

THE MOUTH

**Oral Health Information for
Primary School Nurses**

February 2005

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This document describes the generally accepted practice at the time of publication.

It is a guide only and as such is a general summary of the clinical knowledge.

Primary School Nurses should regularly update their knowledge of the area and exercise their clinical judgment when applying this information.

If you have any doubts as to the correct application of this information, you should obtain advice from a dental professional. Section 11 provides further information on dental services and contacts.

No warranty is made, express or implied, that the information contained in this document is comprehensive. Parties associated with this publication accept no responsibility for any consequence arising from inappropriate application of this information.

The Mouth: Oral Health Information for Primary School Nurses is also available at www.dhsv.org.au/psn.pdf

i. Foreword

We are pleased to present *The Mouth: Oral Health Information for Primary School Nurses*, a tool for oral health promotion developed by Dental Health Services Victoria in conjunction with the Primary School Nursing and Dental Health Programs at the Department of Human Services. The resource is designed to support and guide Primary School Nurses to promote good oral health and prevent disease. Early detection and intervention in health issues are key to the role of the Primary School Nurse.

The Mouth: Oral Health Information for Primary School Nurses supports broader Victorian Government policy frameworks such as Best Start and Children First, which recognise the importance of early intervention of risk factors and timely intervention. This resource complements *The Teeth: Oral Health Information for Maternal and Child Health Nurses*, which was widely circulated in 2003 and has been warmly received.

Oral health is essential for health and wellbeing. Primary School Nurses are well placed to promote oral health for young children through their regular visits to schools and health assessment of school entrants.

The Mouth: Oral Health Information for Primary School Nurses provides information to assist Primary School Nurses to promote oral health and undertake mouth checks in their health assessment role. Oral health materials for parents and carers are also provided. The format is designed so updated information and new resource materials can be added.

Many people contributed expertise and enthusiasm to the development of this resource. We wish to thank all those who have been involved in the process.



Hon Bronwyn Pike MP

Minister for Health



Ms Robyn Batten

Chief Executive Officer
Dental Health Services Victoria

ii. Acknowledgements

A significant proportion of this document has been reproduced from *TEETH: Oral Health Information for Maternal and Child Health Nurses*, which was produced by Dental Health Services Victoria in 2004. The work of the people who contributed to that document is gratefully acknowledged.

Numerous other people provided their expertise in the preparation of this resource. The work of those people is also gratefully acknowledged.

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1. Introduction

There are many reasons for promoting oral health in primary school aged children. Good oral health is an essential part of general health and wellbeing, yet its importance is not widely recognised by the general community. The deciduous dentition (“first” or “primary” teeth) is important for primary school aged children to develop their eating ability, speech patterns, appearance and later to guide the eruption and position of the permanent teeth (DHSV 2003).

Oral disease is largely preventable. Many children still suffer unnecessarily from the pain and complications of dental decay. School Dental Service data (2003) show that 41 percent of five year old children experienced dental caries (decay), 75 percent of which was untreated (DHSV, 2004). Every child is at risk of developing dental caries, although some groups of children are more vulnerable than others. There are marked inequalities, with those from lower socio-economic backgrounds, culturally and linguistically diverse communities and rural communities experiencing the greatest risk. Children living in fluoridated areas have far better oral health than their counterparts living in non-fluoridated areas (DHS, 2004a).

1.1 Oral Health Policy Context

Oral Health is a recognised priority of The Victorian Department of Human Services (DHS). *Promoting Oral Health 2000-2004: Strategic Directions and Framework for Action* (www.dhs.vic.gov.au/phd/oral/index.htm) provides a context and framework for oral health promotion and encourages the development of the oral health promotion capacity of the oral health and community- based workforce.

A central objective of the strategy is to “increase the capacity of the community-based workforce to integrate oral health concerns into their practice, to facilitate the identification and implementation of oral health promotion practices and/or referral to appropriate oral health services”.

School nurses are members of this community-based workforce and are well placed to promote oral health for primary school children.

1.2 Primary School Nursing Policy Context

The School Nursing Program has been in existence since the early 1900's.

The service has changed significantly over the years to reflect the needs of a changing community. In the 1970's and 1980's, both nurses and general practitioners provided a school health service from preschool to secondary school.

A review in 1996 resulted in a new framework, which developed health goals and targets aimed at disease prevention. It also concentrated on better resourcing those who may be affected by an illness or disability as well as providing support to families. At a similar time, *Future Directions for Dental Health in Victoria (1995)* noted a need to develop a state wide oral health promotion strategy as a key action to prevent oral disease and promote oral health. This document recommended that all age groups should be targeted and that there should be identified roles for health, education and welfare providers regarding oral health promotion.

Taken together, these two documents provide an important policy context for the primary school nursing role in addressing oral health.

1.3 The Role of the Primary School Nurse

The role of the Primary School Nurse is one of surveillance, screening and health promotion. There are 67.3 FTE nurses who visit approximately 1,750 state, catholic and independent primary schools in the state.

The Primary School Nursing Program provides specific health surveillance activities for children at school entry as part of a network of support services offered to families within the school and local community.

A health assessment is undertaken with all school entry aged children, as well as any other students of any grade where a parent, teacher or nurse has a concern.

The assessment includes :

- administration of the School Entrant Health Questionnaire (SEHQ) for parents, which addresses information regarding their child's health and parental concerns, and provides consent for the nurse to undertake the assessment;
- a universal distance vision screening of preparatory students;
- a targeted hearing test of children where concerns have been identified; and
- guidance and reassurance to parents about their concerns identified through the School Entrant Health Questionnaire or via the Student Referral process.

Additional services include :

- health assessment of students with additional needs, newly enrolled students from overseas, students referred, and all students attending English Language Centres;
- health promotion and education activities through both specific activities (eg group sessions) and opportunistically through daily contact with students, teachers or parents in line with program goals including immunisation, safety, nutrition, positive parenting and asthma management;
- resourcing school communities by providing support and information, to facilitate increased awareness and knowledge of health issues;
- developing strategies to assist families in accessing specific local family support services;
- referral of identified conditions to another health service where appropriate for further assessment and treatment; and
- follow-up assessments of students with previously identified health conditions to check progress and health gain (usually within 6-12 months).

Mouth checks and referrals for any identified oral health concerns are included as part of the prep health assessment. These mouth checks are an excellent opportunity to ensure early identification of and intervention in oral disease in school children, and to provide advice and information to parents regarding oral health. Mouth checks are implemented as a result of expressed concerns by parents and/or teachers.

Primary School Nurses are in a position to:

- initiate referrals for treatment as required;
- provide educational resources about oral health to both parents and teachers within the school community, as well as deliver some oral health promotion activities within the school environment;
- equip parents with up to date information about the importance and benefits of fluoride as well as a number of other oral health promotion issues; and
- provide data which is helpful in identifying health issues, as well as providing evidence for health planning initiatives around oral health issues for prep children, through the collection of information on the School Entrant Health Questionnaires (SEHQ's).



2. Use of this Resource

The purpose of *The Mouth: Oral Health Information for Primary School Nurses* is to provide Primary School Nurses with oral health information and tools to assist them in their professional role to address oral health in children.

The information provided has been developed recognising the knowledge and skill base of Primary School Nurses, and it is intended as support material to use as part of their wider health assessments.

The information can be updated through the Dental Health Services Victoria website: www.dhsv.org.au/resources.asp. The looseleaf format will allow hard copies of these updates to be inserted.

Section 3 - The Prep Mouth: outlines normal development of teeth and shows a healthy mouth of a child of this age group.

Section 4 - Tooth Structure and Development: outlines tooth types and structure and their eruption patterns.

Section 5 - Mouth Checks: provides a framework, including rationale and indicators, to assist Primary School Nurses to undertake effective targeted oral health checks.

Section 6 - Promoting Individual Oral Health Practices: provides information on oral health maintenance, including management of thumb, finger and lip sucking.

Section 7 - Preventive Measures: covers aspects of personal safety measures.

Section 8 - Promoting Population Oral Health: Fluoride: addresses the issue of fluoride. It provides information about water fluoridation and its effect on dental health in Victoria.

Section 9 - Dental Disease and Trauma and Other Identified Problems: provides information and photographs to describe dental disease and early childhood caries (ECC) and advice to parents about common oral health issues.

Section 10 - Oral Pathology: provides information and photographs to describe a number of pathological conditions. These should assist Primary School Nurses to explain conditions to parents and to refer to a dental professional where there is a concern.

Section 11 - Dental Services and Contacts: lists the public and private dental services available for referral in Victoria, and other useful contacts.

Fact Sheets For Parents - address children's oral health and are included for Primary School Nurses to support their work. Parents and teachers will benefit from these as they reinforce information discussed with the child during the health assessment.

In Addition - age specific Tooth Tips Sheets for 0-6 year olds are also available. These are easily photocopied for distribution to parents and are available in the following community languages: Arabic, Vietnamese, Chinese, Somali, Turkish and Macedonian.

All resources are downloadable from www.dhsv.org.au/resources.asp

Section 12-Bibliography: lists the references used in this document.

3. The Mouth of a Prep Child

3.1 A Healthy Mouth



Healthy child's mouth (aged 5)

The major structures that are visible when looking inside the mouth include the mucosal lining of the lips, cheeks, gums, teeth, tongue, palate, uvula, tonsils and posterior oropharynx.

In a healthy mouth:

- the mucous membranes (inside of the lips, cheeks, palate and underside of the tongue) should be bright pink, smooth, glistening, uniform and moist;
- permanent teeth will appear to have a yellowish appearance compared to plaque-free deciduous teeth;
- the teeth present should be whitish in colour and smooth (free of plaque);
- the gums should be pink (in dark-skinned children the gums are more deeply coloured and a brownish area is often observed along the gum line);
- the tongue should have papillae (small projections that contain several taste buds) which give the tongue its characteristic rough appearance; and
- the roof of the mouth consists of the hard palate near the front of the cavity, and the soft palate towards the back of the pharynx, which has a small midline protrusion called the uvula. The arch of the palate should be dome-shaped (Hockenberry, Wilson, Winkelstein, Kline, 2003).

3.2 Tooth Eruption

Although deciduous (first or primary) teeth begin to form in utero, they do not usually begin to erupt until around six months of age. Eruption times vary from child to child, just as the individual growth rate varies. The deciduous teeth complete their eruption by around three years of age.

The following describes the pattern of eruption :

- lower teeth usually erupt before the upper teeth;
- tooth eruption usually occurs in girls before boys; and
- the teeth in both jaws usually erupt in pairs - one on the right and one on the left.

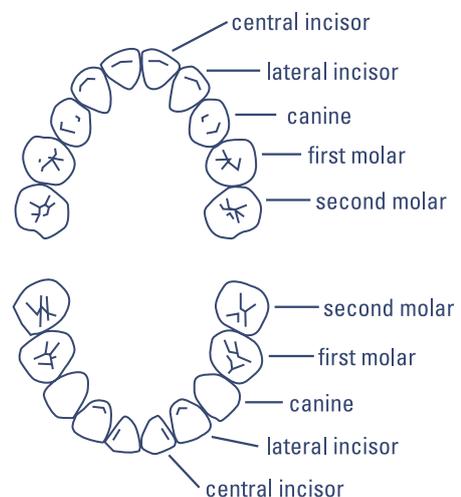
At around six years, permanent (second) teeth begin to erupt at the back of the mouth behind the deciduous molars. This is about the same time that the deciduous incisors at the front of the mouth exfoliate and make way for permanent incisors. However, it is important to note that the first permanent molar erupts before any deciduous molars exfoliate. Between the ages of approximately 6 and 12 years, children have a mixture of permanent and deciduous teeth. This is known as a mixed dentition. By the age of 12, most children have all their permanent teeth except for the third molars.



