

# ORAL HEALTH POLICY AND PRACTICE GUIDELINES

# FOR ORAL HEALTH CARE PROVIDERS TREATING PEDIATRIC PATIENTS

#### GUIDELINES FOR ORAL HEALTH PROVIDERS TREATING PEDIATRIC PATIENTS

#### **Assess Risk and Oral Health Status**

In the knee-to-knee examination (pictured below), the parent and dental care provider sit facing each other, with knees nearly touching. The young child sits on the parent's lap and leans backward so the child's head is in the lap of the dental provider, who can then examine the child's mouth while the child can see their parent and hold the parent's hands. This positioning is beneficial and reassuring to the child as he/she can see their parent. The provider, child, and parent all wear eye protection. The provider also wears a face mask, gown, and gloves. Through this process, the provider can assess growth and development, eruption sequence, hard and soft tissue (extra-oral and intra-oral) injuries, and signs of child abuse or neglect.



#### Advise and Educate

provider.

In general, be willing to be an ongoing source of care for children 12 months of age or younger. Maintain a dental record starting at age 12 months with yearly updates addressing the child's oral health needs to include any special instructions given to the parent/caregiver. Encourage child and family-centered healthy eating and beverage consumption habits.

- $\checkmark$  Choose age-appropriate healthy foods and snacks during planned meals and snacks; limit foods containing added sugar to decrease caries risk.
- ✓ Limit use and frequency of sugary food and drinks, and night-time feedings of anything except water.
- $\checkmark$  Assess fluoride exposure, including fluoride varnish applied in other settings, systemic and topical fluoride, and community water fluoridation.
- $\checkmark$  Encourage fruits and vegetables, or other healthy snack options and dairy products (milk, cheese, cottage cheese, unsweetened yogurt) for snacks.

- ✓ Avoid sugary and sticky foods, such as candy, sugared-based gum, cookies, cakes, fruit roll-ups, and raisins. Foods like crackers and chips tend to get stuck in the biting surfaces of teeth and lead to cavities, so limit these snacks.
- ✓ Drink water between meals. Drinks high in sugar (such as chocolate milk, juices) should be limited to less than 4 ounces once a day and be consumed with a meal.
- ✓ Advise and educate parents/caregivers about practicing good oral hygiene to prevent tooth decay for infants and children.
- ✓ Do NOT put infants to sleep with a bottle, sippy cup, or no-spill cup with formula, milk, or juice products. Do not breastfeed to sleep past the eruption of the first tooth.
- ✓ Do NOT feed infants with a propped-up bottle.
- $\checkmark$  Offer only water from a sippy or no-spill cup.
- ✓ Only offer juice at mealtime; infants should not consume more than 4 ounces of 100% juice daily. Juice is not necessary for a balanced diet and whole fruit should be prioritized.
- $\checkmark$  Wean infants from the bottle by 12 months of age.

# Home Care

<u>Discuss health promotion</u> and self-care practices, home oral hygiene, the use of fluoride, appropriate diet, and nutrition, eating and sugar-sweetened beverage drinking behaviors, and the importance of professional preventive dental visits. Remember to emphasize that bacteria from untreated dental caries in a caregiver/parent can be transmitted to the baby through sharing a toothbrush, pre-chewing food, and cleaning a pacifier with caregiver/parent saliva. These bacteria then can start the caries process in the child.

# For baby and caregiver/parent

- ✓ Wipe gums/teeth twice daily with a soft cloth or baby toothbrush.
- $\checkmark$  The use of fluorides in toothpaste, rinses, and water is safe when used appropriately.
- ✓ Limit food and utensil sharing between caregivers and infants/children to reduce the transmission of bacteria that can cause dental caries.
- Encourage parents/caregivers to practice and to set an example of good oral health habits like flossing and brushing.
- ✓ Avoid cleaning a dropped pacifier or toy with the caregiver's mouth. This will transmit bacteria from caregiver to child.
- $\checkmark$  Do not dip the pacifier in sweetened foods, such as honey, syrup, or sugar.

 $\checkmark$  Do not ingest any food or beverages other than water after the nighttime brushing



# Habits

Infants should NOT be put to sleep with a bottle, sippy, or no-spill cup with formula, milk, or juice products. Only water should be offered in such drinking vessels. Children should be weaned from the breast, the bottle, and the pacifier after one year. The pacifier should never be dipped in sweetened foods such as honey, syrup, and sugar.

