



Strategies to Improve Health by Enhancing the Integration of Oral Health and Maternal and Child Health Programs

Purpose

This document is intended to help state^a and local officials, health directors, maternal and child health (MCH) program directors, oral health program directors, and others understand how to improve oral health and general health within the MCH population by better integrating oral health activities and information into state and local MCH programs. The MCH population comprises all pregnant women, infants, children, adolescents, and their families, including women of reproductive age, fathers, and children with special health care needs.

Importance of Oral Health

The Surgeon General's report *Oral Health in America* emphasizes that oral health is an essential component of overall health and well-being and that a coordinated effort is needed to reduce environmental, social, educational, health system, and financial barriers to achieving optimal oral health for everyone.¹ Dental caries (tooth decay) is the most prevalent chronic disease affecting children.² Oral disease impacts a child's ability to eat, thrive, speak, and learn.³ Pain from an untreated oral problem may affect a child's school attendance, attention, and social well-being.⁴ Untreated oral disease, especially dental caries, accounts for an estimated 51 million school hours lost per year for children and can result in developmental delays and a lifetime of chronic health problems.⁵ When children's acute oral problems are treated, pain is alleviated, and a child's ability to learn and attend school improves.⁶



Risk factors for suboptimal oral health are also associated with other childhood morbidities. For example, frequent and prolonged use of baby bottles or sippy cups with milk, formula, or beverages high in sugar can cause dental caries and can also increase risk for ear infections.^{1,7} Some eating behaviors that contribute to childhood obesity (frequent snacking on high-sugar foods and beverages) or eating disorders (frequent vomiting in bulimia nervosa) may also initiate the formation of dental caries. Physical abuse often involves injury to the mouth as well as to the head and neck.⁸ Dental caries and oral trauma can be prevented, however, through good oral hygiene practices, optimal use of fluorides (including community water fluoridation) and dental sealants, healthy eating choices, use of protective equipment in motor vehicles and during sports and recreation, and prevention of violence.

A mother's health is intimately connected to her child's health. Recent research suggests an association between periodontal disease in pregnant women and preterm and low-birthweight infants.^{9,10} Other studies have shown a direct transmission of decay-causing bacteria by mothers to their children's mouths, thus making dental caries a transmissible, infectious disease.¹¹ Ensuring that mothers have direct access to preventive services and treatment is important for improving both the mother's and the child's oral health.



The *Healthy People 2010* initiative lists 17 specific oral health objectives to prevent and control oral diseases and reduce oral health disparities; additional state oral-health-specific objectives are also in place.¹² The Title V MCH Block Grant includes a national performance measure related to dental sealants, and at least 27 states and the District of Columbia (DC) included additional oral-health-specific performance measures in 2005.¹³ Oral health questions also are part of the Behavioral Risk Factor Surveillance System (BRFSS) and the Pregnancy Risk Assessment and Monitoring System (PRAMS).^{14,15}

Benefits of Integrating Oral Health and MCH Activities

Integrating oral health activities and information into state and local MCH programs can lead to desirable outcomes for the MCH population, such as:

- Improved identification of oral diseases, injuries, and craniofacial disorders, with appropriate, timely referral for care and coordination of services.
- Increased understanding of the interaction between oral diseases and other diseases and conditions.
- More frequent health-promoting behaviors such as tooth-brushing with fluoride toothpaste, appropriate feeding and eating practices, using mouthguards and helmets during sports and recreational activities, using appropriate child-restraint devices in motor vehicles, and tobacco-use-cessation efforts.
- Increased access to preventive services and all aspects of health care, especially for families with low incomes or those with inadequate or no insurance.
- Early detection and prevention of family violence, especially child abuse and neglect, with fewer children experiencing advanced oral disease and trauma that often require extensive treatment and hospitalization.
- Opportunities for improved birth outcomes, less-frequent ear infections, and prevention of obesity.