Tooth eruption (model of a 5 year old)

Usual Eruption and Exfoliation Sequence for Deciduous Teeth

Tooth	Eruption Month (approx)	Shed Year (approx)
lower central incisor	6-10	6-7
lower lateral incisor	10-16	7-8
upper central incisors	8-12	6-7
upper lateral incisors	9-13	7-8
lower first molars	14-28	9-11
upper first molars	13-19	9-11
lower canines	17-23	9-12
upper canines	16-22	10-12
lower second molars	23-31	10-12
upper second molars	25-33	10-12



Name and position of deciduous teeth

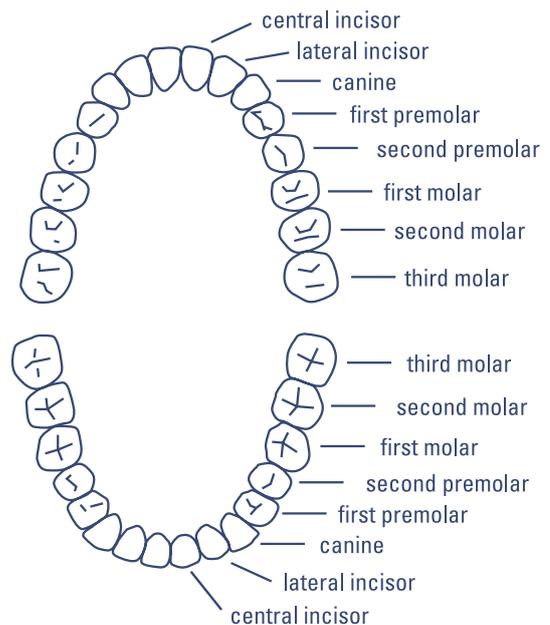
The health of a child's teeth affects their appearance, the way they smile, eat and speak, as well as their overall health and wellbeing. It is fundamental that children adopt good oral health practices early to prevent dental caries in both the deciduous and permanent dentition.

As noted above, front deciduous teeth are replaced around the age of six years, but the six year old molars erupt without replacing a deciduous tooth. These molars remain as the first permanent molars and consequently, for a number of years the child has a mixed dentition, comprising both deciduous and permanent teeth. It is important to have good oral health practices established by this time, to ensure these six year old molars are cleaned effectively.

Deciduous teeth guide the adult teeth into position. If they are lost early or extracted because of decay, the space may close due to movement of the nearby teeth and this may necessitate orthodontic treatment later on.

Usual Eruption Sequence for Permanent Teeth

Tooth	Year (approx)
lower first molars	6-7
upper first molars	6-7
lower central incisors	6-7
lower lateral incisors	7-8
upper central incisors	7-8
upper lateral incisors	8-9
lower canines	9-10
upper first premolars	10-11
lower first premolars	10-12
upper second premolars	10-12
lower second premolars	11-12
upper canines	11-12
lower second molars	11-13
upper second molars	12-13
third molars (wisdom teeth)	17-21



Name and position of permanent teeth



4. Tooth Structure and Development

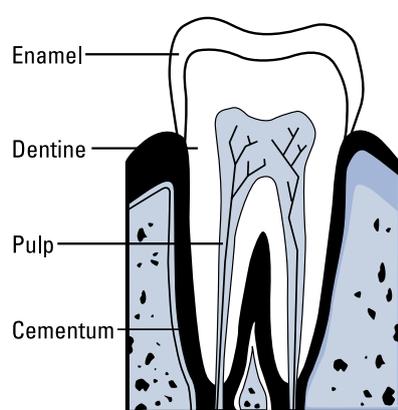
4.1 Tooth Structure

The portion of the tooth visible in the mouth is called the crown. The crown is covered with **enamel**, which is a hard, white, shiny substance. Enamel is the hardest calcified tissue in the human body and is the protective layer of the tooth.

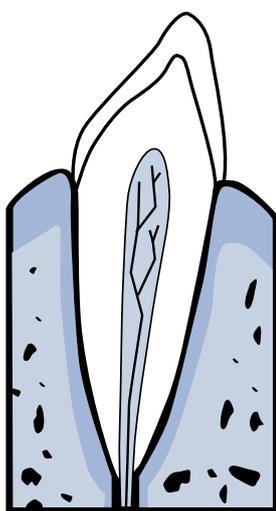
Enamel is made up of millions of tiny rods, which form the framework of the tooth.

It is thickest at the biting surface of the tooth and thinner near the gum line. The colour of enamel ranges from yellow to white depending upon its translucency - the more translucent the enamel, the more the yellow colour of the underlying dentine is apparent. The enamel portion of the tooth has no feeling. Even though the enamel is very hard, it can wear away due to:

- attrition (abrasion)
- erosion (dissolved by acid)
- fracture due to stress/trauma
- effects of dental decay (acid attack).



Molar structure



Canine structure

The layer found under the enamel is the **dentine**. It forms the bulk of the crown and the roots and is yellowish in colour. Dentine, while highly calcified, is softer than enamel and carries sensations such as temperature and pain to the pulp.

The **pulp** is the innermost portion of the tooth and is the only soft tissue of the tooth. It is made up of blood vessels, cellular substance and nerves. The pulp supplies nutrients to the tooth and its nerve endings transmit sensations such as pain and temperature.

Cementum forms a very thin layer over the root of the tooth and is similar to bone. It is yellowish in colour and also carries sensations such as temperature and pain to the pulp. If the gum recedes from the tooth and the cementum is exposed, there may be a sharp sensation when brushing the teeth or eating food. This is usually an adult condition.

4.2 Tooth Types

Deciduous Teeth

Deciduous teeth are also known as baby teeth, milk teeth, primary teeth or first teeth. They are shed and replaced by **permanent** teeth; this process is called **exfoliation**. Deciduous teeth are much whiter than permanent teeth and are also softer. Therefore, deciduous teeth can appear very worn due to grinding and normal wear through eating. The incisors are used for cutting, the canines for tearing and the molars for chewing.

In the **upper arch** (maxilla) there are ten deciduous teeth:

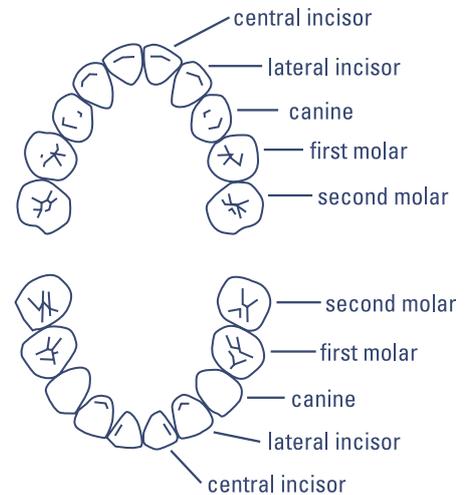
- two central incisors
- two lateral incisors
- two canines
- two first molars
- two second molars.

In the **lower arch** (mandible) there are ten deciduous teeth:

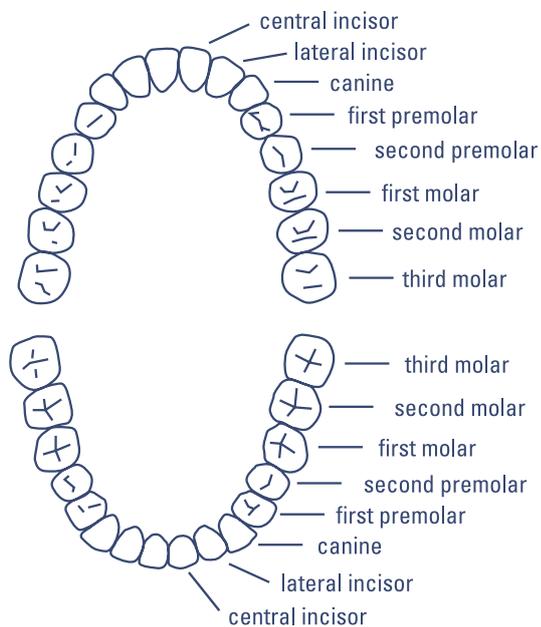
- two central incisors
- two lateral incisors
- two canines
- two first molars
- two second molars.

Healthy deciduous teeth are important for:

- efficient mastication of food. Missing or badly decayed teeth may cause young children to reject foods that are difficult to chew;
- maintaining normal facial appearance;
- formulating/developing clear speech patterns;
- maintaining space for and guiding the eruption of the permanent teeth;
- jaw development; and
- self-esteem.



Deciduous teeth



Permanent teeth

Permanent Teeth

Permanent teeth may also be referred to as second or adult teeth. Permanent teeth are more yellow in colour than deciduous teeth.

In the **upper arch** (maxilla) there are 16 permanent teeth:

- two central incisors
- two lateral incisors
- two canines
- four premolars
- six molars.

In the **lower arch** (mandible) there are 16 permanent teeth:

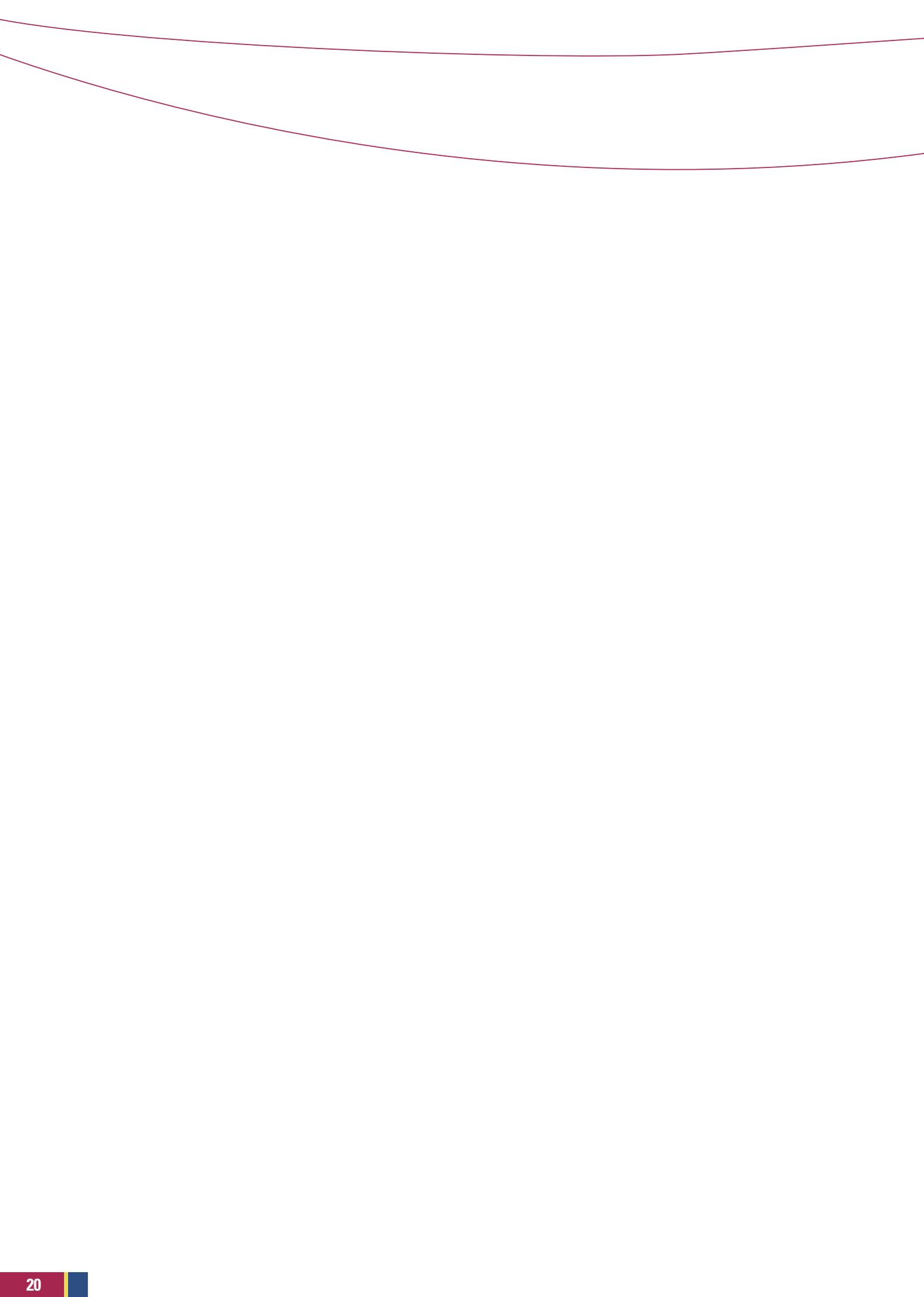
- two central incisors
- two lateral incisors
- two canines
- four premolars
- six molars.