Limit food and utensil sharing between mothers or primary caregivers and infants/children to reduce the transmission of tooth-specific bacteria that can cause dental caries. Avoid cleaning a dropped pacifier or toy with saliva. This can transmit bacteria from caregiver to child.

The eruptive process can be a source of stress and pain for children and can be alleviated with age/weight adjusted dose of Motrin or Tylenol. Avoid using topical benzocaine for children under the age of 2 years old due to its toxic properties.

# For infants and toddlers from birth to 3 years

<u>Brushing</u>: Wipe gums with a clean, soft child-size toothbrush or washcloth, after each feeding to establish early good oral health habits before the eruption of the first tooth. Regular cleaning of gums and use of a toothbrush before the eruption of teeth will introduce a baby to the sensation of a toothbrush and make the acceptance easier once the teeth erupt.

Upon eruption of teeth, brush teeth gently with a 'smear' of fluoridated toothpaste twice daily morning and night. There is no need to rinse after brushing when using such a small amount of toothpaste. For children under age 3, a smear amount is used and is about "rice-sized." This is much less than the widely recognized "pea-size" amount previously recommended. This amount limits swallowing but helps with the uptake of fluoride.



**Image 10.** Amounts of fluoridated toothpaste "smear" on yellow/orange brush for 3 years and younger, "pea sized" on blue/green toothbrush for children 3-6 years of age. Clear brush shows amount of toothpaste for 7 years and older.

M. Van Kanegan

**Image 11.** Floss String, Tape, and Flossers. Several types of floss and flossing aids are available, some of them pictured here.



M. Van Kanegan

<u>Flossing</u>: Begin flossing when any two teeth touch. Again, the idea here is to get the child accustomed to the feeling of cleaning in between teeth. Early practice with flossing will lay a habit-forming acceptance and behavior.

#### For children from 3 to 6 years of age

Children do not have the dexterity to brush and floss effectively until they can tie their shoes at approximately 6–8 years of age. Always brush or help brush the child's teeth with a pea-sized drop of fluoridated toothpaste in the morning and at night and floss the child's teeth, especially those that touch.

- ✓ Teach the child to spit out NOT swallow the fluoridated toothpaste.
- ✓ Schedule a dental appointment every six months for cleaning/routine care (more often if indicated by the dental team).
- ✓ Encourage caregivers to supervise children's brushing, including the use of the appropriate

amount of toothpaste, until age 7 or 8 years old or older depending on the maturity of the child.

- ✓ Advise parents on protective factors of oral health care, including establishing a dental home, consistent source of fluoride (toothpaste, drinking water), low cariogenic diet, and twice-daily tooth brushing.
- ✓ Advise parents on age-appropriate injury prevention counseling, such as mouth guards, use of car seats, strapped in while in a stroller, and a child-proofed home environment.

# **Provide Care and Management**

Oral health care providers should develop a comprehensive management plan by providing a dental home for their patients. Beginning after the eruption of the first primary tooth or by age 1, provide oral preventive care as recommended by caries risk assessment.

Assess the barriers to oral health care for young children.

- ✓ Transportation or financial issues.
- $\checkmark$  Competing health issues, especially for those with special needs.
- ✓ Fear and fatalistic attitudes, such as "they are only baby teeth."

Comprehensive treatment of caries.

- $\checkmark$  Restoration or extractions as needed.
- ✓ Amalgam or composite restorations are acceptable.
- ✓ Use of a rubber dam and high-volume evacuation is recommended.

Follow up – have office staff check that patient is following through with home care, schedule follow-up visits and referrals if provided.

#### **Refer and Collaborate**

- ✓ Consult with child's pediatrician for children with high-risk conditions, including those with heart disease, complex medical conditions, or taking multiple medications.
- ✓ For children without a regular source of medical care, assist them in finding a medical home. Maintain current listing of all sources of local medical care.
- ✓ Coordinate fluoride prescription with child's pediatric provider, as appropriate.
- ✓ Communicate with area pediatricians about available oral health services at your practice for children and area offices that are accessible to physically impaired children.
- ✓ Consider collaborating with pediatric health care providers who gives a written referral form for oral health care to the parent/caregiver.

<sup>4</sup> Illinois Department of Public Health. Improving Women's and Children's Oral Health, 2005.

https://dph.illinois.gov/sites/default/files/Improving%20Womens%20and%20Childrens%20Oral%20Health.pdf <sup>5</sup> Massachusetts Department of Public Health. Oral Health Practice Guidelines for Pregnancy and Early Childhood.

