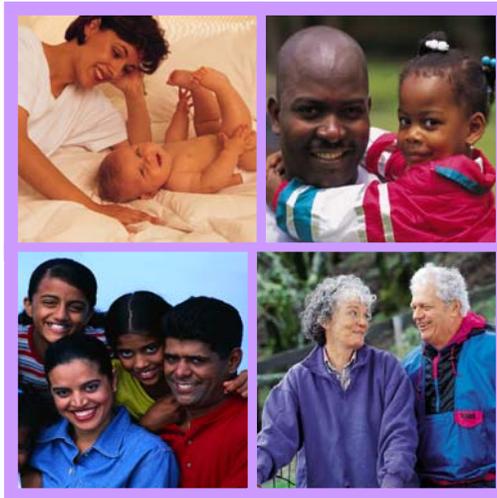




# Rhode Island



## Oral Health Plan

2006

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## EXECUTIVE SUMMARY

*Oral Health in America: A Report of the Surgeon General* alerted Americans to the importance of oral health in their daily lives. Issued in May 2000, the report's message was that oral health is essential to general health and well-being. However, several barriers hinder the ability of some Americans to attain optimal oral health. The report concluded with a framework for action, calling for a national oral health plan to improve quality of life and eliminate oral health disparities.

The Surgeon General's report on oral health was a wake-up call, spurring policy makers, community leaders, private industry, health professionals, the media, and the public to affirm that oral health is essential to general health and well-being and to take action. That call to action led a broad coalition of public and private organizations and individuals to generate *A National Call to Action to Promote Oral Health*. This *National Call to Action* promotes the development of oral health plans at the state and community levels, with attention to planning, evaluation, and accountability.

In response to the Call to Action, the Oral Health Program, the Rhode Island Department of Health, in collaboration with the Rhode Island Senate Commission on Oral Health, hosted a statewide **Oral Health Summit** on March 29, 2006. The federal Centers for Disease Control and Prevention (CDC) and Maternal Child Health Bureau (MCHB) sponsored the Forum with additional support from local partners, Blue Cross Blue Shield of Rhode Island and Delta Dental of Rhode Island.

Under the leadership of Senator Elizabeth Roberts, the Rhode Island Senate Commission on Oral Health developed twenty-two recommendations, which have guided the work of numerous oral health stakeholders statewide since 2001. The Commission has continued to meet quarterly to track implementation of the recommendations, and many of the original strategies have been accomplished. The Summit provided an opportunity for a broad group of stakeholders, including oral health professionals, policymakers, early childhood program staff/families, nursing home/senior groups, primary health care providers, and other state-level/community-based partners, to share expertise, best practices, and collaborative solutions in developing a new, future-focused five-year oral health plan for Rhode Island.

Prior to the Oral Health Summit, several workgroups sessions were convened in the areas of Data/Evaluation, Financing/Policy, and Oral Disease Prevention/Public Awareness. Through discussion, workgroup participants formulated overarching goals and recommended actions that were compiled in a first draft of the new plan, expanding upon the Senate Commission recommendations and incorporating essential elements of the *Early Childhood Oral Health Action Plan* and recommendations of the Nursing Home Dental Care Workgroup to address oral health across the lifespan.

Following presentations on the accomplishments of the Rhode Island Senate Commission on Oral Health, the Oral Health Access Project and RIte Smiles, and oral health issues in children and elders, Summit participants reviewed the *Draft Oral Health Plan* and approved draft goals and related actions, established timelines for progress measurement, and identified gaps, resources and likely partners. Upon conclusion of the Summit, stakeholder comments/suggestions/edits were incorporated to compose the final *Rhode Island Oral Health Plan, 2006*.

# Priority Areas for Improving Oral Health in Rhode Island

## GOAL 1:

### Remove known barriers between people and oral health services.

#### Background

Although gains in oral health status have been achieved for the population as a whole, they have not been evenly distributed across subpopulations.

#### Racial/Ethnic Disparities

Non-Hispanic blacks, Hispanics, American Indians, and Alaska Natives generally have the poorest oral health of any of the racial/ethnic groups in the U.S. population. These groups tend to be more likely than non-Hispanic whites to experience dental caries in some age groups, are less likely to have received treatment for it, and have more extensive tooth loss. African-American adults are more likely than other racial/ethnic groups to have periodontal (gum) disease. Compared with white Americans, African Americans are more likely to develop oral or pharyngeal cancer, are less likely to have it diagnosed at early stages, and experience a worse 5-year survival rate.

#### Socioeconomic Status

People living in low-income families bear a disproportionate burden from oral diseases and conditions. For example, despite progress in reducing dental caries (tooth decay) in the US, children and adolescents in families living below the poverty level experience more dental decay than more affluent children. Furthermore, the caries seen in individuals of all ages from poor families is more likely to be untreated than caries in those living above the poverty level. Nationally, 50% of poor children aged 2 to 11 years have one or more untreated decayed primary teeth, compared with 31% of non-poor children. Poor adolescents aged 12 to 17 years in each racial/ethnic group have a higher percentage of untreated decay in the permanent teeth than does the corresponding non-poor adolescent group.

