



The mouth

A guide to oral health in schools



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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 clinical knowledge. Nurses and other health professionals who work in schools should regularly update their knowledge in these areas 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 registered dental practitioner.

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: A guide to oral health in schools is also available at: www.ohv.org.au

i. Foreword

We are proud to release the second edition of ***The mouth: A guide to oral health in schools*** (from here on referred to as *The mouth*).

The mouth is a general guidance document, designed to support school nurses and other health professionals (e.g., first aid officers), who may be required to assess or manage oral health issues in school children.

While the first edition (2024) focused on primary school nurses and their role in promoting oral health and undertaking mouth checks, this update includes new content that is relevant to other health professionals and nurses working in secondary schools.

The overall content will look familiar; however, this edition has been reorganised into three parts – **Oral health fundamentals**, **Clinical considerations**, and **Oral health promotion** – making it easier to navigate.

This resource covers oral health best practice and should be read in conjunction with any relevant workforce and/or position-specific protocols, policies and guidelines.

ii. Acknowledgements

The mouth: A guide to oral health in schools (2nd ed.) has a reputable provenance.

A significant proportion of its predecessor *The Mouth: Oral Health Information for Primary School Nurses* (DHSV 2005) was reproduced from *TEETH: Oral Health Information for Maternal and Child Health Nurses* (DHSV 2004; re-produced in 2011). The vision and work of the people who contributed to both foundation documents are gratefully acknowledged.

Numerous others provided expertise and support in the preparation of this resource, including staff from the Department of Education. We are grateful for their contributions.

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iii. Oral health policy context

Oral health is a recognised priority of the Victorian Department of Health.

Victorian action plan to prevent oral disease 2020-2030

This action plan focuses on opportunities for oral health promotion across the life course and acknowledges that **the places where Victorians conduct their daily lives are important in influencing their ability to prevent oral disease**. This action plan focuses on promoting oral health in key settings such as early childhood services, **schools**, health services, residential aged care and disability settings.

School nurses are well-placed to promote oral health for school students.

Victorian free school dental program – Smile Squad

The Smile Squad free school dental program is a partnership between Oral Health Victoria, the Department of Health, Department of Education, community dental agencies and Victorian government schools.

iv. Using this resource

The mouth recognises the broad knowledge and skill base of nurses and other health professionals working in schools and highlights the practical procedures they may be expected to perform in schools. People working in these roles will be able to identify the information of most use to them.

Whilst information is presented in a logical sequence, this manual does not need to be read in its entirety, or in sequential order. To facilitate the stand-alone nature of sections, readers may notice some repetition of content throughout the manual.

Part A – Oral health fundamentals

- [Section 1: Why is oral health important?](#)
- [Section 2: Supporting oral health](#)
- [Section 3: Oral health messages for everyone](#)
- [Section 4: Introduction to the mouth and teeth](#)
- [Section 5: Oral hygiene](#)
- [Section 6: Common dental diseases](#)
- [Section 7: Introduction to oral medicine](#)
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Part B – Clinical considerations

- [Section 11: Mouth checks](#)
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Part C – Oral health promotion

- [Section 18: Promoting oral health in schools](#)
- [Section 19: Whole-of-school policies and programs](#)
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- [Section 27: Participating in oral health campaigns](#)
- [Section 28: Bibliography](#)

v. Introduction

Promoting oral health in school settings supports the overall health and wellbeing of children and young people. A healthy mouth enables them to eat, speak, smile and socialise without pain, discomfort, or embarrassment (COAG Health Council, 2015).

Good oral health in childhood contributes to good oral health in adulthood (AIHW, 2016). This begins with the care of deciduous (baby) teeth, which are essential for the development of proper eating habits, speech and appearance, and for guiding the permanent teeth into place. As students grow older, they benefit from ongoing guidance about how their lifestyle choices can affect their oral health, ensuring that as they gain independence, they are well-versed in how to keep their mouth and teeth healthy for life.

The challenge

Despite being largely preventable, oral diseases continue to affect many children and young people. The most common issues include:

- dental caries (tooth decay)
- periodontal (gum) disease
- oral trauma.

These conditions can significantly impact a student's ability to communicate, concentrate, participate and thrive at school. Pain and infection, or the social stigma of visible dental issues can lead to missed school days, reduced self-esteem and difficulties with eating or speaking.

The opportunity

Not all children and young people can easily access dental services. This is why Australia's *National Oral Health Plan* emphasises that oral health promotion should be embedded in the settings where children learn and live, such as schools and early childhood centres, to improve access and outcomes (COAG Health Council, 2015).

Schools offer a natural and effective environment to integrate oral health prevention into existing programs.

- Visiting Primary School Nurses (VPSNs) already review School Entrant Health Questionnaire (SEHQ) responses, conduct targeted mouth checks, share oral health advice and connect families with dental practitioners.
- Secondary School Nurses (SSNs) deliver health education around lifestyle factors such as nutrition, hygiene and substance use – all of which are closely linked to oral health.

By enhancing the skills and knowledge of school-based health professionals in oral health, students stand to gain improved access to preventive care, earlier detection and management of oral health issues, and increased confidence in maintaining their well-being during and upon leaving school.

Part A: Oral health fundamentals

1. Why is oral health important?

Oral health is an essential part of general health and wellbeing.

Oral health is more than just having strong teeth and a bright smile. A healthy mouth enables people to eat, speak and socialise without pain, discomfort or embarrassment (COAG 2015).

This is especially important during a person's formative years in school.

- For primary school children, the deciduous teeth (also called baby or primary teeth) are important as they help develop eating ability, speech patterns and appearance, and later guide the eruption and position of the permanent teeth.
- For secondary school students, establishing good oral health practices can support physical health, self-confidence and long-term well-being.
- Establishing strong oral hygiene habits, understanding the impact of food choices, and making good food choices, sets the foundation for a healthier adulthood.

Good oral health in childhood contributes to good oral health in adulthood (AIHW 2016).

Dental issues and poor oral hygiene can impact on school students in several ways, including:

- articulation (speaking) difficulties
- poor nutrition: when pain and absent teeth affect a student's ability to bite and chew food
- confidence and self-esteem
- the ability to concentrate at school, and school attendance
- general well-being.

1.1 Oral health and young people

The burden of oral disease in children and young people can be attributed to three main conditions – dental caries (tooth decay), gum disease, oral trauma.

Dental caries

Dental caries can cause pain and complications for many children and teenagers, particularly those from vulnerable groups.

As outlined in the *Victorian Action Plan to Prevent Oral Disease 2020–30* (Department of Health 2020b), children from lower socio-economic backgrounds, culturally and linguistically diverse communities, and rural areas are at greatest risk.

- 43% of children aged 5-10 years have signs of tooth decay.
- Dental conditions (predominantly dental caries) are the highest cause of all potentially preventable hospitalisations in children 0–9 years.
- Advanced dental caries is more prevalent in children with:
 - a parent who has a health care card – 1.8 times more prevalent
 - an Aboriginal and Torres Strait Islander background – 1.9 times more prevalent
 - families who do not speak English at home – 2.1 times more prevalent.

- Nearly 1 in 4 (~24%) of children aged 6-14 years had experienced decay in their permanent teeth (AIHW, 2025b).
- Among 6–14-year-olds, around 11% had at least one permanent tooth with untreated decay (AIHW, 2025b).

Furthermore, in Australia, children living in areas without optimal water fluoridation experience considerably more dental caries than those in areas with water fluoridation (Do 2020).

Oral trauma

In 2023, nearly 9,000 children aged 6-12 years attended government-funded dental clinics for emergency care. Of these, nearly one third were triaged as Category 1 – requiring emergency (immediate) attention for oral trauma, severe mouth or facial swelling, or uncontrolled bleeding (OHV 2024b).

1.2 Self-reported quality of life measures

Health services routinely capture disease prevalence; however self-reported quality of life measures should also be considered.

These measures give a fuller picture of how oral health really affects daily life, in terms of:

- **comfort** – e.g., experience of pain.
- **function** – e.g., difficulty eating, speaking, sleeping, carrying out usual activities.
- **social impact** – e.g., feeling embarrassed, avoiding smiling or showing teeth.

The National Dental Telephone Interview Survey (NDTIS) 2021 found that in children aged 5-17 years:

- 9.1% had experienced toothache in the past 12 months.
- 15.2% had avoided some foods because of problems with their or mouth in the past year (ARCPOH, 2023).

Including such measures helps ensure that care and prevention address what matters most to children and teenagers.

2. Supporting oral health

A multi-faceted approach to oral health promotion is important.

Nurses and other health professionals are encouraged to educate and support students, parents and carers. Healthy smiles can be achieved by eating, drinking and cleaning well, and visiting a dental practitioner regularly.

In addition to individual oral health promotion, a whole-school-approach, as well as population and clinical prevention strategies also play a crucial role in preventing dental disease. This includes community water fluoridation, providing oral hygiene products, and offering clinical services such as fluoride varnish, fissure sealants and mouthguards.

■ For more information, see [Part C: Oral Health Promotion](#)

2.1 Establish good oral habits early

Establishing good oral health practices at an early age provides the best chance of reducing unnecessary oral disease and its associated burden.

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 (NHMRC 2013). It is also a time where new behaviours and skills are learned and refined.

The home and school environment are two places where children and teenagers spend large amounts of time, and different factors in each can influence oral health.

Parents and carers can influence behaviours such as toothbrushing, limiting sugary snacks at home, and role model actions that can be carried into adulthood. Healthy eating habits at home guide children and teenagers towards healthy food choices away from home (Department of Social Services 2021).

For many children and teenagers, attending school offers the first opportunity to exercise some personal freedoms about what they eat and drink. Schools can support oral health by providing safe drinking water and tooth-friendly options at the canteen.

3. Oral health messages for everyone

Eat well, drink well, clean well and stay well applies to everyone across all life stages, including children and young people.

An important opportunity exists for nurses and other health professionals to identify and begin addressing any oral health literacy gaps that families in their schools may have.

3.1 Eat well

To eat *well*, it's important to eat a variety of healthy foods that are fresh and nutritious, especially during childhood and adolescence when growth and development are occurring.

Whilst eating well for general health and oral health share the same nutrition principles, eating well for oral health places significant consideration on a food's local effect when it is in the mouth and in contact with teeth.

Bacteria in dental plaque can metabolise *any* fermentable carbohydrate, which may result in dental caries. Foods containing natural sugars (e.g., fresh fruit, honey), as well as processed foods where sugars are added by manufacturers can contribute to dental caries. Sweet, sticky foods are of particular concern.

Whilst we often focus on the *quantity* of sugar consumed, the *frequency* of consumption also plays a role in dental caries risk. Each exposure to fermentable carbohydrate lowers the pH of the mouth to a level where minerals are lost from the tooth surface. The buffering capacity of saliva can raise and restore the pH to a safer level in about 20-40 minutes, when minerals are resorbed back into the tooth, so long as no additional sugar is consumed during that time. Frequent sugar consumption can interrupt the recovery process and reduce time spent at a safe pH level. This makes teeth more susceptible to dental caries.

Exposure to foods and drinks containing sugars should be limited. They are better eaten with main meals rather than between meals (Australian Dental Association 2024a). Chewing gum containing sugar should also be avoided.

Foods to encourage	Foods to limit
• fruit – fresh, stewed, or frozen	• fruit bars and straps • candied fruits or dried fruits (infused with sugar syrup prior to dehydration)
• vegetables – raw, steamed, or grilled ○ Try veggie sticks with creamed cheese, peanut butter, yoghurt and other dips ○ Plain or lightly salted popcorn is a great snack	• sweetened popcorn (e.g., caramel-coated)
• grains, breads and cereals – including low sugar breakfast cereals • pretzels	• cakes and icing • sweet biscuits and donuts • chocolates and lollies • sugar-sweetened breakfast cereals • muesli/health bars high in sugar
• dairy – cheese or plain yoghurt. Plant-based, calcium enriched foods can be a substitute for dairy products	• ice cream, dairy desserts

• spreads and fillings – hummus dip, tahini spread, peanut butter, cheese spread, Vegemite	• sweet spreads (such as jam, honey, hazelnut spread)
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3.2 Drink well

Drinking well for oral health highlights:

- the presence of fluoride in tap water and its protective effect on teeth.
- the importance of good hydration needed to support healthy saliva levels.
- the local contact effect of drinks on teeth (namely dental caries and dental erosion).

Tap water and milk

Everyone should be encouraged to drink tap water. Fluoridated tap water (where available) is the best option for healthy teeth. Plain milk is another preferred option. Calcium-enriched, plant-based milks (with little to no added sugar) are an option for people intolerant to dairy.

Hydration and healthy saliva

Being well-hydrated allows the body to produce a sufficient quantity of watery saliva, which is essential for good oral health. Saliva helps to keep the mouth clean by washing away food remnants and is a reservoir for minerals that can buffer against the effects of acids. Saliva is 99% water and is most quickly replenished by drinking water.

Sugar and dental caries

Limit sugary drinks (even those with natural sugars like 100% fruit juice) whenever possible. If consumed, these are best drunk with meals, rather than in between. It is preferable to drink sugary drinks in one sitting. Using a straw can reduce the drink's direct contact with teeth. Sipping sugary drinks over time – for example, drinking juice from a “pop top” container – should be avoided. Eating a fresh piece of fruit with a glass of water is a more nutritious alternative to juice.

Acidic drinks and tooth erosion

Carbonated and other acidic drinks can cause irreversible loss of tooth structure by erosion, even when no sugars are present. The pH of some common drinks can be as low as 2.0 (lemon juice), 2.5 (cola) or 3.5 (apple juice). Water has a neutral pH (7.0) so does not cause erosion and likely has the added benefit of being fluoridated. Adding a squeeze of lemon juice to water increases the water's acidity (i.e., lowers the pH) and should therefore be avoided. Plain milk has a nearly neutral pH (6.5-6.9), plus has the added benefit of calcium.

¶ For more information, see [Section 13.6.3.2 Tooth erosion](#)

Caffeine and alcohol

Young people may start consuming caffeinated drinks like sports and energy drinks, coffee and tea, without being aware of the potential impact on their teeth. All caffeinated drinks can reduce saliva production to some extent. In addition,

- Sports and energy drinks are highly acidic (pH 2.5-3.5), and some varieties contain significant amounts of sugar. Sports drinks are often consumed during and immediately following exercise when the mouth is dry. This amplifies the damaging effect of the acids on

teeth. From an oral health perspective, water is the best *first* drink to consume during and after exercise.

- Coffee and black tea are mildly acidic (pH 4.8 – 5.4). Hot and iced versions of these are often consumed with added sugar – sometimes a significant amount. These are often sipped gradually, rather than drunk all at once.
- Teas, such as green tea have been found to have some protective effects such as increasing salivary production and raising pH levels in the mouth.

Some high school students may also drink alcohol. Alcohol can reduce salivary flow, irritate oral tissues, and is a known cause of cancer. Alcoholic beverages tend to be acidic (beer = pH 4.0, wine = pH 3.0-4.0) or are served with a sugary, acidic mixer (e.g., Cola).

The tannins in coffee, tea and red wine cause tooth staining.

¶ For more information, see: [Section 17.16 Alcohol – oral considerations](#)

Drinks to encourage	Drinks to limit
Tap water (especially if contains fluoride)	Fruit juices (including 100%, fresh or processed)
Plain milk	Soft drinks and cordials Bubble teas
Calcium-enriched, plant-based milks (no-low sugar)	Sports drinks, energy drinks. Caffeinated drinks like tea, coffee. Alcohol

3.3 Clean well

Good oral hygiene reduces the chance of developing dental caries and gum disease.

Brushing teeth twice a day with fluoride toothpaste, and cleaning in between teeth daily is recommended. People who have difficulty cleaning their teeth should be supported according to their needs.

3.3.1 Oral hygiene at home

Throughout each day, a sticky, soft layer of bacteria known as plaque, continuously forms on the teeth. Food debris is also left behind on teeth (and any oral appliances) after eating and drinking. A good oral hygiene routine will help limit the damage these can cause, and should include:

1. cleaning the outside and top surfaces of teeth twice a day (e.g., toothbrushing)
2. cleaning in between teeth once a day (e.g., flossing)
3. using fluoride toothpaste every time brushing occurs
4. providing help and support to those who require it
5. cleaning of orthodontic appliances and dentures.

1. Clean the outside and top surfaces of teeth twice a day

Toothbrushing in the morning and at night before bed helps to physically remove plaque and food debris from the outside and top surfaces of teeth. Parents can support their children to use the correct technique and brush for an adequate amount of time (approx. 2-3 minutes).

According to data from *The Royal Children's Hospital National Child Health Poll (2018)*:

- one in four of all school-aged children (27%) and two in five preschoolers (39%) don't have their teeth brushed twice a day.

Another 2018 study found that for children aged 6-12 years (Rhodes 2018):

- 54% of indigenous children compared to 70% of non-indigenous children and brushed their teeth twice a day.
- 59% of children in low-income households compared to 79% of children in high-income households brushed their teeth twice a day.

The results from the *National Child Oral Health Study 2012-14* (Armfield *et al* 2016) were similar:

- just over two-thirds (69%) of children aged 5–14 brushed their teeth at least twice a day with toothpaste.

A soft-headed toothbrush is recommended. The size of the head should be appropriate for the size of the mouth. Generally, a smaller head allows the toothbrush better access to all teeth. Manual or electric toothbrushes are both good options. Each member of the family should have their own toothbrush.

Toothbrushing is an effective way to apply fluoride to the teeth.

2. Clean in-between teeth once a day

Toothbrushing is unable to remove plaque and food debris that collect between teeth, however there are many options that can. These include dental floss, flossettes, interdental brushes and water flossers.

Dental floss is used most frequently; however, an oral health professional can provide personalised advice on the most appropriate product to use.

🦷 For more information, visit:

🦷 [Cleaning between the teeth | teeth.org.au](https://teeth.org.au/cleaning-between-the-teeth)

🦷 [Tips for cleaning between teeth | teeth.org.au](https://teeth.org.au/tips-for-cleaning-between-teeth)

3. Use fluoride toothpaste when brushing

Fluoride toothpaste reduces tooth decay. A small pea-sized amount for children and teenagers is sufficient.

Age	Recommended toothpaste
18 months – 5 years (inclusive)	Low fluoride (junior) toothpaste (500-550ppm)
6 years and over	Standard fluoride toothpaste (1000-1500ppm)

Everyone should be encouraged to spit the toothpaste out after brushing and discouraged from swallowing it. There is no need to rinse away the toothpaste. This allows the fluoride to stay in contact with the teeth for longer, providing extra protection against decay.

Junior toothpaste has a milder flavour which young children find more palatable, and a lower fluoride concentration means that less fluoride is swallowed when young children are learning how to spit.

Where a child or teenager is at higher risk of dental caries, an oral health professional may recommend the use of a higher strength fluoride toothpaste (e.g., a young child may be advised to use standard fluoride toothpaste). Parental supervision of younger children is required to ensure the toothpaste isn't swallowed.



Clean well

Toothbrushing cleans away the bacteria that causes tooth decay. Fluoride toothpaste helps to repair the tooth surface and keeps teeth strong.

Children will need help to brush their teeth until they are eight years old.

How to brush



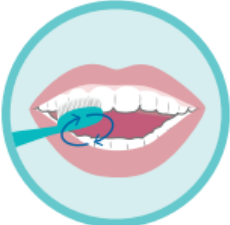
STEP 1

Brush in the morning and at night before going to bed.



STEP 2

Use a pea-sized amount of fluoride toothpaste on a soft toothbrush.



STEP 3

Brush teeth and along the gum moving in gentle circles. Start with the outside surfaces.



STEP 4

Repeat on the inside surfaces.



STEP 5

Use a light back and forth motion on the chewing surfaces. Spit out toothpaste, but don't rinse with water.

Be sure to brush all surfaces: top and bottom, left and right, front and back.

4. Children and teenagers should receive appropriate oral hygiene help and support

Not all parents will be aware of how they can best support their child or teen's oral hygiene and may ask school nurses for tips.

General tips

- **Lead by example** – Observing parents and other family members brush their own teeth helps establish oral hygiene as an important habit.
- **Provide the right tools** – Choose oral hygiene products together with their child. Using a toothbrush and fluoride toothpaste that they like can make a big difference.
- **Make time for oral hygiene** – Help children and teens fit oral hygiene into their daily schedule.

- **Use reminders** – Oral hygiene can be overlooked when families are busy and tired. It might be helpful to use age-appropriate gentle reminders, such as reward charts, alarms or smartphone apps.
- **Regular dental visits** – Oral health professionals can reinforce the importance of oral care and provide tailored professional advice.

Primary school-aged children

- Parents should assist young children with brushing and interdental cleaning until the age of 8 years. A general rule is that once a child can tie their own shoelaces, they should also have the dexterity to brush their teeth adequately on their own.
- Parents can teach and encourage pre- and primary school children to use their toothbrush independently; most children do not have sufficient manual dexterity to brush effectively. One popular technique has the child start the brushing routine, which is then completed by an adult.
- The best way to clean a child's teeth is to sit the child on a 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.

Secondary school students

- Offer independence and trust – give teens space to manage their own hygiene but check-in occasionally. Use positivity rather than criticism.

Students with additional needs

- Oral health professionals can work together with families to understand a child's unique needs and tailor suggestions accordingly.
- An oral health professional may also recommend using adapted products such as toothbrushes with special handgrips, or low-foaming, plain-tasting toothpaste.
- [Autism toothcare](#) is a fantastic UK site that provides advice and support for families of young autistic children to care for their teeth.

5. Cleaning of orthodontic appliances (e.g., retainers) or dentures

Regular cleaning of appliances helps prevent plaque build-up, staining, bad odours and reduces the likelihood of fungal infections (if the appliance sits on the oral mucosa).

It is important to clean the appliance at least twice a day (at the same time when teeth are cleaned), but more frequent cleaning (e.g., after meals) may be required. A soft brush and a non-abrasive cleaner (e.g., dishwashing detergent) should be used. Avoid regular toothpaste, as it can be too abrasive.

Students should follow care instructions provided by their dental practitioner.

- ¶ For more information, visit [Denture care | ohv.org.au](https://www.ohv.org.au/denture-care)

3.3.2 Oral hygiene FAQs

Toothpastes

1. **There are so many different toothpastes to choose from. Are the more expensive toothpastes better?**

Price is not necessarily an indication of quality. Any toothpaste that is sugar-free and contains fluoride (in the appropriate quantity for each student's age and needs) is a suitable option.

2. What about the fun-flavoured toothpastes?

There is an increasing number of toothpastes on the market offering fun, attractive new flavours that differ from traditional mint. Many (but not all) of these contain fluoride. Those with fluoride are a suitable option. Parents might consider these to help motivate their child to brush. Some of the flavours are comparable to the “real” product, so care may be needed to ensure these are not accidentally swallowed.

3. Some parents have told me that it is difficult to find a suitable toothpaste (i.e., one that they like) for their child who has sensory issues. What advice can I offer them?

Children with sensory issues may take some time to find a suitable toothpaste. Whilst individual preferences will vary, sensory-averse children often prefer a toothpaste with no (or mild) flavour, no (or minimal) colour, be low-foaming (SLS-free) or have a smooth texture (not gritty).

Various products are available, although parents need to take care that fluoride is included in the formulation. Parents should seek the support of an oral health professional to help them navigate options (and other strategies) for their child. [Autism toothcare](#) is a fantastic UK site that provides advice and support for families of young autistic children to care for their teeth.

4. Do whitening toothpastes work?

Whitening toothpastes can help remove surface stains and *may* lighten the appearance of teeth slightly. While they often contain whitening agents similar to those used by dental practitioners, the concentration is much lower. This means the results are usually limited and less noticeable than professional whitening treatments. They're generally safe to use, but if you're looking for a significant whitening effect, it's best to speak with a dental practitioner for personalised advice.

5. I have been asked by a student about smoker's toothpaste. Is this better than regular toothpaste? Smoker's toothpastes are designed to remove tobacco stains and often contain stronger abrasives and intense mint flavours to mask bad breath. This does not make them *better* than regular toothpaste. In fact, abrasive ingredients can contribute to damage of the tooth enamel and dentine when used incorrectly. A regular fluoride toothpaste is a safer and more appropriate choice. If a student does smoke and is concerned about staining, it's best to see a dental practitioner for professional cleaning and advice.

Toothbrushes and toothbrushing

1. I have heard students with braces talking about difficulties cleaning their teeth. Do they have any options to make cleaning easier?

Orthodontists generally provide comprehensive oral hygiene information and ongoing support for their patients, including advice on choosing the right products. In the first instance, guide students back to their dental practitioner.

[Orthodontics Australia](#) also has some great information on [care and hygiene](#).

2. Are electric toothbrushes better than manual toothbrushes for children and young people?

Both electric and manual toothbrushes can clean teeth effectively when used with the right technique. The *best* toothbrush is the one that is used properly and consistently, which can vary between individuals.

- If a person can clean well using a manual toothbrush, there is no need to consider anything else.
- If brushing is a struggle, an electric toothbrush might help make the routine easier and more effective. Electric toothbrushes can assist children and teens who may struggle with manual dexterity. Many electric brushes have built-in timers, pressure sensors, and oscillating or vibrating heads that can help remove more plaque with less effort. Electric toothbrushes are often seen as a fun way to brush, which can engage and motivate people to practice their oral hygiene.

Note, electric toothbrushes may be battery operated, or rechargeable. Battery-operated toothbrushes typically use replaceable AA or AAA batteries, making them cheaper to buy upfront, convenient for travel, but requiring frequent battery changes (so need to consider ongoing costs). Rechargeable toothbrushes come with a built-in battery that can be recharged using a charging base or USB cable. They usually cost more initially, but are more powerful, and offer advanced features like a timer or pressure sensors.

¶ For more information, visit:

🦷 [How to brush with an electric toothbrush | ohv.org.au](https://www.ohv.org.au/how-to-brush-with-an-electric-toothbrush)

🦷 [How to brush with an electric toothbrush | teeth.org.au](https://www.teeth.org.au/how-to-brush-with-an-electric-toothbrush)

3. Advertisements for U-shaped toothbrushes keep appearing on my social media feed. Are they any good?

U-shaped toothbrushes are often promoted online as a quick and easy way to brush teeth – especially for children. However, most oral health professionals do not recommend them.

Studies and clinical experience show that these brushes often don't clean teeth effectively, especially along the gumline and between teeth. If children and young people struggle with brushing, it's best to ask a dental practitioner for personalised advice.

Other oral hygiene products

1. Should I use a mouthwash?

There are a multitude of mouthwashes available, each designed with a different purpose. Mouthwashes are generally not needed for people with good oral hygiene but can be helpful in specific situations or for managing certain conditions – when recommended by an oral health professional.

Mouthwashes generally fall into 3 categories:

- **Breath fresheners** – temporarily mask bad breath. They often contain strong flavours like mint, but do not address the underlying causes of bad breath.
- **Fluoride mouthwash** – may be beneficial to some people at higher risk of dental caries. Fluoride toothpastes generally contain a higher concentration of fluoride than these mouthwashes, so can be rubbed onto teeth when added protection is required.
- **Antibacterial or antiseptic mouthwash** – is designed to reduce plaque and other oral bacteria. Often contain ingredients like chlorhexidine or essential oils.

2. I saw GC Tooth Mousse in the oral health section at our local pharmacy. What is it? And is it required?

GC Tooth Mousse is a topical cream that is applied to teeth after brushing and left to sit. It is not a cleaning product. There are two variations of this product – one with fluoride (*Tooth Mousse Plus*), and one without fluoride (*Tooth Mousse*).

Both variations contain a special milk-derived protein called CPP-ACP, which is a source of calcium and phosphate, the key minerals that make up tooth enamel. Surrounding the tooth surface in CPP-ACP encourages the uptake of these minerals into the tooth surface, which can strengthen teeth, as well as reduce sensitivity and dental caries.

It is not a substitute for using fluoride toothpaste and should be used under guidance of an oral health professional. It is not suitable for people with milk protein allergies.

3. Do purple tooth colour corrector pastes work?

Colour correctors do not actually *change* the colour of teeth the way bleaching agents do. Instead, they offer a temporary visual effect, by altering how our eyes perceive the colour of teeth – using complementary colours (i.e., purple/blue) to neutralise yellow tones. Results may vary and not necessarily mirror those seen in advertisements.

Anyone wanting to try a colour corrector should make sure the product is safe to use on teeth. Products such as purple hair shampoo, conditioner or toners should not be used – as these are not intended to be used in the mouth and can be harmful if ingested or applied orally.

4. Does tongue cleaning make a difference?

Tongue cleaning is routinely practiced in many countries around the world to remove bacteria and debris from the tongue's surface, particularly to combat bad breath. While it is believed that reducing the oral bacterial load through tongue cleaning may help prevent dental diseases, current scientific evidence to support this claim remains limited.

5. What is the best way to clean a mouthguard?

Mouthguards should be cleaned after each use, to prevent the build-up of plaque, stains and bad odours. As with other dental appliances and dentures, a soft brush and a non-abrasive cleaner (e.g., dishwashing detergent) should be used. Rinse in warm water, air dry, then return to the mouthguard case for safe keeping until next required. Avoid soaking or rinsing mouthguards in hot water, as they can become distorted, which will affect the fit.

3.4 Stay well

There is more to oral health than what we eat and drink, and how we clean our teeth.

Stay well encompasses everything else – the importance of regular dental checks, the relationship between oral health and general health including common risk factors, and the prevention of dental injuries.

3.4.1 Visiting a dental practitioner

Regular professional dental check-ups are important throughout life. Dental practitioners are the best to advise on the frequency of check-ups, based on an individual's oral health needs.

Regular dental examinations for children allow early identification of oral health issues. Early identification is important in disease prevention and early intervention and usually means simpler treatment options and minimising costs.

Dental decay has been described as a silent disease, where the first signs are hard to see. Damage to the tooth structure can increase by stealth, until it causes big issues that require treatment or extraction.

Children should start having their teeth checked from the eruption of the first primary tooth, and before one year of age. However, for many children this is not the case.

According to data from [The Royal Children's Hospital National Child Health Poll \(2018\)](#):

- one in four (23%) Australian parents believe children only need to see the dentist if they have a problem with their teeth
- one in three (31%) Australian preschoolers have never visited a dentist
- more than three quarters (77%) of Australian parents don't know that children should visit the dentist for a checkup when they are about one year old
- more than one in five primary school children (22%) and one in four teenagers (25%) have not seen a dentist within the past year
- half of parents (49%) are not aware their children may qualify for free dental services.

By the time a child enters primary school, they should have already seen a dental practitioner for general care.

Where access to dental practitioners is limited, general medical practitioners, maternal child health nurses and Aboriginal health practitioners may be able to assist with basic mouth checks and guidance.

3.4.1.1 A child's first dental visit

A child's first (and subsequent) dental visit/s should be regarded as a normal part of growing up. For most children, irrespective of age, the first dental visit is about familiarisation with the dental setting and providing oral health information to families. It is preferable to visit a dental practitioner before a dental issue or emergency arises. Many families find dental visits anxiety-inducing, which is heightened when a child is in pain, or requires urgent care.

3.4.1.2 Tips on dental visits

For some **helpful tips** on visiting the dentist, the following resources may be useful:

- 📖 [Dental checks for young children | Better Health Channel](#)
(Please note, the recommended age at first visit needs updating in this resource. It should read that every child should have a mouth check by the time they turn one, not two.)
- 📖 [First Dental Visits | teeth.org.au](#)

Story books or **social stories** can help introduce children to dental visits.

- 📖 OHV has compiled a list of storybooks aimed at younger children:
 - 📖 [Dental Health @ Storytime Kit | ohv.org.au](#)
 - 📖 [Storybooks | ohv.org.au](#)
- 📖 Generic social stories are available to support clients on the autism spectrum. However, other children may also find them helpful.
Some examples can be found at [Autism Association of Western Australia](#).
 - 📖 Social story: [Brushing my teeth](#)
 - 📖 Social story: [Visiting the dentist](#)
 - 📖 Social story: [Dental needle](#)
 - 📖 Social story: [Dental filling](#)
 - 📖 Cartoon style [dental images](#)

- 🦷 Some dental clinics have developed their own social stories, using images of their own dental clinics and staff. This is one from [Holstep Health](#) (formerly Merri Health):
 - 🦷 Social story: [Visiting the dentist](#)

3.4.2 Connection between oral health and general health

Many medical conditions, medications and behaviours can have impacts on the health of the mouth (e.g., diabetes, asthma and some epilepsy medications, smoking). Sometimes the relationship is two-directional, where poor oral health can also impact on general health conditions (e.g., diabetes).

Nurses can encourage children and their families to seek additional information and support from their medical or oral health team.

- 🦷 For more information, see:
 - 🦷 [Section 7: Introduction to oral medicine](#)
 - 🦷 [Section 17: Brief guide to oral medicine](#)

3.4.3 Playing well – keeping teeth safe from injury

There is an inherent risk of mouth injury associated with playing sport and physical activities, regardless of age.

Custom-made mouthguards should be worn for all sports and training where there is a reasonable risk of a mouth injury (Welti R et al. 2023). Properly fitted (custom-made) mouthguards absorb and spread the impact of a knock to the mouth and protect against mouth or dental injuries which can be difficult to treat and have lifetime repercussions.

The Australian Dental Association recommends custom-made mouthguards, as they are more protective for the teeth and mouth than store-bought options (Australian Dental Association 2024b). Families can obtain personalised advice from a dental practitioner.

- 🦷 For more information, see:
 - 🦷 [Section 15.1.3 Mouthguards](#)
 - 🦷 [Sports mouthguards | teeth.org.au](#)

4. Introduction to the mouth and teeth

4.1 Basic mouth anatomy

Some of the major structures that are visible when looking inside the mouth include the following.

- Hard tissues:
 - teeth
- Soft tissues:
 - gums
 - mucosal (inside) lining of the lips
 - mucosal (inside) lining of cheeks
 - tongue
 - floor of mouth
 - palate
 - uvula
 - tonsils

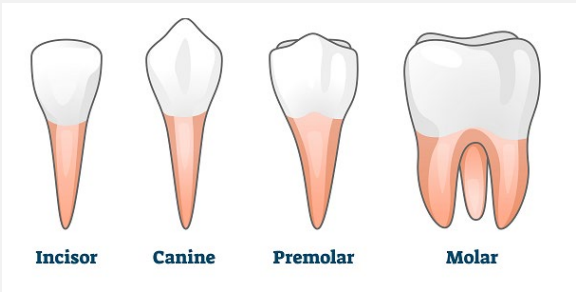


Features of a healthy mouth

- Teeth are clean, free of plaque, and appear shiny and smooth.
- Gums are pink and stippled; may be darker in people with darker (pigmented) skin.
- Mouth should be moist with plenty of watery saliva.
- Mucous membranes are pink, smooth, moist and uniform.
- Bony anatomical features (e.g., upper and lower dental arches, roof of mouth) are generally symmetrical.
- The number and type of teeth present will vary by age.

4.2 Tooth types

There are four types of teeth.

Incisors	• Also referred to as front teeth. • Are used to cut food (a bit like scissors).	Image 1: Tooth types  Incisor Canine Premolar Molar
Canines	• Also known as dog teeth or eye teeth. • Are used to tear food.	
Premolars	• Are only found in the permanent dentition. • These teeth sit behind the canines and before (pre) the molars. • Are used to tear and grind food.	
Molars	• Also referred to as back teeth or chewing teeth. • Are used to grind food.	

4.3 Sets of teeth – deciduous and permanent

We all have two sets of teeth.

1. **Deciduous teeth:** also known as baby teeth, milk teeth, primary teeth or first teeth.
2. **Permanent teeth:** also known as secondary or adult teeth.

