Great Faces. Great Smiles.

Oral Health Plan for South Dakota

May 2009

South Dakota Department of Health

OFFICE OF THE SECRETARY

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Pierre, South Dakota 57501-2536
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Dear Fellow South Dakotans:

I am pleased to present the first ever statewide Oral Health Plan for South Dakota. This strategic plan was prepared in recognition of the important role oral health plays in the overall health of all South Dakotans. This plan addresses the burden of oral disease in South Dakota and was developed by the Department of Health in collaboration with a group of key stakeholders in the Oral Health Coalition from across the state. The group identified goals, objectives, and strategies covering a broad spectrum of issues related to surveillance, prevention, workforce, and access to dental care.

Optimal oral health remains a challenge for many South Dakotans. Sixty-six percent of South Dakota children have experienced dental decay by the time they reach third grade. Even though dental decay is preventable and treatable, too many people do not receive routine care. Untreated dental decay can lead to pain, tooth loss, and serious infections at a huge economic and social cost.

The Surgeon General's Report in 2000, Oral Health in America, provided evidence of the integral relationship between oral health and general health, including associations between chronic oral infections and diabetes, heart and lung conditions, and certain adverse pregnancy outcomes. This State Oral Health Plan gives each of us a place to start and will provide guidance for achieving optimal oral health for all South Dakotans.

The Department of Health recognizes that this plan would not be possible without the active participation of many committed partners, including the State Oral Health Coalition. We thank everyone who has contributed to this important endeavor. We encourage you to review the strategies in the enclosed plan and identify ones you can support and implement in your area. Working together, we can strive for improved oral health for all South Dakotans.

Sincerely,

Doneen B. Hollingsworth
Secretary of Health

South Dakota State Oral Health Plan

Published May 2009

Doneen Hollingsworth
South Dakota Department of Health, Secretary

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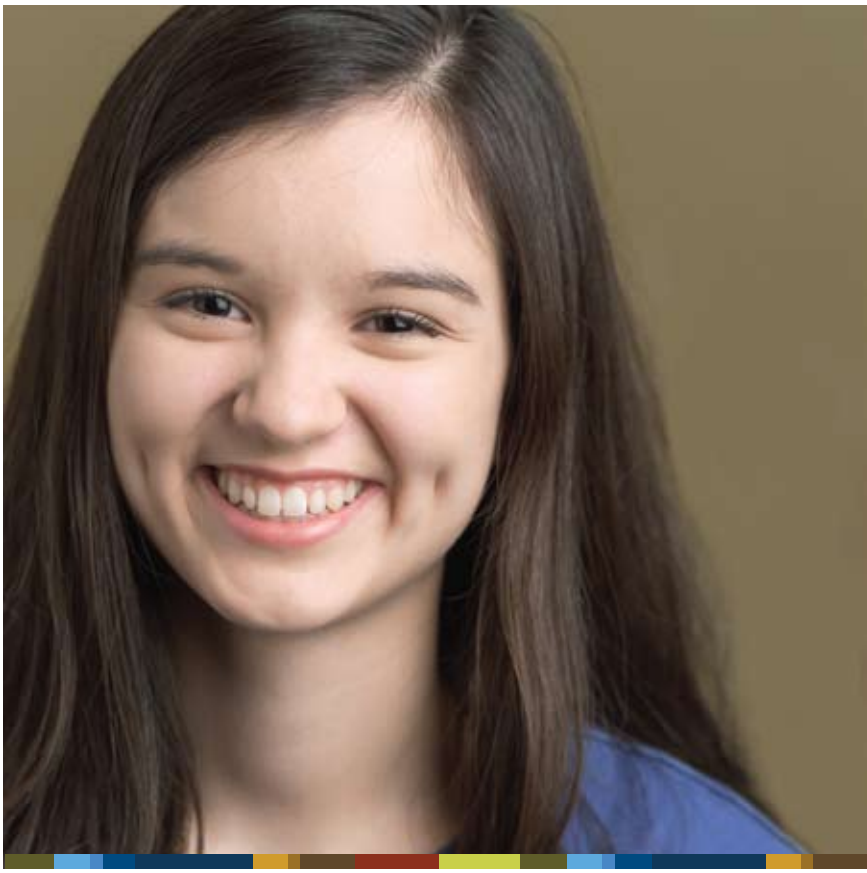


