

Oral Health Section
Division of Public Health
North Carolina Department of Health and Human Services

Strategic Plan for July 2009 to June 2010

Mission:

To promote conditions in which all North Carolinians can achieve oral health as part of overall health.

Vision:

North Carolina children – cavity-free forever.

People We Serve:

- Children
- Adults who influence the health of children
- Healthcare providers

Goals:

To work towards eliminating disparities in oral health by using best practices* to:

- Reduce oral diseases through prevention, education, and health promotion services
- Monitor the public's oral health
- Promote access to dental care
- Provide professional education

We work towards these goals in partnership with:

- Healthcare professionals and professional organizations.
- Organizations that support improved health in their communities.
- Individuals who care about our children's health.

* The Association of State and Territorial Dental Directors (ASTDD) in conjunction with the Centers for Disease Control & Prevention (CDC), Division of Oral Health defines a **Best Practice Approach** as a public health strategy that is supported by evidence for its impact and effectiveness. Evidence includes research, expert opinion, field lessons and theoretical rationale.

Introduction:

The North Carolina Oral Health Section has a long and distinguished history going back ninety-one years. At the request of North Carolina dentists to the state legislature, it became the first dental public health program in the nation in 1918. The program is nationally recognized for providing statewide dental health prevention and education services, with an emphasis on children. The mission of the Section is to promote conditions in which all North Carolinians can achieve optimal oral health as a part of overall health.

Prevention is the foundation of oral health. Tooth decay is the most common, chronic infectious disease of childhood, more common than asthma. It starts as a reversible white spot on the tooth and without preventive intervention, progresses to visible irreversible tooth decay that can lead to tooth loss, pain and suffering. No matter how many treatment resources for dental disease are established in the state, treatment alone cannot solve the problem. Lifelong prevention and management of this communicable disease requires essential public health interventions.

With a focus on the three principles of public health – assessment, policy development and assurance – the Section’s goal is to eliminate disparities in oral health through prevention and education. To achieve this goal, the Section carries out best-practice based services, as defined by the Centers for Disease Control and Prevention (CDC), which promote community fluoridation and school-based dental sealant programs as the two most effective public health measures to reduce dental decay.^{1,2,3} The Section has a staff of public health dentists, public health dental hygienists, a health educator, an education media specialist and support staff, most residing in the communities they serve and working in cooperation with local health departments. They carry out population-based public health activities devoted to 1) Dental Disease Prevention Services, including community water fluoridation, dental sealants and school-based weekly fluoride mouthrinse; 2) Dental Health Education and Health Promotion; 3) Oral Health Monitoring Systems; 4) Access to Care, including the nationally recognized collaboration with physicians in the Medicaid-funded *Into the Mouths of Babes* program; and 5) Dental Public Health Residency Training. Each year Section staff provide direct, school-based services for over 300,000 children and preventive dental services that impact six million citizens.

The last 40 years have seen dramatic reductions in the prevalence of tooth decay, thanks in part to the efforts of the dental public health programs in our state.⁴ We know this because North Carolina has the most comprehensive oral health surveillance system in the nation.^{5,6,7,8} In addition to large periodic statewide surveys of children’s oral health, each year the Section conducts standardized assessments for kindergarten and fifth grade children; data are used for disease surveillance and tracking disease patterns. The results of the 2003-04 North Carolina Statewide Children’s Dental Survey show that, after decades of decline, the trend in tooth decay reduction in permanent teeth is leveling off, while the amount of tooth decay in baby teeth is increasing. While the Oral Health Section’s annual kindergarten and fifth grade surveillance data report only obvious tooth decay, the 2003-04 NC Statewide Children’s Dental Survey data report both obvious tooth decay and early tooth decay (reversible white spots). Results show that the actual amount of decay is underestimated by 35 to 40% when early cavities are not included.⁸ These early cavities are the ones that can repair (remineralize) in response to fluoride therapy and other preventive oral health interventions. The presence of so much early decay reinforces the need to enhance the preventive strategies the Section has in place so these early cavities do not progress to the point that they have to be filled to prevent unwanted consequences on people’s lives.⁹

