VERMONT
ORAL HEALTH PLAN
2005

DEPARTMENT OF HEALTH

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Toward a Comprehensive System to Support Oral Health

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Vision Statement

Vermont will have an oral health system that allows all Vermonters to achieve and sustain optimal oral health, contributing to their ability to lead healthy lives.

VISION STATEMENT

Introduction

In 2000, the U.S. Surgeon General released the first-ever report on oral health, *Oral Health in America: A Report of the Surgeon General.* The major message of the Report was that oral health is essential to general health and well-being throughout life and can be achieved. However, "a silent epidemic of oral diseases is affecting our most vulnerable citizens – poor children, the elderly, and many members of racial and ethnic minority groups." Proven prevention measures exist to improve oral health, yet many segments of the population continue to experience needless pain and suffering, as well as complications that affect overall health and well-being.

Vermont's achievements in addressing the oral health and dental access needs of its residents are many. Vermont's coverage of oral health services, dentist participation in the Medicaid program, oral health status indicators and utilization rates by Medicaid-eligibles are among the highest in the country. Additionally, in the 2003 National Report Card released by the advocacy group Oral Health America, Vermont was among the four highest-scoring states overall. Despite these achievements and high scores compared to other states nationally, Vermont has areas that can be improved.

The Surgeon General's Report clearly defined the need for a National Oral Health Plan as well as individual state oral health plans. To meet this need, the Vermont Department of Health secured grant funding from the federal Maternal and Child Health Bureau to facilitate the development of the Vermont Oral Health Plan. A multidisciplinary steering committee met regularly from April 2004 through February 2005 to provide input and guidance into the development of the plan. The result is a research-based, consensus-driven plan to address individual and community oral health needs in Vermont. The Plan directs work in four major areas of need: 1) Public Health Infrastructure 2) Prevention and Health Promotion; 3) Workforce; and 4) Financing and Delivery Systems.

The public, policy makers and many professionals are unaware of, or give scant attention to, the critical importance of oral health to overall health. The Vermont Oral Health Plan, incorporated as a component of the Vermont State Health Plan (April 2005), attempts to fill that gap. The Vermont State Health Plan and the Blueprint for Health (the initiative focusing on chronic diseases) are built on the following tenets: Self-management, Community, Provider Practice, Health Systems and Public Health/Public Policy. In each of these areas, the goals of the Vermont Oral Health Plan are fully integrated.

Self-management: Actions to develop informed, activated people who are prepared to manage their own health care. Sometimes called "empowered" consumers, they use effective self-management strategies and take on a central role in their health care. Objectives and strategies found in Goal 2, Oral Health Education, address the critical importance of personal oral hygiene in preventing oral disease.

Community: Mobilization of community resources to support healthy behaviors as the easiest choice. Community programs can and should support or expand a health systems' care for people with, or at risk for, chronic disease. For oral health this might include changing the norm so that regular dental care is viewed as important (Goal 3); ensuring that the community water supply is fluoridated (Goal 4); or promoting healthy foods at community events (Goal 2).

Provider Practice: Measures to address workforce needs, promote a prepared, proactive practice team, provider support and guidance of self-management and focus on keeping a person as healthy as possible. Expanded use of dental sealants (Goal 5) and improved cancer screening (Goal 6) are two areas for targeted change in the system. Goal 7 addresses workforce and provider practice issues as they relate to oral health.

Health Systems: Measures that ensure access to essential health services in settings where the culture, organization and mechanisms promote safe, high quality, consumer driven care. Goal 8 addresses the financing and delivery of oral health services.

Public Health and Public Policy: Processes, procedures and actions undertaken by government agencies and other public bodies to continually assess the health needs of the population, develop policies and programs to address those needs and assure provision of needed services. Goal 1 addresses the public health infrastructure essential to effective oral health services in Vermont.

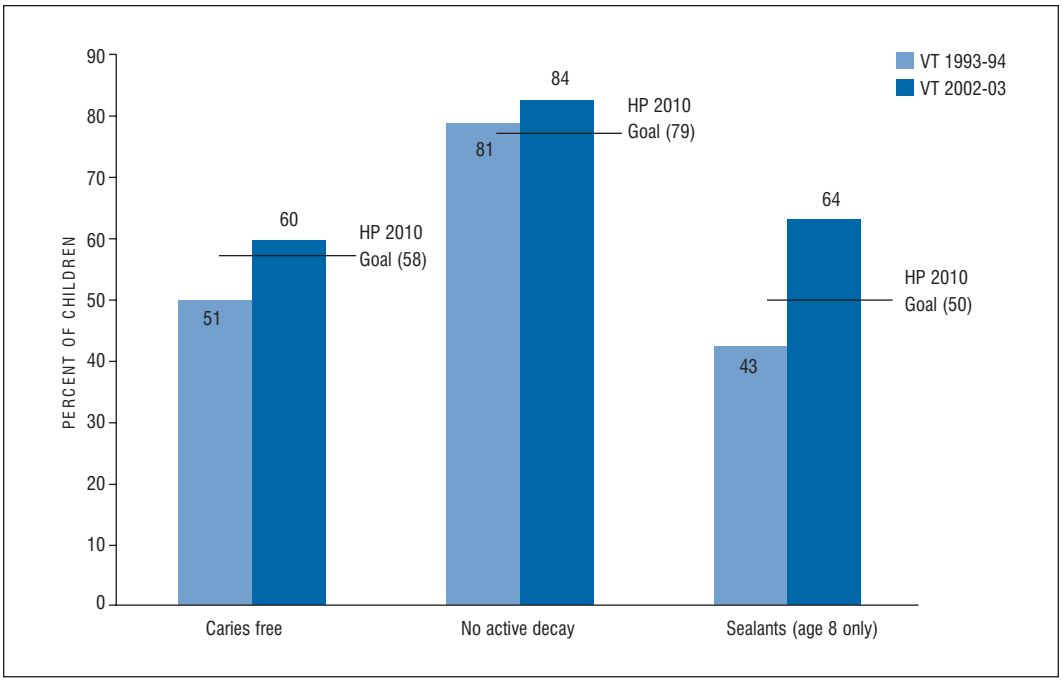
The Vermont Oral Health Plan complements and builds on all elements of the Vermont Blueprint for Health. These two documents provide a framework for the systems change called for in the Vermont State Health Plan to improve the health of all Vermonters.