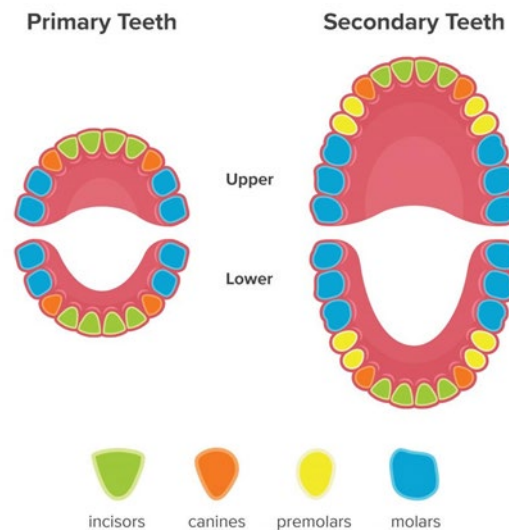
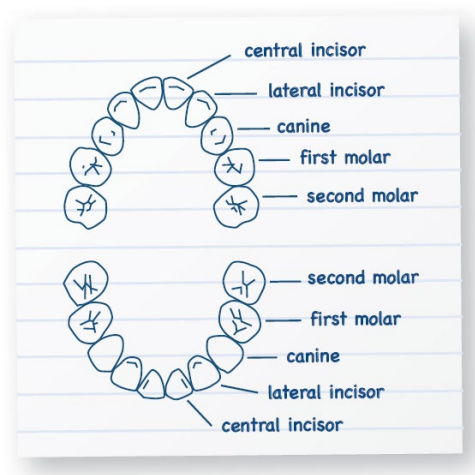


Image 2: Comparing mouths: primary (deciduous) teeth and secondary (permanent) teeth.

Deciduous teeth

There are ten (10) deciduous teeth in each arch – making a total of twenty (20).

Deciduous teeth are whiter, smaller and softer than permanent teeth. Because they are softer, it is quite normal for them to become quite worn due to normal wear and tear. They are only intended to be in the mouth for 6-12 years.



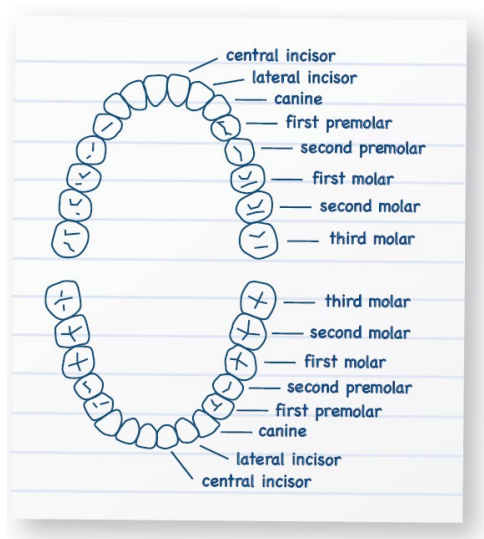
Deciduous teeth are just as important as permanent teeth, as they assist with:

- efficient chewing 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.

Permanent teeth

There are sixteen (16) permanent teeth in each arch – making a total of thirty-two (32).

Permanent teeth are larger, stronger and more yellow in colour than deciduous teeth. Permanent teeth are meant to last until the end of a person's life, which could be 75 years or more, so it is important to treat them well.



Based on their anticipated eruption times:

- first permanent molars are often known as 6-year-old molars
- second permanent molars as 12-year-old molars
- third permanent molars as wisdom teeth.

4.4 Tooth exfoliation and eruption fundamentals

Tooth exfoliation

Tooth exfoliation is the natural shedding of baby (deciduous) teeth which occurs so that they can be replaced by permanent teeth. As permanent teeth develop and begin to erupt, the roots of the baby teeth begin to dissolve, thereby loosening them until they fall out. On average, tooth exfoliation occurs between the ages of 6-12 years.

Tooth eruption

Tooth eruption is the process by which teeth emerge through the gums into the mouth, following their development in the underlying jawbone.

- Eruption of the deciduous teeth is usually complete by 3 years of age, so it is expected that by the time a child starts school, they will have their full set of deciduous teeth.
- Eruption of the permanent teeth begins at around 6 years, with the first permanent molars erupting at the back of the mouth, behind the deciduous molars.
- By around age 13 years, most permanent teeth (except for wisdom teeth) have erupted.

Permanent teeth are guided by their predecessor deciduous teeth into position. If those deciduous teeth are lost or extracted early (through trauma or tooth decay), the space may close due to movement of the nearby teeth and block the eruption path of the permanent tooth. This may necessitate orthodontic treatment later on.

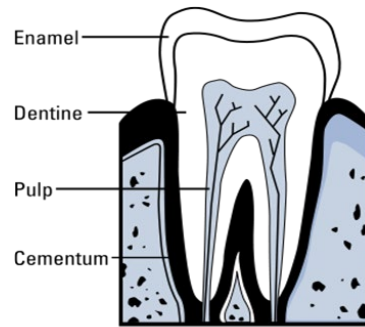
The timing and order of tooth eruption can vary between individuals but follow a general pattern.

Deciduous teeth	Age		Permanent teeth
Formation begins in the jaws. Different tooth types begin to calcify at different times, ranging from 14 – 19 weeks <i>I.U.</i>	<i>In utero</i>		Formation begins in the jaws. Different tooth types begin to calcify at different times, ranging from birth – 10 years.
Eruption into the mouth begins	6 months		<i>Tooth formation continues until each tooth type is ready to erupt.</i>
Eruption is complete	3 years		
<i>All deciduous teeth are now present in the mouth</i>	4 - 5 years		
Loosening & exfoliation begins (in the following order)	6 years		Eruption into the mouth begins (in the following order)
• Central incisors	6 - 7 years		• Central incisors (lower) • First molars (lower, upper)
• Lateral incisors	7 - 8 years		• Lateral incisors (lower) • Central incisors (upper)
	8 - 9 years		• Lateral incisors (upper)
	9 -	10 years	• Canines (lower)
		11 years	
12 years			
• First molars	10 -	11 years	• First premolars (upper) • Second premolars (upper)
• Canines (lower)		12 years	• First premolars (lower)
• Second molars		11 -	12 years
• Canines (upper) • Second molars	13 years		• Second molars (lower)
Exfoliation should be complete	12 years		
	12 – 13 years		• Second molars (upper)
	13 years		Almost all permanent teeth have erupted (28 out of 32), except for the third molars (wisdom teeth)
	17-24 years		• Third molars (wisdom teeth) erupt

For more information, see:
[Section 12.7 Tooth exfoliation and eruption](#)

4.5 Tooth structure

Regardless of tooth type, all teeth share the same structural features.



Molar structure

Crown	The crown is the part of the tooth that sits above the gum line (i.e., the visible portion of the tooth).
Enamel	The crown is covered by enamel, the hardest calcified tissue in the human body. As the outermost protective layer of the tooth, it provides a strong surface for crushing, grinding and chewing food. Despite this, enamel can wear away due to: • attrition – wear of the tooth resulting from tooth-to-tooth contact • abrasion – wear of the tooth produced by something other than tooth-to-tooth contact (e.g., brushing with a hard toothbrush) • erosion – wear of the tooth due to dissolution by acid • fracture – due to stress or trauma • dental caries. Enamel is translucent and can range in colour from yellow to greyish white. The enamel has no nerve supply.
Dentine	The layer beneath enamel is called dentine. Dentine makes up the main portion of the tooth. Dentine, while highly calcified, is softer than enamel and carries sensations such as temperature and pain to the pulp, via its tubular/rod structure. In deciduous teeth, dentine is a very light-yellow colour, while in permanent teeth it is a light-yellow and a little transparent.
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, nerves and cellular substance. It supplies nutrients to the tooth, and its nerve endings transmit sensations such as pain and temperature.
Cementum	Cementum is a bone-like connective tissue that covers the root of the tooth. It is light-yellow in colour and able to carry 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 short, sharp sensation when brushing teeth, with cold or sweet drinks, or eating food.

5. Oral hygiene

The cleanliness of a person's mouth reflects how often and how well they care for their teeth at home. If a student reports brushing their teeth but visible plaque is present, it suggests their brushing technique or frequency may need improvement.

5.1 Plaque

- Is the soft, sticky, creamy white substance found on the surface of teeth. It is primarily made of bacteria.
- It is most commonly found along the gumline, and its presence is easily confirmed by scraping the front a tooth with a fingernail.
- People often describe the feeling of plaque on their teeth as “furry” (although sometimes this is only noticed once plaque is removed, and teeth feel smooth).
- Plaque can be removed from the surface of teeth using a soft toothbrush and from in between teeth using dental interdental aids like floss.
- Once plaque is removed, it begins to form again almost immediately.
- Plaque disclosing products (available from pharmacies) can be used to temporarily stain the plaque pink or purple, making it easier to see. These products are often used by oral health professionals to show people how effective their cleaning technique is.



Image 3 Teeth before cleaning	Image 4 Plaque is stained	Image 5 Teeth after cleaning
• Plaque is a creamy white colour, so can be difficult to see on teeth. • “Plaque is present on the teeth near the gumline.” • “The gums are a little inflamed, where they are in contact with the plaque.”	• The plaque disclosing product stains the plaque to make it easier to see. • The purple stain shows established plaque, the pink stain shows newly formed plaque.	• This photo is taken immediately after cleaning. • The plaque has been removed, but the gums are still inflamed. • If the teeth are kept clean, this inflammation will resolve in a few days.

5.2 Calculus (tartar)

- Is plaque that has been calcified (hardened) following exposure to the minerals found in saliva.
- The colour ranges from yellow to brown to black and is commonly found behind the lower front teeth (although it can be found on any tooth).
- It firmly attaches to tooth surfaces, cannot usually be removed by a toothbrush so will require cleaning (scaling) by a dental practitioner.

Image 6 Calculus		• Calculus is commonly found behind the lower front teeth. • It is firmly attached to the tooth surface. • It can be removed by a dental practitioner in a procedure called “scaling”.
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While plaque is a causative agent in both tooth decay and gum disease, calculus is only implicated in gum disease.

5.3 Bad breath (halitosis)

Bad breath may originate from the mouth but can also be related to conditions originating in other parts of the respiratory or digestive tracts. Some students will be totally unaware of having bad breath. On the other hand, some students will be fixated about having bad breath, even when no malodour is present.

Mouth-related causes of bad breath include recent intake of smelly foods (e.g., garlic, tuna), poor oral hygiene, tooth, gum or soft tissue infections, dry mouth or smoking.

Other causes may include acid reflux (GORD), infected tonsils, sinusitis and certain medical conditions like diabetes.

Any concerns about bad breath should be given due consideration, particularly when raised by a student. Improving oral hygiene and good hydration are good first steps. A dental practitioner can help identify (or rule out) any underlying oral causes.

🔔 For more information, see:

🦷 [Section 3.3.1 Oral hygiene at home](#)

6. Common dental diseases

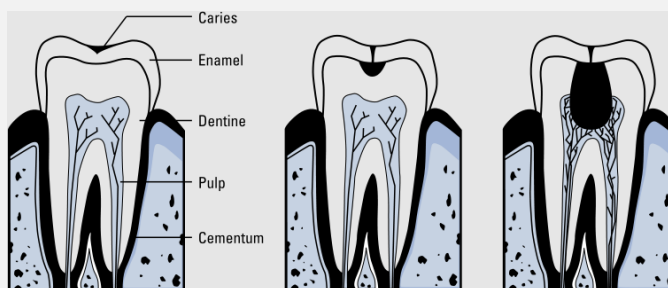
6.1 Dental caries (tooth decay)

Dental caries, commonly known as tooth decay or dental decay, is a diet-related, transmissible infectious disease of the tooth structure, where bacterial by-products dissolve tooth structure.

<i>If detected during a mouth check</i>	Recommend student see a dental practitioner. • First stage caries (white spot lesions) can be reversed. • Early and advanced caries (cavitated lesions) can be stopped from progressing further and damage can be repaired.	
<i>Prevalence</i>	More than 90% of Victorian adults have had or currently have dental caries, with one in three (32%) experiencing untreated dental caries (ARCPOH 2018). Dental caries is one of the most prevalent diseases in Victorian children. Almost half of all children (43%) have signs of dental caries (Do and Spencer 2016).	
<i>Signs and symptoms</i>		
Image 7: First stage of caries: White spot lesions		• Dull white band/area on the tooth near to the gum line, indicating loss of mineral from tooth surface. • Difficult to see when teeth are wet; often covered by a layer of plaque. • Usually not noticed by family. • Able to be reversed.
Image 8: Mixed caries: white spot lesions and advanced caries		• Photo shows a mixture of white spot lesions and advanced caries. • White spot lesions have progressed; tooth structure has weakened sufficiently resulting in yellow/caramel brown holes/cavities. • No longer reversible; can be stopped from progressing further.
Image 9: Advanced, extensive caries		• Caries affecting most teeth; cavities covering larger portion of tooth surface. • Extensive brown areas on the teeth or stumps. • Can be stopped from progressing further, however considerable damage will require fillings and/or extractions.

Signs and symptoms
(continued)

The caries process starts on the surface of the tooth. Left untreated, it will progress towards the pulp (area containing nerves and blood vessels) in the centre of the tooth.



Process of caries invading a molar tooth (cross section)

Radiographs help detect dental caries that may not yet be visible to the naked eye.

The nature of the sensitivity or pain is related to how much tooth structure has been damaged, how close the cavity is to the pulp, and how inflamed the pulp tissue is.

A student may complain of:

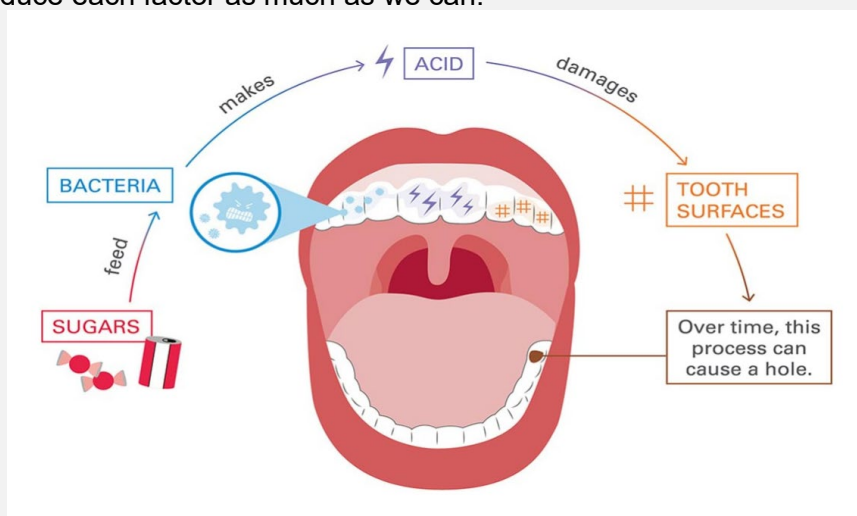
- short-lasting sensitivity to sweet or cold
- longer-lasting sensitivity to cold or heat
- toothache or mouth pain, OR
- no pain at all.

Causes

For dental caries to develop, the following are required:

1. bacterial dental plaque
2. fermentable carbohydrates (sugars)
3. a susceptible tooth
4. (sufficient) time.

In the total absence of any one of these factors, caries cannot develop. Practically speaking this is almost impossible to achieve – so we aim to reduce each factor as much as we can.



1. Bacterial dental plaque	Immediately after cleaning teeth, a thin organic film forms on the teeth. This is soon colonised by bacteria found in the mouth and becomes known as dental plaque. The plaque bacteria feed on fermentable carbohydrates left on the tooth surface, producing an acid which then attacks the tooth enamel resulting in a loss of mineral (demineralisation). These minerals are stored in the saliva and can be resorbed back into the tooth enamel (remineralisation). The remineralisation process is enhanced by the presence of fluoride. In a healthy mouth, teeth are continually undergoing a cycle of demineralisation-remineralisation. Caries starts and progresses when the rate of demineralisation exceeds the rate of remineralisation. As minerals continue to be lost, early “white spot lesions” can be seen on the tooth surface. At this stage, the caries is totally reversible by supersaturating the area with minerals and fluoride. If mineral continues to be lost, the tooth structure weakens further and the enamel surface breaks down, forming a cavity (hole). Once a cavity forms, caries can still be stopped but not reversed.
2. Diet - Fermentable carbohydrates	Fermentable carbohydrates are metabolised by plaque bacteria. They are generally simple sugars and starches such as glucose, sucrose, fructose and maltose. The following factors need to be considered. - Increasing the frequency of fermentable carbohydrate consumption increases the frequency of acid production in the mouth, which in turn increases caries risk. This is the factor that has the greatest potential for damaging teeth. - Foods that are cleared less rapidly from the mouth (e.g., sticky foods) are more likely to be consumed by plaque bacteria, and therefore more likely to cause caries.
3. Susceptible tooth	The enamel is the protective coating of the tooth. Because the enamel layer on deciduous teeth is thinner than on permanent teeth, deciduous teeth are more susceptible to dental caries. Any tooth with poorly formed enamel is also more susceptible. Parts of the tooth that are harder to clean (e.g., deep grooves on the biting surface, or contact areas between teeth) are also more susceptible to decay. Teeth that have been strengthened with fluoride are less susceptible to dental caries.
4. Time	Whilst the caries process only starts in the presence of the four causative factors, the time taken for caries to progress enough for white spot lesions or cavities to form is influenced by the other causative and modifying factors.

	Because caries is a relatively slow process that is reversible in the early stages, assessment for dental caries should be undertaken regularly by an oral health professional.
Modifying factors	Several factors can modify caries progression: • the presence of natural protective factors such as saliva • exposure to fluoride.
1. Saliva	Saliva protects the teeth from caries because it: • acts as a buffer to neutralise acids • provides and stores the minerals involved in the remineralisation process, and • lubricates the mouth and washes away food from the teeth. Dehydration and certain medications/medical conditions can reduce salivary levels significantly, therefore increasing the risk of dental caries. Saliva flow decreases naturally during sleep, so teeth should always be cleaned thoroughly prior to going to sleep.
2. Fluoride	Fluoride acts as a repair kit for teeth. Following acid attack, the fluoride in saliva helps to drive/encourage remineralisation. A constant supply of a low level of fluoride within the saliva is beneficial. When fluoride is incorporated into the developing tooth structure (such as drinking fluoridated tap water during early childhood and primary school years), the tooth structure is more stable and less likely to undergo demineralisation. It can be likened to placing steel reinforcement into concrete structures.
Age	Dental caries is found in people of all ages who have natural teeth.
Prevention	The prevention of dental caries requires a holistic approach, taking in the many factors involved in the causation of the disease, such as: • therapeutic levels of fluoride in the environment • preventive measures, including tooth brushing • reduced exposure to fermentable carbohydrates and sugars • early detection and management of the disease • social influences and medical conditions.
Early intervention and treatment	• Once teeth are damaged, teeth cannot repair themselves without intervention. • Early intervention may involve measures such as dietary and oral hygiene advice or topical fluoride application. • Advanced caries will require clinical treatment such as restorations (fillings) or possibly extractions.

6.1.1 Early childhood caries

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

ECC is usually seen in preschool children, however primary school aged children may present with untreated ECC, or evidence of previous therapeutic dental interventions used to treat ECC.

If detected during a mouth check	Recommend child see a dental practitioner. • First stage caries (white spot lesions) can be reversed. • Early and advanced caries (cavitated lesions) can be stopped from progressing further and damage repaired.	
Prevalence	Dental caries is one of the most prevalent diseases in Victorian children. Almost half of all children (43%) have signs of dental caries (Do and Spencer 2016). The prevalence and severity of ECC in low socio-economic, immigrant and indigenous communities is higher (Department of Health 2020b).	
Signs and symptoms	As per Section 6.1 Dental caries: Signs and symptoms • Initially, the upper incisors develop a dull white band (demineralisation) along the gum line; this usually goes undetected by the parents/carers. • As the condition progresses, these white areas develop into cavities along the gum line (like a collar). The cavities may be yellow or brown in colour. • In advanced cases, the crowns of the four upper incisors may be destroyed completely, leaving decayed darker black root stumps. The four lower incisors generally remain unaffected. • This condition is often painless until the advanced stages. However, a child may complain of tooth sensitivity or pain. Infection/swelling and irritability may also occur.	
	📎 Images can be found at: Section 6.1 Dental caries	Whilst any tooth can be affected by caries, typically in ECC: • 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.
Cause/s	For caries to develop, the process and causative factors are essentially the same across all ages. 1. Bacteria Babies are not born with caries-causing bacteria (<i>Streptococcus mutans</i>) in their mouths. It is transmitted from the mother (or primary carer/s) to the infant through saliva when: • they use their eating utensils to feed the infant	

	• they taste the food or test the temperature in their mouth prior to feeding • the dummy/pacifier is “washed” in their mouth and then given to the infant • the infant places their fingers into their mother (or carer’s) mouth and then into their own. Babies should begin to have their teeth cleaned as soon as the first teeth erupt into their mouths (at around 6 months). 2. Diet – fermentable carbohydrates Research into breastfeeding and oral health is still evolving. Studies have shown that breastfeeding up to 12 month protects teeth against dental caries; whilst there are mixed results regarding the effect of breastfeeding longer than 12 months on caries (Australian Breastfeeding Association 2022). Babies should not be put to bed with a bottle, and after a formula-feed should have their teeth wiped with a cloth. As babies are introduced to other foods and drinks (many containing sugars) from around 6 months, the likelihood of dental caries increases. 3. Susceptible tooth Newly erupted teeth and immature enamel are more at risk of dental caries, due to limited exposure of the enamel to fluoride. 4. Time The time taken for caries to progress enough for white spot lesions or cavities to form is influenced by the other causative and modifying factors.
Age/s	Whilst the age distinction between <i>early childhood caries</i> and <i>caries</i> is mainly academic, ECC is said to affect children up to 5 years of age. ECC can begin as soon as the first tooth erupts but is not often noticed by parents until the child is about 20 months of age. Primary school aged children can show symptoms of this disease, even though the disease may have been most progressive in the past.
Prevention	Preventing ECC requires a holistic approach to the many biological and social factors involved in the causation of the disease, including: • the importance of maternal (or primary carer) oral health • the appropriate use of the feeding bottle (e.g., remove bottle from baby when they are finished feeding, not putting baby to bed with a bottle) • the appropriate use of a dummy or pacifier (e.g., avoid dipping dummy into sweet substances such as honey or jam) • limitation of sugary foods and drinks • use of sugar-free medications (where appropriate) • cleaning teeth as soon as they erupt into the mouth (i.e., wiping with cloth after breast/bottle feeding) • early detection and management of the disease (such as parents looking in their child’s mouth regularly for signs of decay)

	regular dental visits.
Early intervention and treatment	ECC detected for the first time in a primary school aged child is not early detection. However, a valuable opportunity exists to educate parents/carers, and interventions now (such as diet and oral hygiene advice or topical fluoride application) can slow down or stop caries progression and prevent new caries forming. If caries is more advanced, treatment may include restorations (fillings) or possibly extractions.

For more information, visit:

-  [Tooth decay - young children | Better Health Channel](#)
-  [Oral health information | OHV.org.au](#)

6.2 Gum (periodontal) conditions

Gingivitis and periodontitis are diseases of the periodontal tissues that support the teeth (the gums and underlying structures including alveolar bone).

Note: *gingiva* or *gingivae* = gums; *periodontium* = the supporting structures of a tooth.

6.2.1 Gingivitis

Gingivitis (meaning *inflammation of the gingiva*) is usually a mild, localised condition affecting only the gums. It is easily reversed with good oral hygiene.

If detected during a mouth check	Mild gingivitis can often be managed without professional intervention. However, in more severe presentations, a dental practitioner will confirm diagnosis, ensure that children and their families understand the condition and receive proper oral hygiene instruction. Professional cleaning may also be required.	
Prevalence	Very common at all ages.	
Signs and symptoms	Red, swollen or puffy gums, gums bleed easily when brushing (blood is often noticed on the toothbrush during brushing, or when spitting). Accompanied by plaque or calculus (along the gumline). Not painful.	
Image 10: Mild gingivitis		“There is some mild inflammation of the gums, where the gums are in contact with plaque on the tooth surface.” “There is slight redness and swelling, and the gum contours are more rounded.” - This person may report that their gums bleed when they brush.

Image 11: Moderate gingivitis		• “The gums have lost their sharp edges and appear very rounded.” • “The gums are red and inflamed, and bleed easily when touched.” • It is more difficult to clean these teeth well as they are crowded and overlapping.
Cause/s	The gums produce a localised inflammatory response due to contact with bacteria (in dental plaque) that is present on the surfaces of teeth, or dental implants (where present).	
Age/s	Any person who has natural teeth (or dental implants).	
Prevention	Gingivitis can be prevented by excellent oral hygiene involving regular and thorough removal of plaque or calculus.	
Early intervention and treatment	Gingivitis is easily reversed by removing the plaque or calculus that is in contact with the gums. This is possible through improved oral hygiene (toothbrushing), interproximal cleaning (e.g., flossing) and/or professional cleaning (e.g., removal of calculus, where required). Most people with gingivitis avoid brushing near their gums due to the bleeding, however, gums only bleed due to the presence of plaque. Children and teenagers should be encouraged to brush gently along the gumline and to expect increased bleeding at first. Inflammation can be reduced (sometimes even resolved) in as little as 1-2 days. Optimal oral hygiene must be maintained, otherwise gingivitis will return.	

6.2.2 Periodontitis

Periodontitis (meaning *inflammation of the tissues surrounding the teeth*) is a more severe form of gum disease affecting the deeper tissues supporting the teeth, including loss of alveolar bone. It typically begins as *untreated* gingivitis.

Periodontitis in children and young people is complex and different to that seen in adults.

If detected during a mouth check	Non-dental practitioners are <i>unlikely</i> to see periodontitis in young children, as it is very rare, and sometimes mimics other normal processes taking place in the mouth at this age. It <i>may</i> be seen in teenagers where hormonal changes, smoking or vaping, increased stress, poor diet and lack of sleep are involved. In line with general advice regarding presentations that vary from “normal”, recommend the student see a dental practitioner.
Prevalence	Mainly seen in adults.

	Two forms of “early onset” periodontitis can be seen in children (prepubertal) and teenagers (juvenile) but these are extremely rare.
Signs and symptoms	Prepubertal periodontitis: severe gingival inflammation, rapid bone loss, early exfoliation of deciduous teeth, usually associated with systemic illness such as Papillon-Lefevre Syndrome. Juvenile periodontitis: severe destruction of the periodontal tissues, limited to the first permanent molars and/or incisors. Clinically, the gums may appear completely normal with very little plaque present (Dental Practice Education Research Unit 2022).
Cause/s	Primarily bacterial plaque, however other local and systemic factors (e.g., impaired immune function, genetic conditions) are involved.

¶ For more information, visit: [Gum disease | Better Health Channel](#)

6.2.3 Other gum conditions

Gums can react to the presence of plaque bacteria in different ways. In students, the most common modifiers of this response are stress and hormonal changes.

Acute necrotising ulcerative gingivitis (ANUG)

ANUG is a painful gum infection that can affect young people, particularly senior students under high levels of stress.

Stress, lack of sleep, poor diet, and neglect of oral care—often triggered by exams or assessment deadlines—can significantly increase the risk of developing this condition. The risk is even higher in individuals who smoke.

Symptoms include painful, ulcerated, bleeding gums and bad breath. Students should be guided to see a dental practitioner urgently for treatment with antibiotics. Improved hygiene is essential to prevent complications.

Note, ANUG was historically known as “trench mouth”, because it was commonly seen among soldiers during WWI, who spent long periods in the trenches under stressful conditions where access to good food, sleep and oral hygiene was limited.

Hormone-mediated conditions

Hormonal changes during life stages like puberty and pregnancy can significantly affect gum health.

Increased hormone levels, especially estrogen and progesterone, can make gums more sensitive to plaque. The signs and symptoms of *hormonal gingivitis* are the same as for gingivitis, however, might be considered an *over-reaction* to the amount of plaque present (i.e., a small amount of plaque results in severe gingivitis).

During puberty, teenagers may notice their gums becoming more reactive, and pregnant women may develop *pregnancy gingivitis* or even *pregnancy tumours* (non-cancerous gum growths).

Good oral hygiene and regular dental visits are important during these times to maintain healthy gums. Students should be guided to see a dental practitioner for assessment and management.

7. Introduction to oral medicine

Pathological conditions of the mouth can affect the teeth, gums, or other soft tissues of the mouth.

Ideally, nurses and other health professionals will be able to recognise when something they see in a child's mouth differs from the norm. **They are not expected to provide a diagnosis.**

When in doubt, a dental recommendation or referral can, at the very least, provide a diagnosis or peace of mind. Early detection also may result in a wider choice of interventions that provide best outcomes for the patient.

Dental diseases (See [Section 6: Common dental diseases](#))

- [dental caries \(tooth decay\)](#)
- [gum \(periodontal\) disease](#)

Oral diseases or conditions

- cleft lip and/or palate
- eruption cysts
- mucocoeles
- mouth ulcers
- oral *herpes simplex* primary infection
- recurrent *herpes simplex* and *herpes labialis*
- *oral candidiasis* (oral thrush)
- dental abscess
- facial cellulitis
- geographic tongue
- dry mouth (xerostomia)
- temporomandibular joint (TMJ) dysfunction

Oral manifestations of systemic diseases or conditions

- hand, foot and mouth disease (HFMD)
- chicken pox
- measles
- leukemia

Oral complications associated with systemic diseases or conditions

- asthma
- diabetes
- epilepsy

Oral complications associated with behaviours

- alcohol
- betel (areca) nut and betel quid
- eating disorders and disordered eating
- mouth piercings
- mouth tattoos
- illicit drug use
- sexually transmitted infections (STIs)
- tobacco (smoking, snus)
- tooth jewels
- vaping

☞ These are covered in more detail in:

☞ [Section 17: Brief guide to oral medicine](#)

8. Introduction to clinical interventions

Dental practitioners can provide a vast array of clinical interventions, which nurses might be asked about, or see during mouth checks.

8.1 Preventive interventions

Protect teeth and gums and prevent dental disease or injury. Interventions include:

- cleaning of teeth
- fissure sealants
- concentrated fluoride therapies (such as fluoride varnish, or silver diamine fluoride)
- mouthguards
- nightguards/bite splints

8.2 Dental treatments

Remove, repair and/or replace damaged parts of the tooth following disease or injury and restore aesthetics or function. Treatments may include:

- restorations (fillings)
- stainless steel crowns (SSCs)
- tooth extractions (and other dental surgery)
- pulp (nerve) or root canal treatment
- tooth whitening
- crowns, bridges, veneers
- dentures
- dental implants

Orthodontic treatment can straighten misaligned (crooked) teeth, and correct bite issues.

🦷 These are covered in more detail in:

🦷 [Section 15: Professionally delivered \(clinical\) interventions](#)

9. Accessing oral health care

Nurses working in schools should be aware of the location of their local dental services, as well as any relevant eligibility criteria.

9.1 School Dental Program – Smile Squad

All students who attend a Victorian government primary, secondary or specialist school are eligible for free dental care through the free school dental program – Smile Squad.

Students may be seen at their school or by visiting their local community dental clinic.

🦷 For more information, see [Section 9.2.2: Community dental agencies](#).

All students enrolled in a government school are eligible for Smile Squad, even if they do not have a Centrelink card, Medicare card or are ineligible for the Child Dental Benefits Schedule (CDBS).

All Smile Squad services are free. There are no out-of-pocket costs for students or families for examination and any necessary follow-up treatment.

🦷 For more information, visit: [Smile Squad | health.vic.gov.au](https://smilesquad.health.vic.gov.au)

9.2 Other public dental services

If students do not attend a government primary, secondary or specialist school, children and young people are still eligible for public dental services if they:

- live in Victoria **and**
- are aged 0-12 years of age, irrespective of family income, or
- are aged between 0–17 and are eligible for the Child Dental Benefits Schedule, or
- are aged between 13-17 with a Health Care card or Pension Card or whose parents hold a Health Care card or Pension Card, or
- are a youth justice client in custodial care, regardless of age, or
- are aged up to 18 years of age and are in out-of-home care, provided by the Department of Families, Fairness and Housing (DFFH) (including kinship and foster care), or
- meet other Department of Health eligibility criteria (e.g., Aboriginal or Torres Strait Islander, refugee or asylum seeker).

Public dental services can be accessed either at the Royal Dental Hospital of Melbourne or a community dental agency.

🦷 For more information, refer to:

🦷 [Public dental eligibility tool – children and young people | ohv.org.au](#)

🦷 [Public dental eligibility tool – adults | ohv.org.au](#)

9.2.1 The Royal Dental Hospital of Melbourne (RDHM)

The Royal Dental Hospital of Melbourne (RDHM) provides general dental, specialist dental care and urgent/emergency dental care for people of all ages.

The Royal Dental Hospital of Melbourne is located close to the Melbourne CBD, in Carlton.

🦷 For more information, visit: [The Royal Dental Hospital of Melbourne | rdhm.org.au](https://rdhm.org.au)

9.2.2 Community Dental Agencies (CDAs)

There are more than 45 community dental agencies throughout metropolitan and regional Victoria that provide general and emergency dental care to eligible people.

All students who attend a Victorian government primary, secondary or specialist school are eligible for free dental care through Smile Squad, provided by local community dental agencies.

Eligibility criteria apply to young people who are not eligible for the school dental program.

🦷 For more information, see: [Section 9.2: Other public dental services](#).

The OHV website [Find a public dental clinic | OHV](#) provides a listing of local dental services linked to Victorian postcodes.

9.3 Child Dental Benefits Schedule (CDBS)

The Child Dental Benefits Schedule (CDBS) is a national program that provides eligible children aged 0-17 years with access to basic dental services through Medicare. It covers approximately \$1000 over two calendar years, for services such as check-ups, x-rays, cleaning, fissure sealants, fillings and extractions.

The aim of the CDBS is to support early intervention and improve oral health outcomes for children from families receiving certain government benefits, such as Family Tax Benefit Part A. Services are available through both public and private dental providers who accept the scheme, including Smile Squad.

Parents can check their child's eligibility in the following ways.

- 🦷 Through **Medicare**. Eligibility is assessed automatically each year, and families are usually notified by letter if their child qualifies.
- 🦷 **Online via MyGov** (where a MyGov account is linked to Medicare).
- 🦷 **Call Medicare** on 13 20 11.
- 🦷 **Ask your local dental provider**. Most dental clinics can check eligibility on the family's behalf using Medicare details.

🦷 For more information, visit: [Child Dental Benefits Schedule | Services Australia](#)

9.4 Private dental care

The details of private dental services (general and specialist) in your area can be found online at:

- [Yellow Pages](#) telephone directory
- Australian Dental Association's (Victorian Branch) ["Find a dentist"](#) service

Word of mouth from friends and family can also be helpful.

9.5 Specialist dental care

A dentist can undertake further training (3+ years) to become a specialist dentist in a specific discipline, such as:

- Paediatric dentistry
- Oral medicine
- Special Needs dentistry
- Oral and maxillofacial surgery

- Orthodontics
- Periodontics
- Endodontics
- Prosthodontics
- Public health dentistry (community dentistry)
- Forensic odontology

Dental specialists practice in the both the private and public sector. Children may require specialist dental care when their behavioural management or clinical needs go beyond what a general dental practitioner can provide.

Some examples include:

- a **paediatric dentist** (paedodontist) may be required when a child is unable to have treatment completed in the dental chair. Depending on the child, desensitisation techniques and nitrous oxide sedation may be offered initially, with general anaesthetic considered as a last resort. Paediatric dentists are also able to manage children who are medically compromised, or who require complex restorative work or follow-up management of complex traumatic injuries
- **oral and maxillofacial surgeons** may be the most appropriate choice for complex surgical procedures.

