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## ORAL HEALTH

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### **RATIONALE**

Dental caries, commonly referred to as “tooth decay” or “cavities,” is the most prevalent chronic health problem of children in California, and the largest single unmet health need afflicting children in the United States. A 2006 statewide oral health needs assessment of California kindergarten and third grade children conducted by the Dental Health Foundation (now called the Center for Oral Health) found that 54 percent of kindergartners and 71 percent of third graders had experienced dental caries, and that 28 percent and 29 percent, respectively, had untreated caries. Dental caries can affect children’s growth, lead to malocclusion, exacerbate certain systemic diseases, and result in significant pain and potentially life-threatening infections. Caries can impact a child’s speech development, learning ability (attention deficit due to pain), school attendance, social development, and self-esteem as well.<sup>1</sup>

Multiple studies have consistently shown that children with low socioeconomic status (SES) are at increased risk for dental caries.<sup>2,3,4</sup> Child Health Disability and Prevention (CHDP) Program children are classified as low socioeconomic status and are likely at high risk for caries.

With regular professional dental care and daily homecare, most oral disease is preventable. Almost one-half of the low-income population does not obtain regular dental care at least annually.<sup>5</sup> California children covered by Medicaid (Medi-Cal), ages 1-20, rank 41 out of all 50 states and the District of Columbia in receiving any preventive dental service in FY2011.<sup>6</sup> Dental examinations, oral prophylaxis, professional topical fluoride applications, and restorative treatment can help maintain oral health. Twice a day brushing with fluoride toothpaste by the child’s primary caregiver until age seven or eight, supervised brushing thereafter until adolescence, and daily flossing, are necessary components of maintaining oral health. Topical fluoride treatments and/or supplements, as well as dental sealants on both primary and permanent posterior teeth, are important means of prevention.

### **SCREENING REQUIREMENTS**

- 1) An inspection of the mouth, teeth, and gums must be performed at every health assessment visit. Dental caries are classified according to treatment needs, from routine dental referrals to referrals for emergency (immediate) treatment. For a visual reference on what to look for and how to document findings, see the [“PM 160 Dental Guide”](#) (under revision as 7/14/2016)
- 2) Assess risk for dental caries. The following links provide tools to aid in assessing caries risk factors:

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- American Academy of Pediatrics - [Preventive Oral Health Intervention for Pediatricians](#)
  - American Academy of Pediatrics - [Oral Health Risk Assessment Tool](#)
  - National Maternal & Child Oral Health Resource Center – Bright Futures in Practice: [Oral Health--Pocket Guide](#) 2<sup>nd</sup> edition
- 3) A fluoride supplement should be prescribed if the child’s drinking water, including bottled water, does not contain adequate levels of fluoride, or for infants who are exclusively breastfed after six months of age. More information about fluoridation of local water systems can be seen at the [California Environmental Protection Agency website](#). See [Table 1 Fluoride Supplement Dosage Schedule](#) in “Fluoride” section below.
- 4) Provide anticipatory guidance. For prevention of caries and gum disease, key topics to emphasize include establishing a dental home, parents’/caregivers’ oral health, transmissibility of caries-causing bacteria, proper oral hygiene practices, fluorides, and dental sealants. Other important areas to stress include dental injuries (especially related to sports), tobacco use and oral cancer, eating disorders, and oral piercing. See [Table 2 Anticipatory Guidance for Oral Health](#) which contains age-specific messages regarding these topics located at end of the Oral Health Section below.

### **Bright Futures\*\***

For more information see the following:

- [Bright Futures in Practice: Oral Health Pocket Guide](#) (2<sup>nd</sup> edition)
- [Bright Futures Guidelines for Health Supervision of Infants, Children and Adolescents: Promoting Oral Health](#)
- [Bright Futures Toolbox: Oral Health Resources](#)

### **CONSIDERATIONS FOR REFERRAL, TREATMENT, AND/OR FOLLOW-UP**

- Refer children directly to a dentist **beginning at age one** as required by [CA SB75 \[P. 32 of Ch.18. SEC. 22.124040.\(6\)\(D\)\]](#) (Scroll to Ch.18. Page 32) to establish a dental home.  
This will help set a regular practice of preventive dental visits and maintenance of oral health. For more information on establishing a dental home see the AAP policy [Oral Health Risk Assessment Timing and Establishment of the Dental Home](#). :

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- Refer to a dentist at any age if a dental problem is detected or suspected. An immediate dental referral is indicated if there is an acute injury, oral infection (abscess, swelling, or cellulitis) or other painful condition.
- Routine annual referrals to a dentist are required; however, more frequent referrals may be needed for the CHDP high-risk population. Please review the [CHDP Periodicity Schedule for Dental Referral by Age](#).
- Most Medi-Cal eligible children should be referred to a dentist every six months. A referral should be made directly to a dentist. However, if help finding a dentist is needed, contact the local CHDP program or the Denti-Cal beneficiary number 1-800-322-6384 or the [Denti-Cal provider lists](#).
- Refer children with significant craniofacial anomalies to the [county California Children's Services \(CCS\) program](#), or to a craniofacial center.
- Refer children with severe malocclusion (not cosmetic) appropriately. For children with full scope Medi-Cal refer to Denti-Cal. For low-income children without full scope Medi-Cal refer to CCS. The "[CHDP-CCS Orthodontic Referral Guide](#)" is a screening tool to use in making appropriate referrals for severe malocclusion.
- Children with documented special health care needs may be considered high risk for caries. If medical or oral condition is affected, refer every three months.

### **Oral Health Issues**

Dental decay, including early childhood caries, is the most predominant oral health problem for children. There are other habits, conditions, and diseases that play a role in their oral health status. These include oral lesions, orthodontics, wisdom teeth, periodontal disease, halitosis, tobacco habits, "meth mouth", and oral piercing. Medical providers should address these issues with their patients, as explained below.

**Early childhood caries (ECC)** is the currently accepted term for a disease that is also commonly known as baby bottle tooth decay (BBTD), nursing caries, baby bottle caries, and bottle mouth. ECC is a multifactorial dental disease that is prevalent among children age five and younger. Interacting biological, behavioral, and social factors contribute to this serious condition that causes the primary teeth to decay rapidly. The disease is characterized by a unique pattern of decay. It begins with the tongue side of the upper anterior teeth, progressing to the front of these teeth. This is followed by decay on the chewing surfaces of the primary molars, in the order of their eruption.<sup>7</sup> In

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some cases, other patterns of disease progression occur with more severe destruction of the posterior dentition. Severe decay can expose the tooth nerve and pulp, leading to severe pain, failure to thrive, tooth loss, local and systemic infections, compromised nutrition, and/or loss of sleep. Premature loss of primary teeth may lead to speech disorders, feeding and nutritional problems, low self-esteem, and malocclusion. Early tooth decay increases the risk that a child will experience caries throughout their lifetime.<sup>8</sup>

ECC can be exacerbated by putting a child to bed with a bottle containing anything other than plain water, or letting a child have a bottle or training (“sippy”) cup for long periods of time while awake. When the bottle or training cup is filled with liquids other than plain water, bacterial plaque convert these fermentable carbohydrates into acids, increasing the acidity level of the child’s mouth. Higher acidity levels weaken the enamel of the teeth and lead to decay.