The Burden of Oral Diseases in Vermont

The major theme of this document is that oral health is an integral component of overall health. Without good oral health, a person is not truly healthy and may experience needless pain and suffering, as well as complications that diminish overall health and well-being. Over the past few decades, great progress has been made in understanding what causes most dental diseases and this has resulted in tremendous improvements in the oral health of the population. Most Vermonters experience good oral health and expect to retain their natural teeth over their lifetime. However, there are still many of our residents that suffer from tooth decay and periodontal disease, as well as other chronic oral conditions and injuries.

Children

Dental caries (tooth decay) is the single most common chronic childhood disease – 5 times more common than asthma and 7 times more common than hay fever. Children in Vermont are fortunate to experience significantly better oral health than their peers in other states. The 2002-2003 Oral Health Survey conducted with 1st, 2nd and 3rd grade students throughout Vermont, 60 percent of the children surveyed were caries-free. Also, 84 percent of the children had no active decay present in their mouth and 64 percent of the 8-year-old children had sealants on at least one of their permanent molars. All of these findings exceeded the US Healthy People 2010 goals for the nation.



The majority of Vermont children in grades 1-3 were found to be in good oral health. Troubling though, was the concentration of decay. Twenty-three percent of the children in grades 1-3 experienced 82 percent of all the decay found. This statistic reflects national data showing striking disparities in dental disease, notably by income. Children living below the Federal poverty line suffer far more dental caries than their wealthier counterparts, and their disease is more likely to be untreated. Furthermore, only 56% of Vermonters receive the benefits of fluoride in their drinking water. Every dollar spent on fluoridation saves an average of $38 in dental costs. Residents of communities with fluoridated water have 20 - 40% less dental disease than those living in non-fluoridated communities.

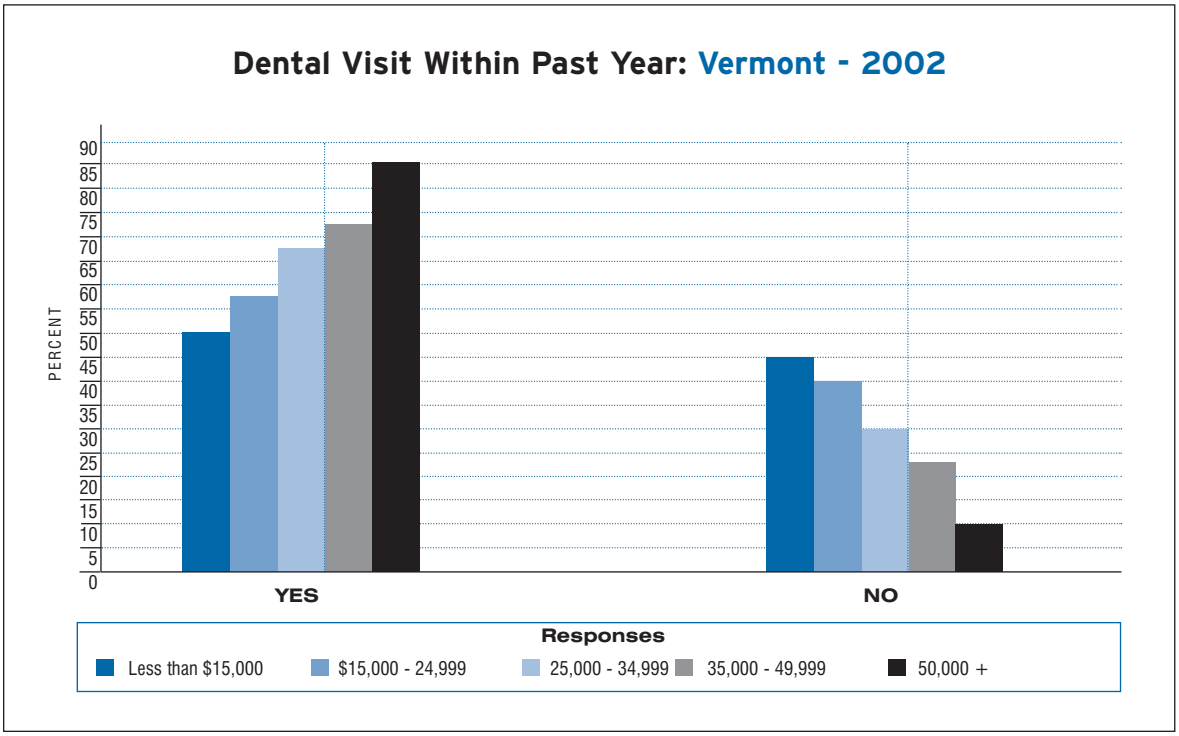
Medicaid helps to fill the gap in providing dental care to lower income children. In Vermont, Medicaid utilization rates for children are higher than many states. In addition, utilization trends have been increasing. For 2004, nearly 48 percent of Medicaid-eligible children received dental care.

Many of the recommendations in this plan address interventions that will improve the oral health of Vermont's children through a variety of measures.

Adults

Most adults show some signs of caries or periodontal disease. Nationally, employed adults lose more than 164 million hours of work each year due to dental disease or dental visits. Additionally, for every adult 19 years or older without medical insurance, there are three without dental insurance.

In Vermont, 74.6 percent of adults age 18 and over reported visiting a dentist or dental clinic within the past year. When this percentage is broken down by income levels, however, disparities emerge. Approximately 90 percent of those with incomes of $50,000 + reported visiting a dentist within the past year compared to just over 50 percent of those with incomes less than $15,000.



Medicaid coverage for Vermont adults is limited and includes preventive, diagnostic and basic restorative treatment with a maximum benefit of $475 per calendar year. Medicaid claims data show that in State Fiscal Year 2004, approximately 26 percent of Medicaid-eligible adults utilized dental services.