9.5.1 Public dental specialists

To access public dental specialists, a written referral must be completed by one of the following:

- dental practitioner
- medical practitioner (for oral medicine only)
- specialist dentist at Royal Dental Hospital of Melbourne
- dental student (dentist in training) with the approval of a clinical supervisor.

Medical, nursing and allied health professionals will need to refer patients to a local community dental clinic initially for a full dental examination and relevant diagnostic tests. The local community dental clinic can then refer to a dental specialist, where required.

Eligibility

- Students eligible for Smile Squad can access all public specialist dental services, excluding orthodontics. Referrals must be generated from Smile Squad providers.
- For non-Smile Squad students, normal public dental service eligibility **PLUS** specialty-specific, clinical criteria applies.
- The Royal Children's Hospital Melbourne [Department of Dentistry](#) provides clinical care for children and teenagers with complex medical and dental problems. Given the highly specialised nature of the department, special eligibility criteria must be met before patients are accepted for care.

9.5.2 Private dental specialists

Access to private dental specialists is generally only through referral from another dental practitioner. There are a few exceptions:

- private orthodontists generally accept self-referred clients
- private oral medicine specialists and oral and maxillofacial surgeons will accept referrals relating to oral pathology from medical practitioners.

Medical, nursing and allied health professionals will need to refer patients to a general dental practitioner initially, who can then refer to a dental specialist, where appropriate.

Eligibility

- Everyone is eligible to attend a private dental specialist, via referral. Costs can be discussed with the specialist practice prior to making an appointment.
- Public dental clients who do not meet the clinical criteria for public dental specialist services, or who simply wish to, may elect to see a private dental specialist.

10. Resources

Oral Health Victoria has a range of oral health resources available for health professionals as well as families.

These are available in English, and many have been translated into commonly used community languages.

🔗 [Oral Health Victoria | ohv.org.au](https://ohv.org.au)

For information and resources, select **Oral Health Information** on the home page.

For Smile Squad resources:

🔗 [Smile Squad | health.vic.gov.au](https://health.vic.gov.au)

10.1 Websites and information

Oral Health Victoria (OHV)

🔗 [Oral Health Victoria | OHV.org.au](https://OHV.org.au)

For information and resources, select **Oral Health Information** on the home page.

🔗 Email: info@dhsv.org.au

Smile Squad

🔗 [Smile Squad | health.vic.gov.au](https://health.vic.gov.au)

🔗 [Smile Squad | ohv.org.au](https://ohv.org.au)

🔗 Email: smilesquad@dhsv.org.au

Australian Dental Association (Federal Branch)

🔗 [Australia's home of healthy smiles | teeth.org.au](https://teeth.org.au)

Better Health Channel

🔗 [Better Health Channel | betterhealth.vic.gov.au](https://betterhealth.vic.gov.au)

In the menu, select: **Conditions and treatments – Body parts - Mouth and teeth**

Health Translations Directory

🔗 [Health Translations | healthtranslations.vic.gov.au](https://healthtranslations.vic.gov.au)

Search **all resources**: Enter **dental** under keyword

Raising Children Network

🔗 [Raising Children Network | raisingchildren.net.au](https://raisingchildren.net.au)

Search the site: Try **dental**, **teeth**, **mouth**, etc

Also explore **school age** and **pre-teens**

10.2 Oral hygiene products

Smile Squad provides a free oral health pack to all students attending Victorian government primary, secondary and specialist schools, including Virtual School Victoria.

The **Smile Squad oral health pack** contains everything students need to support their oral health. Packs are offered to schools every year to distribute to their students.

Each oral health pack contains:

- **toothbrush** – junior size for primary students, or adult size for secondary students
- **toothpaste** – 115g standard strength fluoride
- **oral health brochure** with 'eat well, drink well and clean well' messages.

Schools are encouraged to accept the oral health packs and distribute to their students to support oral health promotion.

School nurses are welcome to contact Smile Squad if additional oral health packs are needed.

Email: smilesquad@dhsv.org.au

Part B: Clinical considerations

11. Mouth checks

Mouth checks provide an excellent opportunity to identify oral diseases or conditions in school students. Interventions, such as sharing information or advice with parents, or making a recommendation (or referral) to see a dental practitioner may follow.

All health professionals should understand the consent requirements (including mature minors) pertaining to mouth checks, as they relate to their roles.

11.1 When is a mouth check required?

Foundation (preparatory grade) students

Primary school nurses may perform targeted mouth checks on prep students, in connection with the School Entrant Health Questionnaire (SEHQ), as per Department of Education protocols.

Students presenting with a mouth-related concern

Mouth checks may be undertaken in response to a concern raised by a student, their family and/or teacher. Concerns may include:

- teacher has noticed difference in a student's behaviour (e.g., not eating their lunch, cradling their jaw, covering mouth with hand while talking or laughing), or is concerned there is a dental problem
- teacher has noticed change in a student's appearance (e.g., external swelling or bruising around the student's face)
- concerns around a student's general health, safety or wellbeing
- student has injured their mouth in a schoolground accident
- student approaches a nurse for guidance on a specific oral health issue or complication (e.g., bad breath or tongue piercing).

Oral symptoms can also be associated with medical conditions (including viral infections like chickenpox or hand, foot and mouth disease, diabetes, or bulimia).

11.2 Preparing for a mouth check

In the school setting, a simple mouth check can be performed using minimal equipment, and without any physical contact between the nurse and student. Mouth check requirements include:

- a room with good lighting
- an additional light source to see inside the mouth (e.g., a small torch)
- a chair for the nurse to sit on (student will stand facing them)
- hand sanitising lotion
- mouth check checklist (see [Section 11.7: What to look for during a mouth check](#)).

Optional extras

- Disposable examination gloves, face mask and protective eyewear should be worn if there is any contact with the mouth, especially if the mouth is bleeding (e.g., following trauma), or when a communicable disease risk exists.

- Display a poster showing students what happens during a mouth check. The [Smile Squad mouth check poster](#) can be downloaded and printed.
- Oral health promotion resources. Most times these will be distributed to parents electronically. Links for specific oral health topics appear under the relevant section/s in this manual.
- A disposable tongue depressor can be helpful to retract cheeks/lips/tongue.
- A hand-held mirror is routinely used by oral health professionals during dental visits, so that students can watch themselves as they lift their lips and open their mouth. A wall-mounted mirror could be used as an alternative.
- Secondary school students may require additional privacy, depending on the nature of their concern.

11.3 Tell, Show, Do

Many young children will not have had a mouth check before, and may be apprehensive due to:

- lack of familiarity with school nurse, or environment in which mouth check occurs
- wariness of strangers or medical personnel
- invasion of personal space
- mistaking the torch for something more threatening
- accidentally having the torch light shine in their eyes
- previously hearing scary things about dental visits by family or friends (e.g., they'll pull your teeth out or give you a big needle if you don't brush your teeth).

Even if a student has visited an oral health professional before, a parent/carer is likely to have been in attendance to help guide or assist. Some students may have had a previous negative dental experience, which you may not be aware of, so all students should be managed on an individual basis.

Tell, Show, Do

Students, especially younger ones, may find it difficult to conceptualise what they are meant to do during a mouth check and may struggle to follow instructions on how they need to assist you. *Tell, Show, Do* is a technique that can help overcome this. The wording and level of detail provided can be adapted to suit individual student needs.

Here is an example that could be used for prep grade students who are having a mouth check for the first time.

Tell: A simple explanation of what you are going to do
e.g., <i>"I'd like to look inside your mouth today. I want to check (and count) your teeth, and your tongue and your cheeks. Do you know how many teeth you have?"</i>
<i>"I'll have to get up quite close so that I can look inside. Is that OK?"</i>
<i>"And because it's very dark in your mouth, I have this torch to help me see. Do you think you'll be able to help me?"</i>
Show: Demonstrate what you are about to do (outside of their mouth)
e.g., <i>"This is my torch. Do you think you can hold it for me and check that it's working?"</i>

"In a moment, I'm going to ask you to hold your top lip with your fingers so I can see your top front teeth just like this." ... and do this yourself, or point to photo (e.g., [Smile Squad mouth check poster](#)).

"Then I'm going to ask you to hold your bottom lip with your fingers so I can see your bottom front teeth just like this." ... and do this yourself or point to a photo.

"Then I'm going to ask you to open really wide and say "AAH" just like this." ...

"And I might even ask you to look up to the ceiling just like this." ...

You may ask the student to copy your actions as you demonstrate or show them a photo (e.g., [Smile Squad mouth check poster](#)).

Having the student look in a hand-held mirror during a mouth check is routinely used by oral health professionals to help engage with timid or uninterested individuals.

If you demonstrate on yourself, don't forget to wash or sanitise your hands before taking the torch back and continuing.

Do: Proceed with the mouth check as per your previous instructions

e.g., *"OK, are we ready now? Let's go."*

Be ready to respond to a child who says "no" and address any concerns.

Anxious children and students with additional needs

Students who are anxious or who have additional needs may require extra time and support, such as:

- showing photos of other children having their teeth checked (e.g., Mouth check poster)
- allowing the student to watch other children having their mouths checked before their turn
- asking the student to look into the mouth of a friend, teacher or support person
- attending with a friend, teacher or support person, who can help demonstrate the procedure and reassure how simple a mouth check can be
- schools may choose to create their own social story relating to a mouth check. Generic and dental clinic-based social stories are available online for reference.

¶ For more information, see:

🦷 [Section 3.4.1: Visiting a dental practitioner](#)

🦷 [Section 11.10.2: Students with additional needs](#)

11.4 Clearing the mouth

Where practical, asking a student to have a small drink, or rinse with water prior to looking in their mouth can make a big difference to your visibility. Benefits include:

- clearing the mouth of any food remnants. Dark-coloured foods, such as chocolate biscuits are notorious for settling into the pits and grooves of teeth, giving the appearance of dental caries. Light-coloured foods, such as bread, mimic the appearance of dental plaque. Both will impede vision of tooth surfaces

- rehydrating the mouth and washing away any thick, bubbly saliva (which may be present if the student is a little dehydrated after playing).

If a mouth trauma has occurred, it is best if the student does not rinse their mouth out (or have a drink) in case they accidentally swallow a loose tooth or tooth fragment.

Nurses might consider asking students to bring their own drink bottles with them or stop by a water fountain on the way to their mouth check.

11.5 Positioning the student

There are a number of different ways to position a student to make looking in their mouth easier.

- In most cases, mouth checks will be conducted facing the student, with the student sitting or standing in an upright position.
- Following a traumatic injury, students may be most comfortable lying down on their back or their side.

As the ultimate goal is to look inside the mouth, success may require a flexible (and perhaps creative) approach.

11.6 Lift the Lip

The 'Lift the Lip' protocol for school students has been developed to enable an effective mouth check. It is not considered a full dental examination.

A co-operative, physically capable student (even a prep child) should be able to lift their own lips, therefore freeing up the nurse's hands to hold a torch. The nurse will not need gloves.



With the student's mouth at rest, or teeth lightly biting together (i.e., **do not** ask them to open wide):

- ask the student to lift their top lip off their teeth using their thumbs and forefingers to give a good view of the upper front teeth
- the student can also lift their lower lip from their lower teeth to give a good view of the lower front teeth

- for a closer look at the inside of the cheek (buccal mucosa), ask the student to use their fingers to move the outer lip and cheek to one side.

With practice, Lifting the Lip will give a reasonable view of the “outside” surfaces of the teeth, but is unlikely to provide an adequate view of the “inside” and “biting” surfaces of the teeth, tongue, palate, or floor of mouth.

11.6.1 Open wide and say AAH

To look *inside* the mouth, it is necessary for the student to open their mouth.



- Ask the student to open their mouth wide.
 - Most will be unaware of their tongue position or inadvertently poke it out. Asking them to say “Aah” should lower their tongue for a full view of the back of the mouth.
 - The student can continue holding their lips loosely, but this is not essential.
- For better vision:
 - you may need the student to tilt their head back (“please look up to the ceiling”)
 - or move their tongue in different directions
 - “Poke your tongue out”
 - “Curl your tongue up”
- A simple mouth position reset can usually be achieved by asking the student to close their mouth and swallow.

11.7 What to look for during a mouth check

Summary checklist: What to look for during a mouth check			Column A	Column B	Column C
1	Reason for presentation	SEHQ follow-up:			
		• Parent/carer concern?	☐ Yes	☐ No	☐ Unsure
		• Has student had an oral health check by a dental practitioner in the past 12 months?	☐ No	☐ Yes	☐ Unsure
		First aid care for trauma to the teeth or mouth	☐ Yes	☐ No	☐ Unsure
		Student reports pain from the teeth or mouth	☐ Yes	☐ No	☐ Unsure
		Concerns raised by student/ family/ school	☐ Yes	☐ No	☐ Unsure
2	Home care and oral hygiene	Obvious plaque on teeth, or mouth odour?	☐ Yes	☐ No	☐ Unsure
		Does student report brushing their teeth twice a day with a fluoride toothpaste?	☐ No	☐ Yes	☐ Unsure
3	Teeth	Tooth decay concerns?	☐ Yes	☐ No	☐ Unsure
		White spot lesions?			
		Clearly visible holes?			
		Tooth appearance concerns?	☐ Yes	☐ No	☐ Unsure
		Tooth discolouration?			
		Chalky white spots or patches?			
		Broken or chipped teeth?			
		Excessive tooth wear? (e.g., grinding, erosion)			
		Tooth eruption or position concerns?	☐ Yes	☐ No	☐ Unsure
		Number of teeth present?			
		Is this well outside "expected" range?			
		Crooked or crowded teeth?			
4	Gums	Red, swollen, bleeding?	☐ Yes	☐ No	☐ Unsure
		Lumps, sores, abscesses or suppuration?	☐ Yes	☐ No	☐ Unsure
5	Tongue, lips & cheeks (inside), palate, floor of mouth	Lumps or sores?	☐ Yes	☐ No	☐ Unsure
		Asymmetries?	☐ Yes	☐ No	
		Presence of tongue-tie or lip-tie?	☐ Yes	☐ No	
		Mouth piercings?	☐ Yes	☐ No	
6	Function and bite	Thumb-, finger-, lip- sucking?	☐ Yes	☐ No	☐ Unsure
		Tongue-thrust? Lisp?	☐ Yes	☐ No	
		Anterior open bite?	☐ Yes	☐ No	
		TMJ (jaw joint) concerns?	☐ Yes	☐ No	
7	Other	Underlying medical conditions that may affect the teeth/mouth?	☐ Yes	☐ No	☐ Unsure
		Any additional concerns?			
After completing a mouth check: Use your professional judgement to consider all responses					
8	No concerns (= Ticks <i>only</i> in Column B)	- Provide oral health information, as required. https://www.health.vic.gov.au/smile-squad/smile-squad-oral-health-resources - Provide dental service information, as required.			
9	Concerns (= Any ticks in Columns A and/or C)	- Provide relevant oral health information. - Provide dental service information. - Recommend a visit to see a dental practitioner OR provide a referral letter. - For more information, see Section 14: Recommendations and referrals			
Please note: Column C "Unsure" might be selected for clinical uncertainty and/or when there is poor visibility (e.g., student not co-operative, food debris covering teeth, difficulty obtaining information).					

11.8 Documenting a mouth check

It is good practice to document the findings of a mouth check in line with workplace protocols.

When undertaking a mouth check, nurses and other health professionals are expected to look for any appearance outside the norm which may indicate a visit to a dental practitioner is required, or that oral health promotion resources should be provided to the student or their family.

Documentation should include a brief description of presenting reason, findings and any actions undertaken. The [Summary checklist: what to look for during a mouth check](#) can be used as a guide.

Nurses and other health professionals are not expected to use dental jargon or provide a diagnosis.

11.9 Suggested content for correspondence

If nurses or other health professionals feel that written correspondence with families or a dental practitioner is required, some examples are given below.

For parents/carers

Example:

Dear [Parent/Carer],

[Student] has had an oral health check, and some oral health problems were noted.

It is recommended that all school age children visit an oral health professional every year, even if you don't have any specific concerns.

As your child is enrolled in a Victorian Government school, they are eligible to receive free dental services through Smile Squad.

If Smile Squad has not seen your child at school, you can still make a free Smile Squad appointment at your local community dental clinic.

To find your closest clinic visit: [Find a public dental clinic | ohv.org.au](#)

Kind regards, [Nurse name, contact details]

For dental practitioners

Example 1:

Dear Dental Practitioner,

Re: [Student name, DOB, address]

Today's mouth check revealed poor oral hygiene, very inflamed gums, discoloured teeth and signs of decay. [Student] says they often forget to brush their teeth and like to drink fruit juice every day. Reports no pain or difficulty eating. Brief discussion with [Student] and their mother about importance of good oral hygiene and reducing sugar in diet.

I refer them to you for examination and ongoing management.

Medical history: Nil of note, NKA.

Kind regards, [Nurse name, contact details]

Example 2:

Dear Dental Practitioner,

Re: [Student name, DOB, address]

[Student] was involved in a playground incident today at approximately 1pm, where they collided with another student. Their mouth contacted the other student's elbow, resulting in their upper left central incisor being knocked out. Another student found the tooth in the tan bark, with minimum debris attached.

First aid was provided, including: socket wiped with sterile gauze, tooth rinsed in milk and re-implanted, foil splint applied. The tooth was out of the mouth for approx. 15 minutes. I refer [Student] to you for emergency care.

Medical history: Asthma, Penicillin allergy (hives), most recent Tetanus [date]

I haven't had to deal with a dental trauma before and would be keen to receive some feedback on this case.

Kind regards, [Nurse name, contact details]

11.10 Considerations when looking in the mouth

11.10.1 Personal space

To look in the mouth (even just having a quick look), it is necessary to step into a student's personal space, specifically what is known as a person's *intimate zone*. This zone ranges from physical contact to 46cm (arm's length) from another person's body, and is generally reserved for romantic partners, close family members and very close friends. Nurses should be mindful that being in such close physical proximity may trigger feelings of discomfort, anxiety, defensiveness or anger.

Communicate clearly about what you are going to do and ensure consent is given prior to such close contact. Nurses should also look for a student's non-verbal signs or body language showing discomfort (such as crossed arms, leaning away or avoiding eye contact) and adjust their actions accordingly.

In some situations, it may be necessary to create the feeling of distance by:

- constructing a physical barrier like wearing a face mask and glasses
- avoiding eye contact (e.g., focussing your gaze on the mouth)
- moving into the space only when necessary and moving back out of the space as soon as possible.

¶ For more information, see: [Section 11.3: Tell, Show, Do](#).

11.10.2 Students with additional needs

Every student is unique and may have different needs relating to an underlying long-term health or developmental condition or disability or a student's priority grouping (such as self-identification as an Aboriginal or Torres Strait Islander person, CALD background, refugee status or care/living arrangements).

Some students may benefit from a different approach when a mouth check is required. A number of different techniques can be used.

- **Preparing for the visit is key.** Where possible, speak to the parent/family beforehand to prepare for the visit. Know what support the student may need and bring this along to the mouth check (e.g. carer, sibling, parent, headphones, mobile phone, toy, fidgets etc). Awareness of a student's cultural practices or traumatic past experience may also be relevant and require consideration.
- **Desensitisation.** The student's family can assist by explaining what is going to happen during the mouth check visit. The student may like to visit the room where the mouth check will take place beforehand, or watch another student have their teeth checked.
- **Flexibility.** The ultimate goal is to look in the mouth, so being flexible about location and technique is important. For example, it's okay if the mouth check takes place in a beanbag or sandpit!
- **Focus on the wins.** There is no need to be disheartened if only a brief look is able to be provided. Focus on what has been achieved instead.
- **Special equipment.** For students with physical or severe cognitive limitations, it may not be possible to see inside the mouth without the use of special equipment like mouth props. This is most likely out of scope for nurses or other health professionals in school settings.
- **Prevention is important,** regardless of whether a mouth check is completed. Reinforce oral hygiene instruction, provide dietary advice and recommend student see a dental practitioner for further support.

🔔 For more information, see:

- 🦷 [Section 3.4.1: Visiting a dental practitioner](#)
- 🦷 [Section 11.3: Tell, Show, Do](#)

Specialist dental services are available for students with additional needs, if required. The referral would be made by a general dental practitioner to the most appropriate service.

- A Smile Squad patient would generally be referred to see a paediatric dentist.
- A non-Smile Squad patient would generally be referred to a Special Needs Dentist.

🔔 See also:

- 🦷 [Section 9.5: Specialist dental care](#)

12. A healthy mouth

12.1 At a glance

Some of the major structures that are visible when looking inside the mouth include the following.

- Hard tissues:
 - teeth
- Soft tissues:
 - gums
 - mucosal (inside) lining of the lips
 - mucosal (inside) lining of cheeks
 - tongue
 - floor of mouth
 - palate
 - uvula
 - tonsils



12.2 The hard tissues: a summary

In a healthy mouth:

- teeth are **clean and free of plaque** (the sticky soft film containing bacteria)
- teeth will be **whitish in colour, shiny and smooth**. Permanent teeth tend to be more yellowish in colour compared to deciduous teeth
- newly erupted teeth may have **mamelons** (wavy incisal/biting edge). These wear down over time
- the **crowns** of the teeth will be visible above the gum line; the **roots** of the teeth will be covered by gum tissue (and underlying bone)
- the number and type of teeth present will vary depending on the age of the student
- the shape of the dental arches (the line where the teeth sit) will be rounded and reasonably symmetrical.

12.3 The soft tissues: a summary

In a healthy mouth:

- the gums will be **pink and stippled** (like they have tiny indentations). In darker-skinned individuals the gums may also be pigmented a darker brown
- the mucous membranes (inside of the lips, cheeks, palate and underside of the tongue) will be pink, smooth, glistening, uniform and moist
- the tongue will have papillae (small projections that contain several tastebuds) which give the tongue its characteristic rough appearance, and
- the roof of the mouth will be symmetrical (left and right sides) with a dome-shaped palate, and may have:
 - a soft, hanging midline protrusion called the uvula (at the back of the soft palate)
 - a hard, bony projection in the midline of the hard palate called a palatal torus (Hockenberry, Wilson, Winkelstein & Kline, 2023)
- the oral environment should be wet, with (plenty of) watery saliva.

12.4 Inside the mouth

Knowing what to expect when looking inside the mouth at each age requires consideration of general anatomical features, as well as tooth exfoliation and eruption sequence and timing.

The main differences between a student starting primary school compared to one in secondary school are:

- jaws and mouths (including soft tissues) grow as children get older
- the ratio of deciduous (primary) teeth to permanent (secondary) teeth decreases, as deciduous teeth are lost and replaced by permanent teeth
- additional permanent molars erupt at the back of the mouth, increasing the arch length.

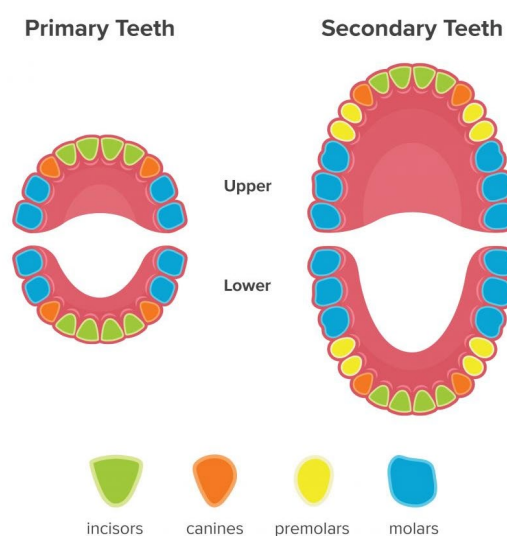


Image 12: Comparing mouths: primary (deciduous) teeth and secondary (permanent) teeth

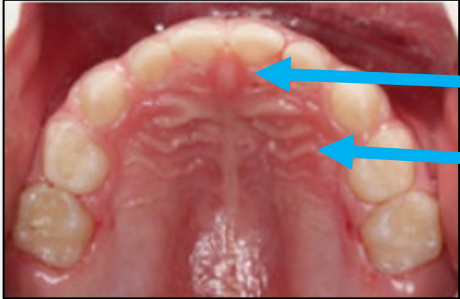
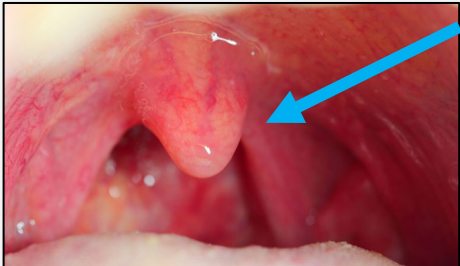
12.4.1 4-6 year olds

When a prep child has their mouth checked, they will generally be between 4-6 years old. This is the time when children **begin** to transition from having *only* deciduous teeth, to a *mixed* dentition of both deciduous *and* permanent teeth.

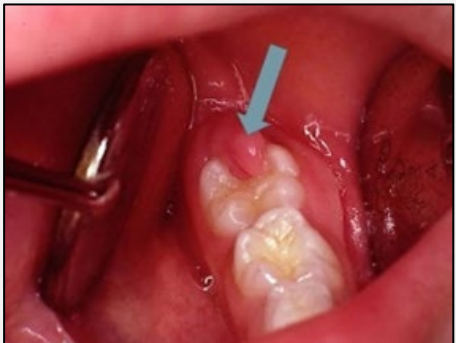
FRONT VIEW OF MOUTH: What you might see

Image 13: Healthy mouth with deciduous teeth		• “Only deciduous teeth are present.” • “Teeth look very clean.” • “Gums look healthy – there are no obvious signs of inflammation.” • “Gaps are present between teeth, which is normal (and desirable) in the deciduous dentition.”
Image 14: Recently exfoliated lower incisor		• “Child has recently lost (exfoliated) a lower incisor.” • “Upper incisors look like they are mobile (loose/wobbly).”
Image 15: Newly erupted lower incisors		• “Child has newly erupted lower permanent incisors.” • “Mamelons form a wavy, biting edge on the new incisors.” • It is normal for permanent teeth to be more yellow than deciduous teeth.
Image 16: Newly erupted lower incisors		• “Child has recently lost (exfoliated) an upper incisor.” • “Two permanent central incisors (with mamelons) have erupted.” • Mamelons are completely normal and wear down over time to create a flat biting edge.
Image 17: Melanin (racial) pigmentation of gums		• The darker brown line of colour on the gums above the teeth is due to racial (melanin) pigmentation. • The pattern of pigmentation can vary in extent and shape. • “The gums display racial pigmentation.” • “The upper right central permanent incisor is a little crooked, creating a gap between the central incisors. It is too early to know if this will self-correct.”

INSIDE VIEW OF UPPER JAW (including palate): What you might see

Image 18: Upper dental arch		• “The upper arch is symmetrical and parabolic-shaped.” • The <i>incisive papilla</i> is the small lump behind the upper incisors. • “<i>Rugae</i> (wavy ridges) are present (on the anterior palate).”
Image 19: Uvula		• The <i>uvula</i> hangs down at the back of the soft palate. • It can vary in size and shape but is always in the midline.
Image 20: Palatal torus		• The <i>palatal torus</i> is a hard, bony projection in the middle of the hard palate. • They can vary in size and shape and are not always symmetrical. • Not everyone has one, but they are completely normal.

INSIDE VIEW OF LOWER JAW (including floor of mouth): What you might see

Image 21: Lower dental arch		• “The lower arch is symmetrical and parabolic shaped.” • The floor of the mouth is the area underneath the tongue.
Image 22: Erupting lower molar		• “The lower first permanent molar (also known as a 6-year-old molar) is erupting into the mouth.” • “This tooth is erupting behind the deciduous second molar tooth.” No tooth has been lost for this to occur. • “A flap of gum remains across the back section of the erupting tooth.” This usually goes away on its own. • It is important to keep this area clean to prevent germs and food becoming trapped under the flap.
Image 23: Permanent incisors erupting behind deciduous incisors		• “The permanent lower incisors are erupting behind the deciduous incisors (due to lack of space).” • Very common; usually self-correcting. • The deciduous incisors will usually exfoliate (fall out) on their own without intervention, and the permanent incisors will eventually be pushed forward into place by the tongue. • A dental practitioner can provide reassurance to families and arrange monitoring of the condition.
Image 24: Tongue		• The tongue is wet and clean (with no coating). • There are many pink papillae (projections) on the upper surface of the tongue. • There are four different types of papillae on the tongue; the largest at the rear of the tongue are visible when the tongue is hyperextended.

12.4.2 7-9 year olds

Following on from the 4-6 year old child.

- The first permanent molars (6-year-old molars) should have erupted (or be close to finishing erupting) into the mouth behind the last standing deciduous molar.
- Any remaining permanent incisors will be in the process of (or have finished) erupting into the mouth.
- Children may experience a temporary period where their upper front teeth are splayed out due to the movement of unerupted upper canine teeth. This is referred to colloquially by dental practitioners as the *Ugly Duckling stage* (see [Section 13.7.1.2: Temporary changes in appearance during the mixed dentition stage](#)). This usually self-corrects as the upper canine teeth erupt into position.
- It is common for the first deciduous molars to loosen or begin exfoliating around 9 years of age.

12.4.3 10-13 year olds

Following on from a 7-9 year old child.

- Eruption of permanent incisors should be complete.
- The permanent premolars are in the process of (or have finished) erupting into the mouth. These replace the deciduous molars.
- The second permanent molars (12-year-old molars) should be erupting (or be close to finishing erupting) into the mouth behind the 6-year-old molars. These are not wisdom teeth.
- The permanent canines are in the process of (or have finished) erupting into the mouth. These are usually the last of the permanent teeth to erupt, except for the wisdom teeth which do not erupt until approx. 18 years of age.

12.4.4 14-18 year olds

- By secondary school age, most students will have completed the transition to permanent dentition, though dental development may still be ongoing.
- Eruption of all of the permanent teeth (except for the third molars - wisdom teeth) should be complete. Any permanent teeth that are missing should be referred for further investigation to determine the underlying cause.
- The third molars (wisdom teeth) may start to erupt between the ages of 18-22 years. These will erupt behind the second molars at the very back of the mouth. There are normally four wisdom teeth – two upper and two lower – but some people have more, fewer, or even none at all. Not all wisdom teeth cause problems or need to be removed. Any students expressing concerns about wisdom teeth should be directed to a dental practitioner for individual advice.

¶ For more information, see: [Wisdom teeth | Better Health Channel](#)

12.5 Oral hygiene

¶ See: Oral health fundamentals: [Section 5: Oral hygiene](#)

12.6 Tooth types

¶ See: Oral health fundamentals: [Section 4.2: Tooth types](#)

12.7 Tooth exfoliation and eruption

12.7.1 Tooth exfoliation

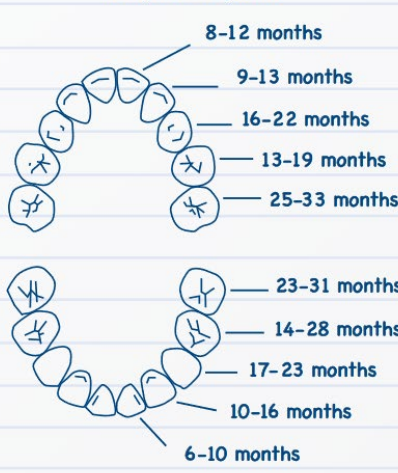
Tooth exfoliation is the natural shedding of deciduous teeth which typically occurs during primary school years. However, late exfoliation of primary molar teeth can still occur in early secondary school students, though it is less common.

Refer to the charts below for typical eruption and exfoliation ages of deciduous teeth.



Image 25: OPG radiograph showing permanent teeth developing in the jaw beneath the deciduous teeth in a child (aged approx. 8 years old)

Usual eruption and exfoliation sequence for deciduous teeth

Tooth	Eruption month	Shed year	Eruption sequence
	(approximately)	(approximately)	
Lower central incisor	6-10	6-7	
Lower lateral incisor	10-16	7-8	
Upper central incisor	8-12	6-7	
Upper lateral incisor	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	

12.7.2 Tooth eruption

By secondary school, most students will have completed the transition to their permanent dentition. However, the timing and sequence of tooth eruption can still vary between individuals, just as growth and development do. In general:

- lower teeth erupt before their upper teeth counterparts
- tooth eruption occurs earlier in girls than boys
- the teeth in both jaws usually erupt in pairs – one on the right and one on the left.

During their primary school years, students are transitioning from a fully deciduous dentition to a fully permanent dentition. A student with a combination of deciduous and permanent teeth is said to have a mixed dentition. By the age of 13, most students will have all their permanent teeth, except for the third molars (wisdom teeth).

Eruption of deciduous teeth

Eruption of the deciduous teeth is usually complete by 3 years of age.

By the time a child starts school, they will generally have their full set of deciduous teeth.

Eruption of permanent teeth

At around 6 years, eruption of the permanent teeth begins:

- the first permanent molars begin to erupt at the back of the mouth, *behind* the deciduous molars. They take up a new position in the arch (i.e., they do not replace a deciduous tooth that has fallen out)
- the lower permanent incisors begin to erupt, taking the place of the lower deciduous incisors which have exfoliated.

As deciduous teeth are being lost and permanent teeth are coming through:

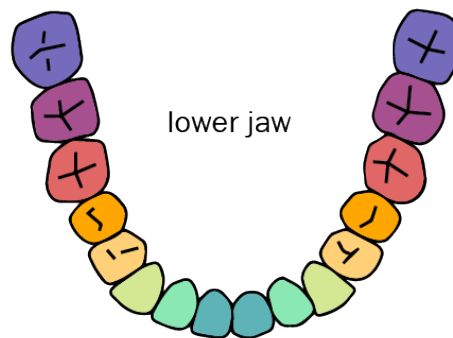
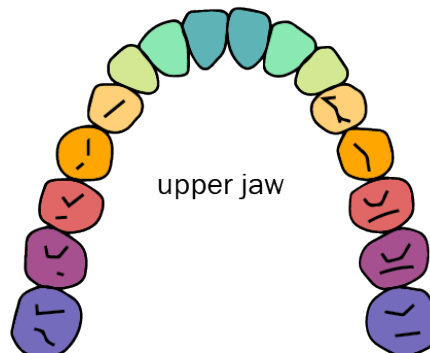
- a student may find that chewing is more difficult when teeth are loose or missing
- a student should maintain their tooth-brushing routine. Extra care should be taken near loose teeth or sensitive areas
- children should be encouraged to wobble their loose teeth as this supports the exfoliation process, however, loose teeth should be allowed to fall out on their own
- sometimes a permanent tooth will start to erupt through the gum before the deciduous tooth has fallen out. If the deciduous tooth still hasn't fallen out within two or three months, the student should see a dental practitioner (Department of Social Services, 2021).

Permanent teeth are guided by their predecessor deciduous teeth into position. If those deciduous teeth are lost or extracted early (through trauma or tooth decay), the space may close due to movement of the nearby teeth and block the eruption path of the permanent tooth. This can lead to misalignment and may require orthodontic treatment in the future.

Tooth eruption guidance tables are provided for reference, if required.