ECC is a transmissible bacterial infection.<sup>7</sup> The bacteria can be spread from parents/caregivers/siblings to the infant/child via contact with saliva. Encourage parents and caregivers to obtain regular dental examinations and treatment, as well as maintain good oral hygiene. For additional information and photographs refer to the [“Oral Health for Infants and Toddlers: A Medical Provider’s Guide”](#).

Counseling parents and caregivers using the following points may help prevent ECC:

- Promote breastfeeding. However, explain that prolonged nocturnal at-will nursing causes breast milk to pool around the teeth of a sleeping infant and may lead to ECC when other predisposing factors are present.
- Advise parents to put infants to bed without a bottle. If a bottle is necessary, use water as this is the only liquid that does not promote tooth decay.
- Once nutritional needs are met, if an infant still needs soothing, suggest alternatives to the bottle such as stories, soft music, rocking, singing, etc.
- Starting at birth, encourage wiping the infant’s gums with a clean, soft washcloth every morning and evening.
- When the first tooth starts to erupt, begin brushing all surfaces of the teeth. Use a tiny dab of fluoride toothpaste on a small, soft toothbrush every morning and night. Emphasize brushing all surfaces of the teeth, especially behind the upper front teeth and along the gum line where ECC develops.
- Introduce infants to a cup beginning at age six months and wean from a bottle by age one. Encourage use of a cup at mealtimes and when seated in the high chair. Discourage allowing the child to carry or use a sippy cup with anything other than water for at-will hydration.

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**Oral lesions** can occur in or around the mouth. Most lesions are common and benign. These lesions may cause discomfort, but can be easily treated by topical or non-invasive methods.

Common lesions include:

- [Angular cheilitis](#)
- Black hairy tongue
- Erythema migrans (geographic tongue)
- Herpes labialis (cold sores)
- Lichen planus
- Oral candidiasis (thrush)
- [Physiologic \(melanin\) pigmentation of the gingiva](#)
- Recurrent aphthous stomatitis (canker sores)

Information about the signs, symptoms, and treatments for these conditions refer to [“Common Oral Lesions: Part 1. Superficial Mucosal Lesions.”](#)

More serious lesions require a referral to a dentist, including:

- Periodontal/dental abscess
- [White and/or red lesions](#) – if not resolved in 2 weeks they should be reevaluated and in some cases, considered for biopsy to obtain a definitive diagnosis
- [Unilateral pigmentation](#) – this needs to be evaluated for pathology

Any unidentified lesion may be indicative of an underlying systemic disease, including cancer, HIV, or diabetes. A patient who presents with a [suspicious lesion](#) should be evaluated further.

**Orthodontics** is the correction of the misalignment (malocclusion) of the teeth and/or jaws. While many patients may seek orthodontics for cosmetic purposes, some children may have a medical necessity for this treatment. A medical necessity would include severely twisted, overlapped, protruded, or misaligned teeth causing functional problems or trauma to the oral tissue.

Malocclusions and/or jaw anomalies can affect the health and normal function of the oral cavity. For example:

- *Severely twisted/misaligned teeth* can make daily oral hygiene difficult, thus increasing the risk of gingivitis/periodontal disease.
- An “*open bite*” prohibits the ability to bite with the anterior teeth and can cause uneven wear and cracking of the posterior teeth.

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- A severe “overjet” occurs when the upper anterior teeth protrude excessively. This can cause an open mouth posture which dries the oral and labial mucosa resulting in increased gingival inflammation, increased caries, and cracked/dry sore lips.
- *Hyperplasia or hypoplasia* of the mandible/maxilla can cause abnormal stress to the temporomandibular joint, and/or traumatic occlusions which can damage or crack the teeth.
- Some malocclusions and jaw anomalies may distort speech and/or interfere with normal mastication.

Orthodontics and orthognathic surgery may be needed to align the jaws and teeth in order to create a more functional and healthy occlusion. Assessment of jaw anomalies, asymmetries and occlusion should be performed at every CHDP visit. If a severe condition is suspected, a referral should be made (please see aforementioned [“Considerations for Referral, Treatment and/or Follow-up”](#)).

**Trauma** to primary and permanent teeth often result from sports injuries, falls, car and bike accidents, and violence. The most common ages for dental trauma are 2 to 4 year olds and 8 to 10 year old. An avulsed primary tooth should not be reinserted into the tooth socket due to the risk of damage to the underlying permanent tooth. However, an avulsed permanent tooth should be held by the crown, gently rinsed with milk or cool water, and reinserted into the socket. In both cases, the child should be seen immediately by a dentist. Emphasize the use of a mouthguard, helmet and other safety equipment when participating in team sports and other physical activities, such as skateboarding, bicycling and skating. A well-fitting mouthguard can reduce the risk of cerebral concussion and dental injury. More information on dental trauma can be found at [Smiles for Life](#) Course 4 [Acute Dental Problems](#).

Physical abuse of children can sometimes be seen as oral manifestations such as trauma to the roof of the mouth or back of the throat. Craniofacial (head, face, and neck) injuries occur in more than half of the cases of child abuse.<sup>9</sup> A complete oral assessment is an essential component of every well-child exam and can help identify abuse.

For more detailed information see the joint statement of the American Academy of Pediatrics and the American Academy of Pediatric Dentistry [“Oral and Dental Aspects of Child Abuse and Neglect.”](#)

**Wisdom teeth/third molars** typically erupt between the ages of 17 and 21 years. Teens with an erupting third molar may present with discomfort and tenderness in the

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posterior region of the lower or upper jaw. Routine removal of third molars is no longer recognized as the standard of care. However, if the third molar is impacted, the teen may experience additional symptoms, such as: prolonged headache or jaw ache; pain, redness and swelling of the gums around the impacted tooth; and if infected, drainage, difficulty opening the mouth, and swollen lymph nodes. Teens with these symptoms should be referred to a dentist.