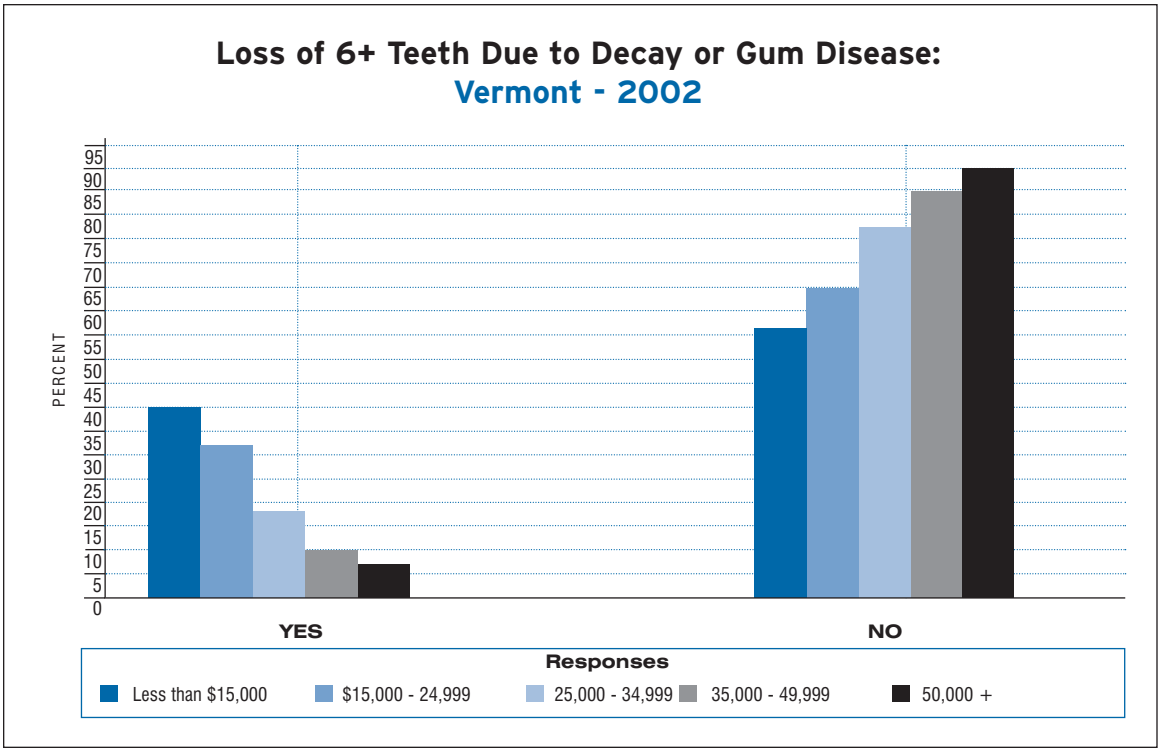
Reasons for non-utilization of dental services are complex and include fear, cost, lack of insurance, problems with access, perception of having “no dental problems”, and having no teeth.

Improvements can be made in Vermont's system of providing dental care to the adult low-income and Medicaid-eligible population. Additionally, public education efforts must expand awareness in adults themselves that oral health is important and can affect their overall health and well-being.

Elderly

The elderly population in the United States, and in Vermont, constitutes an ever-increasing percentage of the population. Children's oral health has received much attention, but oral health issues in the elderly receive little recognition or awareness. Improvements in overall oral health status in the population as a whole are also seen in the elderly with increasing numbers of people retaining their natural teeth throughout their lifetime. However, disparities exist in oral health status for older adults and too many of our elders suffer from chronic oral pain. Poor oral health may contribute to a deterioration of overall general health and can complicate many common chronic conditions such as diabetes and cardiovascular disease.

The need for dental care provided in a dental office continues throughout the lifespan. Increased numbers of people retaining their natural teeth will result in increased need for restorative work. Medicare does not provide coverage for routine dental care and many adults lose dental insurance coverage when they retire. As a result, community-based strategies must be mindful to include the needs of the elderly. It is essential to work with primary care providers and geriatricians to establish the importance of oral health.



Other Special Populations

The Surgeon General's Report on Oral Health clearly shows that gains in oral health for the population as a whole have not been evenly distributed across subpopulations. Non-hispanic blacks, hispanics, American Indians and Alaska natives generally have the poorest oral health of any of the racial and ethnic groups in the US population.

For individuals with disabilities, overall caries rates are higher than those of people without disabilities. In addition, parents consistently report dental care as one of the top-needed services for their children with disabilities. These needs range from the specific, complex care required for an infant with a cleft palate, to the general preventive hygiene needs of all children and adults with special health needs.

A shortage of dental providers trained to serve special needs populations complicates the issue of basic access to services for this population.

Other special populations with unique oral health needs are refugees and children in state custody. Many Vermont refugees arrive in Vermont from countries with few dental health services and may need extensive treatment and education around daily preventive practices, such as toothbrushing, flossing and nutritional habits. Foster children have often lived in situations of limited or intermittent access to health and dental care. Their entrance into state custody allows enrollment into the Medicaid insurance system and provides oversight to enable regular use of clinical dental services. Another subpopulation, those who are sentenced to Vermont correctional facilities, numbers over 6,000 individuals per year. This group can be viewed as another marginalized subpopulation that needs oral health services, whether they are living in their community or in a prison.

Women and children present specific issues and opportunities in oral health and delivery of dental health services. For example, unintentional injuries to the mouth, head, and neck are common in children (e.g. from sports or playground activities). Also, intentional injuries from child abuse or interpersonal violence have been increasingly documented in recent years. Research is also demonstrating the link between periodontal disease in pregnant women and poor birth outcomes. The maternal and child low-income population often is eligible for Medicaid, but due to program regulations, individuals are often intermittently enrolled, thus hindering comprehensive access to care. Also, many low income children make up the subset of children with severe dental caries, a group often hard to reach and assist in getting into care for intensive treatment. However, the maternal and child population has frequent interaction with many community and statewide systems (health, education, social services) that can provide opportunities for education and oral health preventive services.