Thus, although improving historically, oral health disparities and difficulties with access to dental care still exist in North Carolina⁸ and are a continued concern for the Section. The Section continues to address these challenges by revising old programs and developing new strategies. The July 2009-June 2010 annual Strategic Plan for the Oral Health Section supports the Surgeon General's 2003 *Call to Action* by outlining a state oral health plan to improve the quality of life for all North Carolinians and reduce disparities in oral health.¹⁰

GOAL I. Reduce oral disease through prevention/education/health promotion services

Strategies	Action Steps	Data/Evaluation	Outcomes/Measures of Progress
<ul style="list-style-type: none"> Maintain the proportion of citizens on community water systems who receive the benefits of community water fluoridation. 	<ul style="list-style-type: none"> Provide financial and technical assistance with fluoridation. 	<ul style="list-style-type: none"> CDC’s Water Fluoridation Reporting System (WFRS). 	<ul style="list-style-type: none"> Eighty-eight percent of North Carolinians on community water systems continue to receive the benefits of fluoridation.
<ul style="list-style-type: none"> Work with providers of services to high-risk children, age birth to 3½. 	<ul style="list-style-type: none"> Provide training and support for medical professionals providing oral preventive services through the Into the Mouths of Babies (IMB) program in an effort to address early childhood cavities.¹⁰ Work with Medicaid to increase the number of preventive services provided by physicians and dentists for high risk children. Develop educational materials for parents and caregivers of high-risk children in preschool programs such as Early Head Start. 	<ul style="list-style-type: none"> Reports submitted to Section Chief and Management Team. Quarterly Medicaid reports. Reports submitted to Section Chief and Management Team. 	<ul style="list-style-type: none"> Continue providing training and support for approximately 425 IMB medical practices. An increase in the number of Medicaid-eligible children ages one to 3½ receiving preventive dental services. An increase in the number of educational materials available from the OHS.
<ul style="list-style-type: none"> Conduct a weekly fluoride mouthrinse program (FMR) for high-risk elementary schoolchildren. 	<ul style="list-style-type: none"> Conduct FMR in schools with high levels of dental disease, as determined by the annual kindergarten assessment 	<ul style="list-style-type: none"> FMR Rosters. 	<ul style="list-style-type: none"> Maintain FMR program for approximately 77,000 children in targeted elementary schools rinsing weekly for a minimum of 28 weeks.

GOAL I. Reduce oral disease through prevention/education/health promotion services (continued)

Strategies	Action Steps	Data/Evaluation	Outcomes/Measures of Progress
<ul style="list-style-type: none"> Conduct a preventive dental sealant program for children at high risk for cavities. 	<ul style="list-style-type: none"> Provide sealants in school-based projects for at-risk children. Continue sealant promotions using public/private partnerships. Private dentists and public health practitioners place sealants in a variety of settings (e.g., schools, community colleges, churches). 	<ul style="list-style-type: none"> Sealant project reports. RDH Weekly Service Report. 	<ul style="list-style-type: none"> Report number of high-risk grade K through 5 students who received sealants and number of sealants placed.
<ul style="list-style-type: none"> Increase the awareness of children and others in the community about dental diseases and healthy habits. 	<ul style="list-style-type: none"> Provide educational services in conjunction with direct services for children. Work with Local Educational Authorities (LEAs), School Health Advisory Councils (SHACs), Parent Teacher Associations (PTAs), Parent Teacher Organizations (PTOs), etc., on issues of importance to oral health. 	<ul style="list-style-type: none"> RDH Weekly Service Report. Exhibit Tracking and evaluation form. 	<ul style="list-style-type: none"> Adjust the level of activity to reflect the loss of staff positions and budget reductions by Oral Health Section public health dental hygienists working on these issues.
<ul style="list-style-type: none"> Consider the adoption or advancement of information and innovations to impact oral diseases. 	<ul style="list-style-type: none"> Use reviews published throughout the year to assess innovations with the potential to reduce dental diseases for possible implementation and communicate to professionals as appropriate. 	<ul style="list-style-type: none"> Evidence-based studies, peer reviewed journals, public health list serves, and input from dental related leadership organizations. 	<ul style="list-style-type: none"> Implementation of new innovations or concepts into the program as appropriate.