Shows presence of a Supernumerary tooth

Extra or Missing Teeth

Both the deciduous and permanent dentitions may have extra or missing teeth. Extra teeth are also known as supernumerary teeth or mesiodens.



5. Mouth Checks

In recent years, dental health has rated high on presenting issues and parental concerns on School Entrant Health Questionnaires (SEHQ's). In the year 2003, an average 19.4% of all prep students presented with identified dental health related issues.

Mouth checks are an excellent opportunity to ensure early identification of and intervention in oral disease in school children, and to give advice and information to parents regarding oral health. These targeted mouth checks are consistent with other health checks, such as hearing tests, which are implemented as a result of expressed concerns by parents and/or teachers.

5.1 When is a Mouth Check Required?

The role of the Primary School Nurse is to conduct health assessments of all preparatory grade students and to promote healthy lifestyle habits.

School nurses are required to perform targeted mouth checks on preparatory grade students in response to information provided by parents on the SEHQ. The questionnaire asks two questions of parents / carers regarding oral health. These are :

1. Have you any concerns about your child's teeth? Yes No
2. Has your child been to the dentist in the last 1-2 years? Yes No

See the table on the next page for description of school nurse actions in relation to parents' responses to oral health questions in the Manual for the School Entrant Health Questionnaire.

	Parent Response	School Nurse Action	Details of Action
17.0 Have you any concerns about your child's teeth? 18.0 Has your child been to the dentist in the last 1-2 years?	Yes to 17.0 and Yes to 18.0	Nursing Intervention	Perform mouth check No Concerns - oral health promotion & School Dental Service information for parents. Concerns - initiate referral to a dental professional, document history, assessment, intervention and desired outcomes of the identified concern; provide oral health information where necessary.
	Yes to 17.0 and No to 18.0	Nursing Intervention	As above
	No to 17.0 and No to 18.	Nursing Intervention	As above
	No to 17.0 and Yes to 18.0	Useful Information	Provide general oral health information if requested.

5.2 Actions following a Mouth Check

The actions following a mouth check are consistent with the generic action plan outlined in the Manual for the School Entrant Health Questionnaire (DHS 1997).

The generic action plan comprises the following steps:

- Consult with parent(s);
- Identify primary source of professional care relevant to the concern/condition;
- As appropriate, assess impact of condition;
- Provide information as appropriate to the concern/condition;
- Link or refer to appropriate agencies;
- With parental consent, discuss condition/concern with teacher, if appropriate;
- Ensure the appropriate care and support is provided at school; and
- Document the history, assessment, intervention and desired outcome of the identified concern.

5.3 Conducting a Mouth Check

Primary School Nurses will be conducting mouth checks on children where parents have identified oral health concerns. The 'Lift the Lip' protocol has been developed to enable an effective mouth check, which identifies the need for referral, but is not a dental examination.



Child Lifting the Lip

As the protocol requires the nurses to ask the child to lift his or her own lip, as shown in the accompanying picture, the nurse is not required to use gloves.

The protocol is 'Lift the Lip', 'Look', and 'Locate' as follows:

- Lift the Lip - to get a view in the mouth
- Look - at the tooth surfaces
- Locate - a dental professional if an oral health problem is identified.

The prep child can assist the nurse by following the simple steps below.

- Place the child in a position, which will allow a reasonable view of the mouth.
- Ask the child to open the mouth wide, to move the tongue in different directions and say "ahh", which depresses the tongue for a full view of the back of the mouth.
- For a close look at the buccal mucosa (inside of the cheek), ask the child to use their fingers to move the outer lip and cheek to one side.

See section 3.1 for description of a healthy mouth.

As with other health checks conducted by Primary School Nurses, there are frameworks to inform referral protocols. When undertaking a mouth check, nurses are expected to look for conditions outside the norm which may indicate referral to a dental professional or that oral health promotion resources should be provided to parents/carers. Primary School Nurses are expected to use their own professional judgement regarding the need for referral.

Below is a set of questions regarding oral health issues, which will assist nurses in their oral health checks and subsequent referrals. These questions are included in the School Nursing Information System (SNIS) to be used in the same way as the visual, hearing, weight and height checks.

SNIS QUESTIONS (for oral checks)

Does there appear to be any acute signs and symptoms?

Yes No

See checklist below:

- Has the child presented with pain?
- Is the pain disturbing sleep at night?
- Is there facial swelling?
- Is there pain on eating?
- Is there slight swelling, pus or redness on the gums?

Comments _____

Does there appear to be signs that could indicate dental decay?

Yes No

Comments _____

Does there appear to be any broken teeth?

Yes No

Comments _____

Other concerns?

Yes No

Comments _____

Oral health promotion resources provided?

Yes No

Comments _____

5.4 Referral to a dental professional

While Primary School Nurses will exercise their professional judgement in determining referral to a dental professional, affirmative responses to any of the first three questions listed in the SNIS will suggest referral. These questions are detailed in Section 5.3, **Conducting a Mouth Check**. Referrals may also be made if there are other concerns, by either the nurse or the parents.

Referral protocols for oral health issues are consistent with those for vision and hearing assessments.

If the results of the mouth check indicate that the child requires referral to a dental professional, the assessment outcomes will be automatically transferred to a referral letter and an assessment report to parents, generated via SNIS. The referral letter will be applicable for both private dental practitioners and the public dental service and includes capacity for feedback from the dental professional.

Parents will be asked to take the referral letter with them to the first appointment. The referral letter provides the source of the referral and enables feedback to the appropriate Primary School Nurse.

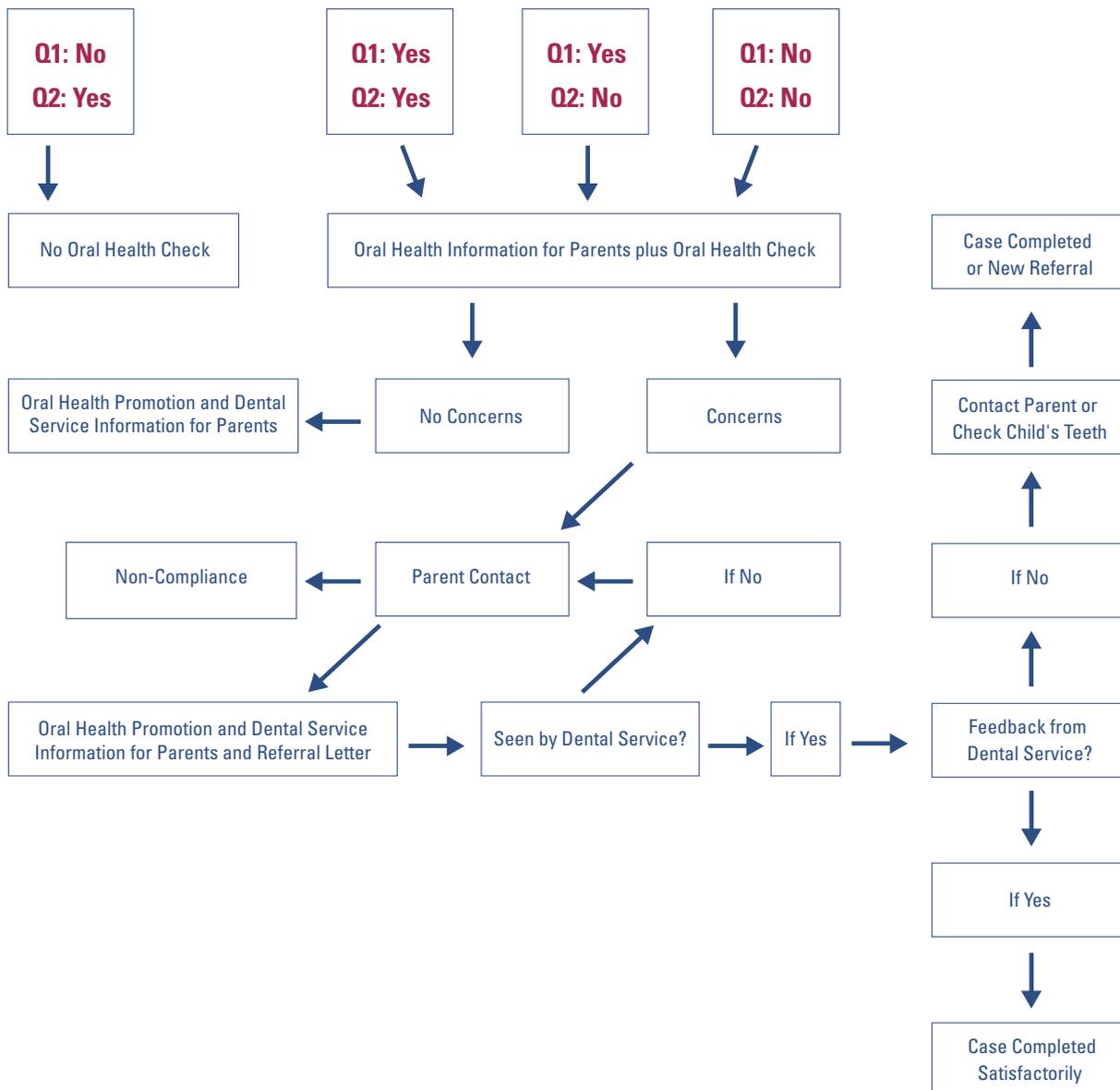
A School Dental Service (SDS) information flyer is available for Primary School Nurses to provide to parents with the referral letter. This flyer advises parents to telephone for an appointment indicating they have a referral letter to a dental professional. Additional flyers are available through the SDS Regional Office (see 11.3 for contact details).

5.5 The Oral Health Check and Referral Process

Questions as presented on SEHQ

Q1: Have you any concerns about your child's teeth?

Q2: Has your child been to the dentist in the last 1-2 years?



6. Promoting Individual Oral Health Practices



This section provides Primary School Nurses with information to use in assisting parents/carers to work with children in promoting good oral health practices. It covers oral hygiene, diet and nutrition, the value of dental visits and at what age they should begin. Tip cards and fact sheets have been developed for Primary School Nurses to provide to parents, encouraging development of these practices. A resource listing is provided in Section 11.

6.1 Toothbrushing

The Primary School years are when many lifetime habits are established, offering the opportunity to prepare for good health in later years. As children grow and develop, they are constantly exposed to new experiences and they respond by developing new behaviours and skills. Through the socialisation of a child, parents and carers can influence behaviours in early life, with the potential to set patterns which are then carried into adolescence and adulthood. Establishing these health behaviours early in life is important (DHSV, 2003).

Thorough toothbrushing with the correct technique is necessary for the maintenance of healthy teeth and gums. Good oral hygiene at an early age will reduce the likelihood of dental caries, periodontitis and gum disease.

During the course of the day, a sticky, soft layer of bacteria known as plaque, forms on the teeth. This needs to be removed each day to prevent tooth decay and gum problems. Regular brushing will prevent the build up of plaque.

- While it is recommended that parents encourage the two to six year old child to use his/her toothbrush independently, most children do not have sufficient manual dexterity to brush effectively until they are at least six or seven years old. Parents should assist young children to brush their teeth thoroughly at least twice a day.
- The best way to do this is to sit the child on the lap or to stand behind the child, tilting the child's head upwards so that all tooth surfaces can be brushed using a gentle scrubbing motion (DHS, 2000b).
- A small soft headed toothbrush is recommended for children.
- A pea-sized amount of low fluoride toothpaste should be smeared onto the toothbrush (DHS, 2003). Children should be encouraged to spit the toothpaste out after brushing, and not swallow it.
- An important aspect of brushing young children's teeth is the establishment of a regular habit from an early age.