All oral health planning activities must be mindful of the needs and issues of special populations and make every effort to address oral health disparities.

GOALS AND STRATEGIES TO IMPROVE VERMONT'S ORAL HEALTH SYSTEM

Focus: Public Health Infrastructure

Public health infrastructure consists of systems, people, relationships, and the resources that would enable state oral health programs to perform public health functions. Capacity enables the development of expertise and competence and the implementation of strategies. Building infrastructure and capacity must be a high priority for the Vermont Department of Health Office of Oral Health since this will allow the state to continue to meet and exceed the national Healthy People 2010 and Healthy Vermonters 2010 goals and objectives to improve the oral health of Vermonters.

The 2000 Surgeon General's Report on Oral Health states that "The public health infrastructure for oral health is insufficient to address the needs of disadvantaged groups, and the integration of oral and general health programs is lacking."

The 1998 landmark Institute of Medicine report, The Future of Public Health, described the core functions of the public health sector infrastructure that are critical to improve the health of the population. These functions are categorized as: assessment, policy development, and assurance. Using these core functions, the Association of State and Territorial Dental Directors identified essential public health services to promote oral health in the United States. The following objectives and strategies incorporate these essential public health services.

1. Goal: Assure a public health infrastructure in Vermont that works effectively to improve the oral health and overall health of the population.

Objective 1.1: Maintain an adequately staffed oral health unit within state government that is skilled in performing public health functions.

SPECIFIC STRATEGIES:

A. Designate the Vermont Department of Health Office of Oral Health as the focal point to advise, monitor and evaluate services provided in all oral health programs in state government. The Vermont Department of Health Office of Oral Health should have at least advisory capacity with oral health programs in other agencies to insure program efficiency and avoid duplication of services. Specific groups to focus collaborative efforts on include schools and congressional representatives.

B. Maintain the technical expertise of a fluoridation specialist within the Vermont Department of Health Office of Oral Health.

C. Aggressively recruit and maintain a licensed dentist as the state Dental Director with a position in the organizational structure of the Vermont Department of Health Office of Oral Health that is visible enough to provide overall agency coordination and leadership, develop and carry out specific program initiatives, and represent the agency to outside organizations.

Objective 1.2: Establish and maintain an oral health surveillance system for ongoing monitoring, evaluation of interventions, and timely communication of findings.

SPECIFIC STRATEGIES:

A. Develop and maintain a comprehensive epidemiological oral health surveillance system.

B. Identify critical data elements and standards needed for effective planning and program development. Specifically, better oral health data is needed that describes the oral health needs of adults and the elderly.

C. Secure funding to implement and maintain a comprehensive oral health surveillance system.

D. Continue school-based oral health surveys routinely to assess trends in the oral health status of children enrolled in VT schools.

E. Implement oral health surveys/needs assessments in other populations, such as adults, elderly, and specific subpopulations.

F. Implement surveillance activities focusing on access issues. Data collected can highlight outcomes and missed opportunities.

G. Develop regular (annual/semi-annual) reports on fluoridation status, oral health status, etc. Produce reports with the target audience in mind.

H. Continue the bi-annual dentist workforce survey.

Objective 1.3: Build linkages with partners interested in reducing the burden of oral diseases by establishing a state advisory committee or work group and community coalitions.

SPECIFIC STRATEGIES:

A. Continue the work of the Oral Health Advisory Committee as a collaborative partnership to provide guidance and recommend directions for the state oral health program.

B. Promote and disseminate best practices for oral health service delivery.

C. Promote regional and community-based collaborative efforts among agencies, organizations and individuals to address oral health needs.

D. Provide leadership, expertise, technical assistance, and resources to address oral health problems through collaboration and integration.

Objective 1.4: Maintain historically high levels of integration between the public and private sectors to address the oral health needs of Vermonters.

Objective 1.5: Maintain and enhance the state Oral Health Plan through a collaborative process.

SPECIFIC STRATEGIES:

A. Integrate the VT Oral Health Plan into all health planning efforts by state agencies, including the State Health Plan and Health Resource Allocation Plan.

B. Monitor the implementation of the VT Oral Health Plan. Review and revise as necessary.

C. Disseminate the VT Oral Health Plan and engage stakeholders throughout the state. Encourage stakeholders to identify specific areas for action and to use the VT Oral Health Plan in their work.

D. Incorporate recommended strategies identified in the VT Oral Health Plan into funding plans from various sources.

Objective 1.6: Educate the public, health care providers, and policy makers about oral health and build support for policies and resources to address oral health.

SPECIFIC STRATEGIES:

A. Focus educational efforts on the link between oral health and general health.

B. Promote efforts to educate on the link between oral health and chronic conditions that affect oral health status, such as diabetes.

C. Initiate and promote oral health policy proposals based on priority oral health needs identified through assessment processes and best practice recommendations.

D. Provide leadership and expertise and participate actively in planning and policy development for future state initiatives in health systems development, service delivery, and financing.

E. Publish newsletters, press releases, annual reports, etc. concerning oral health.

F. Disseminate nationally published literature in the public domain to ensure that both dental and medical health providers are using the same information to treat patients with chronic conditions.

G. Utilize oral health data to build support for program planning.

Objective 1.7: Support the implementation of services that focus on primary and secondary prevention.

SPECIFIC STRATEGIES:

A. Improve public understanding and support for community water fluoridation, school fluoride programs and supplement use.

B. Promote community adoption of community water fluoridation.

C. Support implementation of oral health as an integral component of comprehensive school health and day care programs.

Objective 1.8: Build community capacity to implement community-level interventions.

Objective 1.9: Evaluate the effectiveness, accessibility, and quality of both population-based and individual oral health services.

A. Incorporate a strong evaluation component into any oral health surveillance system that is developed.

B. Secure funding to assure evaluation activities are accomplished.

Focus: Prevention and Health Promotion

Effective prevention strategies exist to greatly reduce the burden of oral diseases. Community water fluoridation is a premiere example of an effective prevention strategy. The positive impact on the prevalence and severity of dental caries due to optimally-fluoridated water led to community water fluoridation being identified as one of the 10 great public health achievements of the 20th century.