#### Children

The RI Department of Health will conduct a Basic Screening survey of 3<sup>rd</sup> graders in Spring 2007 to assess caries experience, untreated decay and urgent care. However, the presence of fillings in a child's mouth can also indicate caries experience. The RI Health Interview Survey (HIS) collects the percentage of RI children ages 1-18 that had one or more fillings in the course of their childhood. Results indicate that the percentage of children with one or more filling remained relatively constant from 2001 to 2004 (31.0% and 32.3%, respectively). As children age, they are more likely to have one or more fillings. Additionally, children with private dental insurance coverage were more likely to have one or more fillings than uninsured and RIte Care/Medicaid recipients

## Adults

The pattern is similar in adults, with the proportion of untreated decayed teeth being higher among the poor than the non-poor. At every age, a higher proportion of those at the lowest income level than at the higher income levels have periodontitis. Adults with some college education have 2 to 2.5 times less destructive periodontal disease than do adults with high school or with less than high school levels of education. Overall, a higher percentage of Americans living below the poverty level are edentulous (have lost all their natural teeth) than are those living above. Among persons aged 65 years and older, 39% of persons with less than a high school education were edentulous in 1997, compared with 13% of persons with at least some college. People living in rural areas also have a higher disease burden because of difficulties in accessing preventive and treatment services.

## Individuals with Special Health Care Needs

The oral health problems of individuals with disabilities are complex. These problems may be due to underlying congenital anomalies as well as to inability to receive the personal and professional health care needed to maintain oral health. More than 54 million persons are defined as disabled under the Americans with Disabilities Act, including almost 1 million children less than 6 years of age and 4.5 million children between 6 and 16 years of age. Caries rates among people with disabilities vary widely among people with disabilities but overall their caries rates are higher than those of people without disabilities.

It is estimated that 14% (approximately 35,265 children) of RI children [ages 0 to 17] have special health care needs, as compared with 12.8% nationally. Twenty-three percent of all households in RI include a child with at least one special health care need. Access to health insurance is especially important for CSHCN. RI, along with Vermont and Wisconsin, has the lowest rate of uninsured children in the country. Children who meet certain disability criteria are eligible for Medicaid and/or cash assistance through the federal Supplemental Security Income (SSI) program. As of December 31, 2004, there were 5,382 RI children under the age of 21 receiving Medical Assistance benefits because of their enrollment in SSI.

Achieving and maintaining a lifetime of oral health requires appropriate self-care practices and timely access to preventive therapies and regular professional care. Individuals with dental insurance are more apt to benefit from early detection of oral disease and prompt treatment of problems. According to the 2004 RI Behavioral Risk Factor Survey (BRFS), 69.5% of Rhode Islanders had some form of dental insurance coverage. Per the 1999 Health Interview Survey (HIS), of those ages 5 to 19 years, 59% had commercial dental insurance coverage and 14% had Medicaid dental insurance coverage.

## Insurance Status

Medicaid is the primary source of health care for low-income families, the elderly and disabled persons in the United States. Nationally, federal Medicaid expenditures for Medicaid totaled \$2.3 billion in 2003, or three percent of the \$74 billion spent on dental services nationally [Centers for Medicare and Medicaid Services 2004]. Data from the RI Department of Human Services indicate FY 2000 RIte Care (state) expenditures for dental services totaled \$6.0 million; about 1% of the total FY 2000 RIte Care (state) budget of \$500 million.

In federal fiscal year 2004, only 43% of children enrolled in Rite Care, Rite Share, or Fee-for-service Medicaid received a dental service. Also, many dentists limit the number of Medicaid patients in their practice; only about 350 dentists (~60%) had at least one paid Medicaid claim and about 200 dentists (~33%) treated 50 or more Medicaid/RIte Care beneficiaries under the age of 21.

A 1998 RI Department of Human Services study noted significant participation in RIte Care at any level is a financial burden for many dentists. Dentists who do not participate in RIte Care cite low reimbursement rates, administrative issues, high “no show” rates, and language barriers as the rationale for non-participation. In contrast, RIte Care enrollees cite transportation, inability to find a participating provider, fear, inadequate coverage, and the attitude of dentists/staff as the most frequent barriers to accessing dental services. Several areas of the state report a limited number of providers serving RIte Care enrollees and few dental specialists. As of January 2006, the RI Department of Human Services reported that a total of 9,651 CSHCN were enrolled in Medical Assistance; 4,211 enrolled in a managed care plan [Blue ChiP, Neighborhood Health Plan of RI, and United Healthcare] and 5,440 remained in fee-for service. A plan that addresses barriers to oral health must establish funding priorities that require collaboration and coordination within communities and increase reimbursement rates for Medicaid dental services.

## **Priority Strategy**

**1A.** Restructure Rhode Island’s Medicaid dental program.

### **Action Steps**

- Sustain and expand the dental benefits manager program targeting children 0-6 years of age.
- Expand the dental benefits manager model to older children and other Medicaid-eligible populations as additional resources are identified/become available.
- Establish Medicaid dental EPSDT guidelines/definitions.
- Establish coding within Medicaid to enable primary care providers to be reimbursed for oral disease prevention services delivered to targeted at-risk populations.

## **Priority Strategy**

**1B.** Implement strategies proposed by the Dental Care in Nursing Homes Workgroup (convened by The Rhode Island Foundation) to improve access to timely and appropriate oral health services for elders in nursing facilities.

### **Action Steps**

- Create new models of oral health service delivery for nursing home residents by implementing a mobile dental practice model in targeted nursing home facilities.
- Maximize the contributions of dental hygienists and dental assistants through expanded function and appropriate supervision in public health settings and underserved areas.

## **Priority Strategy**

**1C.** Reconstruct/enhance Medicaid rates of payment to general dentists and dental specialists to assure that private dentists remain significant providers of oral health services for low-income and vulnerable populations.

## **Priority Strategy**

**1D.** Sustain an adequate level of Medicaid reimbursement for hospital-based dental clinics to assure access to oral health services for children from families with low-income and individuals with special needs.