6.2 Dental Flossing

Flossing is not essential for all primary school children but may be of benefit for children at high risk of dental caries. Parents may seek professional advice. If flossing is recommended, parents should assist children under seven or eight years to floss, as they do not have the manual dexterity to do it effectively.

6.3 Diet and Nutrition

Eating a wide variety of nutritious foods is important, especially during childhood when growth and development are occurring. The Primary School years are a time when eating and drinking habits are established, so it is important for parents and carers to encourage healthy eating and drinking behaviours (Commonwealth of Australia, 2003).

Examples of foods & drinks to encourage;

- Fruit - fresh, stewed, frozen, tinned.
- Vegetables - fresh, raw, steamed, grilled, beans/peas, capsicum, sprouts, leafy greens. Try carrot or celery sticks with creamed cheese, peanut butter, yoghurt and other dips.
- Grains, cereals - rice, pasta, noodles, buckwheat, polenta, pita bread, flat bread, foccacia, English muffins, crumpets, crispbreads, crackers, low sugar breakfast cereals, rolled oats, rice cakes, wheat bread/rolls, rye bread, multigrain bread.
- Dairy - Milk, cheese slices or sticks, fruit or plain yoghurt. Soy-based calcium enriched foods can be a substitute for dairy products.

The calcium Recommended Dietary Intake for children aged

- 1-3 years is 700mg per day.
- 4-7 years is 800mg per day
(Commonwealth of Australia, 2003).
- Meat or protein foods - Lean meat, chicken, fish, lentils, baked beans, tofu, hard-boiled egg.





- Spreads and fillings - Hummus dip, tahini spread, peanut butter, cheese spread.
- Drinks - Children should drink water when they are thirsty. Water is a much better thirst quencher than fruit juice or sweetened drinks. These will not quench thirst, are acidic in nature, and may reduce a child's appetite for nutritious foods.

"Sweet drinks include all fruit juices, soft drinks and cordials either bought or homemade. Under most circumstances, children do not require any fruit juice or other sweet drinks to have a well balanced and healthy diet." (DHS,2001).

Frequent consumption of sweet sticky foods can contribute to dental caries (DHS, 2000b). It is the frequency of consumption rather than the amount of sugary foods that constitutes the risk of dental caries. Foods and drinks containing added sugars should be limited, especially between meals. If consumed, they are best eaten at mealtimes rather than between meals (DHS, 2003).

Examples of foods to limit:

- sweetened breakfast cereals
- fruit bars and strips
- muesli/health bars high in sugar
- cake and cake icing
- biscuits
- chocolate and lollies
- sweet spreads (such as jam, honey, hazelnut spread)
- hot chips and crisps
- meat pies and sausage rolls
- ice cream, dairy desserts (DHS, 2004).

6.4 Visiting a Dental Professional

Dental examinations for children as young as 12 months may be beneficial to facilitate early identification of oral health problems. While many young children will not experience dental caries at an early age, a significant minority do suffer from early childhood caries (ECC). Cameron and Widmer (2003) state that the reported prevalence of ECC in Australia ranges from 2.5 to 15 percent. It should be recognised that children presenting at Primary School may not have experienced a checkup from a dental professional (dentist or dental therapist).

For many children irrespective of age the first dental visit is about familiarisation with the dental setting. When discussing the first dental visit with parents, the following information may be useful:

- Suggest the child accompanies the parent when they visit the dental professional. The dental professional may have time to offer the child a ride in the chair.
- Help children to accept that dental visits are part of a regular routine.
- Make the child's appointment for early in the day so that the child is not tired.
- Arrive a little before the appointment time, to let the child become familiar with the new surroundings.
- Suggest the parent talk to the child about the dental visit in a positive way; avoiding language such as 'be brave'. Explain to the child that the dental professional will give them a ride in the chair and count their teeth.
- Encourage parents to be a 'passive observer' and allow the dental staff to capture the child's full attention.
- It is not necessary to 'bribe' children to see the dentist/dental therapist, nor for children or parents to feel anxious.

6.5 Managing Thumb and Finger Sucking.

While it is not unusual for children to suck their thumbs or fingers at some stage of their development, the majority cease the practice between the ages of two and four years. The effects of thumb and finger or non-nutritive sucking on the developing deciduous teeth are usually totally reversible up until the age of six to seven years. This is when the permanent teeth start to erupt so dental treatment is not necessary prior to this age.



Open bite

However, beyond the age of seven years, dental problems may occur due to bony structural changes. Extensive sucking of fingers or thumbs has a tendency to push the front teeth out of alignment causing the teeth to protrude, referred to as “buck teeth”. This may alter the growth of the face and cause an open bite.

Parents should encourage children to stop sucking their thumb or fingers. However, this can be difficult as children need to

have an understanding of the habit and want to stop before it will cease. The following strategies can be suggested to help parents assist their child to break the habit.

- **Reward** the child with a hug or praise, to reinforce their determination to stop the habit. Use ticks or stars on a calendar for each period the child does not suck their thumb or fingers. After the successful period, reward the child with a treat such as a surprise outing, a toy or a special privilege.

The younger the child the more frequently the reward may be required. A five to six-year-old may need some special reward after the first difficult night.

Reward periods can gradually be stretched out to several nights, a week and eventually a period of 30 nights without sucking. Some children do not lose the impulse to suck until they have collected as many as three to four rewards, which may take as long as three to four months.

- **Offer encouragement** - A child's first days without sucking are usually the most difficult. Like all habits, the yearning slowly diminishes and eventually becomes easier. Parents and other family members can offer encouragement and rewards. Family members need to be patient to assist children through their difficult time. Often children who have stopped sucking can drift back to their old habit and it can be frustrating for all concerned. It may take several attempts before

the habit is completely broken. Parents may choose to encourage a bond with their favourite toy.

- **Limit nagging** - the frequent repetition of parents' demands to take the child's thumb or fingers out of their mouth can be counterproductive. It is children and not parents who must learn to control the habit. If children feel they are being nagged they will become defensive and view parents as the opposition rather than an ally in the fight against sucking. Occasional good humoured comments that bring the sucking activity to the child's notice can be helpful.
- **Reminders** - Give the child a mitten to wear as a reminder not to suck, or use unpleasant tasting nail paint, which is available from pharmacies, on the fingers or thumb.
- **Offer distractions** - While a child is watching TV or videos have toys available for them to play with. Sit with the child during this time and give a cuddle as another form of comfort to help them not to suck. In the car have toys, such as books and games available to keep children's hands occupied.

Remember, what is effective will depend on each individual child and their particular situation.

6.6 Managing Lip Sucking

Sucking of the lower lip (lip sucking) may occur in isolation or it may occur with thumb sucking. When the lower lip is repeatedly held beneath the upper front teeth the result is usually an open bite. As with thumbsucking, parents should encourage children to stop sucking their lip. However, this can be difficult as children need to have an understanding of the habit and want to stop before it will cease.



Lip sucking

To break this habit the same sorts of strategies as for thumb and finger sucking described in 6.5 above can be used.

7. Preventive Measures

7.1 Dental Sealants

Application of dental sealants at particular stages of development can play a significant role in protecting teeth against decay. A dental professional is best placed to give advice about use of sealants.

A dental sealant is a plastic film professionally applied to the pits and fissures of the back teeth. Often this area is difficult to clean efficiently because the toothbrush bristles are too thick to fit into the grooves or fissures of the teeth, allowing plaque to get trapped and create caries. The sealant assists in preventing access of plaque and plaque acids to the enamel surface of the teeth. Dental sealants are of value in the prevention of dental caries. A good time to apply dental sealants is shortly after the first permanent molars appear at the age of six or seven years and the second molars around the age of 11 or 12 years.

Placement of sealants is not time consuming. It is a painless procedure and there is no need for injection or drilling. Sealants last on average two to seven years (DHS,1996). Dental sealants are available as required/recommended through the School Dental Service.

7.2 Use Of Mouthguards

Falls which occur during play account for most dental injuries to young permanent teeth (see section 9.4 on management of a knocked out tooth). Studies show that one third of accidents occur at school, one third at home and one third elsewhere (DHS, 1998).

Skateboarding, cycling, diving in swimming pools and falls of various types contribute to dental injury. The most common teeth to suffer are the upper front teeth.

Dental injuries also commonly occur in contact sports such as football, hockey and basketball. Dental trauma can include both soft and hard tissue damage such as injury to the gum, tooth fractures, loss of whole teeth and jaw fractures.

The Australian Dental Association has developed guidelines about mouthguard use (ADA, 2003). Sports are categorised into three distinct groups - contact sports, collision sports and non-contact sports and linked with the following recommendations:

- in contact sports such as football, rugby and boxing, mouthguards should be compulsory and their use closely monitored by parents and teachers;
- in collision sports such as basketball, squash, hockey and soccer, where contact is not allowed in the rules but happens anyway, using a mouthguard is highly recommended: and
- in non-contact sports such as tennis, where contact is a rare occurrence, a mouthguard is not needed (www.mydr.com.au).

The use of mouthguards in the prevention of trauma is well accepted (DHS, 2000).

Mouthguards reduce the number and severity of mouth injuries in active sport and during training. A mouthguard should:

- be comfortable to wear;
- fit well;
- have good retention; and
- cause little interference with speaking and breathing.

These features are more likely to be present if the mouthguard is professionally fitted by a dental professional. A dental impression is taken of the upper jaw and then a plaster model is made. This is used to mould the mouthguard plastic accurately to the shape of the upper jaw.

The School Dental Service does not offer a mouthguard fitting service. A Prosthetist or private Dentist should be consulted for the production of a professionally fitted mouthguard. Mouthguards which can be purchased at pharmacies will aid in preventing injury to the mouth, although those fitted professionally will provide superior protection.

8. Promoting Population Oral Health : Fluoride

This section addresses the issue of fluoride. It aims to answer many of the questions parents and teachers are likely to ask of the Primary School Nurse.

Sections 8.1, 8.4 and 8.7 are extracts from the DHS publication:
Water Fluoridation - Information for Health Professionals.

8.1 Role of Fluoride in Oral Health

Fluoride plays a key role in the prevention of dental caries.

Dental caries develops when sugar-containing foods are metabolised by bacteria in the mouth, resulting in acid on the tooth surface. The acid removes calcium, phosphates and carbonates from the tooth enamel into the plaque and saliva surrounding the tooth.

The fluoride in saliva interacts with these minerals and salts at the tooth surface to remineralise the damaged enamel. A constant supply of a low level of fluoride within the saliva is most beneficial for replacement of lost minerals and therefore prevention of dental caries.

Fluoride protects both developing and erupted teeth against caries, and therefore benefits individuals of all ages. The presence of fluoride in the pre-eruptive phase leads to structural improvements that render the tooth more resistant to later acid attack. In the post-eruption phase, fluoride:

- promotes remineralisation of enamel lesions before cavities become permanent, through its presence in plaque and saliva;
- inhibits conversion of sugars into acids by bacteria; and
- is bacteriocidal in high concentrations, such as topical application by a dental professional.

8.2 Fluoride Sources

Fluoride is found in the following forms:

- naturally occurring in water, plants, rocks, soil and air;
- naturally occurring in foods and drinks;
- added to community water supplies;

- present in food and drinks manufactured in fluoridated areas;
- present in fluoride toothpaste, gels and mouth rinses;
- present in fluoride gel painted on by a dental professional; and
- fluoride supplements - drops and tablets.

There is virtually no fluoride present in breast milk. “Fluoride is poorly transported from plasma to milk and concentrations of fluoride in milk remain low even when the intake of fluoride by the woman is high” (Fejerskov, Ekstrand, Burt, 1996).

8.3 Fluoride Supplements

Fluoride supplements (drops or tablets) were introduced as a substitute for water fluoridation for children in non-fluoridated areas, and were intended for use only in areas where there was little or no fluoride in the drinking water (Dental Practice Research Unit, 1997).

Fluoride supplements are no longer recommended unless deemed appropriate by a dental professional. This is likely to be after high risk of dental caries is established and all sources of ingested food have been considered.