Usual eruption sequence for permanent teeth

Teeth	Eruption (approx.)
central incisors (upper)	7-8 y
lateral incisors (upper)	8-9 y
canines (upper)	11-12 y
first premolars (upper)	10-11 y
second premolars (upper)	10-12 y
first molars (upper)	6-7 y
second molars (upper)	12-13 y
third molars (wisdom teeth)	17-21 y



Teeth	Eruption (approx.)
third molars (wisdom teeth)	17-21 y
second molars (lower)	11-13 y
first molars (lower)	6-7 y
second premolars (lower)	11-12 y
first premolars (lower)	10-12 y
canines (lower)	9-10 y
lateral incisors (lower)	7-8 y
central incisors (lower)	6-7 y

(Therapeutic Guidelines 2025)

12.7.3 Summary timelines: exfoliation and eruption of teeth

See Oral health fundamentals: [Section 4.4: Tooth exfoliation and eruption fundamentals](#)

12.7.4 Variation: Over-retained deciduous teeth

Sometimes a deciduous tooth does not fall out according to expected exfoliation timeframes. This can occur with any tooth type. The reason for over-retained teeth is usually either because their permanent replacement tooth is missing, or its permanent replacement tooth is ectopic (i.e., not following its expected eruption path).

This is commonly seen with lower front teeth, where a permanent incisor tooth erupts before the deciduous tooth it is due to replace has fallen out. Most often this situation resolves itself – the deciduous tooth eventually falls out on its own, and the tongue pushes the permanent tooth forward into the correct alignment. While this issue is more common in younger children, it can still be observed in early secondary school students. School nurses may notice students experiencing discomfort, crowding, or visible misalignment. Awareness of this variation can help guide appropriate referrals to dental professionals when needed.

Image 26: Normal exfoliation of upper incisor		• “The upper incisor is very mobile and is going to fall out very soon. All that remains of the tooth is the crown. It is only attached to gum on the rear aspect of the tooth.” • Most children love to “play” with their loose teeth, which helps the teeth come out.
Image 27: Over-retained lower deciduous incisors, with ectopic eruption of permanent incisors		• “Two permanent lower incisors have erupted in the wrong position (ectopically) behind the deciduous lower incisors.” • This is usually self-correcting in time. • Recommend the child see a dental practitioner for assessment and monitoring.

12.7.5 Variation: Extra or missing teeth

Extra or missing teeth are common dental anomalies that affect the normal number of teeth in the mouth.

Extra teeth, known as *supernumerary teeth*, can develop anywhere in the dental arches and may cause crowding, delayed eruption, or misalignment of nearby teeth.

Image 28: Supernumerary tooth: mesiodens		• An extra tooth (usually cone-shaped) located between the upper incisor teeth is called a <i>mesiodens</i> (tooth in the middle). • A mesiodens can interrupt the eruption and alignment of neighbouring teeth and usually requires removal.
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Missing teeth, called *hypodontia* or *anodontia* (when all teeth are absent), occur when certain teeth fail to develop, often due to genetic factors or developmental issues. Teeth may also be missing as a result of trauma or extraction by a dental practitioner.

If a deciduous tooth fails to form, the corresponding permanent tooth will also fail to form (Letra et al 2021).

Image 29: Missing upper lateral incisors		• There are gaps between the upper central incisors are canines because the lateral incisors are missing. • Radiographs (x-rays) would be taken to confirm that the teeth have failed to form.
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Children should see a dental practitioner for assessment and management, as both conditions can impact chewing, speech, and appearance, and treatment may involve orthodontics, prosthetics, or surgery to restore proper function and aesthetics.

13. Common dental diseases and conditions

13.1 Sensitive or sore teeth

It is good practice to ask if a student has any concerns with their teeth, gums, mouth or jaws prior to conducting a mouth check. Their response can help guide you where to look and formulate your action plan.

Sensitive or sore teeth are common signs of an underlying dental problem.

Sensitive teeth

Dental practitioners use the term “sensitivity” when describing the sharp, short-lasting sensation (only a few seconds) experienced by teeth when exposed to cold, hot or sweet stimuli, e.g., “Her teeth are sensitive when she eats ice cream or breathes in cold air.”

Whilst sensitive teeth can be unpleasant, the underlying cause is often relatively minor: e.g., small hole, chipped tooth or filling, exposed root surface (due to gum recession), thin enamel (due to tooth wear).

Dental review is recommended to determine and address cause of sensitivity.

Sore or painful teeth

Pain is an unpleasant feeling experienced by teeth or other parts of the mouth and is usually of a higher magnitude than sensitivity and/or lasts longer than a few seconds. It might be described as:

- **sharp** – stabbing feeling (“I get a sharp pain in my jaw when I open wide”, or “I get a sharp pain when I bite my teeth together.”)
- **aching** – throbbing feeling (“This tooth has been aching all night.”)
- **tender** – like pushing on a bruise (“My gum feels tender when I touch it”, or “My tooth feels tender when I chew meat.”)

Because a person’s pain experience can be quite subjective, a thorough pain history is a good first step to diagnosing any underlying problems. School nurses are not expected to undertake this process.

Dental review is required for any student who presents with pain. An emergency triage (when undertaken by the dental clinic) will include questions relating to characteristics of pain, and its impact (e.g., difficulty eating or sleeping).

13.2 Poor oral hygiene

Nurses may find it difficult to see the surfaces of teeth clearly when oral hygiene is poor. Deposits on teeth, like plaque, calculus, stains and food debris are worth noting as they can hinder visibility during mouth checks.

We can learn a lot about the frequency and quality of home oral hygiene practices by how clean a person’s mouth is. Even if a student says they brush their teeth, the presence of visible plaque tells us that their technique or frequency needs improvement.

Poor oral hygiene in a student is rarely about attitude or choice. It often reflects challenges such as limited family knowledge about oral health, competing priorities at home, difficulty accessing

hygiene products, or sensory sensitivities. Understanding these factors helps to respond with care and support rather than make assumptions.

13.3 Dental caries (tooth decay)

¶ See Oral health fundamentals: [Section 6.1: Dental caries \(tooth decay\)](#)

13.4 Gum (periodontal) conditions

¶ See Oral health fundamentals: [Section 6.2: Gum \(periodontal\) conditions](#)

13.5 Bad breath (halitosis)

¶ See Oral health fundamentals: [Section 5.3: Bad breath \(halitosis\)](#)

13.6 Oral habits

Students may have one or more oral habits, including non-nutritive sucking (using their thumb, finger or dummy), lip sucking, or tongue thrusting. While these behaviours are more commonly associated with early childhood, they can persist into adolescence, especially among students with additional needs or sensory-seeking behaviours.

While families are likely to be aware of these habits, students are less likely to display these habits during school because of peer pressure, and as a nurse you may only become aware of them due to clues in or around the mouth.

Nurses can explain to a student about why habits such as thumb sucking should stop. Sometimes an encouraging conversation with an adult outside of the family can be influential.

A recommendation to see a dental practitioner provides an opportunity for families to discuss the short and long-term impacts of the habit. This includes children with additional needs who display oral habits. Interceptive treatments may be available.

13.6.1 Non-nutritive sucking – thumb, finger, dummy (pacifier) or lip

Thumb, finger, or dummy (pacifier) sucking

Thumb, finger or dummy (pacifier) sucking are common childhood habits, and usually stop between the ages of 2 and 4 years, however, can persist beyond this. Studies of thumb-suckers show they have a greater problem in breaking their habit than do dummy-suckers (Gupta BI et al 2012).

The dental effects of these are usually totally reversible up until the age of 6 or 7, when the permanent teeth start to erupt. If thumb or finger sucking occurs beyond the age of 6 or 7 years, dental problems may arise. These include:

- **protruding front teeth (“buck” teeth)** – where excessive sucking pushes the front teeth out of alignment, causing them to protrude. This may alter the shape of the face and lead to an open bite
- **anterior open bite** – where a large gap exists between upper and lower incisors
- **a lisp** – when front teeth are pushed out of alignment, this interferes with the correct formation of s and z speech sounds, resulting in a lisp.

All three issues may occur at the same time.

Image 30: Protruding front teeth (“buck” teeth)		• “The upper incisors protrude and sit past (forward of) the lower lip.”
Image 31: Anterior open bite		• “There is a large gap between the upper and lower front teeth when the back teeth are biting together.”

Lip sucking

Sucking of the lower lip may occur in isolation or it may occur with thumb sucking. When the lower lip is repeatedly held beneath the upper front teeth, the area around the lips can become chapped, red and irritated, and an open bite may result.

Image 32: Lip sucking		• “The lips are chapped, and the redness extends to the area surrounding the lips.”
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Strategies to break non-nutritive sucking

Most parents will appreciate support to help their young children stop sucking their thumb, fingers, lip or dummy to minimise the long-term impacts of these oral habits.

Parents may approach nurses or other health professionals for advice on how best to do this. The following strategies might assist.

- **Prepare the child**
 - Non-nutritive sucking is more likely to take place when a child is tired, stressed or hungry. Awareness and avoidance of these triggers can help manage these habits.
 - Involve the child in the decision to stop. Make sure they understand why they need to stop the habit, and that they want to stop.
 - When a dummy is used, involve the child in planning and hosting a special ceremony where the child can say thank you and good-bye to their dummy.
- **Reward the child**
 - Use praise or a hug to reinforce their decision to stop the habit.

- Use ticks or stars on a calendar for each period the child does not suck their thumb or fingers. After a 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. Some children may 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**
 - Parents and other family members must show patience and offer encouragement during this difficult time, especially the first few days. Multiple attempts to break the habit may be required.
 - Parents may choose to encourage a child to bond with their favourite toy instead.
- **Limit nagging**
 - The frequent repetition by parents to take the child's thumb or fingers out of their mouth can be counterproductive. It is the child, not the parents, who must learn to control the habit. If children feel they are being nagged, they will become defensive.
 - Occasional good-humoured comments that bring the sucking activity to the child's notice can be helpful.
- **Physical reminders**
 - Some parents give their 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.
 - Band-aids (or bandages!) can also be placed over the thumb or finger at bedtime.
- **Offer distractions**
 - While a child is watching TV, parents might like to keep toys handy or sit with them for a cuddle (or other form of comfort).
 - Keeping a child's hands occupied is crucial. This might include giving them a task like carrying something in their hands, playing with toys or books, or handling sensory or fidget toys.

Children can easily drift back to their old habit, and it may take several attempts before the habit is completely broken. Remember that patience is the key, and that a child's first days without sucking are usually the most difficult. Like all habits, the yearning slowly diminishes, and it eventually becomes easier to control. Effective methods will vary according to each child and their situation.

📖 For more information, visit:

🦷 [Thumb sucking | Better Health Channel](#)

🦷 [Kids' teeth-grinding, mouth guards & more | Raising Children Network](#)

13.6.2 Tongue thrusting (infantile swallow)

During a normal swallow, the tongue is pushed *upward* against the roof of the mouth to stabilise the lower jaw. In comparison, tongue thrusters push their tongue *forward* against the upper front teeth (or between the upper and lower front teeth), to seal the mouth when swallowing.

Nearly all infants are born tongue thrusters. Most children outgrow it and develop a normal swallowing pattern by the time they are 6 years old. A small percentage of children will continue with tongue thrusting by the age of 12 years and into adulthood if not addressed earlier. This can

contribute to orthodontic relapse or ongoing speech difficulties. It may also be seen in older students with additional needs or those undergoing orthodontic treatment.

Because tongue thrusters exert pressure on the front teeth, continued tongue thrusting increases the likelihood that the front teeth will be pushed forward, causing an anterior open bite. Tongue thrusting can also cause speech problems, particularly with articulation of 's' and 'z' sounds.

Image 33: Tongue thrust (child)		• “When the child swallows, the tongue moves forward past the lower front teeth.”
Image 34: Tongue thrust (teenager/ adult)		• “The tongue moves into the gap between the upper and lower front teeth during swallowing. There is an anterior open bite.”

Signs that indicate tongue-thrusting include:

- when swallowing:
 - the tongue moves between or past the front teeth
 - there is a facial grimace and/or pursing of the lips
- when at rest:
 - the mouth hangs open, and the tongue is pushed forward
- lisping: difficulty pronouncing 's' and 'z' sounds
- breathing with an open mouth
- messy eating (as the tongue pushes food out when swallowing)
- anterior open bite.

If there is a concern, an assessment by a speech pathologist or dental practitioner is advised.

13.6.3 Tooth wear

Teeth are expected to wear down slowly over time due to their role in biting, chewing and grinding food. Increased or unusual patterns of tooth wear alert us that something out of the ordinary is going on.

In all instances, recommend student see a dental practitioner for assessment and management.

13.6.3.1 Teeth grinding (bruxism)

Bruxism is the technical term for the involuntary grinding or clenching of teeth, which often occurs during sleep, but can also happen whilst awake.

The prevalence of reported sleep bruxism in children ranges from 3.5% to 40.6% (DPERU 2023). While most children outgrow bruxism naturally, school nurses may still observe signs of grinding in both primary and secondary students – especially in older children where stress or sleep disturbances may play a larger role.

Repeated grinding can wear down teeth, which can range from mild to severe. Deciduous teeth generally wear down faster than adult teeth, as the enamel layer is thinner. Thankfully, worn deciduous teeth are eventually replaced by brand new permanent teeth.

It is not known exactly why children grind their teeth, but risk factors include:

- their mouths and jaws are growing and changing (i.e., their bite is adjusting, discomfort of teeth erupting)
- they have pain somewhere
- they have emotional stress or anxiety
- certain medications (e.g., antidepressants, anti-psychotics)
- certain medical conditions (e.g., cerebral palsy, ADHD). (Department of Health 2020a).

There also seems to be a correlation between bruxism and sleep-disordered breathing (e.g., upper airway obstruction due to tonsillar and adenoid hypertrophy) (Di Francesco RC et al 2004).

Signs and symptoms that children may be grinding their teeth include:

- shortened teeth associated with very flat biting surfaces
- uneven, or chipped enamel edges of the front teeth
- the sound of grinding – it can be very loud
- complaints of a sore jaw or face in the morning
- jaw joints that make a “popping” sound when opening or closing the mouth
- tired jaws making it difficult to chew breakfast
- complaints that teeth or jaws “feel strange” in the morning.

Mild tooth wear in the deciduous dentition is usually not of concern and requires no further dental intervention. But these signs may be more noticeable in secondary school students, who are more likely to report jaw discomfort, fatigue, or difficulty concentrating due to disrupted sleep. Bruxism-induced tooth wear in permanent teeth is of greater concern. In extreme cases of wear, orthodontic problems or temporomandibular joint (TMJ) disease might occur.

Any concerns are best addressed by a dental practitioner. Also, consider referral for support around stress or sleep hygiene if relevant.

- ¶ For more information: [See Section 17.26: Temporomandibular Joint \(TMJ\) dysfunction – oral considerations](#)

Image 35: Bruxism (child)		• “There is severe wear of the biting surfaces of all teeth. The bite plane is very flat.” • “The crowns of the upper and lower front teeth are much shorter than expected due to wear.”
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Image 36: Incisal chipping (teenager/adult)		• “The permanent front teeth have slightly chipped enamel edges.” • “The incisal (biting) edges of the upper front teeth are uneven.”
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13.6.3.2 Tooth erosion

Tooth erosion describes the irreversible loss of tooth structure, caused by contact with an acid *without* the involvement of bacteria.

The sources of acid can come from within the body or from outside the body. Frequent acid contact for long periods of time increases the risk of tooth wear.

- **Internal acid sources** – such as stomach acid from reflux (e.g., GORD) or vomiting (e.g., bulimia) – tend to wear away the back surface of the upper front teeth.
 See [Section 17.20: Eating disorders and disordered eating – oral considerations](#).
- **External acid sources** – such as foods and drinks (e.g., fruit juice, carbonated drinks, sour lollies, salty plums) – tend to wear away the front surface of the upper front teeth or biting surfaces of back teeth.

In young children, erosion is more commonly linked to frequent consumption of acidic foods and drinks. Whereas in older students, additional factors such as energy drinks, sports supplements, and underlying health issues like acid reflux or disordered eating may contribute.

Teeth affected by erosion tend to look more yellow. This is because the worn enamel layer allows the underlying dentine layer (which is more yellow in colour) to show through.

To prevent tooth erosion, it is essential to identify and stop acid exposure. Where total removal is not possible, harm reduction principles include the following.

- Reduce quantity and frequency of acid exposure.
- Limit contact of acid with teeth (e.g., drink through a straw).
- Ensure sufficient saliva is present to wash away and buffer acid (i.e., stay well-hydrated).
- Rinse mouth with water immediately following acid exposure.
- Neutralise acid with a mouthwash made by dissolving 1 teaspoon bicarbonate of soda into 1 cup of warm water, drinking plain milk or eating some cheese.
- Apply fluoride to teeth (toothpaste, or fluoride mouthwash).
- Do not brush teeth for at least 60 minutes following acid exposure.

 For more information, see: [Section 3.2: Drink well](#)

Image 37: Tooth erosion		• This damage is caused by an external acid source (e.g., soft drink or fruit juice). • The acid smooths out any surface characteristics of enamel, making it glossy and causing it to reflect light differently. • Teeth affected by erosion are often sensitive to temperature and sweet.
Image 38: Tooth erosion (transparent incisal edge)		• The enamel on these front teeth is so thin that it has become transparent (see-through) at the incisal edge. This is prone to chipping now. • As the enamel thins, the colour from the underlying yellow dentine layer also becomes more apparent. • Erosion softens the outer layer of the tooth, making it more susceptible to other types of tooth wear and dental caries.

13.6.3.3 Tooth abrasion

Tooth abrasion describes the irreversible loss of tooth structure caused by an external mechanical force over time, including:

- forceful toothbrushing (e.g., “scrubbing”) or using a toothbrush with medium or hard bristles
- habits such as biting on pens, fingernails or oral piercings, or chewing on ice
- using teeth as tools (e.g., to tear open food packets).

Toothbrush abrasion is not likely to be seen in primary school children. It is quite commonly seen in adults and may be seen in teenagers. School nurses may occasionally observe signs of abrasion in secondary school students, especially those with mouth piercings or aggressive brushing habits.

¶ For more information see: [Section 17.22: Mouth piercings – oral considerations](#)

Image 39: Tooth abrasion (severe)		• This example shows the amount of damage that can be caused to teeth when you brush with too much force or use a toothbrush with bristles that are too hard. This person likely has other factors at play (e.g., tooth erosion or using an abrasive toothpaste).
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13.6.3.4 Combination of factors

Some students will have tooth wear resulting from a combination of factors or sources.

Attrition or abrasion in the presence of acid results in faster rates of tooth wear, as the teeth are already weakened by the acid.

13.7 Tooth alignment and occlusion

During a child's mixed dentition phase (between 6-12 years of age), the mouth is in a constant state of change. Jaws are growing, deciduous teeth are being lost (exfoliated) and permanent teeth are erupting. For some children, these processes are beautifully synchronised, whilst for others there can be a complete mismatch between jaw growth, space availability and tooth sizes, or the timing of eruption and exfoliation of teeth. These changes are most relevant in primary school-aged children, but early signs of misalignment or bite issues may continue into secondary school, especially if not addressed during the mixed dentition phase.

In addition, there can be much variation in the way that teeth are positioned in the mouth, with a range of what is considered "normal" or "acceptable".

- **Tooth alignment** refers to the way that teeth sit next to each other in the same arch. Most people think of this as how straight (or crooked) the teeth are.
- **Dental occlusion** refers to the way that upper and lower teeth come together when the mouth is closed (i.e., your "bite"). This can be influenced by the position of the teeth themselves, or the size and/or alignment of the upper and lower jaws.

Significant issues with these can interfere with speaking and eating, make it more difficult to keep the mouth clean, or result in jaw pain or increased traumatic injury or tooth wear.

While some conditions are self-correcting, it is also true that not all problems need to be "fixed". But in some cases, especially adolescent students, concerns about appearance and peer perception can impact self-confidence and self-esteem, making early detection and referral particularly important for supporting wellbeing, which may increase the options available for treatment.

Conditions to look for:

- obviously **crooked teeth** (e.g., teeth that overlap, protrude "stick out", are retroclined "lean backwards", or are rotated)
- obviously **crooked bite** (e.g., mismatched jaw size or jaw shape, asymmetrical dental arches)
- **large gaps between upper and lower teeth** when biting.

13.7.1 Misaligned teeth (malocclusion)

A mismatch between the size (or developmental growth stage) of a child's jaw and the size of the child's teeth can result in misaligned teeth. Gaps between deciduous teeth are normal (and desirable) – as this extra space provides some leeway for the permanent teeth, which are larger than the deciduous teeth they replace. Space deficiency can result in crooked or overcrowded teeth.

Most parents will notice misaligned teeth, especially if they are easily visible at the front of the mouth. Unfortunately, this can also attract unkind attention from school peers.

Misaligned teeth should always be referred to a dental practitioner for review and management. Many early intervention options exist, that may remove the need for more involved (and costly) orthodontic care later.

13.7.1.1 Crooked and overcrowded teeth

Mildly crooked or crowded teeth may present a mild aesthetic issue or may not even be noticed. However, moderate to severe cases of crooked or crowded teeth have the potential to affect a person's self-confidence and self-esteem, as well as impact on their ability to speak, eat or clean their teeth properly.

For example:

- protruding upper front teeth (buck teeth) are more susceptible to trauma
- difficulty cleaning around crowded teeth can increase risk of dental caries and gum disease
- abnormal bite relationships can result in unusual tooth wear patterns.

13.7.1.2 Temporary changes in appearance during the mixed dentition stage

From 7-12 years of age (usually around 8-9 years), some children go through temporary changes in appearance due to patterns of eruption of the adult teeth. This is known colloquially among dental practitioners as the “Ugly Duckling Stage”.

This stage is characterised by splayed (fanned out) permanent upper incisors and a gap between the upper permanent central incisors. This is due to the changing position of the unerupted permanent upper permanent canines.

This stage is usually self-correcting. Once the upper canines erupt, the incisors usually revert to their correct position. Review by a dental practitioner allows for confirmation of diagnosis and monitoring.

School nurses working with primary school students may notice this stage during routine checks or when children express concern about their changing appearance. Reassurance and referral for monitoring can help support both dental development and emotional wellbeing.

Image 40: Splayed upper front teeth		• “The upper permanent incisors are splayed.” • “The upper permanent front teeth fan out.” • The splaying is most likely due to the position of the unerupted upper canines; and will resolve on its own as the upper canines erupt.
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13.7.1.3 Bite irregularities (abnormal bite relationship)

When teeth bite together (in a resting position), the upper teeth usually sit slightly in front of (outside) the lower teeth. Deviations from this can occur when there are discrepancies in jaw sizes or shapes, or when teeth are not in the correct position in the arch (either due to crowding, rotation or oral habits). One or more teeth may be affected.

Students with bite irregularities should be seen by a dental practitioner for review and management.

Image 41: Regular (normal) bite relationship		• “When biting, the upper teeth sit slightly outside of the lower teeth. This is normal.”
Image 42: Anterior crossbite		• “When biting, the upper right central incisor sits behind the lower right central incisor.” • “The upper right central incisor is in a cross-bite with the lower right central incisor.” • The upper lateral incisors are also in cross-bite.”
Image 43: Posterior crossbite (multiple teeth)		• “When biting, the back teeth on the upper left side sit inside of the teeth on the lower left side.” • “The left-side teeth from the lateral incisor to the molars are in cross-bite with the corresponding lower left teeth.”
Image 44: Restricted (narrow) upper jaw		• “The upper jaw is v-shaped.” • “The upper jaw is significantly restricted (narrower) at the front.”

13.8 Tooth appearance

13.8.1 Natural colour of teeth

Whilst we often describe tooth colour as white, teeth are usually more a cream or yellow shade.

Deciduous teeth are generally “whiter” than permanent teeth, due to differences in the enamel and dentine layers. This is normal, and most noticeable when the first permanent teeth erupt into the mouth and sit alongside the deciduous teeth.

- There can be subtle variations between shades of different classes of teeth. (e.g., canines are usually darker than incisors).
- Perception of tooth colour can depend on other colours in close proximity.
 - skin colour – a person with darker skin may appear to have whiter or brighter teeth, compared to a person with a paler complexion.

- eye sclera “whites of eyes” – a person’s eyes are the nearest facial feature with a similar colour to teeth, making them an easy point of comparison. A person with very white sclera may appear to have yellower teeth, and vice versa.

Students and their families may have concerns around tooth colour. A visit to see a dental practitioner is recommended.

13.8.2 Tooth discolouration (staining)

A student may present with discoloured teeth. Discolouration may be either extrinsic (external cause) or intrinsic (internal cause) and can affect both deciduous and permanent teeth.

Extrinsic (external) discolouration is superficial and occurs after tooth eruption. This includes stains caused by tea/coffee, red wine, smoking, and chromogenic bacteria, which all can be removed from the surface of the tooth with professional cleaning.

Image 45: Extrinsic black stains (chromogenic bacteria)		• “There are patches of black staining on almost all the teeth.” • “The teeth are covered in areas of black discolouration.” • “The gums appear healthy. There are no obvious signs of redness or inflammation.”
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Intrinsic (internal) discolouration may result from a developmental defect or internal staining of the tooth. Causes include:

- extensive use of antibiotics during tooth formation (e.g., Tetracyclines)
- congenital conditions (e.g., Amelogenesis imperfecta - where enamel formation is affected.)
- trauma
- developmental defects (e.g. hypoplasia)
- fluorosis.

In younger children, discolouration is often due to developmental factors or chromogenic bacteria. In older students, lifestyle factors such as diet, oral hygiene habits, or trauma may play a larger role. Because discolorations can mimic dental caries, further assessment by a dental practitioner is advised.

Image 46: Discoloured tooth due to previous trauma		• “The upper incisor has a darkened crown due to previous trauma (knock to the tooth).” • Exact colour/shade can vary – often a more bluish/grey colour. • The change in colour means the nerve inside the tooth has died. • This dead nerve may become infected in future. • If the tooth remains without pain or infection, the tooth would be left to exfoliate on its own.
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Image 47: Mottled enamel		• “There are extensive light brown patchy areas visible on the enamel of the front teeth.” • “The enamel has a mottled appearance.”
Image 48: Hypomineralised enamel on first permanent molar which is a condition where enamel is softer and more prone to decay		• “The enamel on the upper first molars (6-year-old molars) are yellow and have a mottled appearance.” • “The upper first molars seem to be hypomineralised.” • The enamel is weakened and more prone to caries, so needs to be assessed by a dental practitioner ASAP for management options. • Other teeth in this photo do not appear to be affected.

13.8.3 Size and shape of teeth

There can be some differences in the size and shape of teeth, because of genetic variation.

A variation often seen is the “peg lateral”.

A **peg lateral** (incisor) describes the condition when a permanent upper *lateral* incisor (the tooth next to the central incisor) is small, tapered or pointed (peg-shaped). This can affect one or both sides.

Other than a potential impact on symmetry or aesthetics, there are no serious clinical implications.

Image 49: Peg lateral incisors		• “The upper permanent lateral incisors are smaller than expected and have a pointy, tapered appearance.”
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Students presenting with a peg lateral can be directed to see a dental practitioner for assessment and management, particularly if concerned about the appearance as they may affect a student’s confidence.

14. Recommendations and referrals

Nurses and other health professionals in schools have a duty of care to communicate any concerns they have about a student's oral health with the student's family. Communication methods and processes may vary, depending on relevant workforce policies or protocols.

The following information is written from the oral health professional perspective, to provide context to any referral source about how their referral or recommendation will be viewed or received in an oral health setting.

14.1 Recommendation or referral?

School nurses play a key role in identifying oral health concerns early and supporting families through recommendations and referrals. Clear communication, empathy, and practical guidance can help ensure students receive timely care.

A **recommendation** is where a nurse advises the family of a student to visit a dental practitioner. This can be done verbally or in writing.

A **referral** is a more formal type of communication. A **referral letter** is written to a dental practitioner, introducing the student and any outlining concerns or relevant findings. The letter does not need to be addressed to a specific clinician and can be given to the student to take to their dental visit.

It is not common practice for general dental practitioners to provide a written response to a referral letter. If a written response is required, this should be indicated in the referral letter.

In the school setting, for most students in most cases, a recommendation to see a dental practitioner will suffice; however, professional judgement should be used.

14.2 General care referrals

General dental care does not require immediate action; however, families should seek care in a timely manner.

From a dental perspective, there are a few situations where a written referral for general care is recommended:

- when a significant or complex dental issue is identified
- where there are concerns about communication and understanding (i.e., student's family may not fully understand the nurses concern or may have difficulty conveying this to a dental practitioner)
- in situations where the importance of seeking dental care is a view not shared by the family, and a written referral might have some influence.

Usually, in primary school settings, general care referrals may focus more on developmental concerns such as delayed exfoliation, misalignment, or early signs of decay. In secondary school students, general care referrals may be prompted by caries, orthodontic concerns, teeth sensitivity, or stress-related oral health issues such as bruxism or erosion. A general referral letter can be presented to either a private dental practitioner or community dental agency at the first appointment.

If feedback from the treating practitioner is required, referees should ensure that their contact details are provided.

If a student requires referral to a dental practitioner, the following will be given to a parent:

- referral letter to be given to the dental practitioner
- Smile Squad information brochure
 - [Smile Squad oral health resources | health.vic.gov.au](https://health.vic.gov.au)
- information on how to find their closest local community dental agency.
 - [Find a public dental clinic | ohv.org.au](https://ohv.org.au)

14.3 Emergency care referrals

In emergency situations, school nurses may be the first point of contact. Prompt action and accurate documentation can significantly impact the outcome of dental or medical treatment. The incidents listed below warrant emergency (immediate) attention.

Emergency incident	Emergency referral letter should include
Dental trauma (e.g., tooth knocked out or loosened due to trauma)	• Time of incident. • Details of first aid provided. • Significant medical history e.g. allergies, bleeding disorder.
Facial swelling (or facial cellulitis)	
Significant swelling inside the mouth (e.g., Ludwig's angina)	
Uncontrolled bleeding from the mouth (e.g., after trauma or dental extraction)	

When contacting a dental service, the parent or carer will need to clearly explain the nature of the emergency. Clinics will complete a triage over the phone (for private clinics this might be quite informal, however community dental agencies use a standardised triage process). Nurses may be asked to contact the dental service on behalf of the family.

Anyone experiencing any of these emergency incidents should not wait until an appointment is available later in the day (or the next day) for clinical review. If a timely dental appointment is not available, emergency care should be sought at another dental clinic or a hospital emergency department.

A written referral ensures that important background information, which may be critical in the management of the student, is shared with subsequent dental or medical personnel.

If parents or carers are unable to be contacted in these situations, nurses should refer to their school's medical emergency protocols.

14.4 Urgent care referrals

Urgent care differs from emergency care.

Dental presentations warranting urgent care include severe pain such as a toothache, pain disrupting sleep, or difficulty eating. Urgent care needs may be more commonly reported by secondary school students, who are better able to articulate pain or discomfort. Younger children may show signs through behaviour or eating difficulties. Access to prompt clinical care is important for the comfort and wellbeing of the student, but these are not considered dental emergencies.

When contacting a dental service, parents/carers are encouraged to clearly explain their concerns, or any problems their child is experiencing. Clinics will complete a triage over the phone (for private clinics this might be quite informal, however community dental agencies use a standardised triage process) to determine how soon a person should be seen. In general, this will be the next available appointment.

A written referral may help a student access urgent care in cases where their family might struggle to advocate for them, however, is not essential. Nurses may be asked to contact the dental service on behalf of the family.

¶ Examples of simple referral letters to dental practitioners can be found in:

🦷 [Section 11.9: Suggested content for correspondence.](#)

14.5 Quick guide: Recommendation or referral?

Recommendation	• Verbal or written, advising the family to visit a dental practitioner. • Provide Smile Squad brochure OR • Details on how to find the closest community dental agency. • Suitable for most students in most general cases.
Referral	• A written letter to a dental practitioner outlining concerns or relevant findings. • Use professional judgment and/or workplace protocols to determine the need for a written referral.
General care referrals	
When to use a written referral	• Significant or complex dental issues. • Concerns about communication or understanding. • When emphasising the importance of dental care to the family.
What to provide	• A referral letter to a dental practitioner. • Smile Squad brochure OR • Details on how to find the closest community dental agency.
Emergency care referrals	
When immediate attention is needed	1. Dental trauma (e.g., tooth knocked out or loosened). 2. Facial swelling or cellulitis. 3. Significant swelling inside the mouth (e.g., Ludwig's angina). 4. Uncontrolled bleeding from the mouth.
Referral should include	• Time of incident. • Details of first aid provided. • Significant medical history (e.g., allergies, bleeding disorders).
Important notes	• Emergency care should not be delayed. If a dental appointment is unavailable, seek care at another clinic or a hospital emergency department. • If parents or carers are unavailable, follow the school's medical emergency protocols.
Urgent care referrals	
Urgent care situations	• Severe pain (e.g., toothache, pain disrupting sleep, difficulty eating).
Action steps	• Encourage parents to clearly explain concerns to the dental service. • Clinics will triage the situation to determine urgency. • A written referral may be helpful with advocacy, but not essential.

15. Professionally delivered (clinical) interventions

Nurses might see evidence of previous dental interventions during mouth checks.

These can be classed as **clinical prevention** interventions or **treatments**.

15.1 Clinical prevention

Preventive interventions include:

- concentrated fluoride therapies
- fissure sealants
- mouthguards.

15.1.1 Concentrated fluoride therapies

15.1.1.1 Fluoride varnish

Fluoride varnish is a high concentration fluoride product (gel) available for dental professional application only. In Victoria, certification training is available for Aboriginal and Torres Strait Islander Health Practitioners and Certificate 4 Dental Assistants to apply fluoride varnish as well.

Fluoride varnish can prevent tooth decay from starting. It can also slow or stop the progression of established decay. It's especially beneficial for children at high risk of dental caries, including those with reduced saliva and limited access to regular dental care.

Painting fluoride varnish onto teeth is very easy and only takes a few minutes. The varnish is applied to all surfaces of both deciduous and permanent teeth with a small brush or cotton bud. The varnish can stick to the teeth for hours. You can see the fluoride varnish on the teeth, until it dissolves away.

Fluoride varnish works best if applied at least twice a year. Individuals at the highest risk of dental caries benefit the most from fluoride varnish applications.

15.1.1.2 Silver diamine fluoride

Silver diamine fluoride (SDF) is a high concentration fluoride product (liquid), that combines the antibacterial properties of silver with the remineralising effects of fluoride. It is used to arrest (stop) and prevent dental caries without the need for drilling or extensive tooth preparation. It can also be used to reduce tooth sensitivity.

SDF can be applied directly to decayed areas, which eliminates the need to remove large amounts of tooth structure, making the procedure quick, painless, and minimally invasive. It is especially beneficial for young children, elderly patients, or individuals with additional needs who may have difficulty tolerating traditional restorative treatments.

When applied to an area of decay, the SDF kills bacteria, hardens the softened tooth structure and prevents further progression of the lesion. Although SDF can cause dark staining of decayed areas, a restorative material (filling) is often placed on top.

📌 For more general information on fluoride see:

🦷 [Section 26: Fluoride: a population oral health approach.](#)

Image 50: Fluoride varnish application		• Fluoride varnish can be painted onto teeth with a small brush. • Some preparations are yellowish in colour. This is temporary and disappears after a few hours.
Image 51: Remineralised caries due to silver diamine fluoride therapy (before and after)		• Concentrated fluoride, such as silver diamine fluoride products can stop tooth decay from progressing. • When caries is arrested, the decayed area changes from light brown to black – and the texture changes from leathery soft to hard.

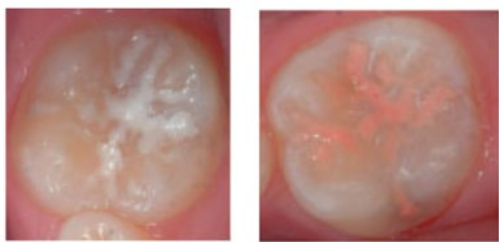
15.1.2 Fissure sealants

Fissure sealants can play a significant role in protecting teeth against decay. A dental practitioner is best placed to give personal advice about sealants, however 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.