Boston, MA; March 2016. <u>https://www.mass.gov/files/documents/2016/10/ne/oral-health-guidelines.pdf</u>.

<sup>6</sup> Healthy People 2030. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion.

<sup>7</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration. Integration of Oral Health and Primary Care Practice. February 2014.

<sup>8</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration. <u>https://www.hrsa.gov/sites/default/files/oralhealth/oralhealthframework.pdf.</u>

<sup>9</sup> New Surgeon General's Report on Oral Health. <u>https://www.cdc.gov/nchs/data/databriefs/db307.pdf. Accessed</u> January 2021.

<sup>10</sup> Gajendra S, Kumar JV. Oral health and pregnancy: a review. N Y State Dent J. 2004 Jan;70(1):40-4. PMID: 15042797. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6555348/</u>.

<sup>11</sup> Casamassimo P, Thikkurissy S, Edelstein B, & Maiorini E. (2009) Beyond the dmft: The Human and Economic Cost of Early Childhood Caries. *The Journal of the American Dental Association*, *140* (6), 650-657. https://doi.org/10.14219/jada.archive.2009.0250

<sup>12</sup> Centers for Disease Control and Prevention. National Center for Health Statistics: FastStats Oral and Dental Health, 2015-2018. <u>https://www.cdc.gov/nchs/data/hus/2019/028-508.pdf</u>

<sup>13</sup> Centers for Disease Control and Prevention. Oral Health.

https://www.cdc.gov/oralhealth/publications/features/pregnancy-and-oral-health.html

<sup>14</sup> Lieff S. Boggess KA. Murtha AP, et al. The oral conditions and pregnancy study: periodontal status of a cohort of pregnant women. *J Periodontol*. 2004; 75:116–126.

<sup>15</sup> Srinivas, S. K., & Parry, S. (2012). Periodontal disease and pregnancy outcomes: time to move on? *Journal of women's health* (2002), 21(2), 121–125. <u>https://doi.org/10.1089/jwh.2011.3023</u>.

<sup>16</sup> Offenbacher S, Katz V, Fertik G, Collins J, Boyd D, Maynor G, McKaig R, Beck J. Periodontal infection as a possible risk factor for preterm low birth weight. J Periodontol. (1996 Oct);67(10 Suppl):1103-13. doi: 10.1902/jop.1996.67.10s.1103. PMID: 8910829.

<sup>17</sup> Links between Oral Health and General Health the Case for Action. Carlton Vic; 2011.

 $\underline{https://www.dhsv.org.au/\ data/assets/pdf \ file/0013/2515/links-between-oral-health-and-general-health-the-case-for-action.pdf.}$ 

<sup>18</sup> Tungare S, Paranjpe AG. Diet and Nutrition To Prevent Dental Problems. [Updated 2020 Aug 11]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. <u>https://www.ncbi.nlm.nih.gov/books/NBK534248/</u>.
<sup>19</sup> Silk H, Douglass AB, Douglass JM, Silk L. Oral health during pregnancy. Am Fam Physician. 2008 Apr 15;77(8):1139-44. PMID: 18481562.

<sup>20</sup> Weintraub, J. A., Prakash, P., Shain, S. G., Laccabue, M., & Gansky, S. A. (2010). Mothers' caries increases odds of children's caries. *Journal of dental research*, 89(9), 954–958. <u>https://doi.org/10.1177/0022034510372891</u>.

<sup>21</sup> Pregnancy Risk Assessment Monitoring System. (2021, March 30). Retrieved November 2020, from <u>https://www.cdc.gov/prams/index.htm</u>.

<sup>22</sup> Pregnancy Risk Assessment Monitoring System. Prevalence of Selected Maternal and Child Health Indicators for all PRAMS sites, Pregnancy Risk Assessment Monitoring System (PRAMS), 2012-2015. Available at: <a href="https://www.cdc.gov/prams/pramstat/pdfs/mch-indicators/PRAMS-All-Sites-2012-2015-508.pdf">https://www.cdc.gov/prams/pramstat/pdfs/mch-indicators/PRAMS-All-Sites-2012-2015-508.pdf</a>.

<sup>23</sup> Boggess, K. A., & Edelstein, B. L. (2006). Oral health in women during preconception and pregnancy: implications for birth outcomes and infant oral health. *Maternal and child health journal*, *10*(5 Suppl), S169–S174. <u>https://doi.org/10.1007/s10995-006-0095-x</u>.