Introduction

The development of the statewide collaborative South Dakota State Oral Health Plan is a joint project between the South Dakota Department of Health and a wide range of key oral health advocates from the state Oral Health Coalition Steering Committee. This Plan is designed to promote oral health by increasing awareness of the importance of oral health and to prevent dental disease by increasing access to preventive interventions and early dental care. It reflects both the Oral Health Coalition's and the South Dakota Department of Health's vision, goals, and activities to achieve those goals. Special emphasis is given to reducing the health disparities that affect low-income or the uninsured, those who are geographically isolated, members of racial and ethnic groups, and others who are vulnerable because of special health care needs.

The release of the 2000 Report of the Surgeon General, Oral Health in America, provided evidence of the integral relationship between oral health and one's overall general health. In addition, recent reports demonstrate associations between chronic oral infections and diabetes, health and lung conditions, and certain adverse pregnancy outcomes. The report's message is that oral health is essential to general health and well-being and can be achieved. Tooth decay (caries), the most common chronic childhood disease, is preventable especially when preventative practices are initiated early. However, a number of barriers, including low socioeconomic status, lack of insurance and low dental literacy hinder some from attaining access to dental care.

The Department of Health has conducted two oral health surveys one each in the 2003 and 2006 school years and found that 66-67% of our third grade students already experience tooth decay (Healthy People 2010 target rate is 42%) with 33% of those third graders in need of dental treatment. Nationwide 51 million school hours are lost by students each year because of dental disease; children are unable to concentrate or learn if they are experiencing dental pain.

Although numerous South Dakotans enjoy good oral health, many still suffer from dental disease. Disparities exist and are largely related to socioeconomic factors and are compounded by our predominantly rural state's geography and population distribution as well as by the distribution of dental professionals. We have seen improvements in providing dental care in some rural areas and for some underserved, but there is still much that can be done to improve oral health for all the people of South Dakota.

Since the formation of the Oral Health Coalition in 2002, many local community agencies, professional organizations, and state agencies have initiated activities intended to improve oral health and to increase access to oral health services. However, in the absence of a comprehensive oral health plan, these various activities lacked the coordinated vision of a long-term and comprehensive approach that will assure effective and lasting change. In South Dakota, people work together to achieve shared goals for the good of the masses.

The SD Department of Health hosted two facilitated meetings of the Oral Health State Planning Committee to initiate the development of a strategic oral health plan in November and December of 2008. The group of 30, comprised of a broad range of key stakeholders, was charged with developing a plan for improving oral health. The group drafted a vision statement, developed guiding principles as the foundation for the plan, and identified criteria to consider when developing goals and strategies. With this state oral health plan, we can enhance our efforts to increase the understanding of the importance of oral health as an integral part of overall health and to increase the availability and utilization of dental services.

The Plan is organized into five key action areas. The plan will serve as a roadmap; an adaptable, working guide for those oral health advocates who have a role in improving oral health, dental and non-dental health professionals, elected officials and policy-makers, community agencies, and all the residents of SD. Inherent in the implementation of this plan is the need for coordination and collaboration as well as adequate funding to ensure the initiatives are delivered in a timely and effective manner.

The planning committee supports the Plan and its principles as a framework for achieving improvements in oral health in SD. The Plan is intended to be a living document, and will be adapted, revised, and updated to meet the future needs of South Dakotans.