## **Priority Strategy**

**1E.** Expand enabling services to strengthen linkages between community-based oral health professionals and Medicaid-eligible populations.

## **Action Steps**

- Provide transportation, translation, care coordination, outreach, and other enabling services to facilitate the delivery of oral health services to patients.
- Educate Medicaid recipients to access oral health services effectively; increase awareness of proven oral disease prevention strategies and the relationship between oral health and general health.
- Develop and periodically update referral resources for Medicaid clients seeking community-based oral health services; disseminate information via RI Department of Human Services and RI Department of Health telephone information lines and websites.

## **Priority Strategy**

**1F.** Encourage Rhode Island employers to provide dental insurance; including coverage for preventive services such as topical fluoride and dental sealants for children.

## **Priority Strategy**

**1G.** Advocate for adequate financing of oral health services for underserved children, low-income adults, and other special populations including frail elders and the disabled.

## **GOAL 2:**

### **Effectively apply evidence-based science and best practices to improve oral health.**

#### **Background**

The *National Call to Action to Promote Oral Health* calls for building the science base and encourages the effective transfer of science into public health practice. The development of best practices should apply science to achieve effectiveness, efficiency and sustainability. Health care providers need to understand the evidence-based science that may influence the development, delivery, and evaluation of strategies and services to improve oral health

Oral diseases and conditions affect people of all ages and contribute to an individual's overall health and well being throughout life. The most common oral diseases and conditions can be prevented. Safe and effective measures, based on scientific research studies and analyses that provide evidence on the effectiveness and/or the efficiency of dental public health strategies, are available to reduce the incidence of oral disease, reduce disparities, and increase quality of life.

Tooth decay, an infectious disease that can be a significant oral health problem for people of all ages, is the most common chronic childhood disease (five times more common than asthma; seven times more common than hay fever). Dental decay can detract from appearance, thus affecting self-esteem and employability. Working adults lose 164 million hours of work each year due to dental problems and many seniors, particularly frail elders in nursing facilities, continue to suffer from the pain and infection associated with untreated tooth decay.

#### **Community Water Fluoridation**

Community water fluoridation (CWF) is the process of adjusting the natural fluoride concentration of a community's water supply to a level that is best for the prevention of dental caries. In the United States, community water fluoridation has been the basis for the primary prevention of dental caries for 60 years and has been recognized as one of 10 great achievements in public health of the 20th century. It is an ideal public health method because it is effective, safe, inexpensive, requires no behavior change by individuals, and does not depend on access or availability of professional services. Water fluoridation is equally effective in preventing dental caries among different socioeconomic, racial, and ethnic groups and offers significant cost savings to almost all communities. It has been estimated that about every \$1 invested in CWF saves approximately \$38 in averted treatment costs. The cost per person of instituting and maintaining a water fluoridation program in a community decreases with increasing population size.

Many of Rhode Island's public water systems provide drinking water with fluoride to prevent dental caries. Currently, 85% of those on public water systems have access to optimally fluoridated drinking water.

Recognizing the importance of CWF, Healthy People 2010 Objective 21-9 is to “Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water to 75 percent.” In the United States during 2002, approximately 170 million persons (67% of the population served by public water systems) received optimally fluoridated water.

## Dental Sealants

Dental sealants have been approved for use for many years and have been recommended by professional health associations and public health agencies. Dental sealants are thin plastic coatings, which are applied to the chewing surfaces of the molars (back teeth) where the majority of tooth decay occurs in children and teens. Placing sealants on permanent molars shortly after their eruption protects them from the development of caries in areas of the teeth where food and bacteria are retained. If sealants were applied routinely to susceptible tooth surfaces in conjunction with the appropriate use of fluoride, most tooth decay in children could be prevented. The Healthy People 2010 target for dental sealants on molars is 50% for 8-year-olds and 14-year-olds.

## Priority Strategy

**2A.** Develop/implement a plan of action to maintain efficacy of water fluoridation as a proven public health measure.

### Action Steps

- Sustain community water fluoridation efforts, assure that at least 75% of Rhode Islanders served by public water systems have access to optimally fluoridated drinking water, and increase awareness of the benefits of water fluoridation among policymakers and the public.
- Assure the quality of community water fluoridation by monitoring fluoride levels in water, conducting periodic inspections, and providing ongoing training/technical assistance to water facility operators.
- Support community-based efforts to fluoridate public water systems that currently contain sub-optimal levels of fluoride.
- Promote testing of well water supplies for fluoride content; provide the public with information on testing laboratories that analyze water for fluoride content, and educate primary care providers on current recommendations for fluoride supplementation.

## **Priority Strategy**

**2B.** Promote the use of proven therapeutic agents/topical fluorides including fluoride varnish applications by primary care providers for young children at high risk for oral disease.

## **Priority Strategy**

**2C.** Promote the use of dental sealants for all Rhode Island children; increase the proportion of children and adolescents with dental sealants on permanent molar teeth.

### **Action Steps**

- Develop a plan for increasing the utilization of dental sealants; create a universal school-based/school-linked oral disease prevention program targeting elementary schools that have at least 50% of students eligible for free/reduced school meals.
- Identify resources to replicate and expand school-based/school-linked programs for all elementary schools that meet the reduced cost school meal criteria above.

## **GOAL 3:**

### **Develop a comprehensive oral disease prevention and health promotion system.**

Oral health includes the prevention or elimination of a number of diseases and disorders that occur in the mouth, such as dental caries, periodontal disease, and oral and pharyngeal cancers. Oral diseases and disorders are progressive and cumulative, becoming more complex over time. Many oral diseases and disorders can be prevented by appropriate interventions by health professionals.