<sup>&</sup>lt;sup>1</sup> American College of Obstetricians and Gynecologists. Committee Opinion 569. Oral Health Care during Pregnancy and Through the Lifespan. August 2013. <u>https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2013/08/oral-health-care-during-pregnancy-and-through-the-lifespan</u>.

<sup>&</sup>lt;sup>2</sup> Illinois Department of Public Health. Maternal Oral Health Practices. PRAMS 2016-2018. https://dph.illinois.gov/sites/default/files/publications/2016-2018-pramsoral-health-infographic.pdf

<sup>&</sup>lt;sup>3</sup> Illinois Department of Healthcare and Family Services. Early and Periodic Screening, 2019. Diagnosis and Treatment Services for Children Illinois' FY2019 CMS-416 Reporting. https://www.illinois.gov/hfs/SiteCollectionDocuments/FFY2019CMS416ReportingOfEPSDTServicesForChildrenF orSharon.pdf

<sup>24</sup> Centers for Disease Control and Prevention. Division of Oral Health, National Center for Chronic Disease
Prevention and Health Promotion. (2021). <u>https://www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html</u>.
<sup>25</sup> Centers for Disease Control and Prevention. *National Health and Nutrition Examination Survey: Analytic*

*Guidelines, 2011–2014 and 2015–2016.* Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2018

<sup>26</sup> Jackson, S. L., Vann, W. F., Jr, Kotch, J. B., Pahel, B. T., & Lee, J. Y. (2011). Impact of poor oral health on children's school attendance and performance. *American journal of public health*, *101*(10), 1900–1906. <u>https://doi.org/10.2105/AJPH.2010.200915</u>.

<sup>27</sup> National Survey of Children's Health 2017: National Performance Measure 13.2: Percent of children who had a preventive dental visit in the past year, Illinois. Retrieved January 2021. Available at: https://www.childhealthdata.org/browse/survey/results?q=6697&r=15.

<sup>28</sup> Patrick, D.L., Lee, R.S.Y., Nucci, M. *et al.* Reducing Oral Health Disparities: A Focus on Social and Cultural Determinants. *BMC Oral Health* 6, S4 (2006). <u>https://doi.org/10.1186/1472-6831-6-S1-S4</u>.

<sup>29</sup> Chalmers NI, Compton RD. Children's Access to Dental Care Affected by Reimbursement Rates, Dentist Density, and Dentist Participation in Medicaid. doi:10.2105/AJPH.2017.303962.

<sup>30</sup> Mofidi, M., Rozier, R. G., & King, R. S. (2002). Problems with access to dental care for Medicaid-insured children: what caregivers think. *American journal of public health*, 92(1), 53–58. https://doi.org/10.2105/ajph.92.1.53

<sup>31</sup> Ventola C. L. (2014). Social media and health care professionals: benefits, risks, and best practices. *P* & *T: a peer-reviewed journal for formulary management*, *39*(7), 491–520.

<sup>32</sup> Guler, E., & Koprulu, H (2011). Preventive measures to reduce the transfer of Streptococcus mutans from pregnant women to their babies. Journal of Dental Sciences, 6(1), 14-18. doi: 10.1016/j.jds.2011.02.003
<sup>33</sup> Clark MB, Douglass AB, Maier R, Deutchman M, Gonsalves W, Silk H, Wrightson AS, Quinonez R, Dolce M,

Dalal M, Rizzolo D, Sievers K. Smiles for Life: A National Oral Health Curriculum. 3rd Edition. Society of Teachers of Family Medicine. 2010 <u>www.smilesforlifeoralhealth.com</u>.

<sup>34</sup> Clark MB, Douglass AB, Maier R, Deutchman M, Gonsalves W, Silk H, Wrightson AS, Quinonez R, Dolce M, Dalal M, Rizzolo D, Sievers K. Smiles for Life: A National Oral Health Curriculum. 3rd Edition. Society of Teachers of Family Medicine. 2010 www.smilesforlifeoralhealth.com.

<sup>34</sup> Barzel R, Holt K, Kolo S. 2018. *Prescribing Opioids for Women of Reproductive Age: Information for Dentists.* Washington, DC: National Maternal and Child Oral Health Resource Center.