**Periodontal (gum) disease** is an inflammation of the soft and hard tissues that support and surround the teeth. It is caused by pathogenic bacteria and can escalate to the destruction of the alveolar bone (periodontitis). This progressive bacterial disease begins with poor oral hygiene and accumulation of plaque, which leads to inflammation of the gums (gingivitis). Bleeding when brushing and flossing is a sign of gingivitis and can be reversed with proper daily home care. However, if left untreated, gingivitis may advance to periodontitis. Periodontitis generally progresses slowly and the effects may only become evident in adulthood. Evidence from the Centers for Disease Control and Prevention (CDC) reveals that 47.2% of adults have some stage of gum disease<sup>10</sup> (which might have been prevented with better oral hygiene as a youth).<sup>11</sup> There are other forms of periodontal disease which are aggressive in nature, such as Juvenile Periodontitis and Acute Necrotizing Ulcerative Gingivitis (ANUG). These forms of gum disease can affect teens and cause rapid destruction of the periodontium and lead to tooth loss. Medical providers should refer the teen directly to the dentist if they notice inflamed/bleeding gums, pus, loose teeth, and/or bad breath. More information about [periodontal disease](#) in children can be accessed the American Academy of Periodontology website.

**Halitosis (bad breath)** is most commonly caused by poor oral hygiene habits. It can also be caused by consumption of certain foods such as garlic and onions, dry mouth, post-nasal drip, tobacco use, and certain health conditions.<sup>12</sup> Advise teens and young adults that bacteria in the mouth, especially on the tongue, is the major cause of odor. Poor gingival health, such as bleeding gums, can also contribute to bad breath. By improving oral hygiene habits, including daily tooth brushing, flossing, and tongue brushing/scraping, bad breath can be reduced. In addition to improving oral hygiene, a referral to a dentist for an exam, preventive care and necessary treatment should be made. Dry mouth due to medication use, infrequent water consumption, and mouth breathing can decrease saliva flow.<sup>13</sup> This reduces the clearance of food particles which contributes to bacterial growth in the mouth. If bad breath persists, an underlying health condition should be considered. More information about health conditions that may cause [bad breath](#) can be accessed at MedlinePlus.

**Tobacco** use in any form, including smokeless (spit, chew, snuff, dip, snus) and

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smoked (cigarettes, cigars, cigarillos, pipes) adversely affects oral health. In the last several decades, the harmful health effects of smoking have become more widely recognized; however, the adverse effects on the oral cavity are not as well known. Tobacco in general has been associated with teeth staining, changes in salivary production, bad breath, altered taste, poor healing of oral tissue, loss of bone and tissue supporting the teeth (periodontal disease), increased caries, decreased success and/or longevity of dental restorations, tooth loss, and oral cancer.<sup>14</sup>

Spit tobacco is widely used; an estimated 15% of high school boys and 9% of all high school students use smokeless tobacco. The harmful health effects of spit tobacco need to be addressed during the CHDP health assessment. Its use increases the risk of periodontal disease and tooth decay in exposed tooth roots. It is also strongly associated with oral leukoplakia—a precancerous lesion that can be found on the soft tissue in the mouth. This appears as a white patch or plaque that cannot be scraped off.<sup>15</sup> Spit tobacco is strongly associated with pancreatic cancer, and both smoking and smokeless tobacco use increases the risk of oral cancer.<sup>16</sup>

There is limited but ongoing research on the health effects of e-cigarettes; and even more limited research on the effects to oral health. There are no rigorous scientific studies that show they are safe for use. The CDC survey published in 2013 showed that e-cigarette use in middle school and high school students doubled between 2011 and 2012.<sup>17</sup> As e-cigarette use continues to rise, CHDP providers should discourage its use because of the unknown health consequences and potential addiction.

“**Meth mouth**” is a common term used to describe the severe oral health damage caused by methamphetamine (MA) use.<sup>18</sup> Oral manifestations that are associated with MA use may include:

- Xerostomia (dry mouth) which can lead to:
  - Thick and stringy saliva
  - Shiny mucosa
  - Cracked lips and sores in the corner of the mouth
  - The appearance of a dry, red, raw tongue
  - Difficulty with swallowing and speaking
- Increase in yeast/fungal infections on the tongue
- Strong craving for sugary foods and sweet, carbonated drinks
- Unusual pattern of decay on the facial surfaces of the teeth and in between the anterior teeth due to the high acidity of the drug and the reduced quantity and quality of the saliva
- Bruxism – clenching and/or grinding which can cause flattened, chipped, fractured, worn or loose teeth.

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In addition to these physiological changes, MA users exhibit long periods of poor oral hygiene. Among all MA users, injection users have the highest risk of dental disease.<sup>19</sup> Providers should be aware of the above oral manifestations that are associated with MA use.

**Oral piercing** may be attractive to many teens and young adults; however, there are a number of associated health risks.<sup>20, 21</sup>

- Increased risk of contracting Hepatitis B, Hepatitis C, and/or Herpes Simplex from improperly sterilized piercing equipment.
- Increased risk of oral infection due to high levels of bacteria in the mouth.
- Damage to the teeth – fractured and chipped teeth is one of the most common problems associated with oral piercings. One study reported tooth chipping in 47% of subjects who had an oral piercing for at least 4 years.<sup>22, (19)</sup>
- Gum recession/loss of gingival attachment – frequent hammering from a barbell or other oral jewelry during daily speaking, chewing and swallowing can result in loose teeth and eventual tooth loss.
- Disrupted daily oral functions – altered speech, difficulties with chewing and swallowing and excessive drooling.
- Other complications including nerve damage, prolonged bleeding, tongue swelling (potentially blocking the airway), allergic reaction to metal, jewelry aspiration, and bacteria entering the bloodstream leading to endocarditis.

Advise patients with oral piercing(s) that extra home care is needed. The sooner the oral jewelry is permanently removed, the less likely damage may occur. More information about oral piercings and home care can be accessed at Know Your Teeth, [“What is an Oral Piercing?”](#)

### Children with Special Health Care Needs

Maintaining optimal oral health can be a challenge for all children, however this challenge can be greatly amplified for children with special health care needs. These children may have intellectual, physical and behavioral issues, as well as inadequate assistance with home care and limited access to a dentist. Due to these barriers, children with special needs are in the highest risk category for oral problems.

Some obstacles to oral health for children with special needs include:

- High carbohydrate nutritional needs that increase sugar exposure
- Medication side effects that dry the mouth and/or cause gingival inflammation or fungal infections
- Immune compromises that decrease the body’s ability to combat oral bacteria

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- Jaw anomalies such as open mouth posture that dry the mouth, or protruding/retruding/deviated jaws and malocclusions that hinder oral hygiene access
- Oral habits that compromise tooth structure and oral tissue such as bruxism, lip/cheek biting, thumb/hand sucking, tongue thrusting
- Excessive drooling causing oral and facial ulcers which add to oral hygiene difficulties
- Sensory inabilities such as hearing loss and speech impediments hindering communication of oral hygiene instructions
- Cognitive impairments and lack of fine muscle control decreasing ability to perform oral hygiene activities without the help of others
- Hypersensitivity to oral hygiene items in the mouth and taste of oral hygiene products
- Frightened or combative behaviors during dental appointments resulting from previous and frequent medical treatments
- Overwhelmed caregivers making daily oral hygiene a low priority
- Lack of access to an appropriate dental home to meet the challenges of the individual resulting in neglected, active oral disease.