The integration of oral health with overall health through sustained and expanded public/private partnerships is critical to address barriers to oral disease prevention, treatment, and education. Through partnerships and collaboration, the collective expertise of government agencies, private industry, social service/community-based agencies, educators, child and long-term care providers, dental and other health care providers, and the public is vital to eliminate oral health disparities.

Oral health education for the community is a process that informs, motivates, and helps people to adopt and maintain beneficial health practices and lifestyles; advocates environmental changes as needed to facilitate this goal; and conducts professional training and research to the same end. Although health information or knowledge alone does not necessarily lead to desirable health behaviors, knowledge may help empower people and communities to take action to protect their health.

#### **Oral Cancer**

Cancer of the oral cavity or pharynx is the fourth most common cancer in African-American men and the seventh most common cancer in white men in the United States [Ries et al. 2004]. An estimated 28,000 new cases of oral cancer and 7,200 deaths from these cancers occurred in the United States in 2004. The 2001 age-adjusted incidence rate of oral cancer in the United States was 10.4 per 100,000 persons. Nearly 90% of cases of oral cancer in the United States occur among persons aged 45 years and older. The age-adjusted incidence was more than twice as high among men (15.0) than among women (6.6), as was the mortality rate (4.1 vs. 1.6).

Survival rates for oral cancer have not improved substantially over the past 25 years. More than 40% of persons diagnosed with oral cancer die within 5 years of diagnosis [Ries et al. 2004], although survival varies widely by stage of disease when diagnosed. The 5-year relative survival rate for persons with oral cancer diagnosed at a localized stage is 81 percent. In contrast, the 5-year survival rate is only 51% once the cancer has spread to regional lymph nodes at the time of diagnosis and is just 29% for persons with distant metastasis.

Some groups experience a disproportionate burden of oral cancer. In Rhode Island and nationally, African-Americans are more likely than whites to develop oral cancer and much more likely to die from it. Cigarette smoking and alcohol are the major known risk factors for

oral cancer in the United States, accounting for more than 75% of these cancers. The use of tobacco, including smokeless tobacco and cigars also increases the risk of oral cancer. Dietary factors, particularly low consumption of fruit, and some types of viral infections also have been implicated as risk factors for oral cancer. Radiation from sun exposure is a risk factor for lip cancer.

Recognizing the need for dental and medical providers to examine adults for oral and pharyngeal cancer, Healthy People 2010 Objective 21-7 is to increase the proportion of adults who, in the past 12 months, report having had an examination to detect oral and pharyngeal cancers. Nationally, relatively few adults aged 40 years and older (13%) reported receiving an examination for oral and pharyngeal cancer, although the proportion varied by race/ethnicity.

### **Relationship of Oral Health to Overall Health**

Most oral diseases and conditions are complex and are the product of interactions between genetic, socioeconomic, behavioral, environmental, and general health influences. Multiple factors may act synergistically to place some individuals at higher risk of oral diseases. For example, the comparative longevity of women, compromised physical status over time, and the combined effects of multiple chronic conditions and side effects from multiple medications used to treat them can result in increased risk of oral disease [Redford 1993].

A growing evidence base pointing to links between oral and whole body health is emerging. Research citing evidence associating obesity, diabetes control and glucose regulation and periodontal disease has been published. Studies documenting the effects of hormones on the oral health of pregnant women suggest that 25 percent to 100% of these women experience gingivitis and up to 10% may develop more serious oral infections. Recent evidence suggests that oral infections such as periodontitis during pregnancy may increase the risk of preterm or low birth-weight deliveries. During pregnancy, a woman may be particularly amenable to disease prevention and health promotion interventions that could enhance her health or that of her fetus.

### **Priority Strategy**

**3A.** Expand training and development opportunities for medical, oral health, and other health professionals.

#### **Action Steps**

- Provide education and training experiences for oral health professionals, including dental residents, dental hygiene and dental assisting students, that allow oral health practitioners to treat a diverse population.

- Provide training for oral health professionals to improve their knowledge and skill in providing services to people with special needs, particularly the disabled, the elderly, and children under five years of age.
- Train primary care providers to provide fluoride varnish for high-risk infants/toddlers and anticipatory guidance for families with low income and all pregnant women.
- Educate nursing home staff to recognize the relationship between oral health and overall health; train nursing home staff to perform basic oral health assessments, daily oral hygiene, and denture care for residents.
- Incorporate oral health into Rhode Island curricula/training for all health professions students [MD, NP, CNM, RN]
- Build effective referral links between the primary care and oral health communities.

### **Priority Strategy**

**3B.** Promote school policies designed to promote oral health, decrease oral disease, and reduce risk for oro-facial injury.

#### **Action Steps**

- Educate school professionals including school committees, administrators, health educators, school nurse/classroom teachers, and parents about the impact of oral health on school readiness and performance.
- Encourage and support healthy vending in schools.
- Integrate oral health education into the standards-based framework for preschool and students in K-12.
- Promote oro-facial injury prevention among school athletic directors, coaches, athletes, and parents; increase awareness of the protective benefits of facemasks and mouthguards, particularly for athletes competing in contact sports; create public/private partnerships to support the fabrication of custom mouthguards for students from families with low-income participating in interscholastic league sports.

## Priority Strategy

**3C.** Increase awareness of oral health and systemic health linkages and effective oral disease prevention measures among policymakers and the public.