A fissure sealant is a plastic coating professionally applied to the pits and fissures of the back teeth. Pits and fissures can be difficult to clean effectively because toothbrush bristles are too thick to fit, resulting in plaque and food getting trapped and causing caries. Sealants prevent access of plaque and plaque acids to these areas.

Placement of sealants is not time consuming. It is a painless procedure and there is no need for injection or drilling. Sealants do eventually break down or wear away, however can be easily replaced. Fissure sealants are available as required/recommended through the school dental program and private dental providers.

📌 For more information, visit: [Dental sealants | Better Health Channel](#)

Image 52: Fissure sealants		• Fissure sealants are placed in the pits and grooves of molar teeth to protect them from decay. • Fissure sealants will eventually wear away. • Fissure sealant material can be tooth-coloured or pink/orange.
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15.1.3 Mouthguards

Falls which occur during play account for most dental injuries to young permanent teeth.

Dental injuries 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.

☞ See [Section 16.1: Dental trauma](#).

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

Mouthguards are proven method of preventing dental injuries during sports and recreational activities Mouthguards absorb and spread the impact of a knock to the mouth and protect against mouth or dental injuries which can be difficult to treat and have lifetime repercussions.

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 custom-made and professionally fitted by a dental practitioner (including a dental prosthetist).

A dental impression is taken of the jaws to create plaster models. The upper model is used to mould the mouthguard plastic accurately to the shape of the upper jaw.

The Australian Dental Association's *Policy Statement 2.2.5 – Prevention and Management of Oral Injuries* (Australian Dental Association 2024b) states that:

“Oral injury can occur anywhere. **Young children and teenagers** have been identified as high-risk groups, particularly when new and/or high-risk activities are involved.”

“Sports during which the use of mouthguards is **strongly recommended**, include off-road bike riding, skateboarding, rock climbing, white-water rafting, trampolining, combat sports, football, basketball, squash, and field hockey.”

“Sports during which protective equipment for the head is worn, may obviate the need for mouthguards, including full-face helmets in ice hockey and goalkeepers in field hockey cricket, rollerblading, and cycling.”

“The most effective protection against oral damage is a custom fitted mouthguard, where precision fit and quality materials offer maximum comfort and injury prevention. Over-the-counter mouthguards provide better protection than no mouthguard, however their protection varies depending on the design, comfort, adaptation and thickness of the final product. Quality control of at-home custom adaptation is not achievable.”

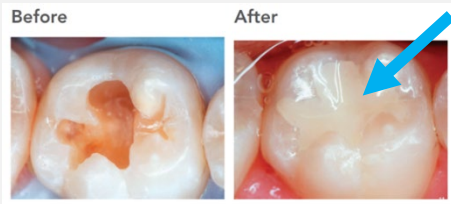
Mouthguards which can be purchased at pharmacies will aid in preventing injury to the mouth, although those fitted professionally provide superior protection.

Schools can play an important role in promoting mouthguard use, especially when students participate in contact or high-risk sports. Education staff may also be the first to respond to dental trauma when mouthguards are not used.

¶ For more information, visit: [Mouthguards | Better Health Channel](#)

15.2 Dental treatment

15.2.1 Common dental treatment seen in primary school students

Image 53: Restorations (fillings)		• Restorations (fillings) replace tooth structure lost due to decay or fracture. • Most restorations placed in children are tooth-coloured, so may be difficult to detect during a visual check. • Amalgam restorations are no longer recommended for children in Australia.
Image 54: Stainless steel crown (SSC)		• These are hollow, pre-made crowns that are cemented over the top of a back tooth severely affected by decay or weakened by a developmental abnormality. • The crown provides protection to the remaining tooth structure until the tooth exfoliates. • SSCs can usually be recemented if they come off.
Image 55: Missing teeth due to early extractions		• Removing deciduous teeth before they are due to exfoliate can result in drifting of adjacent teeth into their space potentially complicating the eruption of permanent teeth. • In this photo the arrows show where the second deciduous molars were removed early. The 6-year-old molars have drifted forwards into the space.

		This loss of space will cause complications later when the permanent premolar teeth are ready to erupt.
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15.2.2 Other dental treatments

There is a broad range of dental procedures that improve oral health and enhance the function and appearance of teeth. The procedures listed below range from simple to complex care. Complex care is often delayed until a person's dental development is complete, and they have reached skeletal maturity, so may not be seen frequently in school students.

Restorations (fillings) in permanent teeth	- Restorations (fillings) replace tooth structure lost due to decay or fracture. - Restorations are generally tooth-coloured. - Some students may have amalgam (silver) restorations, although these are no longer recommended for children in Australia. For more information, visit:  Fillings teeth.org.au
Orthodontic treatment, including braces	- Orthodontic treatment can straighten misaligned (crooked) teeth, and correct bite issues. - A number of appliances may be used, including braces, "plates", or clear aligners. These are designed to apply low force to teeth, to move them through bone. - Food and plaque can accumulate around the appliances, increasing risk of dental decay, so excellent diet and oral hygiene are prerequisites. - Orthodontic treatment is most commonly initiated in late primary or early secondary school years and usually timed to coincide with specific tooth or skeletal development phases. - Cost can be a limiting factor for many families if not eligible for public orthodontic treatment. People are generally able to complete orthodontic treatment as adults, which may be a more viable option. For more information, visit:  Orthodontics Australia  Orthodontic treatment Better Health Channel
Tooth whitening	- Generally considered a cosmetic procedure, bleaching agents are used to lighten the colour of one or more teeth. - Bleaching agents may be applied to the outside of teeth (e.g., dispensed into a thin plastic tray that covers teeth for half mouth or whole mouth whitening), or to the inside of the teeth (e.g., when front teeth have discoloured as a result of trauma or root canal treatment). Some treatments take place entirely in the dental clinic, others are done at home. - Assessment by a dental practitioner ensures that the factors which caused the discolouration are correctly identified and managed, and appropriate treatment options, risks and expectations are explained. - DIY whitening attempts have gained popularity, but generally are not successful, and come with their own risks. - Tooth whitening is generally not recommended for children. However, secondary school students may inquire about it due to appearance

	concerns. Nurses can guide families toward professional advice and discourage DIY methods. 🦷 For more information, visit: 🦷 Teeth whitening teeth.org.au 🦷 4 reasons to see a dentist for teeth whitening teeth.org.au
Crowns, bridges and veneers	• Complex restorative treatments that repair badly damaged or decayed teeth, or to improve appearance. • School nurses may notice these restorations during checks. If student expresses concern about appearance or discomfort, a dental referral may be appropriate. 🦷 For more information, visit: 🦷 Crowns, bridges and veneers teeth.org.au
Nerve (pulp) therapies	• When the nerve inside a tooth is damaged as a result of extensive decay or trauma, it may be possible to treat the damaged nerve in order to save the tooth. Pulpotomy (deciduous teeth): • A pulpotomy is the partial removal of the dental pulp. The pulp tissue is removed only from the pulp chamber of a deciduous tooth; the nerve in the root canals is left in place. A dressing is placed over the remaining nerve tissue, and the tooth is restored (usually with a stainless-steel crown). • This can help keep a deciduous tooth in place until it is time for it to exfoliate naturally. • If there is an abscess present, a tooth cannot be treated with a pulpotomy and must be removed. Root canal therapy (permanent teeth): • The entire pulp tissue/nerve is removed from the pulp chamber and root/s, and the root canal space/s cleaned, shaped and filled. This can save a tooth from being extracted. • The various stages are usually completed over a number of visits. • It is rarely seen in primary school students and not commonly seen in secondary school students either. • If symptoms like pain or swelling is reported by student, prompt referral is recommended. 🦷 For more information, visit: 🦷 Root canal treatment teeth.org.au
Dental implants	• A titanium screw is surgically implanted into the jawbone. A crown is then fitted on top of the implant to replace a missing tooth. Dentures or bridges can also be fitted to the top of the implant to replace multiple teeth. • Normally treatment does not take place until a person is skeletally mature – usually early 20s - so they are not common in school-aged students. 🦷 For more information, visit: 🦷 Dental implants teeth.org.au

Dentures (false teeth)	• Custom-made appliances that replace one or more missing teeth. Dentures can be a temporary or long-term solution to restore function and appearance. • Dentures are not commonly seen in school-aged students, except if a front tooth has been removed or lost due to trauma or caries, and the student is awaiting a more permanent option. Dentures can affect speech and confidence in some students. Nurses can support students by ensuring they feel comfortable and encouraging dental follow-up if issues arise. 📌 For more information, visit: 🦷 Dentures teeth.org.au 🦷 Dentures Better Health Channel
Tooth extractions	• Dental practitioners want people to keep their teeth for as long as possible, where possible. However, teeth may need to be removed for a number of reasons, including irreparable damage caused by dental caries, periodontal disease or trauma, or crowding. • Wisdom teeth often need to be extracted when there is lack of space at the back of the mouth. • Students may report soreness or swelling after extractions. Nurses should make referrals if complications arise. 📌 For more information, visit: 🦷 Tooth extraction Healthdirect 🦷 Wisdom teeth teeth.org.au
Nightguards/ bite splints	• A nightguard (also known as a bite splint or occlusal splint) is a custom-made dental appliance worn over the upper teeth – usually at night – to protect teeth from the effects of grinding or clenching. • Nightguards help reduce tooth wear, prevent jaw muscle strain, and alleviate symptoms such as headaches or temporomandibular joint (TMJ) discomfort. • They are made from durable acrylic or flexible plastic and provide a protective barrier between the upper and lower teeth. 📌 For more information, visit: 🦷 Teeth grinding teeth.org.au

16. Dental emergencies

16.1 Dental trauma

A student may require first aid following an accident involving one or more of their front teeth. There are many different types of traumatic injuries affecting teeth, which all require emergency dental attention. These may include:

- fractures to the crown and/or root
- loosening of the tooth in the socket
- knocking the tooth further up into the socket
- fractures to the alveolar bone surrounding the tooth
- knocking the tooth out of the socket completely.

In all instances, students should be seen by a dental practitioner as soon as possible, as timing is critical in ensuring the best possible long-term outcome for the teeth involved.

Staff who may be called upon to manage dental trauma in schools may consider downloading the [ToothSOS](#) app on their phone. This handy reference tool was developed by the very well-regarded International Association of Dental Traumatology (IADT).

16.1.1 What to do if a tooth is knocked out

One of the most serious dental accidents is when a permanent tooth is completely knocked out of the socket (avulsed).

16.1.1.1 Deciduous (baby) teeth

If a deciduous tooth is knocked out.

1. Do **not** re-implant the tooth back in the socket.
2. Retrieve and place the tooth (or fragments) in a jar containing normal saline, the patients' saliva or plain milk, or wrap in plastic cling wrap. **Do not rinse or store in water.** Do not touch the root of the tooth.
3. Apply pressure to gum to stop any bleeding (have child bite on pad of sterile gauze).
4. Urgent referral to dental practitioner (child to take tooth/ fragment with them).

The dental practitioner will examine the knocked-out tooth to confirm that the tooth is deciduous and therefore cannot be replaced.

Replanting a deciduous tooth may cause damage to the underlying permanent tooth or result in complications later when it is time for the deciduous tooth to fall out.

16.1.1.2 Permanent teeth

If a permanent tooth is knocked out.

1. Keep the student calm.
2. Locate and retrieve the tooth.
3. Handle the tooth by the crown (white part) only, avoid handling the root.

4. If root has debris on it, gently rinse the tooth in normal saline or milk for a few seconds only.
5. Do not attempt to clean the tooth by scrubbing or using cleaning agents.
6. Do not let the tooth become dry.
7. If the student is conscious and cooperative: replace the tooth in the socket immediately. You do not need to rinse the socket out. Make sure to put the root into the socket and facing the right way around – look at the adjacent teeth for reference.
8. Hold the tooth in place using a small piece of aluminium foil extending across the tooth and its neighbours. The student can also gently hold the tooth with their fingers or bite on a handkerchief.
9. Seek emergency dental treatment immediately.
10. Consideration should be given to a tetanus injection – student should seek medical advice *following* the dental visit.

If you cannot replace a permanent tooth in its socket (e.g., student is unconscious) do the following.

1. Store the tooth in normal saline, the patients' saliva or plain milk or wrap the tooth gently in plastic cling wrap to prevent it from drying out. Do not store in water.
2. Seek emergency dental treatment immediately as it is important that the tooth be replaced as quickly as possible. The first 30 minutes is critical.
3. If an ambulance is called to manage other serious injuries, the package containing the tooth should be well-labelled and accompany the student to the hospital.

If a permanent tooth is knocked out and is promptly replaced in the socket (ideally within 30 minutes), it has a good chance of survival. Every minute the tooth is out of the socket decreases the chance of the tooth surviving.

16.1.1.3 Some helpful hints

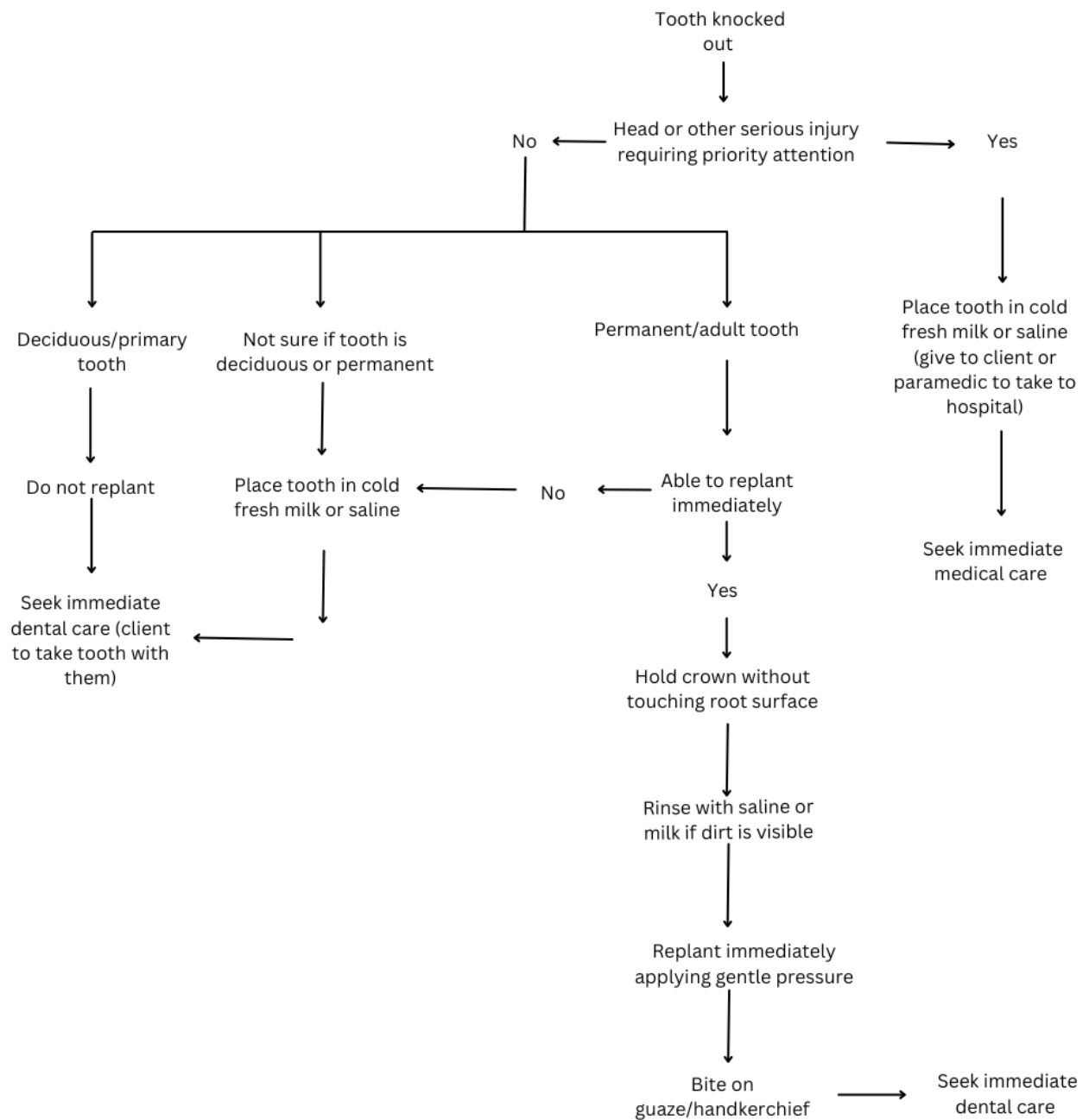
- If you cannot tell if a front tooth is deciduous or permanent, consider:
 - asking the student for guidance
 - age of student:
 - 4 years – almost certainly deciduous
 - 5 years – most likely deciduous but could be permanent in an early developer
 - 6 - 7 years – could be either. Permanent incisors erupt around 6yrs of age
 - 8 years – most likely permanent
 - 9+ years – almost certainly permanent
 - size of tooth (if recovered) – the crown and root of adult teeth are considerably larger than deciduous teeth
 - appearance of the site where tooth knocked from – a larger, deeper socket is more likely to indicate the loss of a permanent tooth
 - If still in doubt, especially in younger children (ages 5–7years), preserve the tooth and seek dental advice.
- When retrieving a lost tooth, check the tooth isn't "hiding" anywhere in the mouth, or caught in clothing. If a tooth is knocked out on a sports field, you may need to coordinate other students to carefully assist in finding the tooth. Ask them to take special care where they put their feet, especially if it is a muddy or soft field. It is worth spending some time locating the tooth, as replanting a person's own tooth back into the mouth is preferred over having a prosthetic (false) tooth for life.

- If more than one front tooth is knocked out at the same time, it can be difficult to know where each tooth belongs for reimplantation. Visually, it can be helpful to line the teeth up next to each other, in the correct order prior to reimplanting them. Teeth replanted incorrectly can be remedied by a dentist. However, if in doubt, store the teeth in saline/milk and seek immediate dental care.
- Create and label a dental trauma pack for your first aid cabinet/sick bay. Include a small specimen jar, sterile saline, sterile gauze and gloves. Generic alternatives include plastic cling wrap or plain milk (fresh or UHT). A student's own saliva can also be used as a storage medium. Include a copy of first aid instructions, and contact details for your nearest dental clinic/s.
- If you cannot get in contact with a parent/guardian to take the student to a dental clinic immediately, follow school protocol for medical emergencies. This may mean contacting the nearest dental clinic and accompanying the student to their appointment. The first 30 minutes is the most critical, especially if the tooth has not been reimplanted.
- When contacting a dental clinic, it is important to tell the dental receptionist taking the call that a tooth has been knocked out, to ensure that the clinic is aware of the critical nature. If one clinic is not able to assist, contact another.

If your school (or the location where the injury occurs) does not have a dental service close by, or if the trauma occurs outside of usual business hours, the hospital emergency department may also be able to assist.

- For more information, see: [Section 14.3: Emergency care referrals](#)

16.1.2 Quick guide: When a tooth is knocked out



16.2 Other emergency presentations – swelling and bleeding

There are several dental conditions that warrant emergency attention.

In addition to dental trauma (see previous section), these include:

- severe swelling of the face or mouth
- uncontrollable bleeding from the mouth.

If a student presents with any of these, nurses should contact the student's parent/guardian and provide instruction to contact their local dental service immediately for assessment. If a parent/carer is not able to be contacted, nurses should follow their school's protocol for medical/dental emergencies, which may include contacting the local dental clinic directly for advice or accompanying the student to the dental clinic for clinical assessment.

When contacting the local dental service, it is important to explain the situation to ensure the student receives timely and appropriate care. Community dental clinics will complete an emergency triage over the phone.

If your school (or the location where the urgent condition arises) does not have a dental service close by, the local hospital emergency department should be contacted for assistance.

16.2.1 Severe swelling of the face or mouth

Swelling of the face (e.g., facial cellulitis) or mouth or around the jaw, regardless of its cause, should be referred for emergency dental or medical care.

Swelling that is accompanied by other symptoms – such as fever, lethargy, difficulty breathing, swallowing or speaking – requires immediate medical attention.

- Swelling may indicate the presence of a spreading dental infection, which can obstruct the airway or close the eye.
- Ludwig's angina is a significant swelling in the floor of the mouth (either one or both sides). The tongue may be raised and pushed forward. **The student is at serious risk of airway obstruction. Prompt referral to emergency services is essential.**
- The swollen area may or may not be painful and tender; and may be associated with lack of function (e.g., can't open mouth properly).

¶ For more information, see: [Section 17.9: Facial cellulitis](#)

16.2.2 Uncontrolled bleeding from the mouth

Any bleeding in or from the mouth that cannot be controlled using local measures, regardless of its cause, should be referred for immediate dental or medical care.

Unless a student has a bleeding disorder, significant bleeding from the mouth is usually associated with:

- injury to the soft tissues of the mouth (e.g., bitten inside of cheek or tongue), or
- reactive bleed following oral surgery (such as a recent dental extraction).

Bleeding may also originate from the respiratory or digestive tracts.

The mouth is highly vascular, which means that even small injuries can result in bleeding. In addition, saliva will mix with the blood, which may give the impression that the bleeding is greater than it really is.

However, a mouth with persistent or uncontrolled bleeding requires urgent dental/medical care.

If a student presents with bleeding from the mouth.

1. Wear appropriate PPE – including gloves, facemask and protective eyewear.
2. Sit the student upright in a chair or elevate their head if lying down.
3. Obtain a brief history to determine possible cause.
4. Using a torch for lighting, try to locate the source of the blood. A piece of gauze will be helpful to soak up blood. If needed, ask someone to hold the torch, so that you can use both hands.

In the case of a mouth injury or recent oral surgery

1. Apply pressure to the area for at least 5 minutes, using a sterile gauze pad. Then review.
 - a. For recent dental extractions, roll up some gauze to fit into the space left by the tooth (make sure there is good contact with the gum), ask the student to bite hard (not chew).
 - b. Tissues are not recommended as they can easily disintegrate in the mouth.
2. If bleeding stops, continue to monitor the area. The student should not rinse their mouth or consume hot food or drinks and should avoid vigorous activity for the rest of the day. Sipping gently on a cool drink is fine.
3. If bleeding continues:
 - a. Apply pressure for another 5 minutes using fresh gauze. Ensure good contact with the area that is bleeding. Review.
4. If bleeding persists but is slowing down, repeat step 3.
5. If there is no change to bleeding, prepare to send the student for dental review.

Bleeding from the respiratory or digestive tracts

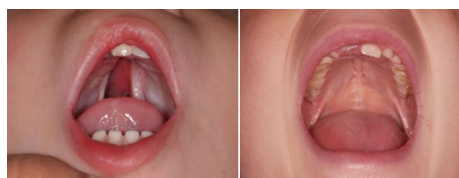
1. Apply first aid management principles and seek medical care.

Students with known bleeding disorders

1. Attempt to stop the bleeding by applying pressure locally.
2. Seek urgent medical care.

17. Brief guide to oral medicine

17.1 Cleft lip and/or palate

If detected during a mouth check	Children born with a cleft lip and/or palate in Australia should already be supported through the <i>Cleft Lip and Cleft Palate Scheme</i> , and therefore be receiving free, ongoing care from a specialised medical and dental team.		
Prevalence	About 1 in 800 babies born in Australia.		
Oral signs and symptoms			
Image 56: Cleft lip (unilateral)			• Appearance of the mouth and teeth will depend somewhat on the location of the cleft/s, and the surgical or dental interventions already completed. • Cleft lip <i>only</i> and cleft palate <i>only</i> will likely have fewer associated dental anomalies. • Cleft lip <i>and</i> palate implications can vary significantly, and may include: • missing teeth, particularly in the line of the cleft • extra teeth, mis-shaped or malformed teeth • teeth that can be crowded, tilted or rotated.
Image 57: Cleft lip and palate			
Image 58: Cleft palate			
Cause/s	Abnormal foetal development where the tissues of the lip, upper jaw or the roof of the mouth fail to fuse properly.		
Age/s	Congenital condition.		
Treatment	Children born with cleft lip and/or palate require one or more surgeries and other therapies throughout their childhood. By the time a child reaches primary school, initial surgical repair will have been completed. It is likely that they will have braces and/or other dental treatments in the future to improve their appearance. Healthy teeth and excellent oral hygiene are essential for this.		
More information	🔔 Cleft lip and cleft palate rch.org.au 🔔 Cleft palate and cleft lip Better Health Channel		

17.2 Eruption cysts

<i>If detected during a mouth check</i>	Eruption cysts usually resolve on their own without intervention. • Recommend student see a dental practitioner to confirm diagnosis, if painful, or if family concerned.	
<i>Prevalence</i>	Not common.	
<i>Oral signs and symptoms</i>		
Image 59: Eruption cyst		• An eruption cyst can develop over an erupting tooth most commonly seen during eruption of permanent molars and incisors. • It appears as a smooth, localised dome-shaped, fluid-filled swelling. It is painless and often bluish in colour. • The cyst drains on its own once the tooth erupts; the length of time varies from individual to individual.
<i>Cause/s</i>	The tooth follicle enlarges just before the tooth erupts. Trauma leads to bleeding within the follicle, producing the purple/brown appearance.	
<i>Age/s</i>	Children aged between 6 months – 12 years. It's rare in older students but may occur with wisdom teeth eruption.	
<i>Treatment</i>	Generally, no treatment is required. If the cyst becomes infected, surgical drainage may be required.	

17.3 Mucoceles

<i>If detected during a mouth check</i>	Mucocele usually resolve on their own without intervention. • Recommend student see a dental practitioner to confirm diagnosis, if painful or if family concerned.	
<i>Prevalence</i>	A mucocele is the most common nodular swelling of the lower lip.	
<i>Oral signs and symptoms</i>		
Image 60: Mucocele		• Asymptomatic, soft, fluctuant, bluish-grey colour (although long-standing lesions may have a whitish appearance). • Usually less than 1 cm in diameter. • The most common location is the lower lip. • Duration 3-6 weeks.
<i>Cause/s</i>	A mucocele develops when one of the minor salivary glands in the lip or cheek is damaged, usually when a student accidentally bites their lip or cheek. Injury causes the salivary gland duct to become blocked, thereby preventing the release of saliva into the mouth. The salivary gland fills with saliva forming a mucocele.	
<i>Age/s</i>	Can occur at any age. Children and young adults are mostly affected.	
<i>Treatment</i>	• Superficial mucoceles usually burst and heal spontaneously without intervention. Referral may be required if lesions interfere with eating or speaking. • If a mucocele appears to be caused by lip biting, school nurses can support prevention by kindly raising awareness of these habits and encouraging students to adopt gentler oral behaviours. Persistent mucoceles are treated by surgical excision.	

17.4 Mouth ulcers

17.4.1 Traumatic ulcers

If detected during a mouth check	Traumatic ulcers will heal without intervention in 7-14 days. Encourage student to see a dental practitioner if ulcer has not healed in this timeframe.	
Prevalence	Traumatic ulcers are the most common type of ulcer.	
Oral signs and symptoms		
Image 61: Traumatic ulcer (lower lip)		- Localised, well-defined erosion - greyish central area with inflamed periphery. - Usually painful and solitary. - Student will often remember the traumatic incident that caused the ulcer (e.g., biting their lip).
Cause/s	Damage to mucosal lining of the mouth due to trauma caused by sharp object (e.g., pencil in mouth, rough toothbrushing), cheek biting or eating overheated foods or drinks. Traumatic ulcers can also result from sharp or rough dental appliances like braces, retainers, or ill-fitting dentures, as well as faulty fillings or broken teeth with sharp edges. Eating hard or sharp foods, such as chips or crusty bread, can also sometimes contribute to irritation and injury resulting in traumatic ulcers.	
Age/s	All ages.	
Treatment	If ulcers are caused by dental appliances or sharp fillings, encourage students to speak with the dental practitioner about possible adjustments to reduce irritation. Otherwise, symptomatic relief only. Mouth lesions may be uncomfortable or painful and interfere with eating and drinking. - Maintain good oral hygiene – extra care may be required around ulcerated area. Use soft cloth to wipe teeth, if unable to brush. - Rinse mouth with salt water (dissolve 1 tsp salt into 1 cup warm water) a few times a day. Avoid mouthwashes that contain alcohol. Avoid foods and drinks that will aggravate the lesion, such as: - Acidic or spicy (e.g., orange juice, vinegar) - Salty (e.g., Vegemite) or very hot. Choose soft/er foods (e.g., jelly, custard) and cool drinks (a straw may help). Allow the ulcer to heal – do not touch it. - Keep hydrated with water and other fluids. - Paracetamol can ease pain and fever. - Over the counter preparations may be suitable for temporary relief, particularly before eating.	
More information	📄 Mouth ulcers Better Health Channel	

17.4.2 Aphthous ulcers (recurrent aphthous stomatitis)

If detected during a mouth check	Aphthous ulcers will heal without intervention within 2 weeks. Encourage student to see a dental practitioner if they have not consulted anyone about these types of ulcers before, or if ulcer has not healed in this timeframe.	
Prevalence	Approx 20% of the population.	
Oral signs and symptoms		
Image 62: Aphthous ulcers (lower lip)		- Painful, recurrent, solitary or multiple lesions or ulcerations. - They are usually no larger than 5mm in size. - Can occur in any site in the mouth, especially on the cheeks, lips and tongue. - Usually heal spontaneously in two weeks.
Cause/s	Complex; predisposing factors may include genetics, trauma, tobacco, certain medications, iron/ Vit B12/ folic acid deficiencies, Coeliac disease/ inflammatory bowel disease, sodium lauryl sulphate in toothpaste (Preeti L et al 2011). In some teenagers and adults, stress and hormonal changes can be common triggers for aphthous ulcers.	
Age/s	No preference for age, sex or race.	
Treatment	No definitive curative treatment. Identify and address any systemic associations. Various topical and systemic agents available. Otherwise provide symptomatic relief. Mouth lesions may be uncomfortable or painful and interfere with eating and drinking. - Allow the ulcer to heal – do not touch it. - Maintain good oral hygiene – extra care may be required around ulcerated areas. Use soft cloth to wipe teeth, if unable to brush. - Rinse mouth with salt water (1 tsp salt into 1 cup warm water) a few times/day. - Avoid mouthwashes that contain alcohol. Avoid foods and drinks that will aggravate the lesion, such as: - Acidic or spicy (e.g., orange juice, vinegar). - Salty (e.g., Vegemite) or very hot. Choose soft/er foods (e.g., jelly, custard) and cool drinks. Drinking through a straw may help. Keep hydrated with water and other fluids. - Paracetamol can ease pain and fever.	

	Nurses could monitor for patterns: If ulcers are frequent, large, or slow to heal, advise families to consult a dental or medical practitioner. Support emotional wellbeing: Stress management strategies may help reduce recurrence in some students.
More information	🔊 Mouth sores and ulcers (canker sores) healthdirect 🔊 Mouth ulcers Better Health Channel

17.5 Oral herpes simplex – primary infection

Also known as **primary herpetic gingivo-stomatitis**

If detected during a mouth check	Primary oral herpes simplex infection is self-limiting without intervention in healthy children. • Recommend child see a medical practitioner for symptomatic support, as child will be feeling unwell. Referral may be necessary if symptoms are severe or prolonged.	
Prevalence	Common viral infection.	
Oral signs and symptoms		
Image 63: Primary herpetic gingivostomatitis		• Extensive oral inflammation and ulceration involving most of the oral soft tissues. • Small clusters of vesicles rapidly erupt in the mouth, and the gums are very red and swollen and bleed if they are touched. • When the vesicles burst, they form yellowish ulcers surrounded by a red halo. • Adjacent lesions may join to form large ulcers in the mouth, including the lips and tongue. • Children generally feel unwell or irritable, may have a fever, and are not interested in eating (due to mouth discomfort). • Usually heals within 10-14 days.
Cause/s	The initial contact of the herpes simplex viruses (Types 1 and 2) within the oral cavity. Following this primary infection, the child generally develops immunity, and future infections appear as local lesions (e.g., a discreet cold sore). Usually transmitted to the child by a parent, relative or friend who has active cold sores when kissing the child.	
Age/s	Before five years of age.	
Dental management	Symptomatic relief only; analgesia as required. Maintain hydration. Restrict/avoid foods that aggravate the open lesion (i.e., acidic or spicy foods and drinks (such as orange juice, vinegar, chilli) and salty items (e.g., Vegemite).	

17.6 Oral herpes simplex and herpes labialis – recurrent infection

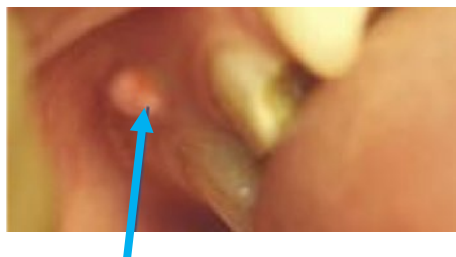
Lip lesions are commonly referred to as **cold sores**

If detected during a mouth check	Recurrent herpes simplex and herpes labialis infections are self-limiting without intervention. • Recommend student see a medical practitioner if feeling unwell.	
Prevalence	Occur in 40% percent of people who have the initial herpes virus.	
Oral signs and symptoms		
Image 64: Recurrent herpes simplex (upper lip)		• The herpes simplex virus causes cold sores on the lips, within the mouth, nose and eyes. • Clusters of many vesicles break down to form painful ulcers, which are slightly depressed, yellow-brown and have distinct red halos. • Most people report symptoms such as tingling, throbbing and burning 24 hours before the eruption of the lesions. • Lasts 7-14 days. • Following the original infection, people may suffer from recurrent bouts.
Cause/s	Herpes-simplex virus. • Virus may become active as a result of trauma to the skin and lips (strong sunlight, cold or wind); low immunity or being run-down/ stressed/ tired/ unwell.	
Age/s	Any age, following initial infection.	
Treatment	Taking a Lysine supplement orally when the prodromal symptoms appear can prevent the cold sore from developing. Supportive care includes keeping the area clean, avoiding picking or touching the sores, and using lip balm or sunscreen to protect against sun-triggered outbreaks. Topical antiviral creams (e.g., acyclovir) may be recommended by a healthcare provider to reduce healing time if started early. Encourage hydration and soft foods if eating becomes uncomfortable. Monitor for frequent or severe recurrences and refer to a general or dental practitioner if needed.	
More information	📄 Cold sores healthdirect	

17.7 Oral candidiasis (oral thrush)

If detected during a mouth check	Recommend student see a dental or medical practitioner.	
Prevalence	Relatively common; often seen in babies or infants, or individuals on long-term antibiotics or immuno-suppressive drugs.	
Oral signs and symptoms		
Image 65: Oral candidiasis		• Thrush usually affects the superficial layers of mouth tissues. • Milky white <i>patches can be easily wiped off the oral mucosa</i>, revealing an inflamed area underneath. • Very rarely is more generalised, with fever and gastrointestinal irritation. • Can persist for days or weeks.
Cause/s	Fungal infection (<i>candida albicans</i>) may occur due to • use of antibiotics or inhaled corticosteroids • poor oral hygiene or ill-fitting dental appliances • being immuno-compromised.	
Age/s	Commonly occurs in young babies and infants, or others who are immuno-compromised.	
Treatment	Topical anti-fungal agents applied directly to the affected areas. Encourage good oral hygiene, including rinsing after inhaler use and cleaning dental appliances. Advise families to sterilise dummies, bottles, and toys regularly. Refer to a GP if symptoms persist beyond a week, recur frequently, or if the child is immunocompromised. Children with oral thrush can attend school or care settings.	
More information	📄 Thrush (candidiasis) fact sheet NHMRC	

17.8 Dental abscess (periapical abscess)

If detected during a mouth check	Recommend student see a dental practitioner. An abscess on a deciduous tooth can affect the development of the underlying permanent tooth potentially leading to enamel defects or altered eruption patterns.	
Prevalence	Relatively common.	
Oral signs and symptoms		
Image 66: Dental abscess		• Pimple-like appearance on the gum close to the affected tooth. • Pus may be visible inside the abscess or draining. • In some cases, fever, facial swelling and general unwellness can accompany. • May be painful (dull throb) due to build-up of pressure. If abscess bursts and pressure is released, pain will resolve. This cycle can repeat. • Duration varies. If asymptomatic, may go undetected.
Cause/s	A bacterial infection around the root of a tooth, resulting from an infection in the pulp of the tooth (due to extensive dental caries, trauma).	
Age/s	All ages. Deciduous and permanent teeth. In primary school-aged children, abscesses often involve deciduous teeth. These children may not always verbalise pain clearly, so look for signs like facial swelling, reluctance to eat, or irritability. In secondary school students, abscesses typically affect permanent teeth and may present with more specific complaints and deeper infections.	
Treatment	Definitive treatment involves removing the cause of the infection. Treatment depends on a number of factors (e.g., tooth involved, cause of pulpal infection, time until deciduous tooth is exfoliated, size of abscess). Tooth may require extraction, pulp therapy or root canal treatment. Abscess may be lanced and debrided. Oral antibiotics are generally not required for localised abscesses unless there are signs of systemic involvement (e.g., fever, facial swelling, cellulitis). Antibiotics should not replace dental treatment and are only indicated when dental care is delayed, or infection is spreading.	