Other proven prevention strategies include the use of dental sealants and the use of products that contain fluoride such as toothpaste, mouth rinses, dietary fluoride supplements, and professionally-applied varnishes and gels. Healthy behaviors including good dietary practice and self-care such as toothbrushing and flossing, and regular professional cleanings and examinations also prevent oral diseases and maintain health.

The role of nutrition in oral health is critical, especially in children. Nearly all carbohydrates can promote decay by containing a mix of sugars and starches. Most important in the prevention of dental caries is reducing the frequency of consumption of foods or drinks containing sugars. Consistency of foods and the order in which foods are eaten have also been linked to risk of decay. Establishing good nutritional practices in infancy and early childhood can greatly increase oral health over the lifetime.

Several levels of oral disease prevention exist. Primary prevention includes interventions designed to prevent oral disease from initially occurring. Examples include: oral health education (e.g. transmission of cariogenic bacteria from mother/caretaker to infant - improving mother/care-giver's oral health reduces risk of caries in child), community water fluoridation, use of dental sealants, changes in dietary patterns, and proper self-care. Secondary prevention approaches are those that eliminate the need for extensive oral health care such as early diagnosis and treatment of oral diseases through periodic examinations, removing decay and restoring tooth structure and function at early stages, and screening for oral cancer. Tertiary prevention avoids disability from oral diseases in intermediate and late stages such as restorative care ranging from crowns to implants. Primary prevention strategies clearly represent the most cost-effective method to improve oral health status. The majority of recommendations made in this plan address primary prevention.

It is widely recognized that oral health care is best delivered in a "dental home." A dental home is defined as a specialized primary dental care provider who is accessible, continuous, comprehensive, coordinated, compassionate, and culturally effective. Where appropriate, professional interpretation and translated material may be necessary to provide information to patients in an effective way. The dental home should be expected to provide:

- An accurate risk assessment for dental diseases and conditions.
- An individualized preventive dental health program based on the risk assessment.
- Anticipatory guidance about growth and development issues (ie, teething, digit or pacifier habits, and feeding practices.)
- Access for emergency dental trauma.
- Information about proper care of teeth and gingival tissues.
- Information regarding proper nutrition and dietary practices.
- Comprehensive dental care in accordance with accepted guidelines.
- Referrals to dental specialists, such as pediatric dentists, endodontists, oral surgeons, orthodontists, and periodontists, when care cannot be provided directly within the dental home.

Transportation has been identified as a major barrier for many in accessing dental care. The rural nature of Vermont, limited public transportation in many areas, and distance necessary to travel to a dental office are factors for consideration.

Currently, approximately 56 percent of Vermont's population receives the benefits of fluoride in their drinking water. Efforts must be directed to support fluoridation in non-fluoridated communities, and to maintain communities that are already fluoridated. Residents living in areas with fluoridated water should be aware of the benefits of drinking the water and encouraged to do so. The use of bottled water is prevalent and may undermine the effectiveness of optimally fluoridated water when residents choose to drink bottled water rather than their tap water.

Community water fluoridation is proven effective in reducing decay rates, and is a cost-effective method that benefits all residents served by public water systems regardless of socioeconomic status. Every dollar spent on fluoridation saves an average of $38 in dental costs. Residents of communities with fluoridated water have 20 - 40% less dental disease than those living in non-fluoridated communities. A list of Vermont communities, representing 66,122 Vermonters, which are currently non-fluoridated, and are eligible to participate in the water fluoridation program of the Department of Health is included in the Appendix.

As noted earlier, disparities exist in the oral health status of the population. Some individuals and groups are at higher risk than others. Interventions should be targeted to match the level of risk. For example, national data indicate that 25% of children experience 80% of all decay. Vermont data reflects national data in that 23% of Vermont children in grades 1-3 experienced 82% of the decay found in primary and permanent teeth. Where possible, prevention strategies should be targeted to those children experiencing the majority of the decay. In addition, prevention strategies should be aimed at special populations such as pregnant women, children in state custody, refugees, children with special health needs, and individuals with certain chronic diseases.

Health promotion and health education efforts can complement other interventions being implemented to address oral health problems. Surveys of the public have indicated a need for accurate oral health information. Messages should be developed based on formative research of both the oral health issue and the target audience.

Oral Health Education

2. Goal: Increase the understanding of oral health as integral to overall health.

Objective 2.1: Educate the public, health professionals and policy makers about the relationship between oral health and general health with an emphasis on: prenatal oral health care for women, prevention of early childhood caries (Baby Bottle Tooth Decay), behaviors that assure good oral health (e.g. daily oral hygiene, routine dental exams, proper use of fluorides, proper nutrition, injury prevention, being tobacco-free), the link between oral health and many chronic conditions, the importance of continuation of care (dental care across the lifespan), and early detection and prevention of oral cancer.

SPECIFIC STRATEGIES:

A. Conduct a statewide media campaign with messages about the value and importance of oral health and the impact of poor oral health on general health. Create specific messages for different target groups.

B. Provide education to pregnant women emphasizing the relationship between maternal oral health and pre-term low birth weight, and between maternal oral health and infant oral health (especially focusing on the infectious nature of dental decay and transmission from mother/caregiver to child), and the benefit of establishing positive oral health behaviors beginning in infancy and early childhood.

C. Develop/disseminate messages and provide education for staff on early childhood caries in appropriate settings (e.g. daycare centers, WIC, DCF, Parent-Child Centers, visiting nurses, MCH coalitions, Head Start/Early Head Start).

D. Coordinate current statewide efforts and resources focusing on oral health education in various settings (e.g. school-based educational programs emphasizing nutrition, frequency of carbohydrate consumption, use of vending machines with healthy food choices).

E. Support organizations that require use of appropriate mouth protection for students participating in school-sponsored physical activities.