Executive Summary

In South Dakota, huge strides have been made to improve the oral health of our residents. The Dakota Smiles Program, growing public awareness of the importance of oral health, and community water fluoridation have made it possible for many South Dakotans to enjoy improved oral health. At the same time, South Dakota mirrors the nation with oral disease being pervasive among families with elderly, those with disabilities, those who are under-insured, and minority groups. In South Dakota, approximately 66% of children experience tooth decay by the third grade. Tooth decay and advanced gum diseases ultimately lead to loss of some or all teeth. About 37% of South Dakota adults have lost one or more teeth, with 6% having lost all of their teeth.

Poor oral health has many significant social and economic consequences as well as an adverse impact on overall health. The mouth serves as our primary connection to sustain life, but also plays a major role in our overall physiology. Poor oral health may result not only in tooth decay, eventual tooth loss and impaired general health, but also in compromised nutrition, in days lost from school and work, and the ability to obtain or advance in education, employment, and social status.

The South Dakota State Oral Health Plan is a roadmap for oral health programming intended to create a unified, organized vision for improved oral health outcomes across the state. Developed in collaboration with many key partners, this document reflects the priorities and ideas of those oral health advocates. The plan is divided into five goals, each with objectives, strategies, actions steps and timelines that will be implemented by responsible parties. All stakeholders can use this plan as a tool to enlist partners, attract funding sources, and promote action for improving the oral health of South Dakotans.

Mission Statement

Increase oral health care in South Dakota.

Goal 1

Increase awareness of the importance of oral health in maintaining overall health across the lifespan.

Objective 1

By 2013, conduct a multi-faceted awareness campaign focusing on the impact of oral health on overall health.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Develop television and radio public service announcements directed at identified target audiences	DOH, OHC	Pre and post surveys	Pre-survey May 09 Post-survey July 2013
2) Provide resources that encourage dental professionals to schedule dental appointments, conduct risk assessments, and provide preventive interventions for high-risk populations	SDDA, Delta Dental	Track number of resources provided. Track use of Medicaid dental codes	Ongoing
3) Submit articles to SDDA, SDDHA, & Delta Dental quarterly newsletters	SDDA, DOH, SDDHA, Delta Dental	# of articles published	Ongoing
4) Provide identified target information as part of continuing education offerings for dental & medical professionals	SDDA, SDDHA, USD, LATI	# of pre and post tests	Ongoing
5) Encourage dental professionals to initiate National Children's Dental Health Month (NCDHM) activities in their communities	SDDA, SDDHA, Delta Dental, DOH	Monitor use of Teeth on the Go bags	Ongoing

Strategies	Responsible Parties	Evaluation Methods	Target Date
6) Provide user friendly, developmentally appropriate educational materials statewide	DOH, Delta Dental	Track # of resources distributed	Ongoing
7) Develop protocol/form of oral hygiene preventive practices to be provided to patients	SDDA	Form developed	December 2011
8) Provide oral health information for health professional conferences and/or their association newsletters	DOH, SDDA, Delta Dental	Track attendance or newsletter subscriptions	Ongoing
9) Partner with Tobacco Program and/or Coalitions to provide tobacco cessation information	DOH, SDDA, Delta Dental	# of tobacco presentations	Ongoing
10) Partner with DOH-NPA to provide information about healthy food/beverage choices for people in their workplace	DOH-OH DOH-NPA	Track # of times oral health info is provided on HealthySD.gov website	Ongoing
11) Provide chronic disease associations with oral health information	DOH, SDDA, Delta Dental	# of associations reached	Ongoing
12) Provide agencies and facilities that serve the elderly and people with disabilities with oral health information	DOH, SDDA, Delta Dental	# of agencies reached	Ongoing
13) Develop and distribute cancer/ oral health monograph	DOH	Monograph developed	December 2011