- Establish a partnership between oral health and medical professionals to educate all pregnant women about the relationship between maternal and infant oral health and the benefits of establishing positive oral health behaviors in infancy.
- Provide technical assistance to dental offices and dental clinics to implement tobacco cessation counseling and referral.
- Increase public awareness of the increased risks of oral cancer associated with co-use of alcohol and tobacco.
- Increase awareness among health professionals and the public of the relationship between oral health and systemic health, specifically the relationship with chronic diseases including diabetes and cardiovascular disease.

## **GOAL 4:**

### **Maintain a safety net infrastructure and ensure an adequate, effective oral health workforce.**

#### **Background**

The oral health care workforce is critical to society's ability to deliver high-quality dental care in the United States. Effective health policies intended to expand access, improve quality, or constrain costs must take into consideration the supply, distribution, preparation, and utilization of the health workforce.

According to *Oral Health in America: A Report of the Surgeon General*, the ratio of dentists to population is declining. Per the American Dental Education Association, the number of graduates from dental schools has declined significantly over the last 13 years. Since 1986, seven dental schools have closed. The remaining U.S. dental schools have experienced reductions in class sizes, and the percentage of graduating dentists declined by 40% between 1986 and 2000. One cause of oral health disparities is a lack of access to oral health services among under-represented minorities. Increasing the number of dental professionals from under-represented racial and ethnic groups is viewed as an integral part of the solution to improving access to care.

#### **The Dental Safety Net in Rhode Island**

Community Health Centers (CHCs) provide family-oriented primary and preventive health care services for people living in rural and urban medically underserved communities. CHCs exist in areas where economic, geographic, or cultural barriers limit access to primary health care. Among other services provided, many CHCs provide oral health care services.

The dental safety net in Rhode Island is currently comprised of 12 Federally Qualified Health Centers (FQHCs, also known as community health centers) with dental centers, one urgent care/community health center (Block Island Health Services), three hospital based dental centers and the dental hygiene clinic at the Community College of Rhode Island. There is a dental safety net provider in each of the six core cities in Rhode Island (Central Falls, Newport, Pawtucket, Providence, West Warwick, and Woonsocket).

As the need for dental services increases, the greater the strain on the existing dental workforce. Thus, the ability of the current workforce to respond to the dental needs of the population is compromised by a number of factors. These factors may affect the ability of the workforce to respond to the needs of vulnerable populations; children with a high prevalence of dental caries present an especially daunting problem.

In September 2005, Rhode Island KIDS COUNT conducted a survey of the dental safety net providers in Rhode Island in order to better understand the delivery of dental services to Rhode Island's underserved children and adults.

The Dental Safety Net Provider Survey was distributed to 16 safety net providers in August 2005 with results detailed in *The Dental Safety Net in Rhode Island, Special Report 2006*. Per the report, dental safety net providers reported employing the equivalent of 25.53 dentists, 22.25 dental hygienists and 35.45 dental assistants.

### **Rhode Island's Oral Health Workforce**

In 2005, there were 603 actively licensed general and specialty dentists with Rhode Island practice addresses. These practitioners were not evenly distributed across the state. The majority of private dental practices are located along the Interstate-95 corridor, with few dentists practicing in the more rural areas of RI. Specific geographic areas, low-income or poverty populations, special populations [Narragansett Indians], and/or facilities [community health centers, state correctional institutions] are designated as Dental Health Professional Shortage Areas (DHPSAs). RI has 12 DHPSAs, which denote a shortage of dental professionals around the state.

In Rhode Island, dental hygienists practice under "general supervision," which means that a dentist must authorize the procedures to be performed but need not be present while the dental hygienist provides the services. According to the Rhode Island Department of Labor and Training, there were 610 dental hygienists practicing in Rhode Island as of May 2004. This occupation is projected to grow to 779 between 2002-2012, with 20 openings annually.

Dental assistants are not licensed, thus it is difficult to quantify the number currently practicing. In November 2004, 1,070 dental assistants were reported employed in the state by the Rhode Island Department of Labor and Training, which likely includes 329 Certified Dental Assistants reported working in Rhode Island by the Dental Assistant National Board. This occupation is projected to grow to 1,404 by 2012, with 62 openings annually.

In addition to the geographic maldistribution of oral health providers, an aging dental workforce exists in Rhode Island. Approximately 50% of the state's dentists are age 50 or older. With no in-state dental school, strategies must be developed to recruit and retain an adequate workforce for the future.

## Priority Strategy

**4A.** Enhance professional linkages/build interdisciplinary professional relationships to assure that vulnerable populations are linked effectively with appropriate community-based sources oral health services and providers.

### Action Steps

- Build effective referral systems to link vulnerable populations [Head Starts/Early Head Starts, Comprehensive Child Care Services, schools with high proportions of at-risk students, children with special health care needs, nursing homes, disabled] with appropriate community-based resources.
- Pursue public/private partnerships and funding to support sufficient safety net capacity to serve Medicaid and uninsured, low-income people living in core cities and other underserved communities.
- Provide incentives for oral health professionals to practice at safety net sites and underserved communities
- Promote volunteerism among oral health professionals; expand the number of hours of continuing professional education credits that can be utilized for volunteering in underserved communities and systems of care.

## Priority Strategy

**4B.** Increase recruitment/retention of oral health professionals to Rhode Island.

### Action Steps

- Establish a workgroup to monitor the status of the oral health workforce and identify strategies to plan for the replacement of 50% of the dentist workforce expected to retire by 2010.
- Develop a marketing plan to facilitate recruitment and retention of oral health professionals to Rhode Island.