8.4 Water Fluoridation

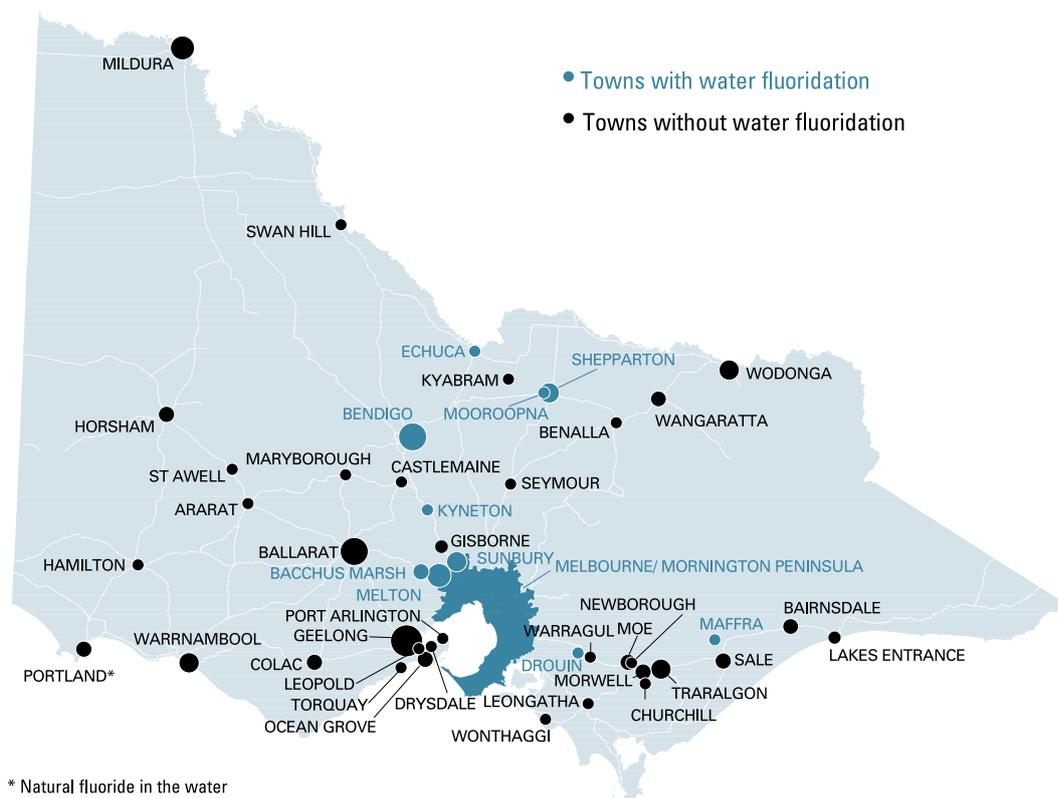
“Water fluoridation is the most effective way to give everybody access to the benefits of fluoride regardless of age, income or education level” (DHS, 2004).

Water fluoridation is the adjustment of the natural amount of fluoride in the water supply to a level recommended for optimal dental health benefits. Natural levels of fluoride in water supplies tend to be lower than the optimal level recommended for the prevention of dental caries. Community water fluoridation programs therefore increase water fluoride levels to optimise dental health benefits.

Australia has fifty years’ experience with community water fluoridation, following the introduction of the first program in 1953 in Beaconsfield, Tasmania. Nearly two-thirds of the Australian population receive fluoridated drinking water, including residents of all capital cities except Brisbane. Approximately 75% of Victorians receive fluoridated water, with most of these people residing in metropolitan Melbourne. The map following depicts the patterns of fluoridation in Victoria.

Water fluoridation status in Victoria population centres greater than 5,000 people, 2002

(Map prepared by GISCA, Adelaide University May 2002)



Since the introduction of community water fluoridation to Melbourne in 1977, the caries prevalence within Victoria has markedly decreased. Dental Health Services Victoria data indicates that six-year-old children in fluoridated areas of Victoria have 45 percent less caries experience in the deciduous dentition than those in non-fluoridated areas, and 12 year-olds have 38 percent less caries experience in the permanent dentition.

Community water fluoridation reduces the prevalence of dental caries in both children and adults, regardless of socio-economic status or access to care, and has therefore been recognised as an important public health achievement (DHSV, 2002).

8.5 Water Filters

Some water filters may remove fluoride, although this is mostly limited to those filters with reverse osmosis, distillation or ion exchange. Normal membrane filters will not remove a small ion such as fluoride (Cameron and Widmer, 2003).

8.6 Safety of Fluoride

With the exception of dental fluorosis, scientific studies have been unable to link community water fluoridation with adverse effects. The World Health Organisation has concluded that community water fluoridation is safe and cost effective and should be introduced and maintained where socially acceptable and feasible.

While toothpaste has been proven to reduce the incidence of dental caries (DHS, 2000), it is not designed to be ingested. As young children may eat or swallow toothpaste, low dose fluoride toothpaste has been introduced for children aged between two and six years of age. It is important that children learn to spit out the toothpaste after brushing.

8.7 Dental Fluorosis

Dental fluorosis is the defective formation of tooth enamel or dentine resulting from excessive fluoride ingestion during the period of tooth development, usually from birth to approximately six to eight years of age. In its mildest (and most common) form, it may manifest as barely noticeable whitish striations, while more severe forms involve confluent pitting and staining of the dental enamel. Determining the exact level of fluorosis within the community is difficult, as there are numerous other causes of enamel defects that may resemble fluorosis (DHS, 2004).

Specifically within Melbourne, it has been reported that the risk of fluorosis has not increased further since the introduction of community water fluoridation in 1977, and that the degree of fluorosis in Melbourne is within expected limits of an optimally fluoridated community.

The risk of fluorosis occurring can be reduced by minimising exposure to fluoride in children with developing teeth, through measures such as:

- discouraging ingestion of toothpaste by children;
- brushing without toothpaste until the age of two, unless otherwise recommended by a dental professional;
- using only a pea - size amount of low fluoride toothpaste smeared onto a child's toothbrush until six years of age; and
- limiting use of fluoride supplements to those with inadequately fluoridated drinking water and high risk of dental decay (as determined by a dental professional assessing factors such as dental history, age, diet, oral hygiene, medical history and family history).

9. Dental Disease and Trauma and Other Identified Problems

This section provides detailed information regarding dental caries, early childhood caries (ECC), and periodontal disease. The descriptions and photographs should assist Primary School Nurses to recognise these conditions and refer them to a dental professional.

Sections 9.1, 9.2, 9.3 and 9.4 are taken largely from the DHSV publication, *TEETH: Oral Health Information for Maternal and Child Health Nurses*.

The conditions in this section have been described under the following sub-headings: prevalence, signs/symptoms, causes, age, treatment and prevention. The prevention section for ECC addresses a number of topics that relate to behaviours which are amenable to change if parents understand their impact on oral health.

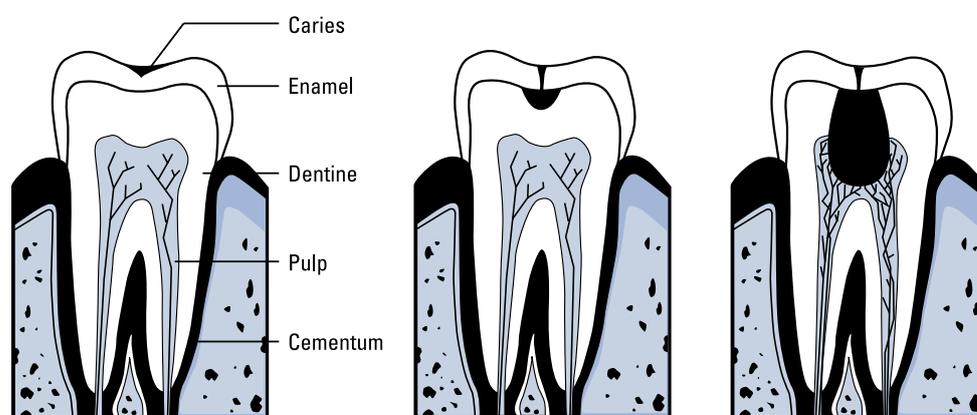
Advice on dealing with knocked out teeth is also provided.

9.1 Dental Caries

Prevalence

Dental caries is largely preventable. Many children still suffer unnecessarily from the pain and complications of dental caries. Victorian School Dental Service data (2003) shows that 41 percent of five year olds experienced dental caries, 75 percent of which was untreated (DHSV, 2004).

Signs/Symptoms



Stages of caries invading the cross section of a molar

Causes

Dental caries is a multifactorial disease. The factors involved include:

- tooth/teeth
- bacterial dental plaque
- fermentable carbohydrates
- acidic foods and drinks
- time taken for decay
- saliva

Teeth

Genetic structure, eruption sequence, position and closeness of teeth can predispose them to decay.

Bacterial Dental Plaque

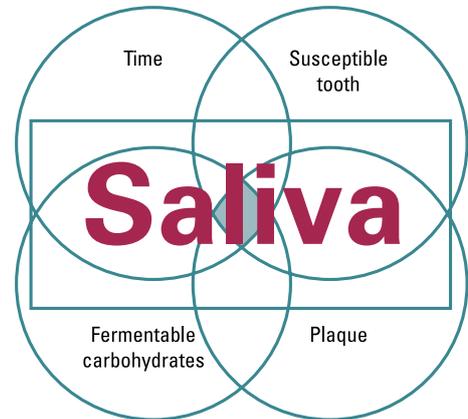
Immediately after cleaning teeth, a thin organic layer called **acquired pellicle** rapidly forms on the teeth. It cannot be removed by forceful rinsing. Although it does not initially contain microorganisms, it is soon colonised by various bacteria. Once bacteria are established, this is called **bacterial dental plaque**.

Bacterial dental plaque continues to form by breaking down sucrose and starches into polysaccharides, glucans and fructans. These are sticky, gelatinous substances that increase the plaque's ability to adhere to the tooth surface and each other. They also reduce the buffering action of saliva. A by-product of this process is acid, which can dissolve tooth structures.

Fermentable Carbohydrates

This refers to sugars and starches that can be converted into acids by microorganisms. They are generally simple sugars such as glucose, sucrose, fructose, maltose and lactose. Microorganisms in the mouth can ferment simple sugars to polysaccharides, forming acids as a byproduct. When considering the relationship of the diet and dental decay, the following factors need to be considered:

- **The Frequency of Eating and Drinking** - The more frequently one eats or drinks, the greater potential there is for acid production in the mouth, leading to decay. This factor is the one that has the greatest potential for damaging teeth.
- **The Consistency of Foods Eaten** - Some foods are cleared more rapidly from the mouth than others. Foods that stay around the mouth longer have more decay-causing potential.



Factors involved in dental caries

Acidic Foods and Drinks

Acidic foods and drinks cause the oral environment to become acidic. When acidic foods (such as pickles, salad dressing, oranges, lemons, soft drinks, cordials, syrups and fruit juices) are consumed frequently, they have the potential to dissolve tooth structures - this is known as erosion.

Time

The time it takes for teeth to decay varies and is influenced by many factors such as areas affected on the teeth, positioning of the teeth in the mouth, the length of time the teeth have been in the mouth and individual differences. New baby teeth can decay very rapidly if frequently exposed to sugar as they have not had very long to be strengthened by the topical effect of fluoride in the mouth.

Saliva

The ability of the saliva to neutralise acid and aid in the remineralisation of enamel affects the decay process. The rate of flow of the saliva is an important factor in dental decay. A steady flow of saliva assists the pH level to return to normal in a relatively short time, provided oral hygiene is maintained. The saliva buffers the acids and provides minerals necessary for the remineralisation of tooth enamel. Diseases and drugs which reduce the flow of saliva also increase the risk of tooth decay. When a child sleeps, the saliva rate slows down.

Age

Dental caries is found in people of all ages who have teeth.

Treatment

Assessment and treatment should be undertaken by a dental professional. Treatment may include an x-ray, local anaesthesia, restorations (fillings) and possibly extractions.