Some children with special needs may not be able to tolerate care in a traditional office setting without extra precautions, accommodations and/or careful monitoring when receiving dental treatment. For some of these children dental treatment is facilitated in a hospital setting with general anesthesia. General anesthesia can be performed safely, however there are always risks involved. These risks can be avoided by early oral disease prevention efforts. CHDP providers can play a pivotal preventive role in helping this population obtain and maintain oral health and therefore avoid more extensive dental treatment.

### CHDP Providers' Role:

- Consider all the unique issues of each child with special needs; “one-size-fits-all” oral care will not work for this population
- Thoroughly assess the oral cavity, looking for signs of dry mouth, mouth sores, oral habits, malocclusions/jaw anomalies, and decay and gum disease. See [CHDP/ CCS Orthodontic & Craniofacial Referral Guide](#) for visual examples.
- Apply fluoride varnish – a simple procedure that can arrest/prevent decay. For a training on fluoride varnish see [CHDP Dental Training: Fluoride Varnish](#).
- Help caregivers develop a daily oral hygiene routine that works best for the child
- Encourage families to establish a dental home that addresses the specific needs of the child

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- Refer the child for preventive dental appointments every 3-6 months or sooner if a problem is suspected or detected. Obtain a dental referral list from the [local CHDP office](#).
- Establish communication with the child's dentist to ensure that oral and overall health needs are met and contraindications are clear
- Provide precise and detailed documentation on the PM 160 reporting form to facilitate follow-up by CHDP staff on these high risk cases. Include special needs, new and pre-existing medical conditions, areas of concern, and oral problems. See the [CHDP PM160 Dental Guide](#) (under revision as 7/14/2016).

Children with special needs are often uncomfortable and in pain. Oral disease is preventable and does not need to be added to their list of challenges. For these children, not only is a clean and healthy oral environment more comfortable and pleasing, but it is a necessity to achieve overall health.

For additional information about oral health and special needs conditions access [Patients with Special Needs](#) from the School of Dentistry, University of Washington and [Special Needs](#) from the National Institute of Dental and Craniofacial Research.

### Diabetes

Traditionally diabetes in children has been type I, but with the current increase in childhood obesity, the incidence of type II diabetes has risen dramatically. Research has suggested that the relationship between diabetes and periodontal disease goes both ways. Periodontal disease affects the body's ability to control blood sugar and diabetes affects the body's ability to combat periodontal pathogens.<sup>23, 24</sup> Often the first sign of diabetes is diabetic ketoacidosis which manifests as breath with a fruity or acetone odor.

When diabetes is diagnosed or suspected, it is imperative that oral health care be part of the child's treatment. The patient should be asked about symptoms of periodontal disease, including:

- sore and bleeding gums
- bad taste or odor in the mouth
- sensitive or loose teeth
- home care practices

Every patient with diabetes should be referred to a dentist; however, a dental referral is urgent if signs of periodontal disease are also present.

### Oral Health and Pregnancy

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*California Department of Health Care Services, Systems of Care Division  
Child Health and Disability Prevention Program, Health Assessment Guidelines  
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CHDP serves clients up to age 21; providers may treat young pregnant women in this age group. Good oral health care is important during pregnancy. Research suggests an association between periodontitis and pre-term birth/low birth weight. In addition, high levels of cariogenic bacteria in the mother can lead to high caries incidence in infants and toddlers. It has been documented that mothers can transmit cariogenic bacteria to their young children.<sup>25</sup>

Pregnancy is an opportune time to educate the mother-to-be about the importance of both her and her baby's oral health. For more information see "[Oral Health During Pregnancy & Early Childhood: Evidence-Based Guidelines for Health Professionals.](#)"

Pregnancy presents challenges for maintaining optimum oral health. Morning sickness increases acidity in the mouth, which elevates the risk of tooth decay. Hormonal changes can lead to "pregnancy gingivitis" and periodontal disease. Pregnancy oral tumor (pyogenic granuloma) a red, vascular, enlarged area of the gingiva is also linked to hormonal changes and poor oral health. The increased levels of progesterone and estrogen can also cause teeth to loosen, even in the absence of gum disease.<sup>26</sup>

Good oral care includes brushing with fluoride toothpaste twice a day, flossing daily, eating a balanced diet and limiting unhealthy snacks. Dental visits on a regular basis are essential. Early and routine dental care has been shown to be not only safe, but necessary during pregnancy.

Comprehensive dental care is a Medi-Cal benefit for all pregnant women (either full or limited scope) through the Medi-Cal Dental Program (Denti-Cal). Expectant mothers should be encouraged to take advantage of this benefit.

### Best Preventive Practices

Providers can utilize best preventive practices to promote oral health in their CHDP population. Topics defined below include fluoride and dental sealants. See [Table 2, Anticipatory Guidance for Oral Health](#) which contains age-specific messages regarding these topics located at end of the Oral Health Section below.

### Fluoride

Substantial research has been conducted on the relationship between fluoride and the prevention of dental caries.<sup>27</sup> Fluoride is highly effective in preventing the onset of dental caries as well as arresting incipient decay of the enamel. Fluoride acts systemically, but the primary mode of action in preventing caries is topical. Systemic fluoride is ingested (e.g., via fluoridated water or dietary fluoride supplements) whereas topical fluoride acts directly on tooth surfaces. The primary benefit that fluoridated

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water and fluoride supplements provide is a topical protection as they flow with the saliva over the teeth and become incorporated into the enamel.

Toothpaste containing fluoride is widely accepted and decades of research demonstrate its effectiveness and safety.<sup>28</sup> Other forms of fluoride include topical fluoride application in dental and medical offices, and in community settings, as well as home use of fluoride supplements and rinses. Generally speaking, topical fluorides, such as toothpaste, gel, foam and varnish, do not pose a risk for fluorosis (excess incorporation of fluoride during the mineralization phase of enamel formation). Children and adults should brush with fluoride toothpaste for two minutes twice daily. As of February 2014, both AAP and ADA recommend the use of a dab of fluoride toothpaste (size of a grain of rice) for all children prior to age two,<sup>29, 30</sup> and especially for high-risk children.<sup>31, (27)</sup> Older children and adults can use a pea-sized amount of toothpaste. Fluoride rinses are not recommended for children under the age of six years due to the possibility of ingesting the rinse.

Water fluoridation is the most cost-effective way of preventing dental caries, and benefits all residents of the community. Before prescribing fluoride supplements, fluoride levels in the child’s drinking water should be verified with the local water system. Other sources of the child’s drinking water should also be evaluated for fluoride content (bottled, school drinking water, and other sources). For more information see the California Environmental Protection Agency [Fluoridation by Public Water Systems](#).