Objective 2
By 2010, provide educational resources to 200 early childhood professionals (Head Start & Early Childhood Enrichment staff) on the importance of oral health practices.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Collaborate with agencies to disseminate oral health materials promoting the importance of early dental care and preventive interventions	DOH, SDDA, Delta Dental	Track numbers of resources provided	Ongoing
2) Provide training and/or technical assistance for Head Start and Early Childhood Enrichment Programs	DOH	Track # of contacts made	Ongoing

Objective 3
By 2011, 65% of pregnant women will receive information from their dentist and healthcare providers on how to care for their teeth and gums. Baseline 47% Perinatal Health Risk Assessment Report 2007.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Provide dental professionals, all medical professionals and their educational institutions with information on oral disease prevention and interventions	DOH, SDDA, I H S, LATI, USD Dental Hygiene, SDAHO, Delta Dental	Track numbers of resources distributed Oral Health info is posted on Health Systems websites	Ongoing
2) Collaborate with the SDMA to distribute information to medical professionals serving pregnant women	DOH, SDDA, Delta Dental	Track number of contacts	Ongoing
3) Collaborate with PA, NP, and nursing programs to promote the importance of prenatal dental care	USD Dental Hygiene, SDDA, DOH, Delta Dental	Track number of contacts	Ongoing

Strategies	Responsible Parties	Evaluation Methods	Target Date
4) Provide technical assistance to USD Med School to promote the importance of prenatal dental care	USD Dental Hygiene, DOH	# of tech. assistance opportunities provided	Ongoing
5) Develop or distribute print materials reinforcing the importance of prenatal dental care & early oral care of the infant's mouth	DOH, SDDA, Delta Dental	Track numbers of resources provided	Ongoing
6) Include medical professionals on the OHC	OHC	Monitor participation list	Ongoing
7) Collect & review oral health data from the Perinatal Risk Assessment	DOH	Compare data	December 2011

Objective 4
By 2013, decrease sweetened beverage consumption among high school students from 28% to 25%. Baseline 28% YRBS 2007

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Provide technical assistance and sample wellness policies to school councils about including oral health issues in their school wellness policy	OHC	Compare data from YRBS Track TA provided	Ongoing
2) Work with school wellness councils to provide information as they institute policy on healthy options in vending machines	OHC DOH-CSH	Wellness council meeting notes on file	Ongoing
3) Develop articles on the hazards of sweetened beverages for the HealthySD.gov website	DOH OHC	Track number of hits on the DOH website	Ongoing

Strategies	Responsible Parties	Evaluation Methods	Target Date
4) Encourage dental professionals to initiate NCDHM activities in their communities	SDDA, SDDHA, Delta Dental, DOH	Track number of Teeth on the Go bags that were utilized during February Track number of dental offices that participate	Ongoing

Objective 5
By 2013, increase to parents awareness of dental sealants. Baseline: 61% of children have dental sealants, SD Oral Health Survey 2006

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Provide families with information about the importance of dental sealants & fluoride varnish	DOH, SDDA, Delta Dental, OHC	Compare data from BSS surveys	Ongoing
2) Encourage dental offices to communicate the importance of dental sealants to their staff and patients	SDDA, Delta Dental	Track use of Medicaid codes for dental sealants	Ongoing
3) Print articles in the SDDA, SDDHA, and Delta Dental quarterly newsletters	SDDA, SDDHA, Delta Dental	Number of articles printed Copies on file	Ongoing
4) Distribute press releases promoting oral health for use by news media for education of the general public	SDDA, SDDHA, Delta Dental	Number of press releases utilized Copies on file	Ongoing
5) Provide continuing education opportunities relating to preventive interventions	SDDA, SDDHA, Delta Dental	Number of dental professionals participating in CE courses	Ongoing

Objective 6
By 2011, increase by 25% awareness of parents who know children should be taken to the dentist by one year of age. Baseline: 14 % Medicaid 2007

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Provide information about the importance of age one dental visits to agencies & organizations that serve families of young children	DOH, SDDA, Delta Dental, OHC	Increase % of parents seeking age one dental visit as measured by Medicaid data	Ongoing
2) Encourage dental offices to communicate the importance of age one dental visits to their staff and patients	SDDA, Delta Dental	Track use of Medicaid dental codes	Ongoing
3) Provide all medical professionals and their educational institutions with information on the importance of early oral care of an infant's mouth	DOH, OHC, SDDA, I H S, LATI, USD Dental Hygiene, SDAHO, Delta Dental	Track numbers of resources distributed	Ongoing

Goal 2
Enhance oral healthcare coverage and access for all.