<sup>35</sup> U.S. Food & Drug Administration. FDA recommends avoiding use of NSAIDs in pregnancy at 20 weeks or later because they can result in low amniotic fluid. (2020). Available at: <u>https://www.fda.gov/drugs/drug-safety-and-availability/fda-recommends-avoiding-use-nsaids-pregnancy-20-weeks-or-later-because-they-can-result-low-amniotic</u>

<sup>36</sup> Illinois Department of Public Health. Maternal Oral Health Practices, PRAMS 2016-2018. Available at: Illinois PRAMS Survey (2016 – 2018). <u>https://dph.illinois.gov/sites/default/files/publications/2016-2018-pramsoral-health-infographic.pdf</u>. Accessed November 2020.

<sup>37</sup> Centers for Disease Control and Prevention. About Teen Pregnancy. (2019, March 01). Retrieved April 2019, from <a href="https://www.cdc.gov/teenpregnancy/about/index.htm">https://www.cdc.gov/teenpregnancy/about/index.htm</a>

<sup>38</sup> Illinois Department of Public Health. Healthy Smiles Healthy Growth 2018-19. An Assessment of Oral Health Status, Beverage Consumption and Body Mass Index of Third-Grade Children in Illinois. Available at: <u>https://www.dph.illinois.gov/sites/default/files/publications/hshg-201819-report-final-2-21-20.pdf</u>. Accessed November 2020.

<sup>39</sup> Sheiham, A., & Watt, R. G. (2000). The common risk factor approach: a rational basis for promoting oral health. *Community dentistry and oral epidemiology*, 28(6), 399–406. https://doi.org/10.1034/j.1600-0528.2000.028006399.x
<sup>40</sup> Duijster, D., de Jong-Lenters, M., Verrips, E., & van Loveren, C. (2015). Establishing oral health promoting behaviours in children - parents' views on barriers, facilitators and professional support: a qualitative study. *BMC oral health*, 15, 157. <a href="https://doi.org/10.1186/s12903-015-0145-0">https://doi.org/10.1186/s12903-015-0145-0</a>

<sup>41</sup> Illinois Department of Public Health. Maternal, Child & Family Health, Maternal and Child Health Services Title V Block Grant.

https://dph.illinois.gov/sites/default/files/publications/FY2021%20IL%20Title%20V%20Action%20Plan%20\_0730 20.pdf

<sup>42</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration. Integration of Oral Health and Primary Care Practice. February 2014.

https://www.hrsa.gov/sites/default/files/hrsa/oralhealth/integrationoforalhealth.pdf.

<sup>43</sup> Qualis Health. Oral Health Integration, Oral Health Integration Implementation Guide. https://www.qualishealth.org/sites/default/files/Guide-Oral-Health-Integration.pdf

<sup>44</sup> Favero, V., Bacci, C., Volpato, A., Bandiera, M., Favero, L., & Zanette, G. (2021). Pregnancy and Dentistry: A

Literature Review on Risk Management during Dental Surgical Procedures. Dentistry journal, 9(4), 46. https://doi.org/10.3390/dj9040046.

<sup>45</sup> Lin HK, Fang CE, Huang MS, Cheng HC, Huang TW, Chang HT, et al. Effect of maternal use of chewing gums containing xylitol on transmission of mutans streptococci in children: a meta-analysis of randomized controlled trials. Int J Paediatr Dent. 2015.

<sup>46</sup> Centers for Disease Control and Prevention. Community Water Fluoridation. Water Fluoridations Basics. https://www.cdc.gov/fluoridation/basics/index.htm#:~:text=Fluoride%20benefits%20children%20and%20adults.kee ping%20teeth%20strong%20and%20healthy <sup>47</sup> U.S. Preventive Services Taskforce. USPSTF Bulletin. May 11, 2021.

https://www.uspreventiveservicestaskforce.org/uspstf/sites/default/files/file/supporting documents/dental-cariesyoung-children-screening-draft-rec-bulletin.pdf

<sup>48</sup> Handbook for Providers of Healthy Kids Services. Chapter HK-200 Policy and Procedures for Health Care for Children. https://www.illinois.gov/hfs/SiteCollectionDocuments/hk200.pdf

<sup>49</sup> Griffin SO, Wei L, Gooch BF, Weno K, Espinoza L. Vital Signs: Dental Sealant Use and Untreated Tooth Decay Among U.S. School-Aged Children. MMWR Morb Mortal Wkly Rep 2016; 65:1141-1145. DOI: http://dx.doi.org/10.15585/mmwr.mm6541e1