Some recent studies indicate that fluoride toothpaste is more effective than fluoride supplements (drops) in very young children. However, for older children (ages 2 and older), if water is not fluoridated, chewing fluoride tablets optimizes its topical benefits and should be prescribed according to the table below<sup>32</sup>.

**Table 1 FLUORIDE SUPPLEMENT DOSAGE SCHEDULE – 2010**

Age of the Child	Fluoride Concentration in Community Drinking Water*		
	< 0.3 ppm	0.3 - 0.6 ppm	> 0.6 ppm
Birth to 6 months	None	None	None
6 months to 3 years	0.25 mg/day**	None	None

*California Department of Health Care Services, Systems of Care Division  
 Child Health and Disability Prevention Program, Health Assessment Guidelines  
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Age of the Child	Fluoride Concentration in Community Drinking Water*		
	< 0.3 ppm	0.3 - 0.6 ppm	> 0.6 ppm
3 to 6 years	0.50 mg/day	0.25 mg/day	None
6 to 16 years	1.0 mg/day	0.50 mg/day	None

\*1.0 parts per million (ppm) = 1 mg/liter

\*\* Sodium Fluoride (2.2 mg sodium fluoride contains 1 mg fluoride ion)

Source: [American Dental Association](#), 2010.

While not usually a problem in California, excessive ingestion of fluoride as the teeth are developing can cause a condition known as fluorosis or mottled enamel. Less than 1% of fluorosis cases are severe enough to visibly mottle the enamel. Mild fluorosis, which is found in 97% of fluorosis cases, is not readily visible and actually strengthens the teeth against decay.

It is safe to use fluoridated water to mix infant formula.<sup>33</sup> The United States Department of Health & Human Services' new recommendation is to reduce fluoride levels used in community water fluoridation from 1.0 ppm to 0.7 ppm.<sup>34</sup> This lower fluoride intake reduces the risk of fluorosis from infant formula prepared with fluoridated water. Using fluoridated water might increase the chance of mild fluorosis if a baby is primarily fed infant formula. This does not affect the health of the child and can have a protective effect on the teeth.

Fluoride varnish applications are a particularly effective form of topical fluoride for infants and young children. Evidence shows that fluoride varnish prevents 33-46% of dental caries with an even higher efficacy of 58% in high-risk children.<sup>27</sup> California law allows *anyone* (i.e., not just health professionals) to apply fluoride varnish if prescribed by a physician or dentist (a written protocol is all that is necessary). Thus, fluoride varnish can be applied to teeth in medical offices, clinics, and community settings by medical staff trained in fluoride varnish application. It does not require a dental setting or specialized dental equipment or supplies. When used appropriately, fluoride varnish is safe and effective:

- It is easily tolerated by infants, toddlers and developmentally disabled persons.
- It can be applied as soon as the first tooth erupts.
- It can be applied directly on the teeth in just a few seconds.

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- It can be used in addition to other forms of fluoride (i.e. fluoridated water, supplements, toothpaste, rinses, and other topical treatments).
- It can be applied on a schedule congruent with CHDP well-child visits and childhood immunizations.

The optimal frequency and intervals of fluoride varnish application have not been established.<sup>35</sup> Most studies of fluoride varnish have used two to three applications per year. However, some studies show additional applications are even more effective and pose no danger to young children. Children at high risk of caries should be prioritized for fluoride varnish application beginning in infancy.<sup>27</sup> CHDP providers should offer fluoride varnish application three times a year for children under 6 years of age.\* Children may also benefit from additional fluoride treatments in a dental office.\*\*

Children and adults at high risk for dental caries may benefit from additional exposure to fluoride, including fluoride varnish beyond age 6. Fluoride toothpaste and water fluoridation are essential for caries prevention throughout a lifetime.

### Dental Sealants

Ninety (90%) percent of dental caries in the permanent teeth of children occurs on the pit and fissure surfaces of the posterior teeth.<sup>36</sup> These chewing surfaces are best protected by dental sealants. Dental sealants are thin plastic coatings applied by a dental professional to the pit and fissure surfaces of teeth to provide a physical barrier to decay-causing bacteria. Sealants should be applied soon after eruption of teeth to maximize their ability to prevent caries. A good time to encourage parents to talk to the dentist about getting sealants on their child's teeth is prior to the eruption of the six- and twelve-year molars. These are the teeth most frequently affected by caries. Primary molars can also benefit from sealants, especially for high risk children. Although the Medi-Cal Dental Program (Denti-Cal) only covers sealants on the permanent first and second molars of children under 21, parents may be willing to pay out-of-pocket for the added caries protection afforded by sealants on other teeth. Finally, sealants also benefit adults and can be recommended to parents for their own oral health.

\* Medi-Cal, not CHDP reimburses providers for up to three fluoride varnish applications in a 12-month period for children under 6 years of age. Providers need to bill Medi-Cal separately for fluoride varnish; it cannot be billed using the PM160 (please refer [MMCD All Plan Letter 07008](#)). Some managed care plans provide a fee-for-service "bonus" for fluoride varnish applications provided by their capitated providers. Medical providers should check with their health plan to determine its policy.

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\*\* Denti-Cal will cover a fluoride application once in a six month period at a dental office for patients under 21 years of age.

**Xylitol** is a natural occurring sugar alcohol found in plants, including many fruits and vegetables. It is often used as a sugar substitute, as well as in some medicines for otitis media. Unlike sugar, xylitol is not converted to acid in the mouth. Many studies suggest that frequent use of xylitol reduces the level of decay-causing bacteria in saliva. An added benefit of xylitol use is the re-mineralization of tooth enamel and the repair of early decay. Transmission of cariogenic bacteria from mother to child may be reduced by the daily use of xylitol. Mints or chewing gum containing xylitol should be used 3-7 times daily for optimum total intake of 4-10 grams.<sup>37</sup> If ingested in excessive amounts (greater than 40 grams), xylitol can have a laxative effect. The quantity required for dental benefits is significantly less than this. There is ongoing research to determine the level of effectiveness of xylitol. (Dog owners need to be aware that xylitol is toxic to dogs, even in small amounts.)

For additional information on [Xylitol](#).

### **HEALTH EDUCATION RESOURCES**

#### **AAP Resources**

The American Academy of Pediatrics (AAP) along with the federal Maternal and Child Health Bureau determined that oral health is so often neglected that the Oral Health Initiative was created in 2001. This followed the U.S. Surgeon General's 2000 Report on the State of Oral Health in America. The AAP also released a policy on oral health including the need for a dental home by age one. Since the creation of the initiative, the AAP has developed a comprehensive oral health website for pediatric providers. Some of the resources available on this website are:

- [Provider education & training](#)
- [Oral health practice tools & resources for families](#)
- [Policy statements](#)

#### **CHDP Resources**

The following parent oral health education materials have been developed at an appropriate literacy level. All materials are available online and are freely downloadable. Many are available in at least English and Spanish.