Objective 1
By 2013, identify and increase by 5% the number of people with oral health coverage. 9% of SD adults do not have health insurance, 1 of every 3 children in SD has health coverage through Medicaid. Zaniya Project Report 2007 (for every child without medical insurance, there are 2.6 who lack dental insurance-CDC)

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Contact various providers for oral health to obtain statistics - Medicaid/SCHIP - Private insurance - I H S/VA – federal	DSS, DOH-OH, Delta Dental	Contact DSS within six months to tabulate ongoing yearly results	Ongoing

Strategies	Responsible Parties	Evaluation Methods	Target Date
2) Review Zaniya Taskforce recommendations for increasing # of people covered by health/dental insurance	DOH- OH	Summary of the review	June 2009
3) Promote the Congressional approved SCHIP dental wrap around	OHC	Funding awarded	January 2010
4) Encourage DSS to adopt annual Medicaid eligibility enrollment	OHC	Eligibility is annual instead of monthly	January 2013

Objective 2
By 2013, increase the number of safety net providers who provide access to care for people without healthcare coverage from six (five FQHCs and one Dakota Smiles Program) to seven.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Support collaboration between RHC and mobile dental units to enable RHC to expand scope of service	CHAD, Delta Dental DOH, I H S OHC	CHAD – grants submitted, funded Medicaid/SCHIP Number of patient visits	Ongoing
2) Encourage private and public funding sources to support private safety net	SDDA, CHAD, Delta Dental, OHC	Funds received Grants awarded	Ongoing
3) Encourage volunteerism among dental professionals	SDDA, OHC, Dakota Smiles Program	Number of volunteers	Ongoing
4) Support CHC presence	CHAD, SDDA, OHC	Number of CHC dental clinics	Ongoing

Strategies	Responsible Parties	Evaluation Methods	Target Date
5) Support the Dakota Smiles Program	Delta Dental, OHC	Number of communities served	Ongoing
6) Support funding for safety net dental care	CHAD, SDDA, Delta Dental, OHC	Number of CHC dental clinics and number of communities served	Ongoing

Objective 3
By 2011, collaborate with three agencies to provide services to culturally diverse populations to address access to oral health care.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Identify three agencies and encourage collaborative outreach Invite agencies such as: -Multicultural Center -Lutheran Social Services -Black Hills State University -Black Hills Special Services -Aberdeen Area Tribal Chairmen's Health Board -I H S -Volunteers of America -Sanford Research	OHC	Meeting minutes	Ongoing
2) Gather information relating to access and reasons culturally diverse populations do not seek dental care	DOH	Provide survey report to OHC	Ongoing
3) Expand OHC participation to include representation from culturally diverse agencies	OHC	Participant list reviewed	Ongoing
4) Provide educational materials related to health literacy and its impact on oral health care	OHC	Copies of materials provided	Ongoing

Objective 4
Increase the Medicaid reimbursement rate to 75 percent of the current commercial rate. Baseline: 72% DSS

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Develop a report of relevant oral health information that supports rationale for increasing Medicaid reimbursement	Delta Dental, SDDA, OHC	DSS data Compile info into report	October 2009
2) Submit report to DOH and DSS	OHC	Disseminate report	January 2010
3) Meet with the DSS Medicaid staff to discuss increasing reimbursement for disparate populations including pregnant women and patients with disabilities	OHC	Report of meeting	January 2010

Goal 3
Assure adequate number and utilization of dental professionals in South Dakota.