Prevention

The prevention of dental caries requires an holistic approach to the multitude of biological and social factors involved in the causation of the disease. These factors include the appropriate exposure to therapeutic levels of fluoride in the environment, early detection, access to timely preventive interventions and reduced exposure of an individual to fermentable carbohydrates and sugars (DHSV, 2002). These preventive issues, and others such as toothbrushing and flossing, are covered in more detail in Section 6: Promoting Individual Oral Health Practices.

9.2 Early Childhood Caries (ECC)

Early childhood caries (ECC) is a particularly severe form of dental caries affecting the primary dentition of infants and young children (Berkowitz, 2003). A number of terms have been given to this condition including nursing caries, infant feeding caries, baby bottle caries and nursing bottle syndrome.

The upper incisors will be the most severely affected because of their early eruption. The lower incisors, protected by the tongue and washed by saliva from the mandibular salivary glands, usually remain unaffected.

Prevalence

- The reported prevalence ranges from 2.5 to 15 percent (Cameron and Widmer, 2003).
- The prevalence and severity of ECC in low socio-economic, immigrant and indigenous communities is high (Hallett and O'Rourke, 2002).

Signs/Symptoms

- Initially, the upper incisors develop a dull white band (demineralisation) along the gum line that usually goes undetected by the parents/carers.
- As the condition progresses, these white areas develop into cavities that girdle the necks of the teeth in a yellow, brown or black collar.
- In advanced cases, the crowns of the four upper incisors may be destroyed completely, leaving decayed brownish-black root stumps. The four lower incisors remain relatively unaffected.
- Signs and symptoms include tooth sensitivity, pain, infection/swelling and irritability.

Causes

The newly erupted teeth are particularly at risk of dental caries, since maturation of the enamel with fluoride is yet to occur. Development of dental caries is an infective process initiated by the transmission of oral bacteria (*Streptococcus mutans*) from mother to infant.



Early stages of ECC



Advanced ECC

This transmission of oral bacteria from mother to infant by way of saliva can be caused by:

- the mother using her eating utensils to feed the infant;
- the mother tasting the food or testing the temperature in her mouth prior to feeding;
- “washing” a dummy in the mother’s mouth and then giving it to the infant;
- the infant placing their fingers into their mother’s mouth and then into their own.

If the infant has a high sugar diet, or the bottle (containing fluids other than water) is used as a pacifier, these bacteria become well established and multiply. This may result in early childhood caries (Pinkham J, 1999).

During sucking, the natural or artificial nipple rests against the palate, while the tongue is extended over the lower incisors. Liquid from the nursing bottle or a mother’s breast will bathe all of the teeth except the lower incisors, which are protected by the tongue.

If the liquid is consumed frequently and for prolonged periods during the day or night, the liquid will pool around the teeth. If the liquid contains simple sugars it will be converted by the bacteria into acids that demineralise the enamel surface of the teeth. In this stagnant acid environment, early childhood caries can develop quickly.

Age

Early childhood caries can occur in children as young as six to 12 months. Parents usually first notice cavities when the child is about 20 months old.

Treatment

In the early stages of ECC the best treatment is to modify behaviour and remove the cause. Parents require education and support, and in particular information on feeding, the appropriate use of the bottle and dummies, toothbrushing and flossing, sugar-free medicines and access to dental care.

In severe cases the treatment may be difficult, costly and distressing to both parents and infants. Treatment frequently requires general anaesthesia in an operating theatre.

It is expected that Primary School Nurses will refer any signs of ECC to a dental professional.

Prevention of ECC

The prevention of ECC also requires an holistic approach to the multitude of biological and social factors involved in the causation of the disease. These factors include:

- the importance of maternal oral health
- the appropriate use of the bottle
- early detection
- the appropriate use of a dummy
- use of sugar-free medications
- toothbrushing
- regular dental visits.

Early Detection of ECC

Early detection is necessary in order to prevent this condition in children. Primary School Nurses play a crucial role in the detection of ECC and in the education of parents and carers. Primary School Nurses are encouraged to 'Lift the Lip', 'Look', and 'Locate' (see Section 5.3 Conducting a Mouth Check).

Medicines and ECC

Some medicines contain a large percentage of sugar and are often given before the child goes to sleep. This can become a problem for teeth if the child suffers from a chronic illness and is continually taking medicines.

Medicines in capsule or tablet form do not cause dental decay. Infants and children are often prescribed liquid medications, as they are easier to administer, but they often contain sugars. Parents and carers should be advised to ask doctors and pharmacists if a sugar-free form is available. If this is not possible then parents should ensure their child brushes their teeth after taking the medication.

A number of liquid medications contain sugar or have a high sugar content.

These include:

- antibiotic mixtures
- anticonvulsant syrups
- antihistamine syrups
- paracetamol syrups
- asthma mixtures
- cough and cold medicines
- cardiac medications

Toothbrushing and ECC

The important role toothbrushing plays in the prevention of dental caries and ECC is covered in Section 6: Promoting Individual Oral Health Practices.

Regular Dental Visits and ECC

The importance of timely dental visits is covered in detail in Section 6.4: Visiting a Dental Professional.

9.3 Periodontal Disease (Gum Disease)



*Periodontal disease
in an adult*

Signs/Symptoms

Red, inflamed, bleeding gums, loose teeth, migrated teeth to near positions, spontaneous exfoliation of deciduous teeth with root resorption. Minimal plaque material may be seen.

Causes

Periodontal disease - periodontitis - is caused by certain bacteria in plaque that accumulate on the gum line of teeth.

These bacteria produce toxins that seep down between

the gum and the tooth, irritating the gum tissues and causing them to become reddened, inflamed and to bleed (DHS, 1996).

Periodontitis may also be a manifestation of a serious underlying immunological or genetic disorder.

Age and Duration

The number and severity of affected sites increase steadily with age, demonstrating that adult periodontitis can often begin in adolescent years. Periodontitis responds well to oral hygiene techniques, especially in the earlier stages.

Treatment

If the plaque is not cleaned away the toxins may gradually destroy the fibres and the bone which hold teeth in place. This eventually leads to the loosening of teeth, whose removal may be necessary. Antibiotic prophylaxis has also shown to be helpful in conjunction with oral hygiene techniques.

Prevention

Like dental decay, periodontitis can be preventable, unless there is a strong genetic or medical component. In young children gum disease is usually reversible.

In adults it is more common and severe.

Serious gum disease in children is rare. However, oral hygiene habits developed as a child can assist an individual in maintaining healthy gums for life.

The plaque causing gum disease is easily removed by correct toothbrushing and flossing or by a dental professional. Most incidences of bleeding gums can be rectified with correct toothbrushing techniques. It is important to ensure that correct and thorough teeth cleaning is practised and that young children are supervised and assisted where necessary.

Persistent gum bleeding in a young person, particularly in the absence of plaque, necessitates an immediate referral to a dental professional as this may result from a disease process not of dental origin.

For tips on correct teeth cleaning see the “Clean Well” Fact Sheet for Parents in cover slip. Section 6.1 also describes aspects of toothbrushing.

9.4 Knocked out Tooth

Deciduous Teeth

If a deciduous (baby) tooth is knocked out, do not place it back in the socket.

Deciduous teeth, which have been replaced tend to fuse themselves to the bone of the socket. Also, the permanent tooth underneath can be damaged when the deciduous tooth is replaced. The treatment for a deciduous tooth that is knocked out is:

1. Do not replace the tooth back in the socket.
2. Seek dental advice as soon as possible, taking any tooth fragments with you to the dental professional.

Permanent teeth

If a permanent tooth is knocked out and is promptly replaced in the socket, it has a good chance of survival. Every minute the tooth is out of the socket decreases the chance of the tooth surviving. Dental advice should be sought straight away.

The treatment for a permanent tooth that is knocked out is:

1. Find the tooth.
2. Handle the tooth by the crown only.
3. If root has debris on it, gently rinse the tooth in milk or normal saline solution for a few seconds only.
4. Do not attempt to clean the tooth by scrubbing or using cleaning agents.
5. Do not let the tooth become dry.
6. Replace the tooth immediately if the patient is conscious. Make sure it is put back facing the right way around - look at the other teeth. Hold the tooth in place with some aluminium foil and/or by gently biting on a handkerchief.
7. Contact a dental professional immediately.
8. Consideration should be given to a tetanus injection; seek dental/medical advice.

If you cannot replace a permanent tooth in its socket:

1. Store the tooth in milk, normal saline solution or wrap the tooth in plastic cling wrap.
2. Seek dental help immediately as it is important that the tooth be replaced as quickly as possible (DHS, 2000b).

9.5 Over Retained Deciduous Teeth

The lower incisors are the first deciduous teeth to loosen. These are followed by the upper incisors. The roots of the deciduous teeth will dissolve naturally. When enough of the root has dissolved, the tooth becomes loose and falls out. There is no need to make a dental appointment for loose teeth.

Sometimes a permanent tooth will begin erupting before the primary tooth/teeth have fallen out. This most commonly occurs with lower permanent incisors.

The permanent tooth may grow on the inside of a primary tooth. If the primary tooth is still present at eight years of age, the dental professional may choose to extract the tooth to assist eruption of the permanent tooth. Most often the problem resolves itself with the primary tooth eventually coming out naturally (DHS, 1997).

9.6 Tooth Discolouration

Staining may be due to a number of causes. These include:

- extensive use of antibiotics during tooth formation;
- congenital conditions;
- trauma;
- developmental defects;
- hypoplasia; and
- fluorosis.

Discolouration may be either extrinsic or intrinsic. Extrinsic staining is superficial and occurs after tooth eruption. Intrinsic discolouration may result from a developmental defect of the enamel or internal staining of the tooth. This may also affect the dentine (calcified layer underneath the enamel) (Cameron and Widmer, 1997). Depending on the extent and severity of the discolouration, further assessment by a dental professional may be advised.

Hypoplasia is a defect in the enamel causing a break in the surface continuity of the enamel. It can result in the thinning of enamel or cause an inconsistent surface, which is rough, smooth, or randomly pitted. It can be caused:

- by trauma;
- as a result of a vitamin deficiency, such as Vitamin D;
- as a result of illness; or
- by genetic inheritance (Cameron and Widmer, 1997).

Professional assessment is required to determine appropriate treatment, if any.

Fluorosis in its mildest form leads to opacities in the enamel, which result in tiny white flecks throughout the enamel. Most cases are in the mildest form. It is rare to have a case of severe fluorosis in Australia (DHS, 2004).

Fluorosis is caused by over consumption of fluoride in the developmental stages of tooth eruption (0-6 years of age). Increased intake of fluoride in the form of fluoride tablets or from ingesting vast amounts of toothpaste can increase the chance of fluorosis in this age group (Cameron and Widmer, 1997). Importantly, the fluoridation of water supplies has not increased the occurrence of fluorosis (DHS, 2004).

It is recommended that a low fluoride toothpaste is used for children up to the age of seven years. Children should be supervised while cleaning their teeth and also encouraged to spit out toothpaste after brushing.

9.7 Teeth Grinding (Bruxism)

Bruxism is the technical term for grinding teeth, which often occurs during sleep. Three out of ten children will experience this, with the highest incidence in children under five years of age (kidshealth.org/parent/Teeth/bruxism.html).

Generally bruxism does not hurt the child's teeth and in most circumstances the child will grow out of it with no ill effects. In extreme cases, night-time grinding and clenching can wear down tooth enamel, and cause orthodontic problems and temporomandibular joint disease (TMJ).

Indications that children may be grinding their teeth include:

- the sound of grinding - it is quite audible;
- complaints of a sore jaw or face in the morning; or
- complaints that teeth feel strange in the morning.

If parents are concerned about teeth grinding it is best to get an assessment by a dental professional to determine the causes of the grinding and whether any damage to the teeth is being caused. In some cases a special night guard may be prescribed to protect the teeth. This acts very much like a mouthguard worn when playing contact sports.