- **Prevent Tooth Decay in Babies and Toddlers** brochure  
This brochure was developed by the CHDP Oral Health Subcommittee for use with families of young children.

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[Prevent Tooth Decay in Babies and Toddlers \(English\)](#). Also available in [Spanish, Chinese, and Korean](#).

- **Fluoride Varnish** brochure  
This brochure was developed by the CHDP Oral Health Subcommittee for use with families following and/or explaining the fluoride varnish application. [Fluoride Varnish -- Helping Smiles Stay Strong \(English\)](#) Also available in [Spanish, Chinese, and Korean](#).
- **Dental Home** brochure  
This brochure was developed by the CHDP Oral Health Subcommittee for use with families. [Every Child Needs a Dental Home \(English\)](#) Also available in [Spanish, Chinese, and Korean](#).

### CHDP Oral Health Educational Resource Guides

The following two resource guides list reputable print and online materials by topic, which provide guidance and educational tips on oral health. Hard copies of the resources listed in the guides may be available at no or low cost.

- [Babies and Young Children \(Birth-5\)](#)  
Topics include: General Oral Health, Preventive Services (Dental Sealants and Fluoride), Diet and Nutrition, Oral Habits (Thumb, Finger and Pacifier Sucking, Teething, and Bruxism), Dental Emergencies, Sedation, and Special Needs.
- [Children and Teens \(6-20\)](#)  
Topics include: General Health, Preventive Services (Dental Sealants, Fluoride, and Xylitol), Diet and Nutrition, Oral Development and Orthodontics (Braces), Mouthguards & Dental Emergencies, Halitosis, Oral Piercing and Dental Grills, Teeth Whitening, Eating Disorders, Tobacco, Methamphetamine Use and Oral Health, Special Needs, and Oral Health and Pregnancy

### Medi-Cal Dental Program (Denti-Cal) Resources

This website provides a list of Denti-Cal dentists by county and lists age-appropriate intervals for dental care.

[Medi-Cal Dental Benefits](#)

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**Table 2 ANTICIPATORY GUIDANCE FOR ORAL HEALTH**

Age	Discuss	Main Message
<b>Infancy: Birth to 12 months</b>	Parents' oral health	Parents' oral health is very important during pregnancy for healthy birth outcomes, and all through life. Parents should brush in the morning and brush and floss before bedtime, using fluoride toothpaste. It is safe to have dental treatment while pregnant. Decayed teeth should be restored and gum disease should be treated before baby is born. Ask dentist about rinses and xylitol gum/mints to help prevent tooth decay in adults. (Do not give any gum to children under 4 years.)
	Dental Home	Every child needs a dental home by age one. Infants should be referred to a dentist to establish a dental home as soon as their first tooth erupts or at least by their first birthday. Frequency of checkups is then determined by the dentist; minimum annual visit. Parents/caregivers and siblings should have a dental home, too.
	Do not spread tooth decay germs	Parents/caregivers and siblings can spread tooth decay germs to infants and toddlers through saliva. Do not share spoons, cups, toothbrushes, etc. Do not use your mouth to test bottle or food temperature or to "clean" pacifier.
	Clean infant's mouth to keep gums healthy	Wipe gums daily with clean damp washcloth before teeth erupt.

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Age	Discuss	Main Message
	Proper toothbrushing	Start cleaning child's teeth as soon as first tooth begins to appear. Brush infant's teeth and gums using small, soft toothbrush with tiny dab (rice grain size) of fluoride toothpaste. Wipe off excess toothpaste. Brushing should be done at least twice each day, morning and bedtime.
	Check infant's teeth daily	Gently push back infant's lips to check all sides of the teeth. Check gums for swelling and/or redness. Look for early signs of decay which include "chalky" white, brown or black spots. Call dentist if any one of these are found.
	Fluoride: Daily supplementation  Toothpaste  Varnish	Beginning at six months, fluoride supplementation (prescription drops), based on fluoride level in drinking water, is needed to strengthen the enamel of developing teeth to help prevent tooth decay. ( <a href="#">Refer to Fluoride Supplement Dosage Schedule</a> )  Using fluoride toothpaste twice daily is appropriate for this age and is the current recommendation by AAP and ADA.  In addition to daily fluoride, fluoride varnish may be applied three times each year at the medical provider's office and additionally twice a year at the dentist.
	Proper feeding practices	Hold infant while feeding. Put infant to bed without a bottle (or sippy cup). Do not prop bottle or allow liquid to pool around infant's teeth.
	Good nutrition for oral health	Breastmilk or formula and solids as directed. No sweet or sticky foods.

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Age	Discuss	Main Message
	Pacifier	Pacifier may be used to help satisfy baby's need for sucking beginning at one month. Do not coat with honey or any other sweet substance. Pacifiers are sized by the age of the infant/toddler.
	Teething	Relieve teething pain by offering a clean cool teething ring or rubbing gums gently with a cold, wet washcloth.
	Cup	Introduce a regular cup at 6 months using breastmilk, formula, or water, at mealtime. Training/sippy cups mimic the bottle. Sipping on a cup/bottle frequently with anything other than water can lead to tooth decay. No juice or sweet drinks in a sippy cup/bottle.
	Weaning from bottle	Help baby give up bottle and drink only from a regular cup by 12 months.
	Injury prevention	Give only age appropriate soft toys. Have dentist's phone number handy for emergencies.

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Age	Discuss	Main Message
	<p>Child with special health care needs</p>	<p>Will likely need more frequent referrals to the dentist, as well as individualized oral homecare, including more frequent brushing with fluoride toothpaste. Due to their complicated medical conditions and likely high risk for dental disease, preventive care is essential for overall health and to reduce the need for extensive dental treatment and/or hospital dentistry.</p> <p>Parents need to brush child's teeth at least twice every day. Special brushes and other aids may be needed as directed by the dentist.</p> <p>Fluoride varnish application is a critical part of their medical visit for this population.</p>