Objective 1
By 2013, maintain the number of counties that have an enrolled dentist serving Medicaid program beneficiaries at 50

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Ensure future funding for state tuition reimbursement program	DOH-ORH SDDA	Dentist Tuition Reimbursement Program (DTRP) is maintained Evaluate the number of current participants (maximum is 5)	Ongoing
2) Ensure adequate relationships with SD dental students and dental schools	SDDA DOH	Number of SD students in dental school	Ongoing
3) Continue loan repayment programs for dentists and dental hygienists in underserved areas	Delta Dental, I H S, DOH-ORH	Number of dentists participating	Ongoing
4) Explore feasibility of funding satellite offices	DOH-ORH, SDDA, Delta Dental	Document meeting notes	Ongoing
5) Recruit culturally diverse and/or rural area students to the dental profession	SDDA, SDDHA, LATI, I H S, DOH-ORH- HOTT Program	Number of rural schools participating in the HOTT Programs	Ongoing
6) Assure all communities eligible for designation as DHPSA in the state are so designated and recognized	DOH-ORH	Updated maps	Annually

Objective 2
By 2013, increase the number of dentists serving more than 100 Medicaid eligible patients annually from 29% to 35%. Baseline: DSS 2007

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Provide enhanced Medicaid reimbursements for dental providers treating the underserved	Delta Dental, SDDA, SD Association of Community Based Services	Review rates annually	March annually
2) Expand programs that expose dental professionals to the needs of the underserved	DOH-ORH, SDDA, I H S, Delta Dental	Track # of dentists in DTRP	Ongoing

Objective 3
By 2013, increase the number of culturally diverse candidates in dental educational programs. Baseline: Zero in 2008, SDDA and USD

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Educate students about opportunities for dental health professions	I H S, Volunteers of America, DOH-ORH- HOTT, Scrubs, high school Medical Occupations classes,	Track number of schools visited, including public, private, I H S, and tribal	Ongoing
2) Partner with the HOTT, Scrubs, and Medical Occupations programs to provide oral health information for health professional career fairs	I H S, DOH-ORH, OHC	Maintain reports of HOTT presentations	Ongoing

Objective 4
By 2013, expand the scope of practice for dental auxiliaries.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Support the training and utilization of Expanded Function Dental Auxiliary (EFDA)	SDDA, LATI	Number of dental assistants enrolled in the program	January 2010
2) Pursue the recommendation of the OHC's Workforce Workgroup concerning the supervision of dental hygienists	SDDA, SDDHA, State Board of Dentistry	Development of policy	January 2010
3) Monitor the national development and employment of mid-level dental providers	SDDA, SDDHA, State Board of Dentistry, OHC	Monitor reports and briefings from other states	Ongoing
4) Encourage acceptance of expanded function and expanded supervision of auxiliaries	SDDA, SDDHA, I H S, LATI, USD	Number of people practicing under new levels of supervision	Ongoing
5) Pilot a regional dental health educator	SDDA, SDDHA	Track # of pilots	December 2013
6) Provide resources for regional hygienists to conduct outreach efforts regarding education and preventive interventions	DOH, OHC, Delta Dental	Number of resources provided	Ongoing
7) Define the role of dental health educator	SD State Board of Dentistry	Definition established	December 2013
8) Identify and seek funding source	OHC	Funding received	Ongoing
9) Develop collaborations between dental hygienists and medical clinics, pediatricians, prenatal providers, etc. to promote regional dental health educators	SDDA, SDDHA	Ongoing meetings	Ongoing

Goal 4
Establish oral health as a statewide priority.

