the new baby. The event needs to be fun.

Q ***What is worse, thumb-sucking or using a dummy?***

A Thumb suckers may have a greater problem breaking the habit than do dummy suckers. Putting honey, glycerine, or other sticky foods or liquids on a child's dummy can put them at risk of tooth decay.

Q ***When should my child stop thumb sucking and dummy habits?***

A Most children stop thumb sucking and dummy habits on their own by age two. If your child has not stopped by age four your dentist or dental therapist can suggest ways of stopping it.

Q ***How can I break the sucking habit?***

A Reward the child with hugs or praise, offer encouragement and rewards, offer toys to play with while watching TV and in the car.

## APPENDIX D: Frequently asked questions

### 3. Eruption of teeth

Q ***Any advice on teething?***

A From around six months to three years of age, your child may have sore gums when teeth come in. Many children like to chew on a clean teething ring, a toothbrush, a cool spoon or a cold wet washcloth. Some parents simply rub the baby's gums with a clean finger. If your child has a fever or diarrhoea, take them to see a doctor.

Q ***Are baby teeth important?***

A Yes. Baby teeth help children to speak clearly and chew their food. They also hold space in the jaws for the adult teeth. If the baby teeth are removed too early it can cause crowding of the adult teeth.

### 4. Tooth brushing tips & supervision

Q ***When should I start to clean my baby's teeth?***

A Start as soon as the first tooth comes in.

Q ***What should I use to clean my baby's teeth?***

A At first clean your child's gums and teeth with a clean cloth soft. When the child can hold an infant toothbrush and play with it at bath time, use this to brush the teeth, but not with toothpaste. Do this before bedtime each day.

Q ***But it's a battle. What can I do?***

A The mouths of children are very sensitive. Many well-meaning parents are too rough. Practice on a partner first. When your partner thinks you are gentle enough, then try brushing your child's teeth. Do not share toothbrushes. Try brushing your teeth at the same time, or let them brush your teeth if you can brush theirs. Buy a toothbrush book. Set a two-minute timer.

Q ***When should we begin using toothpaste and how much should we use?***

A From 18 months of age start using a small pea size amount of fluoride toothpaste on a small toothbrush before bed and in the morning. Show your child how to spit out, and have them copy you until they can spit out. Do not rinse with water after spitting.

*NOTE: Advice on when to start using toothpaste may be varied. Introducing fluoride toothpaste earlier is recommended for children whose risk of dental disease may be greater due to socio-environmental risk factors (eg. no fluoride in public water supply).*

Q ***What if my child doesn't like toothpaste?***

A Try different brands of fluoride toothpaste, or just brush with water. The low fluoride toothpastes have mild flavours and are suitable for children's sensitive taste buds. The important thing is to remove food and dental plaque from around the teeth and gums.

## APPENDIX D: Frequently asked questions

### 5. Food and drink

Q ***How do I make my child's diet safe for their teeth?***

A Children need a balanced diet, including fruit and vegetables, bread and cereals, meat and meat alternatives, and dairy foods. Between meals the best drink is tap water, and snacks should be unsweetened and not sticky. Keep treats such as lollies and fizzy drinks for special occasions – offer them at the end of a meal instead of in-between meals. The more times a day that a child has sugary foods and sweet drinks the more likely it is that their teeth will decay. Children do not need to have food and drinks at bedtime. This is also the most important time to brush the teeth with fluoride toothpaste.

### 6. Visits to the dentist or dental therapist

Q ***When should I take my child for their first dental check-up?***

A "First check-up by first birthday" is a good rule. Your own dentist may tell you not until age three but the latest advice is to have a check-up when the first tooth comes in, usually between six and twelve months of age. The first check-up may be done by a child health professional with training in oral health. They may refer you to a dentist or dental therapist if necessary. Alternatively, you may choose to contact a dentist directly.

Q ***Why is an early check-up so important?***

A Early examination and preventive care will protect your child's smile now and in the future. If tooth decay is caught early enough, the damage can be reversed with home care and fluoride treatments.

## APPENDIX E: Contacts, links and resources

### 1. Contact telephone numbers for Public Dental Clinics in NSW

| Public Dental Call Centre | Phone Number |
|---|---|
| Sydney | (02) 9293 3333 |
| South Western Sydney | |
| South Eastern Sydney | 1300 134 226 |
| Illawarra Shoalhaven | 1300 369 651 |
| Northern NSW | 1300 651 625 |
| Mid North Coast | |
| Hunter New England | |
| Central Coast | 1300 789 404 |
| Northern Sydney | 1300 732 503 |
| Murrumbidgee | 1800 450 046 |
| Southern NSW | |
| Western Sydney | (02) 9845 6766 or 1300 739 949 |
| Nepean Blue Mountains | (02) 4734 2387 |
| Far West | 1300 552 626 |
| Western NSW | |

# Appendices



## APPENDIX E: Contacts, links and resources

### 2. Links for Professionals

| | |
|---|---|
| **Centre for Oral Health Strategy NSW** | www.health.nsw.gov.au/oralhealth |
| **NSW Kids and Families** | www.health.nsw.gov.au/kids |
| **Multicultural health website** | www.mhcs.health.nsw.gov.au |
| **Healthy Kids Website** | www.healthykids.nsw.gov.au |
| **NSW Messages for a Healthy Mouth** | www.health.nsw.gov.au/publications/healthy-mouth-2007.pdf |
| **Raising Children Network** | www.raisingchildren.net.au |
| **American Academy of Paediatric Dentistry** | www.aapd.org |
| **National Maternal and Child Oral Health Resource Centre USA** | www.mchoralhealth.org |
| **12345 First Smiles** | www.first5oralhealth.org |

### 3. Links for parents

**Healthy kids website**
www.healthykids.nsw.gov.au

**Raising Children Network**
www.raisingchildren.net.au

**Colgate Oral Care Brochures**
www.colgateprofessional.com.au/patiented/patiented.asp

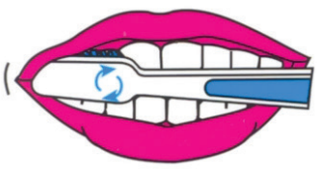
**Oral B Patient Resources**
www.oralbprofessional.com/us/patresources/default.asp

**Australian Dental Association NSW Branch Protecting Tiny Teeth**
www.protectingtinyteeth.com.au

### 4. Books

| | |
|---|---|
| **Paediatric Dentistry**<br>**Dental Care for Children – a guide for parents**<br>Email: kidshealth@chw.edu.au | Richard Widmer & Gerry Wright |
| **Handbook of Paediatric Dentistry**<br>3rd Ed 2008. Mosby Pty Ltd. ISBN 0723431868 | AC Cameron & RP Widmer |
| **Nutrition, Diet & Oral Health**<br>Oxford University Press 1999 ISBN 0192629379 | Andrew J Rugg-Gunn & June Nunn |

## APPENDIX F: Toothbrushing technique



### Outsides

- Using small circles brush one side of the mouth to the other, cleaning all the teeth.

### Top teeth on the inside

- Brush every tooth making sure you brush to the gums.

### Bottom teeth on the inside

- Brush every tooth making sure you brush to the gums.

### Chewing surfaces

- Gently scrub the surfaces of all the top and bottom teeth, reaching back to the last tooth.

*Source: "Toothbrushing tips for kids under 5", NSW Health Centre for Oral Health Strategy*