GOAL I. Reduce oral disease through prevention/education/health promotion services (continued)

Strategies	Action Steps	Data/Evaluation	Outcomes/Measures of Progress
<ul style="list-style-type: none"> Collaborate with key dental health leaders to gain support for dental public health issues. 	<ul style="list-style-type: none"> Convene the NC Committee for Dental Health quarterly. 	<ul style="list-style-type: none"> Meeting minutes and activities. 	<ul style="list-style-type: none"> Suggest ways to broaden preventive dental health programs to reach more people and investigate the feasibility of developing a public relations program which supports the statewide preventive dental health program.
<ul style="list-style-type: none"> Promote Dental Health Literacy (knowledge, understanding, and communication). 	<ul style="list-style-type: none"> Include Kindergarten and 5th Grade Calibrated Oral Health Assessment data in sources such as NC Medical Journal. Develop and distribute age-appropriate educational materials. Provide educational materials for persons with limited English proficiency (LEP). Increase public awareness of importance of cleaning baby's teeth with fluoride toothpaste. Explore and develop a plan to use electronic tools (e.g., internet, webinars, Web site) to deliver educational messages. Distribute the Maternal Child Health Bureau Expert Panel updated topical fluoride recommendations for high risk children. 	<ul style="list-style-type: none"> Monitor State Center for Health Statistics (SCHS) Web site and NC Comprehensive Assessment for Tracking Community Health (NC CATCH). Submit new educational materials to Section Management Team (SMT) for approval. Reports submitted to Section Chief and SMT. Submit plan to use electronic tools for educational messages to SMT. 	<ul style="list-style-type: none"> Results are included and distributed. Number of new materials and/or campaigns developed. Implementation of electronic tools.

GOAL I. Reduce oral disease through prevention/education/health promotion services (continued)

Strategies	Action Steps	Data/Evaluation	Outcomes/Measures of Progress
<ul style="list-style-type: none"> • Collect data on dental health services. 	<ul style="list-style-type: none"> • Maintain current data on services provided by OHS field staff. • Monitor number of children on FMR. • Monitor the number of North Carolinians receiving fluoridated community water. • Monitor the number of eligible Medicaid children receiving IMB services. • Respond to requests for program information. 	<ul style="list-style-type: none"> • RDH Weekly Service Report, program justification, exhibit tracking form. • FMR reporting forms. • CDC’s Water Fluoridation Reporting System (WFRS). • Quarterly Medicaid reports. • County Diagnoses. • Reports submitted to SMT. 	<ul style="list-style-type: none"> • Use data for program development, accountability, presentations, educational materials, and publications. • Report the number of children and schools participating in FMR Program. • Report the percentage of North Carolinians on community water systems who receive the benefits of fluoridation. • Increase the number of high-risk children receiving IMB services. • Provide information for programmatic queries.

GOAL II. Monitor the public's oral health

Strategies	Action Steps	Data/Evaluation	Outcomes/Measures of Progress
<ul style="list-style-type: none"> • Provide on-going surveillance of oral/pharyngeal conditions. 	<ul style="list-style-type: none"> • Conduct calibrated kindergarten and fifth grade assessments. • Post assessment data on OHS Web site. • Work with State Center for Health Statistics and NC Catch to maintain assessment data on state web site. 	<ul style="list-style-type: none"> • Calibrated kindergarten and fifth grade assessment data.¹¹ • BRFSS data.¹² • PRAMS data.¹³ • CHAMP data.¹⁴ • NC Cancer Facts and Figures.¹⁵ 	<ul style="list-style-type: none"> • Use of data to monitor and adjust OHS program. • Use of data by other healthcare organizations. • Use of data by School Health Advisory Councils.
<ul style="list-style-type: none"> • Conduct periodic statewide surveys of oral health status and related conditions. 	<ul style="list-style-type: none"> • Review the results of past statewide surveys to develop programs to improve the oral health of citizens. • Review opportunities for the next statewide survey. 	<ul style="list-style-type: none"> • 2003-2004 NC Statewide Children's Dental Survey database. 	<ul style="list-style-type: none"> • Progress in planning and developing the next state-wide survey.