- Develop a tuition assistance program to support Rhode Island residents at dental schools in exchange for their commitment to practice in Rhode Island upon completion of their training.
- Support pediatric and general practice residency programs.
- Provide incentives for dental residents to practice in underserved areas of Rhode Island upon completion of training.
- Increase state funding for the Rhode Island Health Professional Loan Repayment Program to maximize opportunities for leveraging federal matching funds.
- Expand programs that offer continuing professional education credits for service delivery to special populations [very young children, elders, disabled, those with limited English proficiency]; Collaborate with Rhode Island oral health professional associations/societies to market/promote volunteer continuing professional education opportunities through existing programs.
- Review the Dental Practice Act and associated Rules & Regulations to support appropriate supervision standards for dental hygienists and dental assistants in public health settings [Head Starts, schools, nursing homes]
- Explore need/opportunities for re-entry program for dental hygienists wishing to return actively to Rhode Island practice; Implement programs to facilitate recruitment and retention of dental hygienists and dental assistants.

## **Priority Strategy**

**4C.** Increase interest in dental careers for science-minded students in grades K-12.

### **Action Steps**

- Develop programs/marketing plan to increase awareness of dental careers among students in grades K-12;
- Provide opportunities for high school students to gain community service credit at safety net sites; Link students with oral health professionals willing to serve as mentors.
- Increase the recruitment of underrepresented minority students.

## **GOAL 5:**

### **Ensure adequate and appropriate information is available for effective policy decisions.**

#### **Background**

The burden of oral disease, population needs, oral health systems and scientific knowledge/technology are constantly changing. In order to effectively address these areas, policymakers need accurate, up-to-date, and relevant information to assess and monitor the oral health status of residents and design appropriate policy/interventions to improve the overall performance of the oral health care system.

An effective oral health data system monitors the prevalence of oral diseases/ conditions and the factors influencing oral health, such as health behaviors and the utilization of preventive services. Existing data from multiple local, state, and national sources are coordinated and presented in a functional manner for all stakeholders. The establishment of a state-level coordinated data system will allow for effective policy decisions to improve the oral health status of all Rhode Islanders.

The state oral health plan will be the roadmap for accomplishing the goals and objectives that have been developed by a broad and diverse of stakeholders.

#### **Priority Strategy**

**5A.** Sustain a state-level oral health coalition to guide implementation of the Rhode Island Oral Health Plan and facilitate coordination of oral health policy and related initiatives.

#### **Action Steps**

- Provide an ongoing forum that facilitates coordination of oral health initiatives and fosters ongoing interdisciplinary collaboration.

#### **Priority Strategy**

**5B.** Create and maintain a coordinated, comprehensive oral health surveillance system for use by policymakers and program planners to effectively address the oral health needs of all Rhode Islanders.

## **Action Steps**

- Review existing data sets for relevance and potential integration with the Rhode Island Oral Health Surveillance System. (At a minimum, include data sets that allow comparison of the oral health status of Rhode Islanders with national/other state data).
- Require/encourage the use of standardized dental screening forms and centralized reporting of screening results by oral health professionals conducting dental screenings in schools for grades K, 1 and 3.
- Develop a system to track referrals and follow-up for students and nursing home residents with urgent needs.
- Make data accessible to stakeholders in user-friendly format.

## **Priority Strategy**

**5C.** Monitor implementation of the Rhode Island Oral Health Plan; identify funding sources to support ongoing implementation and evaluation activities.

## **Action Steps**

- Share accomplishments/best practices with policymakers and the public.

## Appendix I

<b>Table 1: Healthy People 2010 Oral Health Objectives</b>		<b>US Baseline</b>	<b>US Target</b>
21-1.	Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth.		
21-1a.	Reduce the proportion of young children (ages 2-4) with dental caries experience in their primary teeth.	18%	11%
21-1b.	Reduce the proportion of children (ages 6-8) with dental caries experience in their primary and permanent teeth.	52%	42%
21-1c.	Reduce the proportion of adolescents (age 15) with dental caries experience in their permanent teeth.	61%	51%
21-2.	Reduce the proportion of children, adolescents, and adults with untreated dental decay.		
21-2a.	Reduce the proportion of young children (ages 2-4) with untreated dental decay in their primary teeth.	16%	9%
21-2b.	Reduce the proportion of children (ages 6-8) with untreated dental decay in primary and permanent teeth.	29%	21%
21-2c.	Reduce the proportion of adolescents (age 15) with untreated dental decay in their permanent teeth.	20%	15%
21-2d.	Reduce the proportion of adults (ages 35-44) with untreated dental decay.	27%	15%
21-3.	Increase the proportion of adults (ages 35-44) who have never had a permanent tooth extracted because of dental caries or periodontal disease.	31%	42%
21-4.	Reduce the proportion of older adults (ages 65-74) who have had all their natural teeth extracted.	26%	20%
21-5.	Reduce destructive periodontal diseases (ages 35-44).	22%	14%
21-6.	Increase the proportion of oral and pharyngeal cancers detected at the earliest stage.	35%	50%
21-7.	Increase the proportion of adults (age 40+) who, in the past 12 months, report having had an examination to detect oral and pharyngeal cancers.	13%	20%
21-8.	Increase the proportion of children who have received dental sealants on their molar teeth.		
21-8a.	Children aged 8 years.	23%	50%
21-8b.	Adolescents aged 14 years.	15%	50%
21-9.	Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water.	62%	75%
21-10.	Increase the proportion of children and adults who use the oral health care system each year.	44%	56%