17.9 Facial cellulitis

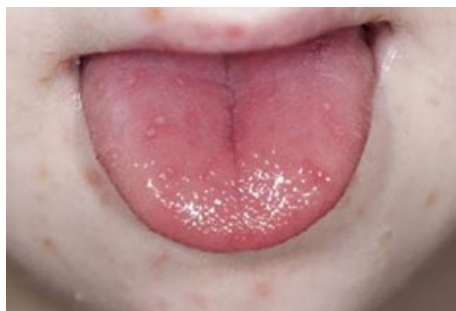
If detected during a mouth check	Emergency referral to see dental or medical practitioner for immediate care. Swelling that is accompanied by other symptoms – such as fever, lethargy, difficulty breathing, swallowing or speaking – requires immediate medical attention, preferably at a hospital. 📖 For more information, see: 🦷 Section 16.2.1 Severe swelling of the face or mouth 🦷 Section 14.3 Emergency care referrals
Prevalence	-
Signs and symptoms	
Image 67: Facial cellulitis (with periorbital swelling)	• The infection spreads from the tooth through the connective tissue. • Results in gross inflammation, exudate and oedema, and often fever. • If it occurs in the facial planes of the lower jaw, it can spread 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. • If it occurs in the facial planes of the upper jaw, it can result in infra-orbital swelling. In rare cases, the infection can track to the brain.
Cause/s	A spreading bacterial infection of the soft tissues of the face often resulting from an infection in the pulp of the tooth (due to extensive dental caries, trauma) or gum infection.
Age/s	All ages.
Treatment	Management depends on location and extent of swelling and ability to adequately remove the source of infection. Severe cases may require hospitalisation especially in young children, I.V. antibiotics, fluid replacement and/or airway protection - in addition to removal of the cause (e.g., dental extraction, root canal treatment). Incision and drainage may be needed if an abscess is present. Dental evaluation is critical to address the underlying cause and prevent recurrence.

17.10 Geographic tongue

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

If detected during a mouth check	Recommend student see a dental practitioner to confirm diagnosis, and for reassurance.	
Prevalence	Affects approximately 1-2% of the population.	
Oral signs and symptoms		
Image 68: Geographic tongue		• Irregular-shaped patches on the top surface of tongue. • Pink to red, smooth surface due to loss of taste buds in these areas. • The areas continually change position and migrate from site to site. • The patches may become tender, especially to spicy and acidic foods. • May appear suddenly and persist for months or years.
Cause/s	Unknown. Emotional stress, nutritional deficiencies and hereditary factors have been suggested. May be more noticeable during periods of stress, illness, or hormonal changes. Often runs in families and may be associated with conditions like asthma, allergies, psoriasis, or nutritional deficiencies.	
Age/s	Young children to middle-aged adults, though more commonly seen in school-aged and adolescent student.	
Treatment	It is a benign condition and generally does not require any treatment, though it may cause discomfort in some children. If a child reports burning or sensitivity, suggest avoiding trigger foods (e.g., citrus, tomatoes, spicy snacks). Encourage soft-bristled toothbrushes. Referral to dental or general practitioner may be necessary if symptoms persist, worsen, or are accompanied by other oral changes.	

17.11 Hand, foot and mouth disease (HFMD) – oral manifestations

If detected during a mouth check	Recommend student see a <i>medical</i> practitioner.	
Prevalence	Common viral illness.	
Oral signs and symptoms		
Image 69: Hand, foot and mouth disease		• Numerous shallow ulcers are seen in the anterior mouth and on the hands and feet. • Most people complain of a sore throat or mouth and may refuse to eat. • Low-grade fever lasts 1-2 days accompanied by a distinctive pattern of oral vesicles, mainly on the tongue and buccal mucosa (also lesions on the hands and feet, and occasionally buttocks). • Ulceration lasts 7-10 days.
Cause/s	Coxsackie virus – very contagious.	
Age/s	Occurs mainly in children under 10 years and in young adults.	
Treatment	Symptomatic relief only. Mouth lesions may be uncomfortable or painful and interfere with eating and drinking. • Maintain good oral hygiene – extra care may be required around ulcerated area. Use soft cloth to wipe teeth, if unable to brush. • Rinse mouth with salt water (dissolve 1 tsp salt into 1 cup warm water) a few times a day. • Avoid mouthwashes that contain alcohol. Avoid foods and drinks that will aggravate the lesion, such as: • Acidic or spicy (e.g., orange juice, vinegar). • Salty (e.g., Vegemite) or very hot. Choose soft/er foods (e.g., jelly, custard) and cool drinks (a straw may help). Allow ulcer/s to heal – do not touch. • Keep hydrated with water and other fluids. • Paracetamol can ease pain and fever.	
More information	📄 Hand, foot and mouth disease healthdirect	

17.12 Chicken pox – oral manifestations

If detected during a mouth check	Recommend student (and family) isolate and seek medical care. • Medical clinic should be contacted prior to visiting the doctor to obtain guidance on the safest way to see them for medical care. • A referral letter outlining your concerns would be warranted in this situation. <i>Nurses will already be aware that chicken pox is a nationally notifiable disease that must be reported to the Department of Health.</i>
Oral signs and symptoms	
Image 70: Chicken pox in the mouth (palate)	 • Oral manifestations may precede the skin rash. • Multiple vesicles may appear throughout the mouth, breaking down into small ulcers, that become covered in white exudate. • The mucosa surrounding the ulcers is quite red.
Cause/s	<i>Varicella zoster virus</i> – very contagious. Preventable via vaccine.
Age/s	Anyone at any age can be affected, if not immune. Adults usually have a more severe illness and can take longer to get better.
Treatment	Symptomatic relief only. Mouth lesions may be uncomfortable or painful and interfere with eating and drinking. • Maintain good oral hygiene – extra care may be required around ulcerated area. Use soft cloth to wipe teeth, if unable to brush. • Rinse mouth with salt water (1 tsp salt into 1 cup warm water) a few times/day. • Avoid mouthwashes that contain alcohol. Avoid foods and drinks that will aggravate the lesion, such as: • Acidic or spicy (e.g., orange juice, vinegar) • Salty (e.g., Vegemite) or very hot. Choose soft/er foods (e.g., jelly, custard) and cool drinks (a straw may help). Allow ulcer/s to heal – do not touch. • Keep hydrated with water and other fluids. • Paracetamol can ease pain and fever.
More information	📌 Chicken pox (varicella) healthdirect

17.13 Measles – oral manifestations

<i>If detected during a mouth check</i>	Recommend student (and family) isolate and seek <i>medical</i> care. • Medical clinic should be contacted prior to visiting the doctor to obtain guidance on the safest way to see them for medical care. • A referral letter outlining your concerns would be warranted in this situation. <i>Nurses will already be aware that measles is a nationally notifiable disease that must be reported to the Department of Health.</i>
<i>Prevalence</i>	Not endemic in Australia; cases still occur due to importation by overseas travellers.
<i>Oral signs and symptoms</i>	
Image 71: Koplik's spots (measles) on the inside cheek	Characteristic mouth lesions (Koplik's spots): • small white spots (like grains of salt) surrounded by a zone of inflammation • often numerous on the inside of the cheeks or around the upper salivary duct in the upper cheek area • appear 2-3 days before the body rash, coinciding with the most infectious period • then disappear with the development of the general skin rash.
<i>Cause/s</i>	<i>Paramyxovirus</i> – very contagious. Preventable via vaccine.
<i>Age/s</i>	Anyone at any age can be affected, if not immune.
<i>Treatment</i>	Symptomatic relief only. Mouth lesions may be uncomfortable or painful and interfere with eating and drinking. • Maintain good oral hygiene – extra care may be required around ulcerated area. Use soft cloth to wipe teeth, if unable to brush. • Rinse mouth with salt water (dissolve 1 tsp salt into 1 cup warm water) a few times a day. • Avoid mouthwashes that contain alcohol. Avoid foods and drinks that will aggravate the lesion, such as: • Acidic or spicy (e.g., orange juice, vinegar) • Salty (e.g., Vegemite) or very hot. Choose soft/er foods (e.g., jelly, custard) and cool drinks (a straw may help). Keep hydrated with water and other fluids.

	• Paracetamol can ease pain and fever.
More information	 Measles healthdirect

17.14 Leukemia – oral manifestations

<i>If detected during a mouth check</i>	Recommend student seek urgent medical care at a hospital if there is unexplained bleeding, swelling, or ulceration in the mouth, especially when accompanied by fatigue, pallor, or bruising elsewhere. A referral letter outlining your concerns would be warranted in this situation.	
<i>Prevalence</i>	Leukemia is the most common childhood cancer in Australia.	
<i>Oral signs and symptoms</i>		
Image 72: Leukaemia		65% of leukemia patients have oral lesions, with the most common being: • gingival hypertrophy (overgrown gums) • mucosal ulceration • spontaneous bleeding gums • ecchymosis (bruising) • <i>Herpes</i> virus infections (Michalak E et al. 2022).
<i>More information</i>	 The Leukaemia Foundation  Research article Oral Manifestations: A Warning-Sign in Children with Hematological Disease Acute Lymphocytic Leukemia	

17.15 Asthma – oral considerations

<i>If oral complications are detected during a mouth check</i>	Asthma is one of the most common chronic conditions in Australian school-aged children, affecting approximately 1 in 10 students. While asthma itself is a respiratory condition, its management, particularly the use of inhaled medications can have notable effects on oral health. If oral complications are detected during a mouth check recommend student to see a dental practitioner. Medical follow-up may also be required.
<i>Oral signs and symptoms</i>	• Dry mouth (xerostomia). • People with asthma may be at higher risk of tooth decay, tooth erosion, and gum disease due to frequent mouth breathing and reduced saliva. • Beta-2 agonist inhalers (e.g., salbutamol) reduce saliva production, resulting in dry mouth. • For people using corticosteroids, there is also increased risk of oral candidiasis (thrush). 📎 Related images can be found at: 🦷 Section 17.19: Dry mouth (xerostomia) and hyposalivation 🦷 Section 13.6.3.2: Tooth erosion 🦷 Section 17.7 Oral candidiasis (oral thrush)
<i>To minimise oral complications</i>	• After using an asthma inhaler, rinse mouth with water or a mouthwash containing fluoride. Do not brush teeth for at least 60 minutes. • Use a spacer device. The spacer helps to deliver the medication directly into the lungs, instead of covering the surface of teeth, and soft tissues of the mouth and throat. • Drink water to stay hydrated. • Chew sugar-free gum to help stimulate saliva flow (ADA 2024). • Regular visits to a dental practitioner will help ensure that any asthma-related damage is detected early.
<i>More information</i>	📎 Asthma teeth.org.au

17.16 Alcohol – oral considerations

If nurse is made aware of this during a mouth check	Follow any existing protocols regarding management of students who drink alcohol, including harm minimisation. Consider recommending the student see dental practitioner: • when oral damage is evident • for a routine oral exam, if student hasn't seen dental practitioner in past 6-12 months.
Prevalence	Among young people 14-24 years old: • 30% have drunk alcohol at least once a month, at a level that puts them at risk of harm (single occasion risky drinkers) • 13.1% have drunk alcohol at a level that puts them at risk of harm over their lifetime (lifetime risky drinkers). The most common types of alcohol consumed: • Males: beer, spirits (not pre-mixed), and pre-mixed drinks • Females: wine, pre-mixed drinks and spirits (not pre-mixed). (AIHW 2021)
Oral signs and symptoms	Whilst alcohol consumption can affect oral health, signs and symptoms will depend on the quantity and frequency consumed. If these are low, there may not be any obvious signs or symptoms. Drinking alcohol can cause: • Tooth erosion – by direct contact with the acidic drink itself or with stomach acid (if drinking is followed by vomiting or reflux). • Dry mouth – the diuretic effect of alcohol can lead to dehydration and lower salivary production. • Tooth decay – combined effect of sugary drinks, erosion and dry mouth. • Bad breath – as a result of dry mouth. • Tooth staining – associated with red wine components (anthocyanins, tannins). • Dental trauma – resulting from misadventure, or assault. • Oral cancer – alcohol is a carcinogen, and allows other carcinogens (e.g., tobacco) to be absorbed more easily into cells. 📌 Related images can be found at: 🦷 Section 17.19: Dry mouth (xerostomia) and hyposalivation 🦷 Section 13.6.3.2: Tooth erosion
Cause/s	Almost all drinks containing alcohol are acidic or contain sugar. Examples of the pH of alcoholic drinks: • Beer (~ 4.0 - 4.4) • Wine (~ 3.0 - 4.0) • Spirits – vary ○ Gin, Rum (~ 3.0 - 4.0) ○ Whiskey, Tequila (~ 3.5 - 4.5) ○ Vodka (~ 6.0 - 7.0)

	• Liqueurs (~3.0 – 4.0) • Mixed drinks – depends on the alcohol and the mixer ○ Soft drinks (~2.5 – 3.5) ○ Tonic water (~2.5 – 3.0) Examples of sugar content in alcoholic drinks (per standard serving): • Beer (<1 tsp) • Wine - depends ○ sweet (2-5+ tsp) ○ dry (<1 tsp) • Spirits (0 tsp) • Liqueurs (2.5-5+ tsp) • Mixed drinks – depends on the alcohol and the mixer ○ soft drinks (9-11 tsp) ○ sugar-free soft drinks (0 tsp) ○ tonic water (~5 tsp)
Age/s	The average age to start drinking alcohol is 16.2 years, with little difference between males and females (AIHW 2021).
To minimise oral complications	There is no safe level of alcohol consumption for young people, so avoid alcohol intake. • Regular visits to a dental practitioner will help ensure that any alcohol-related damage (including oral cancer) is detected early. • Students should be encouraged to disclose their alcohol use with their dental practitioner and GP. This helps ensure appropriate care and advice. • Any student with a mouth ulcer or unusual red/white patch in the mouth lasting more than 2 weeks should see a dental practitioner or GP straight away. This can be an early sign of oral cancer. If alcohol is consumed: • Drink water frequently to stay hydrated. • Rinse mouth with water or a fluoride mouthwash. • Chew sugar-free gum to help stimulate saliva flow. • If vomiting occurs, rinse mouth with water. Wait for 60 minutes before brushing teeth to avoid damaging enamel softened by the acidic vomit.
More information	📄 Alcohol teeth.org.au 📄 Tobacco, alcohol and recreational drugs SA Dental 📄 Ways alcohol causes cancer Cancer Council Victoria

17.17 Betel (areca) nut and betel quid – oral considerations

Betel nut is the more common name given to the seed of the fruit of the *Areca catechu* palm tree. It is also known as **areca nut**. People usually chew the areca nut with tobacco and slaked lime (calcium hydroxide), wrapped in a betel leaf – this combination is known as **betel quid**. Other flavourings may be added.

If detected during a mouth check	Recommend student to see a dental practitioner for assessment. Medical follow-up may also be required.
Prevalence	Betel nut is not widely used in the general Australian population. It is more common among migrant and refugee communities from regions where betel chewing is a traditional or cultural practice, including: • South Asia - India, Sri Lanka, Bangladesh, Nepal, Pakistan • Southeast Asia - Burma, Thailand, Laos, Vietnam, Cambodia, The Philippines • Melanesia and the Pacific - Papua New Guinea, Solomon Islands, Vanuatu. There are no precise estimates for betel nut/quid use in Australia. • A 2022 study found nearly 7% of Indian migrants reported using betel nut/betel quid products. • Use has also been identified in Burmese refugee communities.
Oral signs and symptoms	In Melbourne, dental practitioners have reported seeing oral damage associated with betel nut use primarily in South Asian and Southeast Asian patients. • Deep red or purple staining throughout the mouth, including soft tissues and teeth. Staining is very difficult to remove. • Mouth ulcers and gum disease. • Increased saliva production/ drooling. • Submucous fibrosis (a pre-cancerous condition). • Oral cancer. Note, if anyone using betel nut/quid presents with any of the following signs or symptoms lasting for more than 2 weeks, they should see a dental practitioner or GP for immediate oral cancer assessment. • Red, white or black patch in the mouth. • A lump in the mouth, neck, or face. • An ulcer. • Any abnormality that bleeds easily when touched. • Pain or difficulty swallowing, speaking, chewing, or moving the jaw or tongue. • Soreness in the throat or mouth. • Numbness in the mouth or face. (OHV 2024a)
Cause/s	Betel nut: • is addictive • is a carcinogen • contains tannins that react with saliva and other oral fluids resulting in red staining

	• causes cholinergic effects (i.e., increased salivary production).
<i>To minimise oral complications</i>	Avoid using betel nuts and betel nut products. • Follow general prevention guidelines (Eat well, drink well, clean well). Note, stains caused by betel quid are very difficult to remove. Avoid using abrasive products at home, as they may cause damage to teeth. • Regular visits to a dental practitioner will help ensure that any betel nut/quid-related damage (including oral cancer) is detected early.
<i>More information</i>	¶ Betel nut & oral cancer ohv.org.au ¶ Betel nut: drug facts adf.org.au

17.18 Diabetes – oral considerations

Diabetes – particularly Type 1 – is increasingly common among Australian children and young people. Oral health complications are often overlooked but can be early indicators of poor glycaemic control or undiagnosed diabetes.

<i>If detected (or suspected) during a mouth check</i>	If student has ALREADY been diagnosed with diabetes • Recommend student see a dental practitioner, if they haven't had an oral examination in the last 6-12 months, or since diagnosis. • Medical review may also be required if oral (or other) signs/symptoms present. • Encourage students to maintain good oral hygiene and follow their diabetes care plan. If student has NOT been diagnosed with diabetes • Recommend student see a dental practitioner for oral examination. • Medical review may also be required if oral (or other) symptoms present. • A written referral would be warranted to ensure your concerns are documented.
<i>Prevalence</i>	Type 1 diabetes • In 2017, around 6,500 children aged 0-14 years had Type 1 diabetes, a rate of 141 per 100,000 children (AIHW 2022). Type 2 diabetes • There are currently no reliable estimates of type 2 diabetes among children. • Some population groups are more likely to see Type 2 diabetes in children (e.g., Aboriginal and Torres Strait Islander people, Pacific Islanders, Asian and Chinese).
<i>Oral signs and symptoms</i>	Complications are only seen when blood sugar levels are not well-controlled and are elevated. • Gum disease ○ Red, swollen, tender or bleeding gums. ○ Persistent discharge (pus) coming from the gums. ○ Gums that are loose and pull away from the teeth. ○ Bad breath. ○ Spaces opening between teeth. • Dry mouth due to reduced salivary production. • Tooth decay – elevated BSLs can mean increased salivary sugar levels. • Oral thrush fungal infections, such as thrush (also known as candidiasis). • Taste disturbances. • Infections in the mouth take longer to heal. Undiagnosed diabetes may be found after further investigation of oral signs/symptoms.

Image 73: Severe periodontal disease in a person with diabetes.		• More severe gum disease is seen in people with diabetes when blood sugar levels are elevated. • In this image, the gums are inflamed (swollen and bleeding) and the teeth are starting to drift apart.
Cause/s	• People living with diabetes generally have lower resistance to infection and reduced healing capacity. • Increased blood glucose levels may cause more glucose in the saliva and very dry mouths. • Dry mouth along with poor healing capacity contribute to gum disease and decay.	
Treatment	Early diagnosis, a multi-disciplinary approach and well-controlled blood sugar levels are essential to minimising diabetes complications.	
To minimise oral complications	• Keep blood glucose levels in the target range. • Follow medical advice about diet and medication to keep blood glucose levels as close to the target levels as possible. • Follow general prevention guidelines (Eat well, drink well, clean well). • Regular visits to a dental practitioner will help ensure that any diabetes-related damage is detected early. • Note, first aid treatment for hypoglycaemia is the intake of fast-acting carbohydrates, such as jellybeans, soft drink, fruit juice or sugar. Rinsing the sugars from the mouth with water once the student feels well again should be encouraged, to reduce caries risk.	
More information	🔊 Diabetes and oral health (brochure) ohv.org.au 🔊 Diabetes and oral health Better health channel 🔊 Dental health Diabetes Australia	

17.19 Dry mouth (xerostomia) and hyposalivation – oral considerations

Hyposalivation is the *objective* reduction in saliva flow, measurable by clinical tests. A person can have hyposalivation without feeling dry.

Dry mouth (or xerostomia) on the other hand refers to the *subjective* feeling of dry mouth, regardless of whether saliva production is actually reduced.

However, *dry mouth* is commonly used to describe either of these and is used throughout the manual in this way.

If detected during a mouth check	• Management of dry mouth depends on the underlying cause. • In students, common temporary causes include dehydration, taking allergy or cold/flu medications. • Recommend that students reporting persistent dry mouth see a dental practitioner or GP.	
Prevalence	• Common among dehydrated individuals, people who smoke or vape, the elderly and those on medication.	
Oral signs and symptoms	• Saliva can range from thick, bubbly or ropery to simply being absent – where the oral mucosa and oral cavity is touch dry. • People with dry mouth may report: ○ difficulty speaking, chewing or swallowing ○ a rough or dry tongue, which may stick to the roof of mouth or lips ○ dry and cracked lips ○ mouth ulcers, bleeding gums and bad breath. • Increased risk of oral candidiasis (thrush) infections, dental caries, and dental plaque formation. • Sometimes the dorsal (top) surface of the tongue may be smooth, shiny, and fissured.	
Image 74: Dry mouth and dental caries.		• This is quite an extreme case of a dry mouth, as there is no saliva to bathe the soft tissues or teeth. As a result, this person has significant dental caries on their remaining teeth. • It would be uncomfortable for this person to eat, speak or function.
Cause/s	There are many factors that can cause dry mouth, including: • Dehydration – Approximately 99% of saliva is water. Not drinking enough fluid can result in thickened saliva and a dry mouth. Other causes of dehydration include medical conditions such as blood loss, frequent urination, chronic diarrhoea or kidney failure. • Snoring or mouth breathing - decreases the humidity in the mouth resulting in dry mouth. • Excess alcohol or caffeine consumption. • Smoking, vaping & chewing tobacco. • Illicit drug use, such as methamphetamine or marijuana. • Medical conditions like diabetes, or Sjögren's syndrome.	

	• Medications like antidepressants, antihistamines, decongestants, muscle relaxants, blood pressure medicines, painkillers or opioids, diuretics. • Deficiencies in Iron, Vitamin A, Folic acid. • Salivary gland blockage or infections (e.g., mumps). • Radiotherapy or chemotherapy - these treatments decrease the ability of salivary glands to make saliva (sometimes permanently).
Treatment	• Whilst dry mouth can in itself be an unpleasant experience, having a dry mouth puts people at risk of further oral complications, so it should be addressed. Potential complications include: ○ dental caries. ○ reduced mouth clearance, increased plaque build-up, potentially gum disease. ○ oral candidiasis (thrush). ○ mouth ulcers. • Treatment of dry mouth depends on accurately diagnosing the cause/s and removing it/them where possible. This is likely to involve consultation with a GP. In severe cases, referral to an oral medicine specialist may be required. • Medications to stimulate salivary flow are available but may not be an appropriate option for everyone.
To minimise oral complications	• General preventive principles apply (Eat well, drink well, clean well) with an emphasis on good hydration (or frequently sipping water), excellent oral hygiene, fluoride use, reducing sugars, avoid smoking, vaping and chewing tobacco, removing appliances like dentures every night and cleaning them properly. • It is very important to visit a dental practitioner for regular oral examinations. They can provide professional tailored advice such as: ○ using artificial saliva, or similar products ○ spraying the mouth with olive oil to help lubricate the oral mucosa ○ chewing sugar-free gum to stimulate salivary flow ○ encourage nose breathing ○ using a humidifier in the bedroom at night ○ applying moisturiser to lips ○ limiting sugary, spicy or acidic foods.
More information	📌 Dry mouth syndrome healthdirect

17.20 Eating disorders and disordered eating – oral considerations

<i>If detected (or suspected) during a mouth check</i>	Follow any existing protocols regarding management of students with eating disorders or disordered eating behaviours, including harm minimisation. • Consider guiding student to see their GP or a mental health professional in the first instance. • Consider recommendation to see a dental practitioner for assessment and management of any oral concerns.
<i>Prevalence</i>	Among school aged children/young people in Australia: • around 5-7% have or have had a formal eating disorder, • with a much larger proportion (maybe ~20-30%) showing disordered eating behaviour.
<i>Oral signs and symptoms</i>	Formally diagnosed eating disorders with oral complications include: Anorexia nervosa • Dry mouth and cracked/dry lips (including angular cheilitis) – due to reduced saliva flow related to dehydration and malnutrition. • Bad breath – may be related to the production of ketones (severe calorie restriction), dry mouth, poor oral hygiene or gastrointestinal issues (e.g., delayed stomach emptying). • Red/swollen gums, tongue or mouth sores – resulting from nutritional deficiencies, immune suppression resulting from malnutrition, poor oral hygiene from fatigue or depression, and dry mouth. Bulimia nervosa • Tooth erosion – Frequent vomiting exposes teeth to stomach acid, which dissolves tooth enamel (notably on the behind surface of the upper front teeth). This can lead to softer, more brittle teeth that wear or break more easily. Teeth may appear smoother, more yellow, translucent, or cupped. • Tooth sensitivity (to hot, cold, sweet) – Erosion means that the protective layer around teeth becomes thinner, and underlying dentine layer is exposed. • Mucosal irritation or ulcers inside the mouth, including the soft palate – due to exposure to stomach acid and nutritional deficiencies. • Angular cheilitis (cracks at the corners of the mouth) due to vomiting and nutritional deficiencies. • Enlarged salivary glands (usually parotid glands in the cheeks) due to frequent vomiting or nutritional changes. • Redness, scratches, and cuts inside mouth – associated with self-induced vomiting methods. • Temporomandibular joint disorders (TMD) – including jaw pain, clicking or popping sounds when opening or closing the mouth, limited jaw movement, headaches or ear pain. Binge-eating disorders • Dental caries – frequent large amounts of sugary or carbohydrate-rich foods during binges.

	• Tooth erosion – some people who binge-eat will also vomit, although less frequently than for bulimia. • Gingivitis and periodontal disease – poor oral hygiene, plus high sugar intake boosting bacterial count. • Dry mouth – linked to medications taken to manage anxiety or depression. • Temporomandibular joint issues – excessive chewing, or stress-induced clenching/grinding. An indirect complication of people with eating disorders is vitamin and mineral deficiencies – which come with their own oral complications. • Vitamin C – supports healthy gums; deficiency leads to scurvy-like symptoms, causing swollen, bleeding gums. • B vitamins (especially B2, B6, B12, folate) - deficiencies can cause mucosal inflammation, soreness, and ulcers. • Iron - can cause glossitis (tongue inflammation), mucosal pallor, and increases susceptibility to ulcers. People with disordered eating may have any of the above signs and symptoms, depending on their individual eating behaviours.	
Image 75: Erosive tooth wear related to anorexia nervosa.		• This photo shows the upper teeth of a female who has had vomiting episodes for more than 5 years related to anorexia nervosa. • There is advanced tooth wear affecting the palatal surfaces of the front teeth, and the biting surfaces of the back teeth. • The wear pattern is typical of vomiting-associated eating disorders.
Cause/s	• Restricting food consumption can lead to a deficiency of calcium, iron, vitamins and other important nutrients critical for dental health. • Stomach acid from vomiting causes erosion of tooth enamel. • Jaw problems result from a complex interplay of jaw strain when vomiting, chewing gum to suppress appetite, stress or anxiety-related bruxism, and bite changes as a result of worn teeth.	
Minimising oral complications	Dental practitioners may be among the first to notice signs of eating disorders that appear in the mouth and play a key role in early intervention and referral for medical/psychiatric help. • Where possible, tailored advice from a dental practitioner is recommended due to the complex nature of eating disorders, and the complex interplay of factors impacting oral health. General prevention • Follow general principles of eat well, drink well, clean well. Vomiting • Immediately after vomiting, rinse mouth with water, or with a homemade sodium bicarbonate mouthwash (made by dissolving 0.5-1 teaspoon of bicarb soda into 1 cup warm water).	

	• Wait at least 60 minutes before brushing teeth (with fluoride toothpaste and soft toothbrush). • Custom-made mouthguards may offer some protection to teeth during vomiting episodes. Dry, cracked lips • Avoid licking lips. Instead, use a lip balm that protects, soothes and helps repair the skin barrier (e.g., Vaseline, glycerin, shea butter) – while addressing underlying causes or nutritional deficiencies. Apply regularly throughout the day and night. Dry mouth ¶ For more information, see: Section 7.19: Dry mouth (xerostomia) and hyposalivation – oral considerations TMJ problems ¶ For more information, see: Section 7.26: Temporomandibular joint (TMJ) disorders – oral considerations
More information	¶ Understanding eating disorders – and how dental providers can help CareQuest: Institute for Oral Health ¶ How eating disorders can affect your mouth Oral Health Foundation

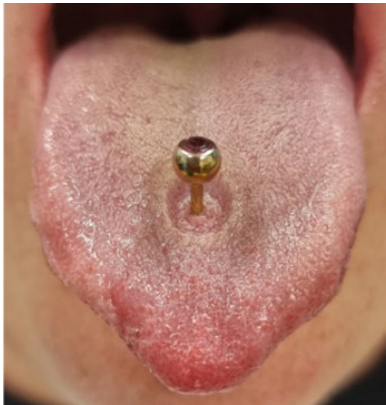
17.21 Epilepsy – oral considerations

If detected during a mouth check	If a seizure occurs during a health check • Provide appropriate first aid and follow DE/school guidelines regarding emergency medical care. 🦷 Epilepsy - first aid and safety Better Health Channel 🦷 What to do if someone has a seizure Epilepsy Society • If a tooth is knocked loose or knocked out during the seizure, it may be possible to reimplant the tooth. 🦷 For more information, see: Section 16.1: Dental Trauma Injuries to teeth caused by a previous seizure Recommend student see a dental practitioner. Other oral complications due to epilepsy medications • Recommend student see a dental practitioner for oral examination. • Medical review by GP or epilepsy management team may also be required.
Prevalence	Approximately 0.5% (1 in 200) of people (0-18 years) have epilepsy in Australia. (Epilepsy Foundation, 2025).
Oral signs and symptoms:	Relating to trauma caused during seizures • Tongue, cheeks and lips can be bitten due to involuntary muscle contraction during seizures. These can result in traumatic mouth ulcers. • Intense seizures may cause dental and oral traumas such as chipped, broken or fractured teeth, or damage to the temporomandibular joint (TMJ). Relating to medications used to manage epilepsy • Gingival hyperplasia (gum overgrowth) is a common side effect of some epileptic medications, such as Phenytoin (Dilantin), Carbamazepine (Tegretol) and Valproic Acid. • These medications can also cause dry mouth, which reduces mouth clearance and increases the risk of dental caries.
Image 76: Gingival hyperplasia	• People who take medications such as Phenytoin, Carbamazepine or Valproic Acid to manage their epilepsy may experience gum overgrowth. • The gums increase in size, resulting in them creeping up to cover the surfaces of the teeth. • This can be remedied by working together with a person's GP or epilepsy management team to see if a medication change is possible, in combination with gum surgery and good oral hygiene practices.

<i>To minimise oral complications</i>	• For students who experience frequent seizures, a dental practitioner may recommend a custom-made mouthguard to protect teeth and soft tissues. • When medication-induced gingival hyperplasia occurs, dental practitioners will often consult with the GP or neurologist to see if any alternate medication options are appropriate. Excess gum tissue can be surgically removed to facilitate oral hygiene and comfort. • General preventive guidelines apply (Eat well, drink well, clean well). ¶ For more information, see: Section 17.19: Dry mouth (xerostomia) and hyposalivation – oral considerations.
<i>More information</i>	¶ Oral health: Children with Epilepsy: A guide for dental professionals University of Washington ¶ Epilepsy - first aid and safety Better Health Channel

17.22 Mouth piercings – oral considerations

<i>If detected during a mouth check</i>	If a student is considering a mouth piercing • Discuss potential issues and recommend student seek dental or medical advice before proceeding. • Discourage students from taking a DIY approach. Emphasise safety and the importance of choosing a reputable and experienced piercing technician with excellent infection control and sterilisation practices, should they wish to proceed. If student has a mouth piercing • Seek immediate care from a dental practitioner or GP if: ○ there is excessive bleeding, swelling or pain after a piercing ○ allergy or infection develops at piercing site. • Refer to dental practitioner if other oral damage has occurred.
<i>Prevalence</i>	-
<i>Oral signs and symptoms:</i>	Oral piercings can be found in a variety of different sites including: • tongue • lip • cheek • upper frenulum • lower frenulum The piercing may sit entirely inside the mouth or may pierce (and extend through) the external skin and inner mucosal lining of the mouth. Main issues caused by piercings include: 1. Tooth damage – wearers often (sometimes deliberately) bite or tap the jewellery against their teeth. Teeth can become chipped, cracked or worn down from repeated or forceful contact with metal jewellery. Microscopic cracks can also form in teeth – which are difficult to detect and treat and often result in the loss of the tooth. 2. Gum recession – constant rubbing or pressure from jewellery can cause the gums to pull away from the teeth. This exposes the root surface, increasing the risk of tooth sensitivity, decay or over time, tooth loss. 3. Infection – due to use of nonsterile or contaminated equipment, or ingress of oral bacteria into the piercing site during healing. 4. Swelling and nerve damage – initial swelling is common, but severe swelling of the tongue can interfere with breathing. Nerve damage can cause temporary or permanent numbness or paralysis and affect taste and/or speech. 5. Interference with oral function – piercings may affect speech, chewing, swallowing and saliva flow. 6. Hypersalivation or drooling – the physical presence of jewellery in the mouth, or changes in the way the mouth functions can increase salivary flow. 7. Allergy – individuals who are allergic to jewellery metals may experience irritation or inflammation. 8. Damage to oral soft tissues – inner lips, cheeks and tongue may develop ulcers, sores or scar tissue as a result of constant rubbing by the jewellery.