GOAL III. Promote access to dental care

Strategies	Action Steps	Data/Evaluation	Outcomes/Measures of Progress
<ul style="list-style-type: none"> • Increase access to dental care for children. 	<ul style="list-style-type: none"> • Provide dental screening, referral and follow-up services for children: <ul style="list-style-type: none"> ○ Kindergarten and fifth grade, ○ Kindergarten registration, ○ Preschool, ○ School nurse requests, and ○ <i>Give Kids a Smile!</i> • Provide sealants for children in kindergarten through third grade in targeted schools. • Collaborate with school nurses, social workers, etc., to assist families in securing needed dental care for their children. • Provide technical assistance to maintain or improve local health departments and not-for-profit groups wishing to start new dental clinics. • Provide technical assistance regarding efforts to train the appropriate number of dental and dental hygiene students in NC to best meet the needs of our citizens. • Contact local health directors and the Department of Corrections Dental Director to offer educational sessions on dental public health for dental hygienists to meet the requirements for working “Under Direction”. 	<ul style="list-style-type: none"> • Calibrated kindergarten and fifth grade assessment data.¹² • Weekly Service Reports. • Reports from field staff. • Maintain a list of safety-net dental clinics. • Discussions by SMT. • Keep a database of the dental hygienists trained to work “Under Direction.” 	<ul style="list-style-type: none"> • Compile and report number of assessments, screenings, referrals, and follow-ups provided for targeted students. • Report the number of sealant places on children’s teeth. • Report the number of requests for technical assistance in order to maintain/increase the number of dental clinics operating. • Participate in discussions regarding the number of dental and dental hygiene students being trained. • Respond to all requests for training of locally employed dental hygienists required to work “Under Direction”.

GOAL III. Promote access to dental care (continued)

Strategies	Action Steps	Data/Evaluation	Outcomes/Measures of Progress
<ul style="list-style-type: none"> • Increase access to dental care for children. (Continued) 	<ul style="list-style-type: none"> • Work with healthcare providers to : <ul style="list-style-type: none"> ○ Monitor the provision of IMB oral preventive services. ○ Support medical providers participating in the Into the Mouth of Babes program. ○ Continue to pilot Carolina Dental Home (CDH) in Craven/Pamlico/Jones Counties and expand to Carteret County to increase collaborations between physicians and dentists. ○ Participate in NC Dental Society Access to Care Committee. ○ Enhance medical provider knowledge to increase the quality, appropriateness, and effectiveness of referring young children to a dental home. 	<ul style="list-style-type: none"> • Quarterly Medicaid Reports. • Medicaid reimbursement data. • Monitor minutes of CDH Operations Committee. • County Program Plans. 	<ul style="list-style-type: none"> • An increase in number of children receiving IMB services. • Continue training and support for approximately 425 medical practices. • Progress in developing CDH pilot program and numbers of children impacted. • Continue to develop and evaluate the Priority Oral Health Risk Assessment and Referral Tool (PORRT).

GOAL III. Promote access to dental care (continued)

Strategies	Action Steps	Data/Evaluation	Outcomes/Measures of Progress
<ul style="list-style-type: none"> Enhance parent awareness of oral health 	<ul style="list-style-type: none"> As per NC IOM 1999 Dental Care Access Task Force recommendation #22¹⁶, convene a committee to identify educational materials to educate parents of Medicaid eligible high risk children about the importance of ongoing preventive dental care. Provide educational materials for people with limited English proficiency (LEP). Develop and/or update materials to increase dental health literacy among high risk populations. Partner with UNC GSGPH on the Zero Out Early Childhood Cavities (ZOE) Project. 	<ul style="list-style-type: none"> Discussions by SMT. Get feedback from Early Childhood Oral Health Collaborative (ECOHC). Get feedback from focus groups. Report to SMT. Feedback from focus groups of Early Head Start (EHS) parents. 	<ul style="list-style-type: none"> Develop, translate, duplicate and distribute educational materials. Record the number of materials developed. Increased oral health knowledge.