Objective 1
Annually revise and maintain a document related to oral health surveillance data.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Conduct oral health survey of third graders	DOH	Conduct every five years	September 2010-May 2011
2) Establish partnerships between oral health advocates and school boards to encourage mandatory oral health screenings at the local level	OHC	Monitor contacts annually	Report to DOH in December
3) Propose legislation for mandatory kindergarten screenings	OHC	Legislation proposed	January 2013
4) Partner with other agencies and organizations to collect additional data	OHC , I H S, DOH, DSS, SDDA, Delta Dental	Monitor data needs annually	Ongoing

Objective 2
Inform identified key South Dakota policy makers and leaders about oral health issues at least once a year.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Inform all members of South Dakota's congressional delegation about issues of oral health	OHC	At least once annually	December annually report to DOH
2) Inform all state legislators about oral health issues	OHC	Monitor record of visitations	December annually to DOH
3) Provide policy leaders oral health data including state government leaders, tribal leaders, business leaders, schools (ESAs), medical community, etc.	OHC	Monitor record of contacts	December annually to DOH
4) Advocate and lobby for mandatory kindergarten oral health screenings	OHC, SDDA, Delta Dental	Legislation proposed	January 2013
5) Advocate and lobby for sustaining dental Medicaid benefits over the lifespan	OHC, SDDA, Delta Dental	Legislation proposed	January 2013
6) Encourage OHC to submit success stories and progress reports to DOH	OHC, DOH	Report written	August Annually to DOH

Objective 3
Pursue oral health representation on all existing and newly-formed general health (medical) initiatives and coalitions.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Foster relationships with oral health advocates in both the dental and medical communities	OHC	Monitor/track contacts made	Ongoing
2) Educate oral health advocates on oral-systemic health link	OHC	Monitor visitations and contacts	Ongoing

Objective 4
Establish a clearinghouse for oral health funding opportunities.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Develop an electronic mailing list of oral health advocates	DOH	Annual review of participants	June 2009
2) Encourage OHC participants to submit oral health funding opportunities to DOH	OHC	Track number of opportunities	Ongoing
3) Distribute oral health funding opportunities to electronic mailing list	DOH	Monitor number of sources sent annually	Ongoing
4) Encourage OHC participants to submit project wish list for future grant applications	OHC, DOH	Create and update project wish list	July 2009 & ongoing

Goal 5
Improve oral health through increased utilization of evidence-based preventive interventions.

Objective 1
By 2013, increase the number of 3rd grade students who have dental sealants to 65%. Baseline data: 61% SD Oral Health Survey 2006

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Encourage dentists to provide preventive interventions including dental sealants for high risk populations	SDDA, Delta Dental	Track sealant rate on BSS	Ongoing
2) Pursue future funding and partnership opportunities to establish school-based/school-linked sealant programs	DOH, school districts, Delta Dental, USD Dental Hygiene	Funding received	Ongoing

Strategies	Responsible Parties	Evaluation Methods	Target Date
3) Provide community-based oral health screenings and preventive interventions	DOH, SDDA, Delta Dental	Screenings conducted	Ongoing

Objective 2
Support community water fluoridation.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Continue collaboration with Department of Environment and Natural Resources (DENR)	DOH	Community water fluoridation reports received	Ongoing

Objective 3
Monitor current research of evidence-based strategies.

Strategies	Responsible Parties	Evaluation Methods	Target Date
1) Monitor CDC's evidence-based preventive intervention reports (including fluoride varnish, xylitol, chlorhexidine etc.)	DOH-OH	Reports reviewed and information distributed via electronic mail	Ongoing
2) Implement projects based on evidence-based reports	OHC	Projects conducted	Ongoing

Overview of Oral Health in South Dakota

This comprehensive oral health report summarizes the most current information available on the status of oral health in South Dakota (SD). This report is a joint effort between the South Dakota Oral Health Program, Delta Dental of South Dakota, the South Dakota Dental Association, and Indian Health Service. The collection of data enhances the epidemiological capacity to monitor trends over time and document improvements in oral health among the residents of South Dakota. It is hoped that this information will help raise awareness of the need for monitoring the oral disease burden in South Dakota and guide efforts to prevent and treat oral diseases and enhance the quality of life of South Dakota's residents.