9.8 Tongue Thrusting

During a normal swallow, the tongue is pushed up against the roof of the mouth. Tongue thrusters will instead push the tongue forward against the front teeth, exerting anywhere from one to six pounds of pressure against the structure of teeth, approximately every 45 seconds. Nearly all infants are born tongue thrusters. However most children will outgrow it and develop a normal swallowing pattern by the time they are six. Only about three per cent of children will continue with tongue thrusting by the age of 12 years (www.electivebeauty.com/orthodontics/tongue_thrusting.html).

As a result of continued tongue thrusting, the front teeth may be pushed forward causing an open bite where front teeth do not meet. Tongue thrusting can also cause speech problems, particularly with articulation of 's' and 'z' sounds which may need correction by a speech pathologist. If parents are concerned that their child may be a "tongue thruster" signs and symptoms to look for include:

- difficulty pronouncing 's' and 'z' sounds;
- a facial grimace and/or pursing of the lips when swallowing;
- when at rest, the mouth hangs open and the tongue is pushed forward; and
- open mouthed breathing.

If there is a concern, an assessment by a dental professional is advised.



Child with an open bite

10. Oral Pathology

This section is intended to broaden Primary School Nurses' knowledge and recognition of oral pathological conditions. It covers the prevalence, signs/symptoms, causes, age, treatment and prevention of the following:

- eruption cyst
- abscess
- cellulitis
- geographic tongue
- mucocele
- ulcers
- candida albicans (thrush)
- primary herpes infection
- recurrent herpes simplex/herpes labialis
- hand-foot-and-mouth disease (HMF)
- measles.

This section is taken directly from the DHSV publication *TEETH - Oral Health Information for Maternal and Child Health Nurses* (DHSV, 2004).

While conducting mouth checks, Primary School Nurses may encounter some of these conditions in varying degrees.

While a section on treatment has been included, Primary School Nurses will use their own professional judgement about appropriate referral to a medical or dental professional.

This document describes the generally accepted practice at the time of publication. It is a guide only and as such is a general summary of the clinical knowledge. Primary School Nurses should regularly update their knowledge of the area and exercise their clinical judgement when applying this information.

10.1 Eruption Cyst

Prevalence

Not common; relatively rare.

Signs/Symptoms

An eruption cyst appears as a smooth, localised dome-shaped, fluid-filled swelling. It is bluish in colour if it contains blood, is painless and overlies an erupting tooth.

Causes

Follicular enlargement just before eruption. Trauma leads to bleeding within the follicle, producing the purple/brown appearance.

Age

Children aged between six months and 12 years.

Duration

The cyst drains once the tooth erupts; this length of time varies from individual to individual.

Treatment

Usually no treatment is necessary unless the cyst becomes infected, when it may be surgically opened.



Eruption cyst



Abscess



Abscess

10.2 Abscess

Signs/Symptoms

An abscess generally appears as a pimple on the gum around the affected tooth. There may be pain of a dull throbbing nature associated with the abscess, and pus may be visible.

Causes

An infection around the root of a tooth usually spreading from infection in the pulp of the tooth.

Age

All ages of people with teeth.

Duration

Can vary from several days to months if asymptomatic.

Treatment

The child should be referred to a dental professional so that the tooth can be treated. Treatment depends on which tooth is involved and the extent of the abscess. It may require extraction or root canal treatment.

Other Information

An abscess on a deciduous tooth can affect the development of the permanent tooth.

10.3 Cellulitis

Signs/Symptoms

The infection spreads through the connective tissue, causing gross inflammation, exudate and oedema, together with toxæmia and fever. It most commonly occurs in the facial planes of the lower jaw and in rare cases spreads to the floor of the mouth and down to the pharynx and larynx. This extremely serious condition known as **Ludwig's angina**, can cause obstruction of the patient's airway.

Causes

Has the same causes as an abscess but the organisms will have the ability to spread. This is an extension of infection through soft tissues and can occur if the resistance of the child is low or the virulence of the infecting organism very high.

Age

All ages of people with teeth.

Duration

Days/weeks.

Treatment

Management of severe cases may require hospitalisation, antibiotics, fluid replacement and removal of the cause (for example, extraction or endodontic (root canal) treatment of the tooth).



Cellulitis



Geographic tongue

10.4 Geographic Tongue

Geographic tongue

Also known as benign migratory glossitis, or wandering rash of the tongue.

Prevalence

Affects approximately 1-2 percent of the population.

Signs/Symptoms

Geographic tongue makes the tongue appear patchy. It is characterised by single or multiple areas of pink to red smooth

patches where the taste buds appear to be absent. The areas continually change position and migrate from site to site. The patches on the tongue may become tender, especially to spicy and acidic foodstuffs. Parents should be assured that geographic tongue is of a benign nature.

Causes

Unknown, but emotional stress, nutritional deficiencies and hereditary factors have been suggested.

Age

Young to middle-aged adults.

Duration

May appear suddenly and persist for months or years.

Treatment

It is a benign condition and generally does not require any treatment.

10.5 Mucocele

Prevalence

The mucocele constitutes the most common nodular swelling of the lower lip.

Signs/Symptoms

These swellings are asymptomatic soft, fluctuant, bluish-grey (although long-standing lesions may have a whitish appearance) and are usually less than 1 cm in diameter. Saliva builds up in connective tissue which is surrounded in a fibrous capsule.

The most common location is the lower lip.

Causes

Arises from trauma to one of the minor salivary glands in the lips or cheeks. Often caused from lip biting or other minor injuries.

Age

Children and young adults are mostly affected.

Duration

Three to six weeks

Treatment

- Superficial mucoceles usually burst and heal spontaneously.
- Persistent mucoceles are treated by surgical excision.



Mucocele



Aphthous ulcers

10.6 Ulcers

Aphthous Ulcer

Prevalence

Aphthous ulcers occur in approximately 1-2 percent of children in the western world.

Signs/Symptoms

Aphthous ulcers are characterised by painful, recurrent, solitary or multiple lesions or ulcerations. They are usually a few millimetres in size. Aphthous ulcers can occur

in any site in the mouth, especially on the cheeks, lips and tongue.

Causes

Minor trauma, stress.

Age

There is no preference for age, sex or race.

Duration

Usually heal spontaneously in two to four weeks.

Treatment

Treatment for aphthous ulcers is limited and confined to restricting the intake of citrus foodstuffs (such as orange juice) and salty items (for example, Vegemite). A suitable topical anaesthetic may be applied to the affected site for temporary relief, particularly before eating.

Traumatic Ulcer

A traumatic ulcer may be the result of damage caused by a sharp object (for example, a pencil), cheek biting or eating overheated foods or drinks. These ulcers usually heal within a week.

Herpetic Ulcer (Infectious Ulcers)

If multiple lesions resembling aphthous ulcers occur, accompanied by a fever, an infection with the herpes simplex virus must be considered. This is often seen in babies and small children (see pages 59 and 60).

The most important of these is caused by leukaemia. This appears as swelling and ulceration of the gingivae with spontaneous bleeding. Squamous cell carcinoma may present as a discrete ulcer with a characteristic rolled edge but would be very rare in an infant/child.

Any ulcer that does not heal within a few weeks should be investigated by a medical or dental professional.

10.7 *Candida Albicans* (Thrush)

Prevalence

Relatively common inhabitant of the mouth and is often seen in babies or infants, or individuals on long-term antibiotics or immuno-suppressive drugs.

Signs/Symptoms

The yeast affects the superficial layers of the mouth tissues.

Thrush is generally a local surface infection that produces milky white patches in the mouth which may be associated with infection in the nappy area. Very rarely, fever and gastrointestinal irritation may accompany the disorder and this signifies a more general infection. White patches can be easily wiped off the oral mucosa.

Candida albicans may also be found in the intestine and genital areas.

Causes

Yeast.

Age

Thrush commonly occurs in young babies and infants.

Duration

Can persist for days or weeks.

Treatment

Treatment consists of topical anti-fungal agents applied directly to the affected areas.



Thrush

10.8 Primary Oral Herpes Infection



The primary form or initial contact of the herpes simplex viruses (Types 1 and 2) within the oral cavity can result in extensive oral ulceration involving most of the oral surfaces.



In particular, the gingival ulceration and vesicles with intense red gums and gingivitis, are particularly important clinical signs to support the diagnosis of primary oral herpes.

Prevalence

Common viral infection.

Signs/Symptoms

Localised inflammation and blistering on the skin.

Causes

It is usually transmitted to the child by a parent, relative or friend who has active cold sores when kissing the child.

Age

This primary form of infection usually occurs before the child is five years of age.

Duration

Herpes usually heals within 12 to 20 days.

Treatment

- maintain a nutritious and substantial diet
- maintain fluid intake
- offer bland foods such as yoghurt and custard
- avoid salty, spicy or acidic foods (which irritate the mouth).

10.9 Recurrent Herpes Simplex/ Herpes Labialis

Prevalence

Occur in 40 percent of patients who have the initial herpes viruses.

Signs/Symptoms

The herpes simplex virus, which causes cold sores on the lips, can also occur within the mouth, nose and eyes. The virus causes many painful blisters, which break down to form a collection of ulcers, which can take up to 14 days to disappear.



Adult mouth showing secondary herpes infection; cold sores

The child generally develops immunity after the onset of the primary infection and thereafter develops local lesions (a discreet cold sore).

The infected child may suffer fever, malaise and irritability. Small clusters of vesicles rapidly erupt in the mouth and the gums will be very red and swollen and bleed if they are touched. When the vesicles burst, they form yellowish ulcers surrounded by a red halo. Joining of adjacent lesions forms large ulcers in the mouth including the lips and tongue.

Following the original infection, people may suffer from recurrent bouts. Recurrent herpes simplex tends to produce clusters of vesicles that ulcerate. The lesions are characterised by the appearance of small clusters of vesicles that erupt and form slightly depressed, yellow-brown ulcers that have distinct red halos. Most people report symptoms such as tingling, throbbing and burning 24 hours before the eruption of the lesions. Vesicles rupture to form painful lesions.

When they appear on the lips they are commonly referred to as cold sores.

Causes

Can be trauma to the skin and lips or being run-down or tired.

Age

All ages.

Duration

Up to seven to 14 days.

Treatment

Treatment involves applying antiviral creams or anaesthetic ointments directly to the affected areas.



Hand



Mouth

10.10 Hand-Foot-and-Mouth Disease (HFMD)

Prevalence

HFMD is a common viral illness.

Signs/Symptoms

Characterised by numerous shallow ulcers in the anterior mouth and on the hands and feet. Most children complain of a sore throat or mouth and may refuse to eat. A low-grade fever lasting one to two days is accompanied by a distinctive pattern of oral vesicles, chiefly on the tongue and buccal mucosa, and peripheral lesions on the hands and feet, and occasionally on the buttocks. HFMD is mild and self-limiting.

Causes

Virus (Cox-sackie virus).

Age

Occurs mainly in children under 10 years and in young adults.

Duration

Seven to 10 days

Treatment

Treatment is supportive. Provide fluids and a soft diet.

10.11 Measles

Prevalence

It was once common but is much rarer since the introduction of widespread immunisation. Epidemics are still occurring, especially in school-aged children.

Signs/Symptoms

This infection can be identified by the presence of characteristic mouth lesions called **Koplik's spots**. These are small white spots (like grains of salt) surrounded by a zone of inflammation and are often numerous on the inside of the cheeks or around the upper salivary duct in the upper cheek area. Koplik's spots appear about two to three days before the general rash and coincide with the most infectious period. They disappear with the development of the general skin rash that usually starts behind the ears and spreads down over the face and body. The rash consists of purplish/red raised spots which run together to form blotchy areas. Also look for red eyes and a dry cough.

Causes

Virus (paramyxovirus).

Age

Infants/childhood especially.

Duration

Incubation period is approximately 10 days, but varies from seven to 10 days from exposure to the onset of fever. It is usually 14 days until the rash appears.

Treatment

The child should have an isolation period for at least five days from the appearance of the rash. The treatment is similar to that for fever.



Clinical appearance of 'Koplik's spots' prior to the eruption of skin lesions in measles



General skin rash and 'Koplik's spots' in the mouth

11. Dental Services and Contacts

This section explains the types of dental services available and contact details for both public and private practitioners. It is important for Primary School Nurses to be aware of the eligibility criteria for public dental services before referral.