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<p><b>Early Childhood: 1 to 4 years</b></p>	<p>Importance of primary teeth</p>	<p>Emphasize importance of primary teeth for child’s overall health (e.g., speech development, eating habits, self-esteem, permanent teeth spacing).</p>
	<p>Dental home</p>	<p>Every child should have a dental home by age one. Most CHDP children are moderate to high caries risk. Emphasize to parent at each visit to take child to the dentist every six months or at least once a year. Parents/caregivers and siblings should have a dental home, too. They can spread tooth decay germs to young children. Ask dentist about rinses and xylitol gum/mints to prevent tooth decay in adults. (Do not give gum to children under 4.)</p>
	<p>Do not spread tooth decay germs</p>	<p>Do not share things from your mouth to child’s mouth (e.g., food, spoons, cups, straws, toothbrushes) or “clean” a pacifier with your mouth.</p>
	<p>Proper toothbrushing and flossing</p>	<p>For children less than 2 years, brush their teeth gently with a small dab (rice grain size) of fluoride toothpaste on soft, child-size toothbrush. For children 2 years through 4 years, brush their teeth gently with a “pea-size” amount of fluoride toothpaste. Brushing should be done at least twice each day, morning and bedtime. Child is too young to brush own teeth effectively. Parents should begin bedtime flossing of child’s teeth when teeth begin touching each other, usually between 2-6 years.</p>
	<p>Check child’s teeth daily</p>	<p>Gently push back child’s lips to check all sides of the teeth. Check gums for swelling and/or redness. Look for early signs of decay which include “chalky” white, brown or black spots. Call dentist if any one of these are found.</p>

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	Fluoride: Daily supplementation	Continue with fluoride supplementation (prescription drops or tablets), as directed, to strengthen the enamel of the developing teeth to help prevent tooth decay. Use is based on fluoride level in drinking water. ( <a href="#">Refer to Fluoride Supplement Dosage Schedule</a> )
	Toothpaste	Continue twice daily toothbrushing with a “pea-size” amount of fluoride toothpaste.
	Varnish	In addition to daily fluoride, fluoride varnish may be applied three times each year at the medical provider’s office and additionally twice a year at the dentist.
	Good nutrition for oral health	Give child a variety of healthy foods and snacks. If sweet or sticky foods are given, they should be limited in amount and restricted to just after mealtime, followed by tooth brushing.
	Weaning from bottle	No more bottles starting at one year.
Cup	Give all liquids in a (regular) cup. If juice is offered, only give limited amounts of (diluted) 100% juice. No sweet drinks or sodas.	
Pacifiers/digit sucking	If still using pacifier, size should be age appropriate. Do not coat with honey or any sweet substance. Adverse dental effects may begin between ages 2 and 4. Begin to discourage sucking habits early. If habit is difficult to stop, consider a referral to a dentist for an evaluation.	

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	Injury prevention	Emphasize use of helmet and mouthguard for team sports or when using bicycles, scooters, etc. Have dentist’s phone number handy for emergencies. Do not attempt to re-insert an avulsed primary tooth due to the risk of damage to the developing permanent tooth underneath.
	Child with special health care needs	<p>Will likely need more frequent referrals to the dentist, as well as individualized oral homecare, including more frequent brushing with fluoride toothpaste. Due to their complicated medical conditions and likely high risk for dental disease, preventive care is essential for overall health and to reduce the need for extensive dental treatment and/or hospital dentistry.</p> <p>Parents need to brush child’s teeth at least twice every day and floss daily. Special brushes, floss holders and other aids may be needed, as directed by the dentist.</p> <p>Fluoride varnish application is a critical part of the medical visit for this population. Fluoride supplements, varnish, and sealants are important to help protect against tooth decay.</p>
<b>Middle Childhood: 5 to 10 Years</b>	Supervised/Independent tooth brushing	Parent should continue to help child brush. Beginning around age 7-8, the child can brush on their own with parental supervision. Child should brush with a soft toothbrush in the same manner as the parent, using very short back and forth “wiggle-type” strokes, brushing teeth and gums at least twice each day, morning and bedtime, with a small “pea-size” amount of fluoride toothpaste.
	Dental flossing	Child may begin to floss own teeth with the help of a flossing device and parental supervision, at least at bedtime.

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Check child's teeth and gums monthly	Continue to check child's gums for swelling and/or redness and teeth for chalky white, brown, or black spots. Call dentist if either exists.
Dental home	Child should continue to visit dental home every six months, or at least once a year, as advised by dentist. If no dental home exists, it is important to establish one as soon as possible.
Fluoride: Daily supplementation  Toothpaste  Varnish  Rinse	Continue with fluoride tablets based on fluoride levels in the drinking water to help prevent decay. Continue the use of twice daily fluoride toothpaste while brushing, using a "pea-size" amount. Fluoride varnish should be applied in the medical office up to age 6. Children age 6 and above should continue to receive topical fluoride treatments at their dental home to reduce their risk of tooth decay. The use of an <i>Over-the-Counter</i> (OTC) fluoride rinse may be appropriate at this age. Advise parents to discuss with the child's dentist.
Dental sealants	Dental sealants are a highly effective protective coating placed by dental professionals onto the chewing surfaces of at least the permanent molars to prevent decay. Advise parents to ask the dentist about sealants.
Good nutrition for oral health	Give child a variety of healthy foods and snacks. Limit frequency of snacking throughout the day. Sweets and sticky foods, if eaten at all, should be limited and restricted to just after mealtime followed by toothbrushing. Encourage drinking (fluoridated) water and eating fresh fruit rather than drinking juice. No sweet drinks, sodas, or sports drinks.

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<p>Xylitol gum and mints</p>	<p>Xylitol gum and mints help prevent tooth decay by hindering cavity causing bacteria and re-mineralizing tooth enamel. Chew gum for about 5 minutes after meals and snacks. Allow mints to dissolve in the mouth. (Keep away from pets.)</p>
<p>Non-nutritive sucking</p>	<p>Sucking of thumbs, fingers, hands, or objects should be stopped before age 5. After the age of 5 or 6, the shape of the jaw may be affected by the sucking activity. If habit is difficult to stop, consider a referral to a dentist for an evaluation.</p>
<p>Mouthguards and safety equipment</p>	<p>Advise youth to practice safety measures to prevent injuries to the mouth. Mouthguards, helmets and other protective gear are needed for any contact sport, and other activities such as skating, biking, skateboarding, baseball, etc. There are 3 types of mouthguards: “ready to wear” (not recommended), “boil and bite” and “custom fitted” by a dentist. Custom fitted mouthguards are recommended, however they are not a Medi-Cal Dental Program (Denti-Cal) benefit.</p>
<p>Injury prevention and how to handle dental emergencies</p>	<p>In case of fracture or avulsed tooth, dentist should be called as soon as possible. For permanent teeth, hold the tooth by the crown and gently rinse if soiled. If possible, insert and hold tooth in its socket. If not possible, hold tooth in mouth between gums and cheek, or put in milk. Youth should be transported to dentist immediately along with the avulsed permanent tooth. Do not attempt to re-insert an avulsed primary tooth due to the risk of damage to the developing permanent tooth underneath.</p>