F. Educate the primary care community on the relationship between oral health and adverse pregnancy outcomes and the transmission of cariogenic bacteria from mother to infant.

G. Provide pediatricians, nurses, and other medical professionals with information on oral disease prevention (including early childhood caries), existing oral health services in their communities, and where to refer patients for oral health treatment.

H. Include oral disease prevention as a component of overall health promotion in the curricula and training experiences of all Vermont schools of medicine and allied health professions.

I. Build and strengthen partnerships between the dental and medical communities.

J. Develop and disseminate educational messages about oral hygiene, periodontal disease, and effects on chronic conditions for use by community organizations serving elderly populations (such as social centers, assisted living facilities, etc.).

Establishment of a Dental Home

3. Goal: Improve the oral health of Vermonters by linking every person with a dental home.

Objective 3.1: Increase the percentage of Vermont residents with an established dental home.

SPECIFIC STRATEGIES:

A. Revisit the Baby Bottle Tooth Decay Initiative or similar strategy to link children ages 0-4 with a dental home.

B. Expand and enhance the Tooth Tutor Dental Access Program.

C. Explore creation of programs intended to link adults and the elderly with a dental home, including an analysis of limitations such as reimbursement.

D. Assess opportunities for increased collaboration between community dental practices and clinics and dental services provided with correctional facilities so as to foster continuity of care during the times when individuals are transferred between prison and their home community provider.

Fluoride

4. Goal: Improve overall health by reducing the prevalence of dental caries among Vermont residents.

Objective 4.1: Increase the percentage of Vermont residents served by public water systems that have optimally fluoridated water.

SPECIFIC STRATEGIES:

A. Create a multidisciplinary statewide fluoridation coalition to provide a forum where stakeholders can communicate, plan, and pool resources to effectively promote and sustain water fluoridation.

B. Ensure adequate infrastructure within the Vermont Department of Health to support fluoridation continuation and new community start-ups. Identify key personnel and resources that will be actively engaged in the fluoridation program including the Vermont Department of Health Office of Oral Health, State Laboratory, and Information Technology.

C. Continue collaboration between the Vermont Department of Health Office of Oral Health and Water Supply Division engineers and Operations and Compliance personnel at the Vermont Department of Environmental Conservation.

D. Continue statewide fluoride monitoring and surveillance that will track fluoride concentrations in each of the fluoridated public water systems and support the Centers for Disease Control and Prevention's National Fluoridation Database.

E. Continue to provide community incentives that will support water fluoridation.

F. Promote public awareness of the benefits of community water fluoridation.

G. Promote public awareness of the availability of optimally fluoridated bottled water.

Objective 4.2: Increase the percentage of Vermont residents receiving the benefits of optimal fluoride.

SPECIFIC STRATEGIES:

A. Expand school-based fluoride mouthrinse programs in non-fluoridated communities.

B. Increase the number of students participating in fluoride mouthrinse programs when offered in their school.

C. Encourage appropriate prescribing of systemic and topical fluoride by dentists and primary

care physicians.

D. Increase awareness of free well water testing for children ages six months to four years available through the Department of Health with requests submitted by a health care provider.

E. Explore opportunities for appropriate fluoride application by non-dental professionals who have received adequate education and training.

Dental Sealants

5. Goal: Reduce the incidence of dental caries through appropriate use of dental sealants.

Objective 5.1: Increase the percentage of Vermont children who receive dental sealants as appropriate for their age and risk for dental caries.

SPECIFIC STRATEGIES:

A. Increase public awareness of the effectiveness and availability of sealants to prevent dental caries.

B. Analyze the current delivery system of sealants, identifying what is currently working well (linking children with a dental home and application of sealants in dental offices), and where gaps exist.

Oral Cancer Prevention and Control

6. Goal: Reduce the prevalence of oral cancer in Vermont.

Objective 6.1: Increase early detection and promote prevention of oral cancer in Vermont.

SPECIFIC STRATEGIES:

A. Ensure that tobacco control and alcohol abuse programs address oral cancer and efficiently work with oral health and primary care providers to integrate programs for the identification and prevention of this disease.

B. Promote routine screening for oral cancer by oral health providers and primary care providers.

C. Promote tobacco prevention and education programs with an emphasis on spit tobacco.

D. Maintain ongoing continuing education on tobacco cessation programs for oral health and primary care providers so that they can adequately provide their patients with the necessary information to help them break their tobacco addiction.

Focus: Workforce

The dental health workforce, specifically dentists, is declining. Between 1986-1993 a net of six dental schools closed. In addition, there have been reductions in class size and the number of graduating dentists declined by 40 percent between 1986 and 2000. Recent increases in the number of graduates are encouraging (15 percent between 1993 and 2002); however the looming shortage of practicing dentists is troubling. Other factors affecting the dental workforce include the high costs of dental school tuition, the number of dentists retiring from practice, and difficulty retaining and finding new faculty at dental schools. New England sends fewer students to dental schools than any other region. Also, the state of Vermont is one of 16 states without a dental school. In addition, Vermont does not send many of its citizens to dental school in relation to the population. As a result, the state is much more dependent on the importation of people who are not originally from Vermont. Vermont does, however, have a dental residency program that provides training opportunities to dentists who may then choose to remain in Vermont.

According to the 2003 Vermont Survey of Dentists conducted bi-annually by the Department of Health, there were 367 dentists working in Vermont. Of these, 80 percent were primary care dentists including 284 in general dentistry and 9 in pediatric dentistry. 194 of the dentists are age 50 and older, and 129 of these are age 55 and older. More than one-third of all dentists plan to retire within 10 years.

Recent Vermont trends in the number of Full Time Equivalents in dental specialties have shown decreases. Reduced availability of specialty dental care providers including pediatric dentistry, oral surgery, endodontics, orthodontics, periodontics, and prosthodontics may have negative implications for the overall oral health delivery system.

In addition to dentists, dental auxiliary personnel including dental hygienists and dental assistants are part of the dental workforce. A 2002 survey conducted by the Vermont State Dental Society indicated that there is a shortage or a maldistribution of working dental hygienists in Vermont with a fragile balance in rural or remote areas. A shortage of dental assistants has not been identified; however, future demand for dental assistants will be dependent on the number of dentists practicing in the state.