	9. Increased plaque accumulation – jewellery can harbor biofilm and bacteria, which may make oral hygiene more difficult. 10. Potential for jewellery aspiration or ingestion – loose or broken jewellery can be accidentally inhaled or swallowed.	
Image 77: Tongue piercing		• This tongue barbell piercing has caused an area on the tongue to atrophy.
Image 78: Gingival recession caused by tongue piercing		• Constant pressure or rubbing of the tongue piercing onto the lower gums, has resulted in the gums pulling away from the lower incisors. • This recession puts the teeth at risk of sensitivity, decay and potentially tooth loss in future.
To prevent oral complications	To give the piercing the best chance of healing well, students should follow these aftercare recommendations. • Gently suck on chipped or shaved ice for tongue piercings, to reduce the risk of the tongue swelling. • Rinse with a non-alcoholic, antibacterial mouthwash 2-3 times daily, especially after eating or drinking. Using a warm saline rinse is another option. • Avoid smoking and alcohol which can delay healing and increase risk of infection. • Avoid very hot, spicy, acidic or salty foods that can irritate the area. • Drink plenty of water to flush area and keep mouth moist. • Avoid touching, playing with, or biting the piercing. • Continue to brush and floss regularly and gently. • Regularly inspect the piercing and seek dental or medical advice if area becomes infected. Once the piercing has healed (1-3 months depending on location of piercing). • It is preferable to wear good quality plastic jewellery rather than metallic jewellery. • Downsize the jewellery, as advised by the piercer. • Remove jewellery before participation in sport and before sleeping.	

	• Visit a dental practitioner regularly so the piercing and any potential damage to teeth can be monitored.
More information	¶ Oral piercings Queensland Government ¶ Oral piercings Safe Smiles ¶ Article: Oral piercing and gems - The Journal of the American Dental Association

17.23 Mouth tattoos – oral considerations

If detected during a mouth check	If a student is considering a mouth tattoo • Discuss potential issues and recommend student seek dental or medical advice before proceeding. • Discourage students from DIY approach. Emphasise safety and the importance of choosing a reputable and experienced tattoo artist with excellent infection control and sterilisation practices, should they wish to proceed. If student has a mouth tattoo • Refer to dental practitioner or GP if allergy or infection develops at tattoo site.	
Prevalence	Not common.	
Oral signs and symptoms:	Common locations for mouth tattoos include the inside of the lower lip, gums, inside cheeks and tongue. Tattooing inside the mouth can be done for decorative or cultural reasons. Decorative: Tattoos may be placed for decorative, symbolic or body modification purposes. Common styles are black, simple and bold, as intricate designs blur easily inside the mouth and colour fades quickly in moist tissue. Designs might include words, short phrases or symbols. Cultural: Black gum tattooing (also known as <i>diamou</i>) is practiced by women in some West-African cultures. Risks associated with intraoral tattoos • Bacteria may enter through the new tattoo site causing infection. ○ Symptoms: pain, swelling (inside the mouth, the jaw or lymph nodes), redness and fever ○ Signs: bad breath or a bitter taste in the mouth. • Gum tattoos might result in: ○ Gingival (gum) swelling, or gingival recession (around the teeth that are in contact with the ink) ○ tooth sensitivity to cold or hot foods or drinks. • Some people will be allergic to tattoo ink. Note, tattoos applied to the outside of the lips (to improve colour or contour) for cosmetic purposes are not covered here.	
Image 79: Mouth tattoo on the inside of the lower lip.		• This mouth tattoo is on the inside of the lower lip. • There is also some interesting gold dental work on their lower front teeth.

Cause/s	• Keeping the tattoo site isolated from saliva (and oral bacteria) during the procedure can be difficult. After the tattoo is placed, it is essentially an open wound inside the mouth. Until it heals the area may be exposed to bacteria, foods/drinks, anything else ingested or inhaled. • Tattoo inks can harbour bacteria and other microorganisms that can cause infection (FDA 2024). • Tattoo inks have also been known to cause severe allergic reactions.
Treatment	Seek dental practitioner or GP advice when infection or allergy becomes apparent.
To prevent oral complications	To give the tattoo the best chance of healing well, students should follow these aftercare recommendations. • Rinse with a non-alcoholic, antibacterial mouthwash 2-3 times daily, especially after eating or drinking. Using a warm saline rinse is another option. • Avoid smoking and alcohol which can delay healing and increase risk of infection. • Avoid very hot, spicy, acidic or salty foods that can irritate the area. • Drink plenty of water to flush area and keep mouth moist. • Avoid touching or playing with the tattoo. Pulling and stretching the lip can blur the tattoo. • Eat softer foods for the first few days and chew away from the tattoo site where possible. • Continue to brush and floss gently. • Regularly inspect the tattoo site and seek dental or medical advice if area becomes infected. Initial healing may take 7-14 days. Full healing may take up to 3-4 weeks.
More information	📄 Mouth tattoos Safe Smiles 📄 Think Before You Ink: Tattoo Safety FDA 📄 Letter to editor: Intraoral tattoos British Dental Journal

17.24 Illicit drug use – oral considerations

<i>If reported to nurse, or detected during a mouth check</i>	Follow any existing Department of Education or school protocols regarding management of student drug use and harm minimisation. • Recommend student see a dental practitioner for assessment of any oral concerns relating to their drug use if appropriate. • Encourage open disclosure of drug use with dental practitioner to ensure best possible support.
<i>Prevalence</i>	In 2019: • nearly one quarter (24%) of young people aged 14-24 engaged in illicit use of drugs (including non-medical use of pharmaceuticals) • the average age of first using/trying drugs was 17.3 years old • the most commonly used illicit drugs (excluding pharmaceuticals) were marijuana/cannabis, ecstasy and cocaine • males were more likely to engage in illicit use of any drugs than females. (AIHW 2021)
<i>Oral signs and symptoms</i>	Illicit drug use can result in serious oral health impacts. The mechanism of damage can be: • indirect - due to lifestyle or behaviours associated with drug use • direct - through the chemical properties of each drug. <u>Indirect effects</u> • Poor oral hygiene – users often neglect brushing/flossing, increasing risk of dental caries and periodontal disease. • Poor diet – high sugar intake (cravings), frequent snacking, or malnutrition, increasing risk of dental caries, erosion and impaired healing. • Dehydration – leads to dry mouth and increased bacterial growth, increasing risk of dental caries, oral candidiasis, mouth ulceration. • Risky behaviours – increases exposure to STIs affecting the mouth. <u>On top of these are the direct effects of each drug</u> Cannabis/ Marijuana • The smoke can stain teeth and irritate oral tissues, resulting in dry mouth, increased risk of gum disease and mouth cancer. Ecstasy (MDMA) • Stimulates the nervous system, causing severe tooth grinding or clenching (increasing worn or cracked teeth). Cocaine • Becomes very acidic when mixed with saliva, resulting in dental erosion. • Causes vasoconstriction. Reduction in blood flow to oral tissues leads to ulceration, necrosis, palatal perforation. • Also causes tooth grinding (and associated wear or cracked teeth). • When rubbed on gums can cause ulceration of gums and underlying bone, and chemical burns.

	Methamphetamine “Meth” • Highly acidic and reduces saliva, resulting in erosion and severe tooth decay in a very short time. • Other side effects include teeth grinding and jaw clenching (with resulting worn or cracked teeth). Heroin (and other opioids) • Increases clenching and grinding – increasing tooth wear and cracked teeth. • Sedative effect leads to neglect of hygiene. Anabolic steroid (misuse) • Increased risk of gum disease (gingivitis and periodontitis).
Dental management	Any dental problems will require comprehensive dental care – comprising of treatment and prevention strategies. Treatment: • While drug use continues, dental practitioners would normally focus on prevention and treatments that address pain, disease management and grinding/clenching. • Complex or cosmetic treatments would usually only be considered following cessation of drug use, and with excellent diet and oral hygiene practices in place.
Preventing oral complications	Prevention – professional interventions may include: • regular dental visits to increase early detection and early intervention opportunities • teeth cleaning and scaling • application of fluoride varnish or other fluoride therapies • fissure sealants. Tailored professional advice may include: • higher-strength fluoride toothpaste, or fluoride mouthwashes for use at home • rinsing with a homemade mouthwash (dissolve 0.5-1 tsp sodium bicarbonate with 1 cup warm water) to assist with neutralising acids. Prevention – home care recommendations will emphasise: • Eat well, drink well, clean well, with a particular emphasis on staying well-hydrated, increasing fluoride exposure, reducing sugars and acids, regular oral hygiene.
More information	¶ Illicit drug use teeth.org.au ¶ Teeth and drug use Better Health Channel ¶ Alcohol and Drug Foundation Australia

17.25 Sexually Transmitted Infections (STIs) – oral considerations

<i>If reported to nurse, or detected during a mouth check</i>	The majority of sexually transmitted infections (STIs) are asymptomatic and detected through screening or contact tracing efforts. • It is more likely that a student will present with genital signs and symptoms, and further investigation reveals concurrent oral symptoms. • It is less likely that a mouth check will, on its own, uncover an STI. • Recommend student to see their GP, or sexual health clinic. • Follow any existing Department of Health, Department of Education or school protocols for reporting requirements of STIs.
<i>Prevalence</i>	In 2023, people aged 15-29 years accounted for: • 67 - 69% of all chlamydia infections • 50% of all gonorrhoea infections. (RACGP 2023)
<i>Oral signs and symptoms</i>	A variety of STIs can have oral symptoms. These include: • Chlamydia • Gonorrhoea • Herpes simplex virus (HSV) ☞ See Section 17.6: Oral herpes simplex and herpes labialis • Human papillomavirus (HPV) • Human immunodeficiency virus (HIV) • Syphilis Oral symptoms that could indicate an STI include: • sores, ulcers or unusual looking lesions inside the mouth, which may or may not be painful • small warts – found on the lips, inside the mouth or throat • sores or ulcers on the lips or around the mouth • sore or burning throat, constant cough or difficulty swallowing • redness in the mouth or throat, with or without white spots • swollen tonsils and/or lymph nodes in the neck • fever • white patches inside the mouth (Oral thrush, leukoplakia).
<i>Cause/s</i>	Bacterial STIs: Chlamydia, Gonorrhoea, Syphilis Viral STIs: HSV, HPV, HIV
<i>Management (oral health perspective)</i>	• Practice safe sex. • Good oral health can help reduce the risk of transmitting or acquiring sexually transmitted infections (STIs), particularly those that can be spread through oral sex. • A healthy mouth with intact mucosa (lining of the mouth), healthy gums, and no sores or cuts helps provide a barrier to infection. Having gum disease, bleeding gums, or oral sores provides an entry point for viruses and bacteria and increases the risk of transmission.
<i>More information</i>	☞ Australian STI Management Guidelines

17.26 Temporomandibular Joint (TMJ) dysfunction – oral considerations

This may also be known as **Temporomandibular Pain Disorder (TMD)**.

<i>If reported to nurse, or detected during a mouth check</i>	Recommend student see dental practitioner or GP for diagnosis and management. Complementary healthcare may be provided by physiotherapists or osteopaths.
<i>Prevalence</i>	- Relatively common; approx. 60-70% of the adult population will have this at some stage. - More common in females.
<i>Oral signs and symptoms</i>	- May affect one or both jaw joints. - The time of day when symptoms occur can be a good indicator of when the causative activity is taking place. - Morning (or on waking) symptoms usually indicates a nighttime (nocturnal) cause. - Late afternoon/early evening symptoms usually indicates a daytime cause. - Headaches (usually over the temples) on waking. - Pain and discomfort in the jaw joint, and/or muscles involved in chewing. Pain can radiate to face, ear, neck and oral cavity (specially near last molars). Pain in the jaw joint when biting teeth together forcefully. - Clicking or popping sounds during jaw movements (often while eating breakfast). - Limited or painful jaw movements (including difficulty opening mouth). - Jaw may lock in an open or closed position. - Visible swelling over the TMJ (area between cheek and ear). - Ear symptoms: ringing, earache, hearing loss, or dizziness. - A change in the way the upper and lower teeth bite together.
<i>Cause/s</i>	Most TMD causes are musculoskeletal, and relate to: Bruxism: Involuntary clenching or grinding of teeth, which is commonly linked to stress. This overworks facial and jaw muscles and ligaments, leaving them tired and painful. Oral habits or improper oral postures: Pen-biting, resting chin on hand, chewing gum, sleeping on stomach, snorkelling/ scuba diving (holding snorkel in mouth), playing a wind (reeded) instrument. Structural anomalies of the jaw joint may be due to: Direct trauma or injury to the face and jaws. Malocclusion: a bad bite due to the improper alignment of teeth. Other: arthritis, congenital jaw anomalies, malignancy.
<i>Age/s</i>	- Most common in people aged 20-40 yrs old. - Can present in teenagers, usually associated with stressful events (e.g., exam time), or following jaw trauma.
<i>Treatment</i>	Musculoskeletal origin: Whilst symptoms can be debilitating, they will often resolve on their own (e.g., when stress passes).

	Supportive care may include: • pain relief (e.g., analgesics) • resting the jaw by: ○ avoiding hard or chewy foods ○ cutting food into small pieces to avoid opening wide ○ not “playing” with the jaw to replicate clicking noises • application of hot or cold compressions (whatever gives best relief) • massage. Once the acute phase is over, the following may be recommended: • jaw strengthening exercises • stress management and or relaxation techniques • a custom-made dental splint (nightguard) if bruxism is identified. Structural anomalies: • Require specialist care; surgical intervention is generally only performed when more conservative care is ineffective.
More information	¶ Article: TMJ disorders MedlinePlus Medical Encyclopedia ¶ TMD (Temporomandibular Disorders) National Institute of Dental and Craniofacial Research

17.27 Tobacco (smoking, snus) – oral considerations

<i>If reported to nurse, or detected during a mouth check</i>	The first signs of smoking damage are seen in the mouth – a useful reminder to students when other internal changes are not so visible. • Recommend student see a dental practitioner for a comprehensive oral exam; and see GP or refer to Quitline 13 78 48 to discuss quitting options. • Advise students that mouth ulcers or an unusual lump, sore or red/white patch in the mouth lasting more than 2 weeks should be followed up immediately with a dental practitioner or GP. These can be early signs of oral cancer.
<i>Prevalence</i>	Young people 14-19 yrs (2022-23): • 2.4% were daily smokers • 1.4% were occasional smokers (smoking weekly or less) • 94.1% had never smoked. Young smokers 14-24 yrs (2022-23): • average age for smoking their 1st full cigarette: 16.3 years • Minimal difference between males and females. (AIHW 2025)
<i>Oral signs and symptoms</i>	<u>Smoking</u> The first signs of smoking damage are seen in the mouth. • Staining of teeth or fillings, bad breath, impaired or bad taste. • Impaired healing, especially following tooth removal (dry socket). Smoking increases the risk of gum disease but also makes the early stages of gum disease harder to detect, as the nicotine in tobacco reduces blood supply to the gums, which may mask inflammation. Advanced gum disease signs include: • red, swollen, tender, bleeding gums • discharge (pus) coming from the gums • gums that are loose and pull away easily from teeth. • loose teeth – over time this can create gaps between teeth, change the feel of the bite when teeth are placed together, or make dentures fit differently. <u>Snus</u> This smokeless tobacco is usually placed under the top lip, or between the cheek and gums. Signs are usually found within this localised area: • staining of teeth or fillings • gum recession or gum disease • white or red patches on the oral mucosa (<i>leukoplakia</i>) – a precursor to cancer • mouth ulcers or sores. The most significant impact of tobacco and snus in the mouth is: • increased risk of developing mouth cancer (especially if also consume alcohol).

Image 80: Tobacco stains on teeth		- Tobacco stains are one of the first signs of smoking in the mouth. - Whilst it may be possible to remove some staining from the front of teeth with a toothbrush, it is more difficult to remove the stains in the embrasure areas. Professional cleaning is recommended.
Image 81: Tobacco Snus		Small tobacco pouches are placed inside the mouth usually under the top lip, or between the cheek and gums.
Cause/s	- Tobacco and other components of tobacco products are carcinogenic. - Nicotine reduces blood flow to the oral tissues and gums – reducing the immune response and healing ability. - The heat from tobacco smoke, and chemicals in tobacco can irritate and cause injury to oral tissues. - Nicotine affects salivary glands – reduces saliva production, changes composition and quality, reduces pH (makes it more acidic).	
Age/s	The average age to start smoking in Victoria is 16.3 years.	
Treatment	- Quitting tobacco is essential. Cutting back tobacco does not improve health outcomes. - An increased risk of gum disease and mouth cancer remains for many years, even after a person stops using tobacco. - Whilst dental care can improve aesthetics, stains will return if tobacco use continues.	
To minimise oral complications	There is no safe level of smoking or tobacco use. - Regular visits to a dental practitioner will help ensure that any tobacco-related damage (including oral cancer) is detected early. - Students should be encouraged to disclose their tobacco use with their dental practitioner and GP. - Any student with a mouth ulcer or unusual lump, sore or red/white patch in the mouth lasting more than 2 weeks should see a dental practitioner or GP straight away. These can be an early sign of oral cancer.	
More information	🔊 Effects of smoking and vaping on oral health Better Health Channel 🔊 Smoking teeth.org.au	

17.28 Tooth jewels – oral considerations

If detected during a mouth check	If student is considering a tooth jewel • Guide student away from DIY approaches. • Recommend student consult with a dental practitioner first to check: ○ tooth surface is suitable (healthy and strong) ○ no healthy tooth structure will be removed in the process ○ placement location will not harm soft tissues ○ appropriate bonding agent and technique is used, to ensure no food traps for decay to start near or underneath tooth jewel. If student has a tooth jewel • If placed by a <i>non-dental practitioner</i>, recommend student see dental practitioner for assessment as soon as possible. • If placed by a <i>dental practitioner</i>, recommend student return to them for review if any of the below signs or symptoms are observed.
Prevalence	-
Oral signs and symptoms	Tooth jewels are easy to spot, although may have varied appearance. They are usually small, clear or coloured gems, metallic or plastic decals or shapes attached to the front-facing surface of teeth. Signs and symptoms that might indicate a problem When the jewel is in place, the following may occur. • Excess adhesive (glue) extrudes out the sides of the jewel – a potential plaque or food trap. • Plaque or food accumulates around jewel – making the area more prone to decay and gum inflammation. • Chalky white enamel develops around the tooth jewel – an indication of primary decay. • Soft tissue inflammation. Any red, swollen area in close proximity to the jewel, such as: ○ gingivitis or gum recession ○ ulceration or localised irritation on the inner lip or cheek, which touches jewel when mouth closed. Once the jewel is removed (or has fallen off), the following may be seen. • Chalky white enamel in the shape or outline of the jewel – an indication of primary decay (note, this can also occur around orthodontic brackets) • Decayed enamel in the shape or outline of the jewel. • Residual glue left on the tooth. This should be removed properly by a dental practitioner. Loose tooth jewels • To reduce the risk of inhalation, these should be removed or re-attached by a dental practitioner.

Image 82: Tooth jewels		• Two diamante tooth jewels have been attached onto the upper canine tooth. • They do not impinge on the gums, and oral hygiene looks to be well-maintained.
Cause/s	• When tooth jewels are placed too close to the gums, localised gingival inflammation or gum recession can occur. • When tooth jewels do not adhere properly to the tooth surface, or there is excess glue around the jewel – it can be difficult to keep the area clean and increases risk of dental caries or gum disease. • Poorly contoured jewels or rough surfaces can irritate the soft tissues that come in contact with them.	
To minimise oral complications	A tooth jewel that has been well-placed in a person with a clean, healthy mouth, by a dental practitioner and is monitored regularly, should pose no additional oral health problems. General prevention recommendations apply (Eat well, drink well, clean well). Regular visits to a dental practitioner will help ensure that any jewel-related damage is detected early. Students should see a dental practitioner when any signs or symptoms that might indicate a potential problem are detected.	
More information	📄 Oral piercings Queensland Government 📄 Oral piercing and gems Journal of the American Dental Association 📄 Tooth Gems: Are They Safe for Your Teeth? University of Utah Health	

17.29 Vaping – oral considerations

<i>If reported to nurse, or detected during a mouth check</i>	Evidence for oral damage continues to emerge. Anyone using vapes should understand that we still don't have all the answers about the effects of vaping on oral or general health. • Early signs of vaping damage are often seen in the mouth – a useful reminder to students when other internal changes are not so visible. • Recommend student see a dental practitioner for comprehensive oral exam; and see GP or refer to Quitline 13 78 48 to discuss quitting options. • Advise students that a mouth ulcer, unusual lump, sore or red/white patch in the mouth <i>lasting more than 2 weeks</i> should be followed up immediately with a dental practitioner or GP. These can be early signs of oral cancer.
<i>Prevalence</i>	• Prevalence has increased drastically in teenagers and young adults in the past decade. For people aged 14-17 years: ○ ~10% were current users in 2022-23 compared to ~2% in 2019 ○ 28% had used vapes at least once in their lifetime in 2022-23, compared to 10% in 2019 (AIHW 2025). • More recent reports have shown that vaping rates have plateaued, suggesting peak vaping rates may be behind us. (Freeman B et al 2025).
<i>Oral signs and symptoms</i>	There are not many signs or symptoms in the mouth that are ONLY seen with vaping. However, people who vape have an increased risk of: • Mouth trauma and burns – caused by exploding vaping devices. • Dry mouth – the most common symptom of vaping. Vaping reduces saliva production, resulting in mouth discomfort, difficulty eating and swallowing, and increased risk of dental caries. • Vape tongue – the temporary loss of taste. • Mouth ulcers and localised inflammation • Gum disease – including gingivitis, gum recession, early loss of teeth. • Dental caries • Delayed and impaired healing – after dental extractions or oral surgery. • Dental erosion – due to acids present in vape liquids. • Oral cancer (Stewart 2025). 📌 Related images can be found at: 🦷 Section 17.19: Dry mouth (xerostomia) and hyposalivation 🦷 Section 13.6.3.2: Tooth erosion
<i>Cause/s</i>	In the mouth, the mechanisms of damage caused by vaping are chemical and thermal exposure. • Chemical factors include nicotine, propylene glycol and other toxic chemicals. Nicotine causes: ○ local irritation of the soft tissues by direct contact

	○ reduced blood supply to the gums, which lowers healing capacity and increases risk of periodontal (gum) disease. ● Thermal factors dry out mouth, causing irritation to oral tissues. ● Chemical and thermal factors change the oral environment, which upsets the balance of good and bad bacteria in the mouth. Vaping favours growth of bacteria linked to dental caries and periodontal disease. ● Many components found in vape juices are known carcinogens.
Age/s	Teenagers, young adults and adults.
Treatment	Quitting vaping is essential for improving oral health outcomes. Quitting can be a journey but is easier with support. Nurses can: ● encourage and support the student to reduce or cease vaping. ● offer links or a referral to specialised counselling (e.g., Quit 13 78 48) to assist with nicotine addiction. ● provide support, information and resources for behavioural and emotional needs.
To minimise oral complications	The biggest concern is limited evidence on long-term effects of vaping on the mouth. ● Regular visits to a dental practitioner will help ensure that any vaping-related damage (including oral cancer) is detected early. ● Students should be encouraged to disclose their vaping use with their dental practitioner and GP. ● Any student with a mouth ulcer, unusual lump, sore or red/white patch in the mouth <i>lasting more than 2 weeks</i> should see a dental practitioner or GP straight away. These can be an early sign of oral cancer. General prevention recommendations (Eat well, drink well, clean well), with emphasis on: ● staying well-hydrated by frequently drinking (or sipping on) water ● reducing sugars in diet ● brushing twice daily with fluoride toothpaste, and daily flossing to remove plaque.
More information	📄 Oral health impacts of vaping Australian Prescriber

Part C: Oral health promotion

18. Promoting oral health in schools

Oral health promotion is about empowering students, their families and the school community to protect and improve their oral health through knowledge, access and environments that support and promote healthier behaviours. It's an essential part of overall health promotion.

A comprehensive approach to oral health promotion in schools will:

- develop and implement school policies that support student's oral health and wellbeing
- consult with and involve parents, families, local health services and the wider community in school oral health initiatives
- equip students with the knowledge and skills they need to make choices that will support their oral health
- re-orient school health priorities from a focus on treating illness to emphasising wellness and prevention.

By using existing frameworks, schools can make the most of available opportunities and improve oral health outcomes.

School nurses have an important role to play as key health educators, caregivers and advocates.

18.1 School engagement

School nurses are skilled and well positioned in engaging with a variety of audiences in schools – students, parents, school staff and leaders. They recognise these groups may share similar interests and priorities relating to oral health in the school context, however, appreciate that each group has different roles, needs and communication styles. By tailoring their approaches, school nurses can strengthen health promotion efforts.

18.1.1 Students

Nurses will be very familiar with the backgrounds, needs and interests of students attending their schools. To engage effectively with students (both individually and collectively), nurses may want to look at the impact the following factors have on oral health.

- Age and developmental stage
- Cultural and linguistic diversity
- Socioeconomic background, and access to healthcare (incl. Medicare eligibility), nutritious food or oral care products
- Health literacy
- Additional health needs
- Psychosocial factors
- Previous health experiences
- Peer influence and social environment
- Privacy and confidentiality

18.1.2 Parents and carers

Whilst parents will often share similar cultural beliefs, language obstacles and socioeconomic factors as their children, there are likely to be many differences too, especially if parents did not grow up or attend school in Australia.

Parents and carers are influential in the oral health of their children, making or influencing key decisions on food and drink options, and oral hygiene routines at home. For schools to gain the support of families, it is important to acknowledge and understand parents' perspectives and circumstances, such as:

- knowledge and attitudes about health, including family priorities
- cultural beliefs and practices
- language and communication
- socioeconomic status and access to healthcare (incl. Medicare access or private health insurance)
- health literacy and information needs
- level of trust and engagement with the school
- role in care, and parenting style
- decision-making.

18.1.3 School staff

School staff may have a wide range of responsibilities and pressures, as well as diverse knowledge about and interest in oral health. Nurses understand that being supportive and respectful of their time, having clear roles and aligning efforts with school goals helps build strong partnerships with fellow staff that benefit the whole school community. Relevant factors may include:

- workload and time constraints
- roles and boundaries
- communication and collaboration
- staff health knowledge and confidence in this area
- attitudes toward health promotion
- school culture and priorities
- confidentiality and student privacy
- support for staff wellbeing.

18.1.4 School Leadership (Principal or Board)

School leaders influence policies, resources and the overall school culture and direction. Engaging them thoughtfully ensures that health promotion efforts are supported, sustainable and embedded in school practices. Engaging with leaders may require consideration of:

- strategic priorities
- policy and decision-making
- allocation of financial and human resources
- accountability and reporting
- whole-school approach
- communication and advocacy
- partnerships and community links
- sustainability and long-term planning.

18.2 Realistic outcomes

Realistic oral health promotion outcomes in a school setting focus on achievable, measurable changes that support students' long-term health. These may include:

- improved oral hygiene habits among students
- increased knowledge of healthy eating, the importance of regular brushing and drinking tap water
- enhanced awareness of strategies to reduce oral health harm associated with behaviours like smoking, vaping or alcohol use
- greater participation in school-based oral health programs (e.g., increased consent rates for Smile Squad)
- earlier identification of dental issues through screenings and referrals
- reduced episodes of pain, and difficulties with eating, speaking and sleeping
- fewer school disruptions (e.g., missed days) due to oral health related issues
- fewer dental emergencies, such as mouth injuries obtained playing sport.

In addition, supportive policies like having oral-health friendly food and drink options at school can contribute to a healthier school environment overall and even extend to outside of school – like at home and the broader community.

These early outcomes lay a strong foundation for long term reduction in oral disease.

19. Whole-of-school policies and programs

Whole-of-school policies and programs play a vital role in creating consistent, supportive environments that promote student health and wellbeing. By embedding health into all aspects of school life – curriculum, policies, partnerships, and daily practices – schools can reinforce positive behaviours and reduce health risks.

Department of Education policies, guidelines and other resources are available.

- **Canteens, Healthy Eating and Other Food Services**
The purpose of this policy is to ensure school food services provide food and drinks which contribute to a supportive, healthy school environment. (Note, this policy will be updated in 2026 and renamed *Nutrition, Canteens and Other Food Services Policy*.)
- **The Healthy Schools [Achievement Program](#)**
Healthy Eating and Oral Health is one of the seven key health areas supported by this program. Each health area sets achievement targets, leading to healthy changes to a participating school's physical environment, policies and practices, and health promoting activities. Schools receive Victorian Government recognition when all targets for a health area are met.
- **Smile Squad – Victorian Government free school dental program**
In addition to clinical services, Smile Squad can support schools by providing guidance, resources and partnership.

19.1 Guidance for schools

A guide to supporting good oral health in schools

This action guide explores the ways schools can create an environment that encourages good oral health behaviours.

19.2 Smile Squad partnership with schools

Smile Squad values ongoing collaboration with school staff, nurses and other health professionals throughout the year – particularly in preparation for and during school visits.

Collaborative activities may include:

1. **Planning and co-ordination**
e.g., support scheduling and logistics of school visit, help disseminate dates and explain processes to school staff, parents, and students.
2. **Supporting consent processes – initial exam and when follow-up care required**
e.g., distribute, collect, or follow-up consent forms, particularly in students at higher risk or those with complex oral health needs.
3. **Student preparation**
e.g., prepare students for what to expect when Smile Squad visits, especially younger or anxious children.
4. **Health promotion opportunities**

e.g., use the school visit as a chance to reinforce oral health messages through classroom activities, posters, or take-home materials. Collaborate with the dental team to deliver brief oral health education alongside the check-ups.

5. Staff development

Smile Squad supports primary and secondary school nurses with oral health training opportunities and resources such as *The mouth* manual, and the Smile Squad [Mouth check poster](#). Refresher training is also available.

¶ For other staff development, see [Section 21](#) below.

20. Health Promotion Plans (HPPs)

Smile Squad welcomes the opportunity to partner with schools who wish to nominate oral health as a priority area or explore oral health promotion as a strategy to support another health priority area in their Health Promotion Plan.

Example 1

Health priority area: Oral health	
<i>Objective</i> Teaching and Learning	Promote oral health literacy.
<i>Objective</i> Support and resources	Provide the school community with oral health resources and support.
<i>Objective</i> Engagement	Raise awareness and strengthen links with local oral health services to improve oral health of the whole school community.

Example 2

Health priority area: Alcohol, tobacco and other drugs	
<i>Objectives</i>	<i>Strategy</i>
Promote literacy around alcohol, tobacco and other drugs.	Support teachers in the development and delivery of curriculum on alcohol, tobacco and other drugs, including oral health considerations associated with alcohol, tobacco and other drug use.
Provide the school community with resources and support for alcohol, tobacco and other drugs.	Develop an audience-appropriate oral health resource to address oral health harms associated with alcohol, tobacco and other drug use.
Raise awareness and strengthen links with local health services and programs to minimise harms caused by alcohol, tobacco and other drug use in the whole school community.	- Strengthen connections with local oral health services, including Smile Squad to provide oral health examinations and comprehensive care to students and oral health education to the broader school community. - Promote pathways for students and their families to access oral health services, including eligibility options for publicly funded dental care.

21. Staff development

School nurses can help to build the capacity of school staff through development opportunities. They may be able to offer training, share resources, and demonstrate how oral health policy can be implemented in practice.

By equipping teachers and other staff with the knowledge, confidence, and tools to promote oral health, it becomes easier to embed oral health promotion into the school fabric.

Development opportunities to consider:

1. Staff education and awareness sessions

e.g., run short, accessible professional development sessions or workshops during staff meetings or professional development days.

Topics to be developed in consultation with school staff, and may cover:

- The link between oral health and learning
- Early signs of dental problems
- Promoting tooth-friendly classroom practices
- Supporting students with dental anxiety or pain

2. Share educational resources

e.g., share simple, evidence-based resources with staff (posters, tip sheets, videos); guide teachers to classroom-ready materials, such as lesson plans, books, videos.

3. Guide policy and practice

e.g., help staff understand and implement school policies that support oral health.

Discussing how staff can reinforce positive messages in class and during school events.

4. Create a supportive school culture

e.g., encourage all staff (not just teachers) to model and support healthy behaviours (e.g., promote tap water, not giving sugary treats as rewards). Partner with leadership to integrate oral health into the school's health promotion goals.

5. Liaise with external services

e.g., co-ordinate visits from oral health professionals who can deliver training or Q&A sessions to staff (e.g., Smile Squad).

6. Provide ongoing support and communication

e.g., be a nominated point of contact for questions or concerns around oral health. Provide regular updates (perhaps in staff newsletters) with seasonal tips (Easter treats) or share ideas (oral health-friendly lunchbox ideas).

22. Student and family events

School nurses may be asked to provide information to students and their families in preparation for schooling milestones, such as transitioning into or from high school.

Nurses might consider the following topics for inclusion.

22.1 Transitioning to secondary school

1. Oral health issues relevant to secondary school students

- Reinforce key oral health messages.
- Reinforce opportunities for HPV vaccination to prevent oral harm (oral cancer).
- Understand the oral health effects of puberty, risky behaviours, and sexual health.

2. Opportunities to access oral health care at secondary school

- Smile Squad
- Child Dental Benefits Schedule
- Other affordable options (incl. warnings about overseas dentistry).
- Provide some simple cost comparisons.

3. Changing attitudes towards dental care in teenagers

- i.e., It's no longer socially acceptable to see a dental practitioner at school.
- Can result in reduced uptake of on-site school dental appointment opportunities.

4. Consenting differences (e.g., becoming a mature minor)

5. Any relevant school policies regarding oral health

- e.g., compulsory mouthguards for contact sports, tooth-friendly options at canteen.

22.2 Transitioning from secondary school

1. Oral health issues relevant to school leavers

- Reinforce key oral health messages.
- Understand the oral impacts of risky behaviours, including alcohol, tobacco, vaping and sexual health.

2. Encourage final opportunity to access oral health care at secondary school

- Smile Squad, Child Dental Benefits Schedule.

3. Future access to oral health care after secondary school

- Be aware of any policy changes to family private health insurance cover that occur once a dependent child turns 18 (if applicable).
- Other options – public dental services (eligibility criteria apply), warn about overseas dentistry, or non-dental practitioners offering dental care (e.g., bleaching), DIY options.
- Provide some simple cost comparisons.

4. Planning for future dental costs

- Understanding that adult oral healthcare may not be free.
- Budgeting or setting aside funds for private dental care.

5. Changing priorities of school leavers

- Dental visits tend to drop off for people aged between 18-25, as people navigate a new part of their life and their priorities change.
- Tertiary education
- Employment opportunities
- Education and workplace cultures may not promote oral health.
- Navigating independence away from family or financial supports.

6. Taking responsibility for their own healthcare

- Maintaining an oral care routine without relying on parents.
- Grocery shopping or preparing their own meals.
- Using their initiative to schedule their own dental appointments for check-ups and preventive care.

23. Classroom activities

23.1 Smile Squad partnership

Smile Squad has developed resources especially for use in schools.

- [Cool.org lesson plans](#)

OHV has partnered with Cool.org to develop free, curriculum-aligned and teacher-approved lesson plans with an oral health theme. These are designed for primary school students, starting at Year 3 level. Student worksheets and background information for teachers are included.

- Secondary school oral health education sessions

These sessions are offered either as a 30min lecture, or 45min interactive session with activities. Sessions have been delivered in the past by Smile Squad, but resources are available so that school nurses can now deliver these sessions.

Key topics covered

- How oral health affects your general health.
- Simple ways to look after your oral health.
- How to deal with oral health issues.
- Prevention is key – don't wait for things to go wrong.

Content aligns with elements of the *Health and Physical Education* curriculum and is appropriate for Year 7 students but can be customised to your requirements.

23.2 Health and Physical Education Curriculum

As schools are required to deliver [Health and Physical Education](#) (HPE) curriculum to students in Prep to Year 10, nurses or other health professionals may be interested in connections between oral health and existing content.