11.1 Dental Services in Victoria

Early Childhood Oral Health Program

The 2004 Victorian Budget committed funds to provide an Early Childhood Oral Health Program. This service targets children up to five years of age. Primary School Nurses will play an important role in assisting families to access this service.

The Early Childhood Oral Health Program provides treatment to:

- all children eligible to attend a funded kindergarten year; and
- other children of any preschool age (ie 0-5 years) where these children have an identified oral health need, particularly those referred from a primary healthcare professional such as nurses and general practitioners.

The program also provides oral health promotion to all preschool age (0-5 years) groups, focusing on strategies that promote early childhood oral health practices, and increase the oral health promotion skills of primary health care and education professionals working with infants and young children.

Depending on the local context, treatment services will be provided through either the Community Dental Program or the School Dental Service. Children of this age group will have priority access. Treatment for the dependants of health care and pensioner concession card holders will be free, and other families will be charged a copayment of \$27.

For further information on the Early Childhood Oral Health Program contact DHSV on tel: **1300 360 054**.

The School Dental Service

The School Dental Service (SDS) is managed by Dental Health Services Victoria (DHSV) - the leading public dental agency in Victoria.

Dental care is offered to all:

- primary school children;
- children enrolled in a special or special developmental school; and
- years 7 and 8 students who are dependants of concession card holders (pensioner concession or health care card).

Care is provided from mobile dental vans and fixed clinics throughout the state.

The SDS aims to offer care to all children every two years. Children with high dental needs are seen every 12 months or less. Following an examination, care provided may include:

- fissure (dental) sealants (preventive)
- application of fluoride (preventive)
- scale and cleaning
- fillings in first and permanent teeth
- radiographs (x-rays)
- extractions
- oral hygiene instruction and dietary advice.

Dental Therapists provide general dental care, and more complex care is performed by Dentists. Specialist dental care is not provided but referral to a dental specialist can be arranged.

Fees

The service is free for dependants of concession cardholders and children enrolled in a special developmental school. Non-cardholders pay a fee of \$27 per child (maximum \$108 per family) per course of care, which includes a dental examination and all general treatment.

Further information on the SDS can be provided by Dental Health Services Victoria on tel: **1300 360 054**.

Royal Dental Hospital of Melbourne

The Royal Dental Hospital of Melbourne is a teaching and specialist facility, also managed by DHSV, offering:

Emergency Care (urgent, serious dental problems, including management of accidents, swelling, bleeding and pain)

- No charge for children (aged 17 years or less) whose families have a pensioner concession or health care card
- \$21 for adults (aged 18 years and over) who have a pensioner concession or health care card

General Dental Care (including checkups cleaning, fillings and extractions)

is generally provided by students studying to become dental clinicians.

- No charge for children (aged 17 years or less) whose families have a pensioner concession or health care card.
- \$21 per visit for adults (aged 18 years and over) who have a pensioner concession or health care card. A maximum fee of \$84 applies for a course of care.

Specialist Services are also available to eligible people upon referral. One of the main reasons children are referred to the Royal Dental Hospital of Melbourne is for dental treatment under a general anaesthetic. Children may be referred through any dental provider including the Early Childhood Oral Health Program, the School Dental Service, the Community Dental Program or private practitioner.

The Royal Dental Hospital of Melbourne is open 7 days a week including weekends and public holidays.

Community Dental Program

General dental care for health care and pensioner concession card holders and their dependants is available at community dental clinics throughout metropolitan Melbourne and in country centres. There are copayments and waiting lists for most types of treatment, although patients who have urgent needs will be assessed for emergency care generally within 24 hours.

In some situations, dental care may be provided through private practitioners. The copayment for patients will be the same regardless of whether the treatment is received at the public dental clinic or through a private practitioner. These referrals can be either for emergency or general dental treatment, or for dentures.

The Community Dental Program offers treatment to a number of priority groups including;

- 0-5 year olds
- Youth
- Special needs groups including the frail elderly

Fees

- No charge for children (aged 17 years or less) whose families have a pensioner concession or health care card.
- 0-5 year olds whose families do not have a pensioner concession or health care card will be charged a copayment of \$27.
- \$21 per visit for adults (aged 18 years and over) who have a pensioner concession or health care card. A maximum fee of \$84 applies for a course of care.

Further information on any of the services provided by Dental Health Services Victoria can be obtained by phoning (03) 9341 1200 or the School Dental Service on 1300 360 054. As eligibility for these services varies, it is recommended that individual enquiries are made.

11.2 Local Dental Services and Contacts

The Dental Health Services Victoria website www.dhsv.org.au provides a listing of local dental services linked to both a Victorian map and postcodes. This website is updated regularly.

Private Dental Services

Private dentists are listed in the telephone directory's Yellow Pages (under 'Dentists') in alphabetical order or by area. The Australian Dental Association (Victorian Branch), tel: **(03) 9826 8318**, can also provide names of most dentists in your area.

11.3 School Dental Service Regional Contact Numbers

Information regarding local contacts for the School Dental Service for each region has been provided to assist Primary School Nurses in developing local links with dental services.

SDS Regional Contact Details

Statewide Telephone Contact 1300 360 054

SDS	Telephone:	Fax:	Office Address	Postal Address
General Enquiries	03 9341 1150	03 9341 1234	Dental Health Services Victoria Level 2, 720 Swanston St Carlton VIC 3053	Dental Health Services Victoria GPO Box 1273L GPO Melbourne VIC 3001
Region	Telephone:	Fax:	Office Address	Postal Address
Barwon	03 5277 9859	03 5277 9372	School Dental Service DEET, Vines Rd Nth Geelong VIC 3220	School Dental Service Barwon Region PO Box 1258 Geelong VIC 3220
Grampians	03 5333 4304	03 5333 1973	School Dental Service 1010 Sturt St Ballarat VIC 3350	School Dental Service Grampians Region PO Box 168W Ballarat VIC 3350
Loddon Mallee	03 5454 6910	03 5454 6919	School Dental Service Ann Caudal Centre Level 6, East Wing 100 Barnard St Bendigo VIC 3550	School Dental Service Loddon Mallee Region PO Box 122 Bendigo VIC 3552
Hume	03 5832 1583	03 5831 6164	School Dental Service Department of Human Services 163 Welsford St Shepparton VIC 3630	School Dental Service Hume Region PO Box 1417 Shepparton VIC 3632
Gippsland	03 5127 4563	03 5126 1493	School Dental Service 35 Albert St Moe VIC 3825	School Dental Service Gippsland Region PO Box 935 Moe VIC 3825
Western Metropolitan	03 9689 8800 03 9689 8359	03 9689 7504	School Dental Service Footscray Dental Centre 2 Geelong Rd Footscray VIC 3011	School Dental Service Western Region PO Box 4252 West Footscray VIC 3012
Northern Metropolitan	03 9481 3179	03 9486 4730	School Dental Service 658 Nicholson St Nth Fitzroy VIC 3068	School Dental Service Northern Region PO Box 1163 Nth Fitzroy VIC 3068
Special Services	03 9481 7083	03 9486 4730	As Above	As Above
Eastern Metropolitan	03 9890 7213 03 9890 3955	03 9890 9124	School Dental Service Suite 207, 901 Whitehorse Rd Box Hill VIC 3128	School Dental Service Eastern Region PO Box 525 Box Hill VIC 3128
Southern Metropolitan	03 9791 7855	03 9791 7588	School Dental Service Suite 4/50 Thomas St Dandenong VIC 3175	School Dental Service Southern Region PO Box 7003 Dandenong VIC 3175

Contact details may change over time.

Up to date information is available on the DHSV website: www.dhsv.org.au

11.4 Other Useful Contacts

Oral Health Information

Health Promotion Division, Dental Health Services Victoria (DHSV)

What's available: Oral health information and oral health promotion materials.

www.dhsv.org.au/resources.asp (See Oral Health Promotion Materials)

email: healthpromotion@dhsv.org.au

ph. (03) 9341 1005

Located at: Ground Floor, Royal Dental Hospital of Melbourne,
720 Swanston St. Carlton 3053

Public Health Division, DHS

What's available: Oral health promotion site, publications and information.

www.dhs.vic.gov.au/phd/oral/index.htm

Local Government, Health Promotion Officer

What's available: Health promotion information and advice, specific to your area.

See local government listings in your telephone directory

Better Health Channel

What's available: Health information directory, including oral/dental health fact sheets

www.betterhealth.vic.gov.au

See "Mouth and teeth" under Topics, Health Conditions

Health Translations Directory

What's available: Multi-lingual health information.

www.healthtranslations.vic.gov.au

Enter "dental" under keyword

Oral Health Products/Resources

DHSV Health Promotion Division, Dental Health Services Victoria (DHSV)

What's available: A wide variety of free and low-cost oral health promotion and educational resources, and loan items.

www.dhsv.org.au/resources.asp (See oral health promotion materials)

email: health.promotion@dhsv.org.au

ph. (03) 9341 1005

Located at: Ground Floor, Royal Dental Hospital of Melbourne,
720 Swanston St. Carlton 3053

Colgate Oral Care

Oral care brochures and *Bright Smiles Bright Futures* oral health education kits for Year 3 (video, stickers, posters, etc).

For more information visit www.colgateprofessional.com.au

www.colgatebsbf.com

Oral B

What's available: Selection of literature, products and resources for children's oral care.

Dental patient education handouts:

www.oralb.com/dentalpros/resources/patient_ed_handouts.asp

Parents' and children's oral health information and advice: www.oralbstages.com.au

Gillette consumer helpline (toll free): 1800 641 820

Dental Outlook

What's available: Oral health posters, balloons, colouring sheets, stickers available for sale.

ph. (02) 9557 9330 Call for a catalogue

Local Dental Professionals

School Dental Service and Community Dental Clinics

What's available: Local dental service information.

ph. 1300 360 054 (local call cost) Directs all calls to closest office.

www.dhsv.org.au

Australian Dental Association

What's available: Dental health information, FAQs, teacher and parent resources, your nearest dentist.

ph. (03) 9826 8318

www.ada.org.au See: Consumer Information

Useful Websites:

www.health.vic.gov.au/ideas/bluebook/index.htm

www.dhs.vic.gov.au/phd/oral/index.htm

www.dhsv.org.au/resources.asp

www.betterhealth.vic.gov.au

www.dhs.vic.gov.au/rrhacs

www.dhs.vic.gov.au/nutrition

www.smartplay.com.au/vic/pub/pstart.asp

www.mydr.com.au

www.pharmaCE.vic.edu.au

11.5 Tip Sheets

DHSV has a range of oral health resources and materials available to dental and allied health and education professionals and the general community.

Targeted Tip Cards and Fact Sheets for parents cover the following topics:

- Eat Well, including tips on everyday foods and occasional foods.
- Drink Well, including information about which drinks to limit and to encourage consumption of.
- Clean Well, including correct toothbrushing techniques.
- Play Well, including information on use of mouthguards, as well as what to do if a tooth is knocked out.
- Stay Well, including information on dental visits, and dental sealants.

(Samples included in cover slip of this resource)

A range of age-specific Tooth Tips sheets is also available

- Tooth Tips 0-12 months
- Tooth Tips 1-2 years
- Tooth Tips 2-6 years

These three sheets are available in English and translated into six commonly used community languages.

The listed materials can be obtained through the Dental Health Services Victoria Online Information and Resource Service: www.dhsv.org.au/resources.asp

or from the: Health Promotion Division
 Royal Dental Hospital of Melbourne
 720 Swanston Street, Carlton, VIC, 3053
 Tel: 03 9341 1005

As mentioned in 11.4, a range of fact sheets is also available on the Better Health Channel, at www.betterhealth.vic.gov.au

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BRUSHBOY

WaterBOY

MUNCHGIRL



**DEFENDERS
of the TOOTH**

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Oral Health Check and Referral Process

Questions as presented on SEHQ

Q1: Have you any concerns about your child's teeth?

Q2: Has your child been to the dentist in the last 1-2 years?