Predicting the workforce needs of dentistry can be complex. Many factors contribute to the supply and demand for dental services. Ongoing data collection and monitoring of the workforce status issue is essential to inform short term and long term planning to assure a workforce that can meet the needs of the population.

The dental practice plays a leading role in oral disease prevention and promotion of healthy behaviors. Dentists and dental hygienists have received advanced training in prevention and work daily to improve the health of their patients and encourage them to lead healthy lives. Throughout Vermont, dentists in a variety of settings provide preventive and restorative care. Vermont dental professionals are committed to increasing access for underserved individuals as reflected in high rates of participation in the Medicaid program.

In Vermont, the dental community and the public health community have a historical record of strong collaboration. Fostering and encouraging the strengths that each group provides will contribute to improved oral health outcomes for Vermonters.

7. Goal: Enhance the oral health workforce in Vermont to meet the needs of all Vermonters.

Objective 7.1: Increase the representation of Vermonters, including those from diverse populations, in dental schools.

SPECIFIC STRATEGIES:

A. Work with Area Health Education Centers to encourage Vermont students in secondary school and college to consider careers in dentistry, dental hygiene or dental assisting.

B. Explore a dental education scholarship program that provides full tuition grants and monthly living stipends to Vermonters who attend dental professional schools and return to practice in Vermont.

C. In addition to monetary payback for scholarship recipients, encourage community service and/or mentoring responsibilities working with underrepresented populations.

D. Continue and expand the loan repayment program for dental professionals practicing in underserved areas.

E. Explore a reciprocity program whereby Vermont students can qualify for in-state tuition at dental schools in other states.

Objective 7.2: Provide more support and continue existing efforts for recruitment of dentists into the state.

SPECIFIC STRATEGIES:

A. Develop tools to inform and encourage dentists to practice in Vermont (e.g. a public relations campaign in dental schools in the region to market Vermont to students).

B. Consider tax credits for dentists and dental hygienists practicing in underserved areas.

C. Increase the number of accredited general practice residency programs at Vermont hospitals. Increase the number of available training slots for general practice residents. Explore mentorship programs.

D. Analyze the current environment for dentists to practice in Vermont and identify factors that may influence the decision to relocate to Vermont (e.g. adequate reimbursement rates, availability of auxiliary personnel, number of specialists for referral, demand for dental services).

Objective 7.3: Explore the use of dental and non-dental providers with appropriate education, training and licensure to enhance the oral health workforce and promote access.

SPECIFIC STRATEGIES:

A. Increase the number and maximize the use of Expanded Function Dental Assistants (EFDAs) in dental practices to improve productivity.

B. Examine and consider ways to maximize productivity of dental assistants.

C. Examine and consider programs in other states that expand the productivity of dental hygienists.

D. Train dental and medical providers to conduct oral health risk assessments, especially targeting certain subpopulations such as children ages 0-3, elderly, and those seeking medical management for chronic disease.

Objective 7.4: Ensure a well-trained dental workforce by providing qualified continuing education opportunities.

SPECIFIC STRATEGIES:

A. Continue the availability of dental continuing education through Vermont dental professional associations.

B. Through a partnership with Vermont Professional Societies and Vermont Department of Health Office of Oral Health, recommend and develop qualified continuing education opportunities for existing practitioners of dentistry and dental hygiene in the areas of prevention, health promotion, working with special populations, and other priority areas.

Objective 7.5: Continue the systematic collection of dental workforce data in Vermont and expand to include detailed information on all dental professionals.

SPECIFIC STRATEGIES:

A. Better monitor supply and demand for all dental professionals in order to predict existing and future workforce shortfalls or surplus.

B. Assess the distribution of and potential need for dental specialists, including pediatric dentists, oral surgeons, and others.

Focus: Financing and Delivery Systems

Comprehensive oral health care in Vermont is largely supplied by dentists and their professional staff in private offices. Nearly 80% of Vermont dentists practice in either a solo practice (50%) or a practice with two dentists (28%). The remaining practices are group practices of three or more dentists.

In addition to private dental practices, dental care is also provided throughout the state in clinics, hospital emergency departments, the Dental Hygiene Program at VT Technical College, and the dental residency program at Fletcher Allen Health Care.

There has been an increase in recent years in the number of Federally Qualified Health Centers (FQHC) and Rural Health Centers providing dental care. New FQHCs are required to offer dental care either on-site or through contract with private practices. Health centers are also required to provide enabling and supportive services including: case management, transportation assistance, eligibility counseling and assistance, translation services, and health education in order to increase patient self-care management. In Vermont, Health Centers serve a wide range of the population including those with private insurance, Medicaid, and uninsured Vermonters.

The Vermont dental community is committed to linking people with a dental home. Programs such as the Tooth Tutor Dental Access Program at the Department of Health have been very successful in increasing the number of school children who are linked with a dental home.

Vermont's Tooth Tutor Dental Access Program was developed in response to the concerns of school nurses, teachers, dental professionals and other health care professionals. The Tooth Tutor Dental Access Program goal is to establish a dental home for each child. It provides a system to identify the children in a school who do not have access to regular dental care, and to help families gain access to dental services in their community. The Tooth Tutor program also contains a curriculum so that all members of the school can benefit from dental health education.

FINANCING AND REIMBURSEMENT

Insurance is a major determinant of dental utilization. Nationally, 70.4 percent of individuals with private dental insurance reported seeing a dentist in the past year, compared to 50.8 percent of those without dental insurance. Dental insurance is not available to a large number of Americans. For every child without health insurance, there are 2.6 who lack dental coverage. For every adult that lacks medical coverage, three are without dental coverage. Only two out of every ten older Americans are covered by private dental insurance. In 2002, annual expenditures for dental services in the US were $70.3 billion or 5 percent of total health care expenditures. Private sources, including private insurance and out-of-pocket spending by consumers, finance an overwhelming majority – 94 percent – of dental care nationwide. Only four percent is financed by public payers, primarily through Medicaid. Access to dental care is a significant concern for many Vermonters, often a direct result of financial barriers. Information and data on various financing sources other than Medicaid in Vermont is lacking.