## Appendix I (continued)

<b>Table 1: (cont.)</b>	<b>Healthy People 2010 Oral Health Objectives</b>	<b>US Baseline</b>	<b>US Target</b>
21-11.	Increase the proportion of long-term care residents who use the oral health care system each year.	19%	25%
21-12.	Increase the proportion of low-income children and adolescents (under age 19) who received any preventive dental service during the past year.	20%	57%
21-13.	(Developmental) Increase the proportion of school-based health centers with an oral health component.	NA	NA
21-14.	Increase the proportion of local health departments and community-based health centers, including community, migrant, and homeless health centers that have an oral health component.	34%	75%
21-15.	Increase the number of States and the District of Columbia that have a system for recording and referring infants and children with cleft lips, cleft palates, and other craniofacial anomalies to craniofacial anomaly rehabilitative teams.	46%	100%
21-16.	Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system.	0%	100%
21-17.	(Developmental) Increase the number of Tribal, State (including the District of Columbia), and local health agencies that serve jurisdictions of 250,000 or more persons that have in place an effective public dental health program directed by a dental professional with public health training.	NA	100%

## Appendix II

<b>Table 2: Healthy People 2010 Related Objectives From Other Focus Areas</b>	
1. Access to Quality Health Services	16. Maternal, Infant, and Child Health
2. Arthritis, Osteoporosis, & Chronic Back Conditions	17. Medical Product Safety
3. Cancer	18. Mental Health and Mental Disorders
5. Diabetes	19. Nutrition and Overweight
6. Disability and Secondary Conditions	20. Occupational Safety and Health
7. Educational & Community-Based Programs	22. Physical Activity and Fitness
8. Environmental Health	23. Public Health Infrastructure
11. Health Communication	25. Sexually Transmitted Diseases
12. Heart Disease and Stroke	26. Substance Abuse
14. Immunization and Infectious Diseases	27. Tobacco Use
15. Injury and Violence Prevention	

## Appendix III: Contributors

Sharon Adams  
Head Start Quality Initiative

Coreen Aidala  
Dental Hygiene Program  
Community College of RI

Kerri Allen  
Office of Primary Care  
RI Department of Health

Jackie Ascrizzi  
School Health Specialist  
RI Department of Education

Barbara Baldwin  
RI Cancer Council

James Balukjian, DDS  
School Dentist  
Scituate School District

Mary Anne Barry, RDH  
RI Dental Hygienists' Association

Diana Beaton  
Oral Health Access Project  
RI Department of Human Services

Jill Beckwith, MPH  
Policy Analyst  
RI KIDS COUNT

Anthony Bellucci  
Assistant Vice President  
Blue Cross Dental of RI

M. Christine Benoit, DMD  
Oral Health Professional Advisory Council

Rita Boie  
Comprehensive Child Care Services Network of RI

John Bossian, DO  
President  
RI Academy of Family Physicians

Kim Bossian, RN  
Health Coordinator  
South County Community Action Head Start

Erin Buck  
South County Community Action Head Start

Elizabeth Burke Bryant, Esq.  
Executive Director  
Rhode Island KIDS COUNT

Christopher Campagnari, MD  
Medical Director  
Wood River Health Services

Carolyn Campos  
Program Director  
CHisPA

Lisa Casalino  
RI Department of Children, Youth & Families

Ingrid Castillo  
CHisPA

Suzanne Charron, RDH  
East Providence

Maria Chionchio, RN  
Health Manager  
Children's Friend & Service

Patrice Cooper  
Executive Director of Medicaid Program  
UnitedHealthcare of New England

Alison Croke, MHA  
Oral Health Access Project  
RI Department of Human Services

Joeanna Cruz  
Parent Consultant  
Pediatric Practice Enhancement Project

Kathy Cullinen, PhD, RD  
Initiative for Healthy Weight  
RI Department of Health

Melissa Deitrick  
Division of Family Health  
RI Department of Health

William Delgizzo, DMD  
Dental Director  
RI Department of Corrections

Martha Dellapenna, RDH, MEd  
Oral Health Access Project  
RI Department of Human Services

Trung Doan, DDS  
Dental Director  
Blackstone Valley Community Healthcare

Valerie Donnelly  
Executive Director  
RI Dental Association

Fran Dzurinko, DDS  
Dental Director  
RI Training School

Kathleen Fraits  
RI Department of Mental Health, Retardation, and  
Hospitals

Deborah Fuller, DMD, MS  
Dentist Consultant  
RI Department of Health

Joyce Fuller  
VNS - Home Health Services

Marie Ganim  
Policy Director for Health & Human Services  
Rhode Island Senate

Kathleen Gazzola, RDH, BS, MA  
Community College of RI/RI Board of Examiners in  
Dentistry

Marie Ghazal, RN  
VP Clinical Services  
Providence Community Health Centers

David Gifford, MD, MPH  
Director  
RI Department of Health

Maureen Glynn, Esq.  
RI Assistant Attorney General  
RI Department of the Attorney General

Dona Goldman, RN, MPH  
Diabetes Control Program Director  
RI Department of Health

Celia Gomes-McGillivray, RN, MPH, CHES  
Clinical Director  
RI Health Center Association

Linda Grace  
Bayside Family Healthcare

Lynda Greene, BS, LDN, CLC  
Providence Community Health Centers

Owen Heleen  
Special Projects Officer  
The Rhode Island Foundation  
The Rhode Island Foundation

William Hollinshead, MD, MPH  
Medical Director, Division of Family Health  
RI Department of Health

Denise Holmes, RN, MEd  
RI Dept of Mental Health, Retardation & Hospitals

James Hosmer, DMD  
Providence Smiles/ St. Joseph Hospital

Bonnie Houle-Piszcz, RDH, MEd  
Coventry

Jackie Jackson  
Ready to Learn Providence

Tom Killmurray  
Administration for Children & Families  
US DHHS

Joan Kwiatkowski,  
Chief Executive Officer  
CareLink, Inc.