HPE areas	Related oral health related content (will be hyperlinked)
Alcohol and other drugs	Caffeine/energy drinks – oral considerations
	Alcohol – oral considerations
	Tobacco (smoking, snus) – oral considerations
	Vaping – oral considerations
	Betel (areca) nut and betel quid – oral considerations
	Illicit drug use – oral considerations
	Dry mouth (xerostomia) and hyposalivation – oral considerations
Food and nutrition	Increased risk for oral cancer
	Eating well for oral health
	Drinking well for oral health, including the importance of hydration
Health benefits of physical activity	Eating disorders and disordered eating – oral considerations
	Playing well – protecting teeth from injury (mouthguards)
	Dental trauma – what to do if a tooth is knocked out.
	Drinking well , including sports drinks and the importance of hydration
	Illicit drug use (anabolic steroid misuse) – oral considerations
	The impact of stress on oral health – gum conditions and jaw pain

Mental health and wellbeing	The impact of medications on oral health
	Body image, body dysmorphia
	Self-expression: Tooth jewels – oral considerations
	Self-expression: Mouth piercings – oral considerations
Relationships and sexuality/sexual health	Self-expression: Mouth tattoos – oral considerations
	The impact of hormones on oral health – puberty, pregnancy
	Sexually Transmitted Infections (STIs) – HPV is a significant risk factor for oral cancer
Safety	Intimacy – oral hygiene , bad breath
	Dental trauma – what to do if a tooth is knocked out
	Dental emergencies and accessing timely, emergency care .

24. Individual-centred care

Students may approach nurses or other school staff seeking information or advice regarding their oral health.

See relevant sections of **Oral health fundamentals** and **Clinical considerations**.

25. Educational resources

There are many resources which can be used in school settings. Most resources are not developed specifically for schools therefore some adaptation (or discretion) may be required.

- ¶ Reputable sources of information are listed in [Section 10.1: Websites and information](#).
- ¶ Links can also be found in the relevant sections of **Oral health fundamentals** and **Clinical considerations**.

25.1 Videos

The Australian Dental Association has produced a series of 15 oral health [“pro-tips” videos](#). These are not specifically aimed at school students but are reasonably short and easy to understand.

Topics relevant to students include:

- *Pro-tips* for better brushing
- *Pro-tips* to protect your teeth
- *Pro-tips* how to maintain a tooth-friendly smile
- *Pro-tips* gum disease explained
- *Pro-tips* understand dental x-rays
- *Pro-tips* why you need to wear a mouthguard
- *Pro-tips* how to protect your teeth from sugar
- *Pro-tips* what to do if you knock out your teeth
- *Pro-tips* tooth decay explained
- *Pro-tips* choosing healthy drinks
- *Pro-tips* how to floss your teeth

25.2 Power Point presentation

The Australian Dental Association developed an editable [PowerPoint](#) presentation for Dental Health Week 2025. Many slides contain general oral health information that is suitable for (younger) school students.

25.3 Oral health packs

Smile Squad offers free oral health packs to students attending Victorian government primary, secondary and specialist schools.

- ¶ For more information, see: [Section 10.2 Oral hygiene products](#).

25.4 Toothbrush and mouth models

Schools may wish to invest in education resources to support oral hygiene instruction, particularly toothbrushing.

Large toothbrushes and mouth models are available for purchase from a range of dental suppliers and online retailers. Models come with a range of features and can vary in quality and cost.

Image 83: **Demonstrating how to brush**



- **Giant, super-sized models** are great for demonstrating proper cleaning techniques in a group setting like a classroom. Some models have spaces between teeth so that you can also show how to use dental floss to clean between teeth.
- **Children's mouth models** may be smaller, softer, often simpler and more colourful, to make learning fun for younger children. There are also puppet varieties available.

25.5 Brochures/pamphlets

- ¶ For more information, see: [Section 10 Resources](#).
- ¶ Links can also be found in the relevant sections of **Oral health fundamentals** and **Clinical considerations**.

25.6 Classroom activity sheets

- ¶ For more information, see: [Section 23: Classroom activities](#).

25.7 Newsletter articles

Smile Squad has developed a [communication toolkit](#) for schools, which includes downloadable resources and promotional material to help schools share Smile Squad messages with their families. The toolkit includes:

- Newsletter and website content (including a Smile Squad badge for your website)
- Social media and school portal content
- Image tiles
- Smile Squad posters
- Smile Squad brochures

25.8 Social stories

- ¶ For more information, see: [Section 3.4.1.2: Tips on dental visits](#).

26. Fluoride: a population oral health approach

26.1 Role of fluoride in oral health

Fluoride is a naturally occurring mineral that plays a key role in the prevention of dental caries. Fluoride protects both developing and erupted teeth, and therefore benefits individuals of all ages.

Fluoride has two mechanisms of action: systemic and topical.

Systemic: When fluoride is consumed during the period when a person's teeth are developing (e.g., by drinking fluoridated tap water during childhood), it becomes incorporated into the developing tooth structure, making teeth more resistant to acid attack in future. This benefit will last for the entire life of the tooth.

Topical: Once tooth development is complete and the tooth has erupted into the mouth, fluoride (e.g., in toothpaste, fluoridated tap water or professional applications) has a topical effect on the surface of the tooth. Topical fluoride can:

1. promote remineralisation of the enamel (i.e., help drive the minerals – calcium, phosphates, carbonates - which were released from the tooth during demineralisation *back* into the tooth structure). The fluoride interacts with the minerals at the tooth surface to repair early caries and can even stop established caries from progressing further. When fluoride is present during remineralisation, it is incorporated back into the surface tooth enamel, making it more resistant to acid attack and demineralisation in future
2. inhibit the conversion of sugars into acids by bacteria
3. kill decay-causing bacteria when used in high concentrations (such as topical application by a dental professional).

After topical application, some fluoride remains in the saliva. A constant supply of a low level of fluoride in the saliva is most beneficial for replacement of lost minerals and prevention of dental caries.

■ For more information, see: [Section 6.1 Dental caries \(tooth decay\)](#).

26.2 Fluoride sources

Fluoride can be found:

- 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 or varnish painted on by an oral health professional.

Fluoride supplements act as systemic fluoride but are no longer recommended or available in Australia due to widespread water fluoridation.

26.3 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”, and because community water fluoridation reduces the prevalence of dental caries in both adults and children, it has been recognised as an important public health achievement (Department of Health 2023A).

Some water supplies already contain natural levels of fluoride. Water fluoridation is the adjustment of the natural amount of fluoride in the community water supply to a level recommended for optimal dental health benefits. Fluoride does not alter the taste or smell of water.

Fluoride was first introduced in Australia nearly 70 years ago in 1953 in Beaconsfield, Tasmania.

- Today, approximately 90% of Australians can access fluoridated drinking water, including residents of all capital cities.
 - More than 97% of Victorians drink water with either naturally occurring or added fluoride.
 - Melbourne and some regional areas have enjoyed the benefits of fluoridated drinking water for nearly 50 years.
- ¶ To see which Victorian towns or postcodes are fluoridated, visit: [Is my water fluoridated? \(health.vic.gov.au\)](https://www.health.vic.gov.au/is-my-water-fluoridated/).

Since the introduction of community water fluoridation to Melbourne in 1977, the caries prevalence within Victoria has markedly decreased, including in children.

- Children of 5 and 6 years of age who have lived more than half their lives in fluoridated areas have 50 per cent less tooth decay in their baby teeth, compared to children who have not lived in fluoridated areas.
- Children who are 12 and 13 years old who have lived more than half their lives in fluoridated areas have 38 per cent less tooth decay in their adult teeth, compared to children who have not lived in fluoridated areas (Department of Health 2023b).

Australian research also shows that access to fluoridated water from an early age is also associated with less tooth decay in adults (ACPOH 2018).

26.4 Water filters

Some water filters are capable of removing 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 2022).

26.5 Fluoride safety

Studies have confirmed that fluoride effectively prevents and reduces tooth decay without causing harmful effects on your health, when used in the modalities and quantities recommended (NHMRC 2017).

26.6 Dental fluorosis

Dental fluorosis is the defective formation of tooth enamel or dentine resulting from *excessive* fluoride ingestion during the period of tooth development, such as when young children swallow excessive amounts of toothpaste. It has been reported that the risk of fluorosis in Melbourne has not increased since the introduction of community water fluoridation in 1977, and that the degree of fluorosis in Melbourne is mild and within expected limits of an optimally fluoridated community.

In its mildest (and most common) form, fluorosis 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. Whilst mild fluorosis may have a slight effect on tooth appearance, it comes with the added bonus of protecting those same teeth against decay.

The risk of fluorosis occurring can be minimised by following the **Clean Well** recommendations, specifically relating to:

- discouraging ingestion of toothpaste by children
- brushing teeth only using water until the age of eighteen months, 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.

Nurses and other health professionals are not expected to engage in deep or detailed (or potentially heated) discussions with families who wish to debate the use of fluoride. Rather, encourage them to seek information from an oral health professional directly.

27. Participating in oral health campaigns

27.1 Dental Health Week – August

Dental Health Week (DHW) is the Australia Dental Association's major annual oral health campaign. It is held in the first *full* week of August. The DHW theme changes every year.

If schools wish to promote oral health during DHW, the ADA offers a range of free resources relating to the year's theme. These are usually released in early July.

Resources can vary each year, and may include digital and web assets, posters, brochures or fact sheets, children's activities, social media tiles and PowerPoint presentation templates. There may also be free resources for educators to download.

¶ For more information, visit: [Dental Health Week](#).

27.2 World Oral Health Day – March 20



World Oral Health Day is an annual international event organised by the FDI World Dental Federation.

It is celebrated on March 20.

¶ For more information on each year's themes and resources, visit: [World Oral Health Day](#).

28. Bibliography

Armfield JM, Chrisopoulos S, Peres KG, Roberts-Thomson KF & Spencer AJ (2016). *Australian children's oral health behaviours*. In: Do LG & Spencer AJ (eds). *Oral health of Australian children: the National Child Oral Health Study 2012–14*. Adelaide: University of Adelaide Press.

Australian Breastfeeding Association (2022) *Breastfeeding and tooth decay*. Available at: <https://www.breastfeeding.asn.au/resources/breastfeeding-and-tooth-decay> (Accessed: 20 September 2024).

Australian Dental Association (2024a) *Teeth.org.au*. Available at: <https://www.teeth.org.au> (Accessed: 20 September 2024).

Australian Dental Association (2024b). *Policy Statement 2.2.5 - Prevention and Management of Oral Injuries*. Australian Dental Association Federal Council, St Leonards.

Australian Institute of Health and Welfare (2016). *Australian Burden of Disease Study: impact and causes of illness and death in Australia 2011*. Australian Burden of Disease Study series no. 3. Cat. no. BOD 4. Australian Institute of Health and Welfare, Canberra.

Australian Institute of Health and Welfare (2021). *Alcohol, tobacco and other drugs*. Web report. Australian Institute of Health and Welfare, Canberra.

Australian Institute of Health and Welfare (2022). *Australia's children*. Web report. Australian Institute of Health and Welfare, Canberra.

Australian Institute of Health and Welfare (2025a). *National Drug Strategy Household Survey 2022-2023*. Web Report. Australian Institute of Health and Welfare, Canberra.

Australian Institute of Health and Welfare (2025b) *Oral health and dental care in Australia*. Web Report. Australian Institute of Health and Welfare, Canberra.

Australian Research Centre for Population Oral Health (2018). *Australia's Oral Health: National Study of Adult Oral Health 2017–18*. The University of Adelaide, Adelaide.

Australian Research Centre for Population Oral Health (2023). *Child Oral Health and Dental Visiting in Australia. Results from the National Dental Telephone Interview Survey 2021*. The University of Adelaide, Adelaide.

Berkowitz RJ (2003). Causes, Treatment and Prevention of Early Childhood Caries: A microbiological perspective, *Journal of the Canadian Dental Association*. 69 (5): 304-7.

Cameron A, Widmer R (2022). *Handbook of Paediatric Dentistry* (5th ed.). Elsevier Health Sciences. <https://clinicalkeymeded.elsevier.com/books/9780702079870>.

COAG (Council of Australian Governments) Health Council (2015). *Healthy mouths, healthy lives – Australia's National Oral Health Plan 2015-2024*. South Australian Dental Service, Adelaide.

Dental Practice Education Research Unit (2022). *Classification of Periodontal Diseases*. Colgate Periodontal Education Program, The University of Adelaide, Adelaide.

Dental Practice Education Research Unit (2023). *Bruxism: Information for Dental Practitioners*. Colgate Dental Education Programs. Specialist Topic No.27, The University of Adelaide, Adelaide.

Department of Health (2020a). *Teeth grinding*. Available at: <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/teeth-grinding> (Accessed: 20 September 2024).

Department of Health (2020b). *Victorian action plan to prevent oral disease 2020-30*, Victorian Government, Melbourne.

Department of Health (2023a). *Water fluoridation for healthy teeth: Community information*. Victorian Government, Melbourne.

Department of Health (2023b). *Water fluoridation in Victoria*. Available at: <https://www.health.vic.gov.au/water/water-fluoridation-in-victoria> (Accessed: 20 September 2024).

Department of Social Services (2021, 2022, 2023). *Raising children*. Available at: <https://raisingchildren.net.au> (Accessed: 20 September 2024).

DiFrancesco RC, Junqueira PAS, Trezza PM, de Faria MEJ, Frizzarini R, Zerati FE (2004). Improvement of bruxism after T & A surgery, *International Journal of Pediatric Otorhinolaryngology*, 68 (4), 441-445.

Do LG (2020). Guidelines for use of fluorides in Australia: update 2019. *Australian Dental Journal* <https://doi.org/10.1111/adj.12742>.

Do LG, Spencer AJ (editors) (2016). *Oral health of Australian children: the National child oral health study 2012–14*, University of Adelaide Press, Adelaide.

Epilepsy Foundation (2025). *Children and Epilepsy*. Epilepsy Foundation. <https://epilepsyfoundation.org.au/managing-epilepsy/children-and-epilepsy/>.

Food and Drug Administration (2024). *Think Before You Ink: Tattoo Safety*. U.S. Food & Drug. <https://www.fda.gov/consumers/consumer-updates/think-you-ink-tattoo-safety>.

Freeman, B, Egger, S, Rose, S, Brooks, A, Madigan, C & Dessaix, A. (2025) *Vaping and young people: Assessing early impacts of Australia's comprehensive approach to vaping product control*. Generation Vape. Cancer Prevention and Advocacy Division, Cancer Council New South Wales.

Gupta BI, Gupta B, Indushekar KR (2012). Childhood thumb sucking habit: the burden of a preventable problem! *Journal of Dentistry, Medicine and Medical Sciences* Vol.2 (1) pp.1-4.

Hockenberry JH, Wilson D, Winkelstein ML, Kline NE (2023). *Wong's Nursing Care of Infants and Children* (12th ed.) Mosby, Sydney.

Langlais RP, Miller CS, Gehrig JS (2020). *Colour Atlas of Common Oral Diseases* (5th ed.) Williams & Wilkins, Sydney.

Letra A, Chiquet B, Hansen-Kiss E, Menezes S, Hunter E (2021). Nonsyndromic Tooth Agenesis Overview. In: Adam MP, Feldman J, Mirzaa GM, et al., editors. *GeneReviews*® [Internet]. Seattle (WA): University of Washington, Seattle; 1993-2024. <https://www.ncbi.nlm.nih.gov/books/NBK572295/>

Michalak E, Dudzik A, Sreba J, Kesek B, Darczuk D (2022). Oral manifestations of leukaemia: cooperation between dentist and haematologist. *Hematology in Clinical Practice*; 13 (2): 55–61.

National Health and Medical Research Council (2013). *Australian Dietary Guidelines*. National Health and Medical Research Council, Canberra.

National Health and Medical Research Council (NHMRC) (2017). *Information Paper - Water Fluoridation: Dental and Other Human Health Outcomes*. Report prepared by the Clinical Trials Centre at University of Sydney. Canberra: NHMRC. < <https://www.nhmrc.gov.au/about-us/publications/water-fluoridation-dental-and-other-human-health-outcomes> >.

Oral Health Victoria (2004). *Teeth: Oral Health Information for Maternal and Child Health Nurses*. Formerly Dental Health Services Victoria, Melbourne.

Oral Health Victoria (2005). *The Mouth: Oral Health Information for Primary School Nurses*. Formerly Dental Health Services Victoria, Melbourne.

Oral Health Victoria (2024a) Betel nut & oral cancer [Brochure].
https://www.ohv.org.au/data/assets/pdf_file/0004/259150/Betel-nut-brochure_v9.pdf.

Oral Health Victoria (2024b). Business Intelligence Unit (unpublished data).

Preeti L, Magesh K, Rajkumar K, Karthik R. (2011). Recurrent aphthous stomatitis. *J Oral Maxillofac Pathol*. 15 (3): 252-6. DOI: 10.4103/0973-029X.86669. PMID: 22144824; PMCID: PMC3227248.

Rhodes A 2018. *Child oral health: habits in Australian homes*. Melbourne: Royal Children's Hospital Melbourne.

Royal Australian College of General Practitioners (2023). *Common STIs surge among young people*. News GP. <https://www1.racgp.org.au/newsqp/clinical/common-stis-surge-among-young-people>.

Royal Children's Hospital Melbourne (2018). *RCH National Child Health Poll*. The Royal Children's Hospital Melbourne, Parkville.

Stewart B. (2025) *E-cigarettes and cancer: A Qualitative Risk Assessment*. Clinical Oncology Society of Australia, Sydney.

Therapeutic Guidelines (2025) *Oral and Dental guidelines*. <https://www.tg.org.au>

Welbury R, Duggal MS, Hosey MT (2018). *Paediatric Dentistry* (5th ed). Oxford University Press, Oxford.

Welti R, Chinotti M, Walsh O, Arcus M, Asgari J, Phillips K, Wallace J, Do L, Moynihan P, Silva M (2023) Oral health messages for Australia: A national consensus statement. *Australian Dental Journal*. 2023;68:247-254.

28.1 Image resources

We gratefully acknowledge the rightful owners of images included in *The mouth*. Any ownership errors or omissions are unintentional.

Image No.	Description	Source
1	Tooth types	Australian Dental Association (2024). <i>Tooth anatomy</i> . Teeth.org.au website. https://www.teeth.org.au/tooth-anatomy
2	Comparing mouths: primary (deciduous) teeth and secondary (permanent) teeth	Sissons B (2023). <i>Teeth: Names, types and functions</i> . Medical News Today website. https://www.medicalnewstoday.com/articles/326754#types-of-teeth
3	Teeth before cleaning	Northwest Paediatric Dentistry (2024) <i>Helping children brush better: Use of disclosing solution</i> . Northwest Paediatric Dentistry website. https://nwpd.com.au/helping-children-brush-better
4	Plaque is stained	Northwest Paediatric Dentistry (2024) <i>Helping children brush better: Use of disclosing solution</i> . Northwest Paediatric Dentistry website. https://nwpd.com.au/helping-children-brush-better
5	Teeth after cleaning	Northwest Paediatric Dentistry (2024) <i>Helping children brush better: Use of disclosing solution</i> . Northwest Paediatric Dentistry website. https://nwpd.com.au/helping-children-brush-better
6	Calculus	© Lighthunter/ Shutterstock
7	First stage caries: white spot lesions	Dental Health Services Victoria (2005). <i>The Mouth: Oral health information for Primary School Nurses</i> . DHSV, Melbourne
8	Mixed caries: white spot lesions and advanced caries	© Tam MJ (2010), personal collection.
9	Advanced, extensive caries	Dental Health Services Victoria (2005). <i>The Mouth: Oral health information for Primary School Nurses</i> . DHSV, Melbourne
10	Mild gingivitis	© sviatlana lazarenka. <i>Mouth with natural teeth. Teeth without whitening</i> . Canva
11	Moderate gingivitis	© Viktoriia M1. <i>Child has crooked teeth. The concept of crowding of molars</i> . Canva .
12	Comparing mouths: primary (deciduous) teeth and secondary (permanent) teeth	Sissons B (2023). <i>Teeth: Names, types and functions</i> . Medical News Today website. https://www.medicalnewstoday.com/articles/326754#types-of-teeth
13	Healthy mouth with deciduous teeth	Dental Health Services Victoria (2005). <i>The Mouth: Oral health information for Primary School Nurses</i> . DHSV, Melbourne
14	Recently exfoliated lower incisor	Masters M (2023). <i>When Do Kids Start Losing Teeth? What to expect</i> website. https://www.whattoexpect.com/toddler/grooming/when-baby-teeth-fall-out.aspx
15	Newly erupted lower incisors	Mohlin B, Westerlund A, Ronsjo, Kurol J (2017). Chapter 21. Occlusal Development, Malocclusions, and Preventive and Interceptive Orthodontics. In Koch G, Poulsen S, Espelid I, Haubek D (Eds) <i>Pediatric Dentistry – a Clinical Approach</i> (3 rd ed). John Wiley & sons, Ltd. West Sussex. https://doctorlib.info/pediatric/pediatric-dentistry-clinical-approach/21.html

16	Newly erupted lower incisors	© Timothy W.Stone/Shutterstock
17	Melanin (racial) pigmentation of gums	Kauzman A, Pavone M, Blanas N, Bradley G (2004). Pigmented lesions of the oral cavity: review, differential diagnosis, and case presentations. <i>J Can Dent Assoc.</i> 70(10):682-3. PMID: 15530266.
18	Upper dental arch	Growing smiles (2020). <i>Oh baby, my teeth!</i> Growing smiles website. https://growing smiles.co.uk/oh-baby-my-teeth
19	Uvula	© Supersmario. <i>Tonsillitis infection throat opened mouth throat tonsil.</i> Getty Images Signature.
20	Palatal torus	Oliván-Gonzalvo G (2021). Torus palatinus in a 13-year-old Spanish girl. <i>Iberoam J Med.</i> 3(4):356-358. https://doi:10.53986/ibjm.2021.0051
21	Lower dental arch	Growing smiles (2020). <i>Oh baby, my teeth!</i> Growing smiles website. https://growing smiles.co.uk/oh-baby-my-teeth
22	Erupting lower molar	Sourav AR (2014). <i>Eruption gingivitis and pericoronitis in children.</i> Slideshare.net website. https://www.slideshare.net/porag25/eruption-gingivitis-and-pericoronitis-in-children#7
23	Permanent incisors erupting behind deciduous incisors	Children's Hospital Colorado (2024). <i>Shark teeth!</i> Colorado Children's Dental Centre website. http://ccdcsmiles.com/blog/19386/Shark-Teeth-
24	Tongue	© Deyan Georgiev. <i>Human Tongue Protruding Out.</i> Canva
25	OPG radiograph	© bdsnp. <i>X ray of child teeth.</i> Getty Images.
26	Normal exfoliation of upper incisor	© Aleksandr Pykhteev. <i>Baby tooth, close-up of the tooth that falls macro shot.</i> Getty Images
27	Over-retained lower deciduous incisors with ectopic eruption of permanent incisors	Zou J, Meng M, Law C, Rao Y, Zhou X (2018). Common dental diseases in children and malocclusion. <i>Int J Oral Sci</i> 10, 7. https://doi.org/10.1038/s41368-018-0012-3
28	Supernumerary tooth: mesiodens.	Kids Dentist (2024) <i>Extra Teeth Growing in Gums.</i> Pure Dentistry website. https://www.kids-dentist.com.au/extra-teeth-in-gums
29	Missing upper lateral incisors	Kazemi Oral Surgery and Dental Implants (2024). <i>Missing upper lateral incisors.</i> Facial art website. https://www.facialart.com/portfolio/dental-implants-stories/smile-zone-bethesda-dentist/dental-implants-missing-upper-lateral-incisors
30	Protruding front teeth ("buck" teeth)	Bis, A (2024) <i>TMJ Disorder Starts In Early Childhood.</i> Smiles By Bis website. https://smilesbybis.com/tmj-disorder-starts-in-early-childhood
31	Anterior open bite	https://www.kids-dentist.com.au/open-bite
32	Lip sucking	Dental Health Services Victoria (2005). <i>The Mouth: Oral health information for Primary School Nurses.</i> DHSV, Melbourne
33	Tongue thrust (child)	Coulson & Associates (2024) <i>Tongue Thrust.</i> Coulson & Associates. https://www.sandracoulson.com/tongue-thrust
34	Tongue thrust (teenager/ adult)	O'Connor Dental Health (2023). <i>Reverse swallow & Tongue thrusting.</i> O'Connor Dental Health website. https://oconnordentalhealth.ie/health-problems/tongue-thrusting
35	Bruxism (child)	Kotsanos N, Birkhed D. (2022). Tooth Wear in Children and Adolescents. In: Kotsanos N, Sarnat H, Park K (eds) <i>Pediatric Dentistry. Textbook in</i>

		<i>Contemporary Dentistry</i> . Springer, Cham. https://doi.org/10.1007/978-3-030-78003-6_18
36	Incisal edge chipping (teenager/adult)	The Smile Center (2024). <i>Bruxism Treatment</i> . The Smile Center website. https://www.thesmilecenter.info/procedures/bruxism
37	Tooth erosion	Kotsanos N, Birkhed D. (2022). Tooth Wear in Children and Adolescents. In: Kotsanos N, Sarnat H, Park K (eds) <i>Pediatric Dentistry. Textbooks in Contemporary Dentistry</i> . Springer, Cham. https://doi.org/10.1007/978-3-030-78003-6_18
38	Tooth erosion (transparent incisal edge)	Kotsanos N, Birkhed D. (2022). Tooth Wear in Children and Adolescents. In: Kotsanos N, Sarnat H, Park K (eds) <i>Pediatric Dentistry. Textbook in Contemporary Dentistry</i> . Springer, Cham. https://doi.org/10.1007/978-3-030-78003-6_18
39	Tooth abrasion (severe)	© Emanuele Ghirardelli. <i>Deep teeth abrasions</i> . Getty Images.
40	Splayed upper front teeth	Osmólska-Bogucka A, Siemińska-Piekarczyk B (2015). Diastema pośrodkowa szczęki - przegląd literatury. <i>Dental and Medical Problems</i> 3. https://www.researchgate.net/figure/Bite-development-ugly-duckling-stage-Fan-arranged-upper-incisoras-and-maxillary_fig1_281118571
41	Regular bite relationship	Pocket Dentistry (2015). <i>Ch 1 Orthodontic Diagnosis and Treatment Planning</i> . Pocket Dentistry website. https://pocketdentistry.com/1-orthodontic-diagnosis-and-treatment-planning
42	Anterior crossbite	Zou J, Meng M, Law C, Rao Y, Zhou X (2018). Common dental diseases in children and malocclusion. <i>Int J Oral Sci</i> 10, 7. https://doi.org/10.1038/s41368-018-0012-3
43	Posterior crossbite (multiple teeth)	Walt Orthodontics (2024). <i>Results Gallery</i> . Walt Ortho website. https://www.waltortho.com/results/page/3/#before-after-98
44	Restricted (narrow) upper jaw	Mostafiz W (2019). <i>Fundamental of Interceptive Orthodontics: Optimizing Dentofacial Growth and Development</i> (course notes). CDE World website. https://cdeworld.com/courses/5182-fundamentals-of-interceptive-orthodontics-optimizing-dentofacial-growth-and-development
45	Extrinsic black stains (chromogenic bacteria)	Janjua U, Bahia G, Barry S (2022). Black staining: an overview for the general dental practitioner. <i>Br Dent J</i> 232, 857–860. https://doi.org/10.1038/s41415-022-4345-0
46	Discoloured tooth due to previous trauma	© Gajus. <i>Kid with broken teeth</i> . Canva.
47	Mottled enamel	Dentistry and Medicine (2015). <i>Dental Fluorosis</i> . Dentistry and Medicine blog. https://dentistryandmedicine.blogspot.com/2015/08/dental-fluorosis.html
48	Hypomineralised enamel I on first permanent molar	Pocket Dentistry (2015). <i>Ch 25 Molar Incisor Hypomineralisation</i> . Pocket Dentistry website. https://pocketdentistry.com/25-molar-incisor-hypomineralisation
49	Peg lateral incisors	Izgi A & Ayna E (2005). Direct restorative treatment of peg-shaped maxillary lateral incisors with resin composite: A clinical report. <i>The Journal of prosthetic dentistry</i> . 93. 526-9. https://doi.org/10.1016/j.prosdent.2005.03.016
50	Fluoride varnish application	© BanksPhotos. <i>Child boy receiving fluoride treatment from dentist</i> . Getty Images Signature.

51	Remineralised caries due to silver diamine fluoride (before and after)	Yawary R & Hegde S. (2021). Silver Diamine Fluoride Protocol for Reducing Preventable Dental Hospitalisations in Victorian Children. <i>International dental journal</i> . 72. https://doi.org/10.1016/j.identj.2021.05.009 .
52	Fissure sealants	Dr Geoff Knight/ SDI (2024) <i>Riva Protect</i> . SDI website. riva protect - SDI
53	Restorations (fillings)	Dr Hien Ngo/ GC Australasia Dental (2024). <i>Glass Ionomer Restorative Cement (GIC) Usage Guide</i> . GC Dental website. usage-guide-fuji-2.pdf (gc.dental)
54	Stainless Steel Crown (SSC)	© Pornpak Khunatorn. <i>Silver amalgam crown dental filling teeth in mouth. Asia girl child with tooth sealant</i> . Getty Images
55	Missing teeth due to early extractions	Bücco (2024) <i>Tooth eruption</i> . Bücco Orthodontiste en ligne website. https://www.orthodontisteenligne.com/eruption-dentaire
56	Cleft lip (unilateral)	Australian Dental Association (2024). <i>Cleft Lip and Palate Scheme</i> . Teeth.org.au website. https://www.teeth.org.au/cleft-lip-and-palate-scheme
57	Cleft lip and palate	Reddy S, Liu C, Vaidyanathan M, Bhujel, N (2021) Cleft lip and palate in general dental practice: filling in the gaps. <i>Dental Update</i> . 48(7), 547-554. https://www.magonlinelibrary.com/doi/full/10.12968/denu.2021.48.7.547
58	Cleft palate	Children's Minnesota (2024). <i>Cleft & Craniofacial Program</i> . Children's Minnesota website. https://www.childrensmn.org/services/care-specialties-departments/cleft-craniofacial-program/conditions-and-services/cleft-palate
59	Eruption cyst	Dental Health Services Victoria (2005). <i>The Mouth: Oral health information for Primary School Nurses</i> . DHSV, Melbourne.
60	Mucocele	Dental Health Services Victoria (2005). <i>The Mouth: Oral health information for Primary School Nurses</i> . DHSV, Melbourne.
61	Traumatic ulcer (lower lip)	healthdirect (2024) <i>Mouth sores and ulcers (canker sores)</i> . Healthdirect website. https://www.healthdirect.gov.au/mouth-sores-and-ulcers
62	Aphthous ulcers (lower lip)	© frank600/Getty Images.com.au
63	Primary herpetic gingivostomatitis	Nair RG, Salajegheh A, Itthagarun A, Paknesha S, Brenna MT, Samaranayake P (2014). Orofacial viral infections – an update for clinicians. <i>Dental Update</i> . Vol 41 (6) pp 518-524. https://www.dental-update.co.uk/content/oral-medicine/orofacial-viral-infections-an-update-for-clinicians
64	Recurrent oral herpes (upper lip)	DiFoggio W (2023). How to Get Rid of a Cold Sore. TeethTalkGirl.com website. https://www.teethtalkgirl.com/dental-health/cold-sores
65	Oral candidiasis	National Health Service (NHS) (2023). <i>Oral thrush (mouth thrush)</i> NHS website. https://www.nhs.uk/conditions/oral-thrush-mouth-thrush
66	Dental abscess	Dental Health Services Victoria (2005). <i>The Mouth: Oral health information for Primary School Nurses</i> . DHSV, Melbourne.
67	Facial cellulitis (with periorbital swelling)	Oral Health Division, Ministry of Health Malaysia (2017) <i>Clinical Practice Guidelines: Management of Acute Orofacial Infection of Odontogenic Origin in Children</i> (1 st ed). Ministry of Health Malaysia, Putrajaya.
68	Geographic tongue	theAsianparent (2024). <i>What parents need to know about 'geographic tongue'</i> . The Asianparent website. https://sg.theasianparent.com/geographic-tongue-in-toddlers

69	Hand, foot and mouth disease	© Dr P. Marazzi/Science Photo In Tesini BL (2023). Hand-Foot-and-Mouth Disease. In MSD Manual Consumer Version. https://www.msdmanuals.com/en-in/home/infections/enteroviruses/hand-foot-and-mouth-disease
70	Chicken pox in the mouth (palate)	Todorov I, Bliznakova D, Madjova C, Tonchev T, Gospodinova M (2015). Oral cavity changes in the course of infectious diseases, during childhood. <i>Scripta Scientifica Medicinae Dentalis</i> . 1(2):7. https://DOI:10.14748/ssmd.v1i2.1411
71	Koplik spots (measles) on the inside cheek	Todorov I, Bliznakova D, Madjova C, Tonchev T, Gospodinova M (2015). Oral cavity changes in the course of infectious diseases, during childhood. <i>Scripta Scientifica Medicinae Dentalis</i> . 1(2):7. https://DOI:10.14748/ssmd.v1i2.1411
72	Leukaemia	Michalak E, Dudzik A, Sreba J, Kesek B, Darczuk D (2022). Oral manifestations of leukaemia: cooperation between dentist and haematologist. <i>Hematology in Clinical Practice</i> ; 13, 2: 55–61. http://dx.doi.org/10.5603/HCP.a2022.0009
73	Severe periodontal disease in a person with diabetes.	Oral Health Victoria (2025). Diabetes and oral health [brochure]. https://www.ohv.org.au/_data/assets/pdf_file/0020/261362/DIOH_OralHealthBrochure_VIC.pdf .
74	Dry mouth and dental caries	Dental Nursing (2 June 2014). <i>Caring for patients with 'dry mouth'</i> . Dental Nursing The Journal for a career in dental nursing website. https://www.dental-nursing.co.uk/content/features/caring-for-patients-with-dry-mouth .
75	Erosive tooth wear related to anorexia nervosa.	Rangé H, Colon P, Godart N, Kapila Y, Bouchard P. (2021) Eating disorders through the periodontal lens. <i>Periodontol 2000</i> ; 87: 17–31. https://doi.org/10.1111/prd.12391
76	Gingival hyperplasia	DermnetNZ.(2026). <i>Gingival enlargement</i> . In DermnetNZ. https://dermnetnz.org/topics/gingival-enlargement .
77	Tongue piercing	Masood M, Walsh LJ, & Zafar S. (2024). Awareness of dental complications with oral piercings. <i>Oral Diseases</i> , 30, 4404–4411. https://doi.org/10.1111/odi.14908 .
78	Gingival recession caused by tongue piercing	Masood M, Walsh LJ, & Zafar S. (2024). Awareness of dental complications with oral piercings. <i>Oral Diseases</i> , 30, 4404–4411. https://doi.org/10.1111/odi.14908
79	Mouth tattoo on the inside of the lower lip.	© Alex Alexander. <i>Photography of man showing tattoo and gold teeth</i> . Pexels.
80	Tobacco stains on teeth	© jarino47. <i>Dental plaque on teeth</i> . Getty Images.
81	Tobacco Snus	© uskarp. <i>Snus – closeup of Snus, a moist powder tobacco product</i> . Getty Images.
82	Tooth jewels	© Dali images. <i>Close-up of lip piercing with rhinestones</i> . Canva.
83	Demonstrating how to brush	© Alexander's images. <i>Dentist shows correct model of teeth and toothbrush</i> . Canva.