For State Fiscal Year 2004, there were 118,940 individuals eligible for dental care through the state Medicaid program. In 2004, 48 percent of Medicaid eligible children and 26 percent of Medicaid eligible adults were utilizing oral health services. Overall utilization was 39 percent.

Vermont Medicaid Adult Program (State FY 2004):

Dental benefits for adults (age 21 and older and aged, blind and disabled, and families with children) limited to $475 per calendar year. Covered services include the following:

1. Diagnostic procedures: oral evaluations (check-ups limited to two per year), x-rays
2. Preventative procedures: two cleanings per year
3. Restorative procedures: amalgam restorations, resin-based restorations, prefabricated crowns, root canals (limited to three per lifetime)
4. Periodontal procedures: scaling and root planing only
5. Oral surgery: extractions, occlusal orthotic appliances (TMJ splints), other medically necessary oral surgical procedures

Vermont Medicaid Children's Program (State FY 2004):

No yearly maximum benefit for children up to age 21. Covered services include the following:

1. Diagnostic procedures: oral evaluations (check-ups limited to two per year), x-rays
2. Preventive Procedures: two cleanings per year, two fluoride treatments per year, sealants, space maintainers

3. Restorative procedures: amalgam restorations, resin-based restorations, prefabricated crowns, cast crowns, bridges, complete dentures, partial dentures, root canals (unlimited)
4. Periodontal procedures: scaling and root planing, medically necessary periodontal surgery
5. Oral surgery: extractions, occlusal orthotic appliances (TMJ splints), other medically necessary oral surgical procedures
6. Medically necessary orthodontic treatment (requires prior authorization)

8. Goal: Expand the dental care delivery system in Vermont so as to create a statewide, comprehensive system of care designed to adequately meet the needs of underserved Vermonters. Development of new subsidized dental facilities/programs should be part of a statewide strategy to supplement, not replace, private dental practices.

Objective 8.1: Explore opportunities for collaboration between Federally Qualified Health Centers/Rural Health Centers and private dentists.

SPECIFIC STRATEGIES:

A. Consider systems that allow contractual arrangement between private providers and clinics, thus enabling a coupling of the providers' clinical services and the clinics' social support services and enhanced reimbursement rates.

B. Explore opportunities for matching community support services with dental practices to enhance patient access.

Objective 8.2: Develop an economic model to understand the impact of reimbursement on provider practices and overall access to care in Vermont.

SPECIFIC STRATEGIES:

A. Establish an advisory committee to work with the Vermont Department of Health to develop a dental economic model for Vermont that will lead to a common understanding of cost calculations and practice capacity.

B. Evaluate other states that are paying a market reimbursement rate and the effect this has had on increasing access to care.

Objective 8.3: Create a community-based coordinated social support system for both patients and providers to increase access.

SPECIFIC STRATEGIES:

A. Examine lessons learned from successful state and national programs (such as Tooth Tutor and community health centers) and suggest innovative strategies to organizations who serve specific vulnerable subpopulations.

Objective 8.4: Educate policy makers on oral health delivery systems and financing.

SPECIFIC STRATEGIES:

A. Establish systems of regular communications about oral health systems issues with policy makers (e.g. elected officials, government policy makers, etc.)

B. Invite policy makers to be active participants in the Vermont Oral Health Advisory Committee.

Objective 8.5: Enhance access to dental services.

SPECIFIC STRATEGIES:

A. Maintain and increase funding to increase the number of schools participating in the Tooth Tutor Dental Access Program.

B. Explore ways to enhance the Tooth Tutor program and services provided by Tooth Tutors. For example, Tooth Tutors could provide more outreach work to facilitate communication between families and their dental home with the goal of decreasing broken appointments.

C. Explore the potential for other personnel to participate in the Tooth Tutor program in roles designed to provide case management, transportation assistance or coordination of establishing a dental home.

D. Consider the development of a “Tooth Tutor-like” program designed to link the elderly with a dental home. Develop specific strategies for elderly living either in their own home or those living in group home facilities.

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Appendix A

HEALTHY VERMONTERS 2010
ORAL HEALTH 2010 OBJECTIVES

Objective 1 Increase the percentage of the population served by community public water systems that receive optimally fluoridated water.

Goal	75%
VT 1999	69%
US 1992	62%

Objective 2 Further reduce the percentage of children (age 6-8) with untreated dental decay in primary and permanent teeth.

Goal	21%
VT 1993-94	19%
US 1988-94	29%

Objective 3 Reduce the percentage of youth (age 14-15) with untreated dental decay.

Goal	15%
VT 1993-94	22%
US 1988-94	20%

Objective 4 Increase the percentage of people who use the dental system each year.

Goal	83%
VT 1999	74% (age 18+)
US 1997	65% (age 2+)

Objective 5 Increase the percentage of children who receive dental sealants –

	AT AGE 8:	AT AGE 14:
Goal	50%	50%
VT 1993-94	43%	45%
US 1988-94	23%	15%

Objective 6 Increase the percentage of dentists who counsel patients about quitting smoking.

Goal	85%
Vermont survey under development	
US 1997	59%

Appendix B

Vermont Oral Health Advisory Committee Members

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Peter Taylor, *Vermont State Dental Society*

Appendix C

List of Towns Eligible to Participate in Community Water Fluoridation Programs

- Barre Town, population 700
- Bennington, population 18,800
- Brattleboro, population 12,200
- Bridgeport, population 3,200
- Brighton, population 2,200
- Chester, population 2,800
- Derby, population 1,100
- Fair Haven, population 2,817
- Grand Isle, population 2,265
- Hartford, population 7,000
- Johnson, population 1,350
- Lyndonville, population 3,200
- North Hero, population 1,530
- Richford, population 1,700
- Rochester, population 660
- Royalton, population 1,500
- South Hero, population 550
- Stowe, population 1,000