Tricia Leddy  
Director, Center for Child & Family Health  
RI Department of Human Services

Laurie Leonard, MS  
Oral Health Program Specialist  
RI Department of Health

Brenda Leone, RN  
Health Manager  
Cranston CAP Child Development Center

Donna Levesque  
Tobacco Control Program  
RI Dept of Health

Susan Libutti  
Comprehensive Child Care Services  
RI Department of Human Services

Mark Lucier, DMD  
St. Joseph Hospital

Carla Lundquist  
Primary Care Program Specialist  
RI Department of Health

Eunice Lydon, RN  
The Children's Network

Beth Marootian  
Neighborhood Health Plan of RI

Ellen Mauro, RN, MPH  
Center for Adult Health  
RI Department of Human Services

Stephanie McCaffrey, MSW  
Site Director  
Thundermist Health Associates

Patti McChrystal, MPA, RDH  
Delta Dental of RI &  
RI Dental Hygienists' Association

Maureen McEvoy, LPN  
Health Manager  
East Bay Community Action Program

Linda McMullen  
Parent Consultant  
RI Parent Information Network

Edwin Mehlman, DDS  
Public Health Liaison  
RI Dental Association

Mary Anne Miller, RN, MPH, CHES  
Chief, Office of Primary Care  
RI Department of Health

Diane Monti-Markowski, DMD, MBA  
Vice President/Dental Director  
Delta Dental of RI

Joseph Nagle  
President & CEO  
Delta Dental of RI

Linda Newton  
Vice President, Community Relations  
Blue Cross Blue Shield of RI

Lauren Nocera, MSW, MPH  
Community Health Programs Coordinator  
Thundermist Health Associates

Ana Novais, MA  
Division of Community Health & Equity  
RI Department of Health

Melissa Oliver, RN  
Health Manager  
CHILD, Inc.

Virginia Paine, RN, MPH  
Health & Nutrition Coordinator  
Woonsocket Head Start & Day Care &  
RI Board of Examiners in Dentistry

John Parillo, DMD  
RI Department of Corrections

Ken Pariseau  
Director of New State Products  
Neighborhood Health Plan of RI

Susan Perlini, RDH, BS  
St. Joseph Hospital &  
RI Department of Health

Angie Pettigrew, RN  
P/C Kids  
CCAP Child Development

Karen Piche  
Bayside Family Healthcare

Candace Powell, RN, MS  
Director Maternal/Child Health  
Visiting Nurse Services

Gretchen Pratt, RDH, BS  
Abbie F. Lawton Dental Clinic

Larry Pucciarelli  
Head Start Collaboration Director  
RI Department of Human Services

Christine Ramalho, DMD  
Joseph Samuels Dental Center  
Rhode Island Hospital

Rosemary Reilly-Chammat  
Division of Family Health  
RI Department of Health

Robyn Riley, MS, RD, LDN, CDE  
Nutrition Manager  
CHILD, Inc.

Hope Rittner  
South County Community Action Head Start

The Honorable Elizabeth H. Roberts  
Rhode Island State Senate

JoAnn Roberts, RN  
Central Falls School District  
M.I. Robertson School

Sonia Rodrigues-Carr  
Rhode Island KIDS COUNT

Maureen Ross, RDH, BS  
Oral Health Program Director  
RI Department of Health

Dennis Roy  
Executive Director  
East Bay Community Action Program

Linda Rusack, RDH  
Delta Dental of RI &  
RI Board of Examiners in Dentistry

Joseph Samartano, DDS  
Chief of Dentistry  
St. Joseph Hospital

Marilyn Saunders, RN  
Health Manager  
East Bay Community Action Program

Sandra Saunders, RDH, MS, MPH  
Associate Professor  
University of Rhode Island

Jennifer Schenck-Bolwell  
Crossroads RI

Kathryn Shanley  
VP for External Affairs  
Delta Dental of RI

Ronald Smith, RN  
Health Manager  
Comprehensive Child Care Services Network of RI

Lisa Smolski  
Executive Director  
RI Free Clinic

Andrew Snyder, MD  
Medical Director of Ambulatory Services  
Hasbro Children's Hospital/The Kids Health Team

Mary Sommer  
Director, Corporate Communications  
Delta Dental of RI

Shirley Spater, DMD, MPH  
Director of Dentistry  
Joseph Samuels Dental Center  
RI Hospital

Karen Stanley  
Director  
Children's Friend & Service

Rebecca Stokes, BA, BS  
Oral Health Program  
RI Department of Health

Judy Taylor  
Medicaid Product Manager  
UnitedHealthcare

Rodney Thomas, DMD  
Dental Director  
Blue Cross Dental of RI

Cecile Turgeon, LPN  
Health Coordinator  
Tri-Town Head Start

Christine Vallee  
Administrative Co-Director  
St. Joseph Hospital

Peter Vargas  
Director of Pharmacy  
Neighborhood Health Plan of RI

Richard Walsh, DDS  
President  
RI Dental Association

Dawn Wardyga  
Program Director, Family Voices of RI  
RI Parent Information Network

Marsha Weiss, RN, MS  
Director  
Lifespan Community Health Services

Joanne Wilbur, CDA  
RI Dental Assistants Association

Donna Wolcott  
RI Dental Assistants Association