GOAL IV. Provide professional education

Strategies	Action Steps	Data/Evaluation	Outcomes/Measures of Progress
<ul style="list-style-type: none"> Enhance healthcare providers' ability to intervene/support better oral health outcomes. 	<ul style="list-style-type: none"> Contact local health directors and the Department of Corrections Dental Director to offer training on dental public health for dental hygienists to meet the requirements for working "Under Direction". Provide training as needed. Provide number of attendee who attended presentations given to local and state healthcare professionals, dental societies, universities, community colleges, etc., by OHS staff. Provide written or electronic educational materials to healthcare professionals and decision makers including articles in professional publications promoting the Oral Health Section mission. 	<ul style="list-style-type: none"> Keep a database of the public health dental hygienists trained to work "Under Direction." Weekly Report of Services, surveys, SMT. Reports submitted to SMT. 	<ul style="list-style-type: none"> Record number of public health dental hygienists trained for "Under Direction" services. Record the number of attendees at presentations. Record the number of articles provided to professional organizations for publication.
<ul style="list-style-type: none"> Expand the dental public health workforce. 	<ul style="list-style-type: none"> Provide Residency training in the American Dental Association (ADA) recognized specialty of Dental Public Health. Increase awareness of dental public health issues among health professionals. 	<ul style="list-style-type: none"> Residency Reports. Poll of field staff in spring of year. Reports from supervisors. 	<ul style="list-style-type: none"> Number of residents who complete one year residency projects. Number of health professional students rotating through OHS. Report the number of and respond to all requests for technical assistance in order to maintain/increase the number of dental clinics operating.

Our Partners:

American Academy of Family Physicians
American Academy of Pediatrics
American Association of Public Health Dentistry
Association of State and Territorial Dental Directors
Centers for Disease Control and Prevention (CDC) Division of Oral Health
Centers for Medicare and Medicaid (CMS)
Faith-based organizations
Head Start/Early Head Start and Migrant Head Start
Health Resources Services Administration (HRSA)
Healthy Carolinians
Latino advocacy groups
Local and regional health departments
Local, state and national dental and medical professional organizations
Maternal and Child Health Bureau
MCH Center for Leadership in Pediatric Dentistry, UNC School of Dentistry, Chapel Hill
Medical residency programs
More at Four
National Institute for Dental and Craniofacial Research (NIDCR), National Institutes for Health (NIH)
North Carolina Academy of Family Physicians
North Carolina Academy of Pediatric Dentistry
North Carolina Agromedicine Institute
North Carolina Association of Local Health Directors
North Carolina Citizens for Public Health
North Carolina Committee for Dental Health
North Carolina Community Colleges, Colleges and Universities
North Carolina Dental Assistants Association
North Carolina Dental Hygiene Association
North Carolina Dental Society
North Carolina Department of Public Instruction and Local Educational Authorities (LEAs)
North Carolina Division of Aging and Adult Services
North Carolina Division of Medical Assistance (Medicaid)
North Carolina Division of Public Health, Social Matrix Team
North Carolina Institute of Medicine
North Carolina Institute of Public Health
North Carolina Medical Society
North Carolina Office of Rural Health and Community Care
North Carolina Pediatric Society
North Carolina Society of Public Health Education (NCSOPHE)
North Carolina State Board of Dental Examiners
Old North State Dental Society
Old North State Medical Society
Other public health agencies and advocacy groups
Other Sections within Division of Public Health
Parent/Teacher Associations (PTAs)
Parent/Teacher Organizations (PTOs)
School Health Advisory Councils (SHACs)
Smart Start/NC Partnership for Children
UNC Gillings School of Global Public Health
UNC School of Dentistry
Women, Infants and Children (WIC)

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