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<p>Tobacco use prevention</p>	<p>Advise child and parent not to smoke or use spit tobacco due to harmful effects to general health and specific unhealthy effects on the oral cavity such as oral cancer, disfigurement, and tooth loss from periodontal (gum) disease. Spit or “new” tobaccos are not safe and may also cause cancer. Advise parents to frequently discuss the dangers of smoking/tobacco use. According to the American Cancer Society, children whose parents talked with them about the risks are half as likely to use tobacco.</p>
<p>Children with special health care needs</p>	<p>Will likely need more frequent referrals to the dentist, as well as individualized oral homecare, including more frequent brushing with fluoride toothpaste, special brushes, or other aids as directed by the dentist. Due to their complicated medical conditions and likely high risk for dental disease, preventive care is essential for overall health and to reduce the need for extensive dental treatment and/or hospital dentistry.</p> <p>Parents need to brush child’s teeth at least twice every day and floss daily. Special brushes, floss holders and other aids may be needed, as directed by the dentist.</p> <p>Fluoride varnish application is a critical part of the medical visit for this population. Please note that fluoride varnish is only a Medi-Cal covered <i>medical</i> benefit through age 5. However, California Children’s Services (CCS) eligible special needs children can receive up to 4 applications per year through a Denti-Cal provider. Fluoride supplements, fluoride varnish and sealants are important to help protect against tooth decay.</p>

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<p><b>Adolescent: 11 to 21 Years</b></p>	<p>Oral hygiene</p>	<p>Youth should become familiar with healthy firm gum appearance, as opposed to spongy, swollen and/or bleeding unhealthy gums. They should recognize that healthy teeth have a shiny bright appearance with no “chalky” white, brown or black spots. Dental plaque, a bacterial film, can accumulate on the teeth and lead to gum disease, tooth decay and cause bad breath. Encourage adolescents to be responsible for their own oral health. They should brush with a soft toothbrush using fluoride toothpaste at least morning and bedtime. Floss at bedtime.</p>
	<p>Dental home</p>	<p>Adolescent should continue to visit their dental home every six months, or at least once a year, as advised by their dentist. Stress the importance of a dental home to be continued throughout their lifetime.</p>
	<p>Fluoride: Daily supplementation  Toothpaste  Topical treatment</p>	<p>Continue fluoride supplementation through age 16 (and older if at high risk for caries) in areas without optimum fluoride levels in drinking water.  Continue the use of twice daily fluoride toothpaste while brushing, using a “pea-size” amount.  Encourage discussing with dentist continued need for topical fluoride treatment (varnish, rinse, gel or foam) to reduce risk of tooth decay.</p>
	<p>Dental sealants</p>	<p>All permanent teeth (except 3rd molars) should be erupted by age 12-13. Ask dentist for sealants to coat the chewing surfaces of at least the first and second permanent molars to protect against decay.</p>

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<p>Good nutrition for oral health</p>	<p>Explain importance of healthy snack foods and balanced meals. Sweets or sticky foods, if eaten, should be limited and eaten just after mealtime followed by brushing. Be aware of high sugar and acid content of sodas and power drinks and avoid them. Learn to read food labels for sugar content. Drink fluoridated water.</p>
<p>Xylitol gum and mints</p>	<p>Xylitol gum and mints help prevent tooth decay by hindering cavity causing bacteria and re-mineralizing tooth enamel. Chew gum for about 5 minutes after meals and snacks. Allow mints to dissolve in the mouth.</p>
<p>Orthodontics</p>	<p>Severe malocclusion can increase poor oral health, cause difficulty chewing, speech problems, stress on jaws, and low self-esteem. CHDP providers may refer children with a medically handicapping malocclusion, and full scope Medi-Cal to a Medi-Cal Dental Program (Denti-Cal) orthodontist. Children with limited or no Medi-Cal can be referred to their local CCS program.</p>
<p>Mouthguards and safety equipment</p>	<p>Advise youth to practice safety measures to prevent injuries to the mouth. Mouthguards, helmets, and other protective gear are needed for any contact sport, and other activities such as skating, biking, skateboarding, baseball, etc. There are 3 types of mouthguards: “ready to wear” (not recommended), “boil and bite” and “custom fitted” by a dentist. Custom fitted mouthguards are recommended, however they are not a Medi-Cal Dental Program (Denti-Cal) benefit.</p>

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<p>Injury prevention and how to handle dental emergencies</p>	<p>In case of fracture or avulsed tooth, dentist should be called as soon as possible. For permanent teeth, hold the tooth by the crown and gently rinse if soiled. If possible, insert and hold tooth in its socket. If not possible, hold tooth in mouth between gums and cheek, or put in milk. Youth should be transported to dentist immediately along with the avulsed permanent tooth. Do not attempt to re-insert an avulsed primary tooth due to the risk of damage to the developing permanent tooth underneath.</p>
<p>Adolescents with special health care needs</p>	<p>Will likely need more frequent referrals to the dentist, as well as individualized oral homecare, including more frequent brushing with fluoride toothpaste, special brushes, or other aids as directed by the dentist. Due to their complicated medical conditions and likely high risk for dental disease, preventive care is essential for overall health and to reduce the need for extensive dental treatment and/or hospital dentistry.</p> <p>Help with brushing and flossing may still be needed.</p> <p>Fluoride supplements, topical fluoride treatments and sealants are important to help protect against tooth decay.</p>
<p>Tobacco use prevention</p>	<p>Advise adolescent and parent not to smoke or use spit tobacco due to harmful effects to general health and specific unhealthy effects on the oral cavity such as oral cancer, disfigurement, and tooth loss from periodontal (gum) disease. Spit or “new” tobaccos are not safe and may also cause cancer. Advise parents to frequently discuss the dangers of smoking/tobacco use. According to the American Cancer Society, children whose parents talked with them about the risks are half as likely to use tobacco.</p>

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<p>Oral piercings</p>	<p>Educate adolescents on the complications of oral piercings which include: bad breath, infections, tooth fractures, severe scarring (keloids), nerve damage, receding gums, and bleeding. If adolescent has, or insists on getting piercings, encourage youth to properly maintain and cleanse area due to the high level of bacteria in the mouth.</p>
<p>Eating disorders</p>	<p>Eating disorders such as bulimia (binging/purging) can result in erosion of the tooth enamel from repeated contact with gastric acids. Other oral symptoms may include traumatic lesions such as ulcerations or hematomas on the hard or soft palates, cheek and lip bites, glossitis, candidiasis and angular cheilitis.</p>
<p>Illegal drugs</p>	<p>Drug abuse is harmful to oral health, especially methamphetamines, which can result in grinding down of teeth and extensive tooth decay due to the acidity of the drug, decreased saliva and cravings for high calorie drinks. It is commonly referred to as “meth mouth”.</p>
<p>Pregnant adolescents</p>	<p>Oral health is very important during pregnancy for healthy birth outcomes, and to help avoid pregnancy complications. Pregnant youth should brush in the morning and brush and floss before bedtime, using fluoride toothpaste. It is safe to have dental treatment while pregnant. Decayed teeth should be restored and gum disease should be treated before baby is born. If adolescent experiences morning sickness, advise patient to rinse mouth after each occurrence.</p>

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