Examples of Areas for Collaboration

- State, county, or local needs assessment: Many oral health programs use an oral-health-assessment tool, the *Basic Screening Survey* (BSS), to collect oral health data on MCH populations, usually in Head Start or school settings. Height, weight, and body-mass-index measurements often can be collected at the same time, or oral health can be one health station in a multidisciplinary screening for vision, hearing, and other health parameters. As Title V requires each state MCH program to conduct a needs assessment every 5 years, these data can be used to inform this needs assessment.
- Integrated data systems: Some states that collect health data, including data on oral health status, on a regular basis have integrated data into one system that can be accessed by multiple programs. This is useful for directing interventions and resources to high-risk populations and tracking populations and health trends.
- Topic-focused or population-focused coalitions or task forces: Oral health professionals participate in coalitions such as *Healthy People 2010* and Healthy Mothers, Healthy Babies. The Association of State and Territorial Dental Directors (ASTDD) supports broad-based oral health forums and development of action plans in states and territories around issues such as Head Start and children with special health care needs.
- School-based health centers: Some centers provide oral health preventive services or treatment services on site, link to mobile dental clinics, or provide referrals for comprehensive oral care in community clinics or private practices. ASTDD has developed profiles of school and adolescent oral health services for more than 20 states.



- Health promotion and disease prevention programs: Oral health can be an integral part of health promotion and disease prevention programs at health fairs, cultural events, or other venues, with coordinated materials that provide consistent messages in various languages.
- Tobacco-use prevention and control: Many oral health professionals are trained in tobacco-use-prevention and cessation methods and can be integral team members in comprehensive clinical, education, and advocacy efforts.
- Medical and dental homes: All health professionals and advocates can promote medical and dental homes for the MCH population, with links to both, and good referral networks for specialty care. Co-locating services can improve access and linkages for families.
- Medicaid and State Children's Health Insurance Program (SCHIP): Enrolling beneficiaries in Medicaid and SCHIP at Special Supplemental Nutrition Program for Women, Infants and Children (WIC) sites, community agencies, health departments, health clinics, and dental offices can increase the number of families covered, help prevent gaps in coverage, and help families understand benefits.
- Shared services: Shared care-coordination and patient-navigation services, family support programs, and advocacy programs can help families navigate complex medical and oral health care systems.
- Risk assessment and anticipatory guidance: All health professionals can use basic risk-assessment approaches and anticipatory guidance for the MCH population using the *Bright Futures* guidelines.¹⁶
- School health curricula: Oral health should be an integral part of school health curricula, starting in pre-school and continuing through high school.
- Emergency and disaster preparedness: Oral health professionals can be trained to serve as key team members at all levels of emergency and disaster preparedness.
- Nutrition: Healthy infant feeding practices, food choices, and eating habits are common goals for programs that engage in outreach to the MCH population.



Resources

Association of State and Territorial Dental Directors. A–Z Topics. <http://www.astdd.org/index.php?template=aztopics.html>.

Children's Dental Health Project. CDHP Issue/Policy Briefs. <http://www.cdhp.org/CDHPPubs/IssuePolicyBriefs.asp>.

Integrating Oral Health and Maternal and Child Health Programs. MCH DataSpeak Web Conference. http://www.mchb.hrsa.gov/mchirc/dataspeak/events/sept_04.

MCHB Title V Information System. <https://perfdata.hrsa.gov/mchb/mchreports/search/search.asp>.

National Maternal and Child Oral Health Resource Center. <http://www.mchoralhealth.org>.

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Endnote

- a. In general, throughout this paper, the term “state” or “states” also refers to U.S. territories and jurisdictions.

This publication has been produced by the Association of State and Territorial Dental Directors (ASTDD) and the National Maternal and Child Oral Health Resource Center.

Development of this publication was supported by project number U44MC00177 to ASTDD's Partnership for Improving State Oral Health Leadership and project number H47MC00048 to the National Maternal and Child Oral Health Resource Center, Georgetown University. Both projects were funded by the Maternal and Child Health Bureau (Title X, Social Security Act), Health Resources and Services Administration, U.S. Department of Health and Human Services.

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