Children's Oral Health Highlights

A statewide oral health survey of South Dakota third grade students was conducted during the 2005/2006 school year. The survey demonstrated that a large number of South Dakota children suffer from this preventable disease.

- Sixty-six percent of third graders had cavities and/or fillings (decay experience) and 33% of the children had untreated dental decay (cavities). Dental decay is a significant public health problem for South Dakota's children (South Dakota Oral Health Survey, 2006).
- Thirty-nine percent of third graders did not have dental sealants. In 2006, 61% of the third grade children screened had dental sealants compared to 50% in 2003. Seventy percent of American Indian children had dental sealants in 2006. During the last three years, the prevalence of dental sealants has increased dramatically in South Dakota. While dental sealants are a proven method for preventing decay, many of South Dakota's children have not received this preventive service (SD Oral Health Survey, 2006).
- Thirty-three percent of third graders were in need of dental care including 6% that needed urgent dental care because of pain or infection. A large proportion of South Dakota's children are in need of dental care (SD Oral Health Survey, 2006).
- The 2006 South Dakota Oral Health Survey compared American Indians to white non-Hispanic children; a significantly higher proportion of third grade American Indian children have decay experience (62% vs. 84%) and untreated decay (28% vs. 51%).
- Forty-one percent of third graders that participate in the free/reduced price school lunch program had untreated decay compared to only 27 % of children not eligible for the program. Low income children have poorer oral health (SD Oral Health Survey, 2006).
- There were 1,153 Head Start children in need of dental care in 2008 (Head Start Annual Profile, 2008).
- Twenty percent of children ages 0-17 had not visited a dentist or dental clinic within the past year (South Dakota BRFSS, 2007).
- Sixty-two percent of children under age 5 had not visited a dentist (South Dakota BRFSS, 2007).

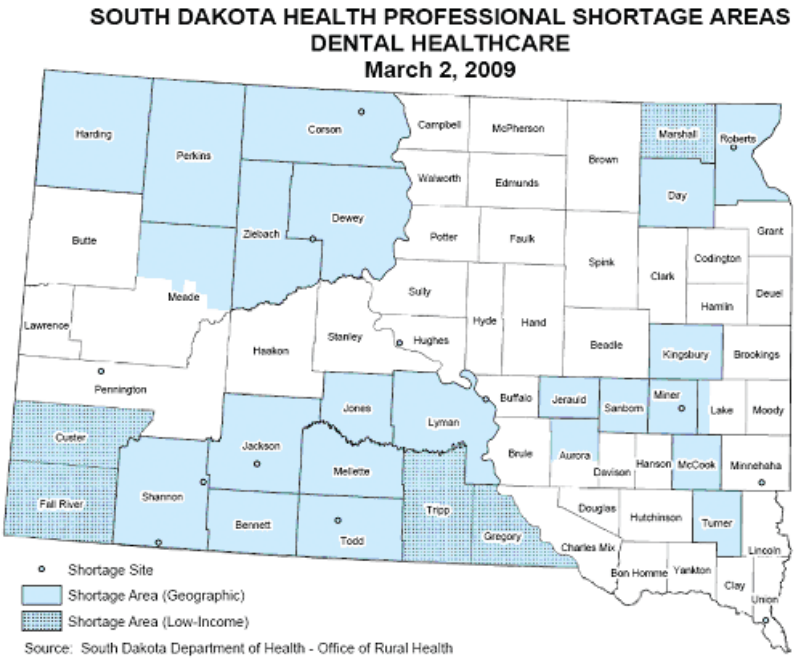
Adult Oral Health Highlights

In 2007, the South Dakota Maternal and Child Heath Program conducted a survey of new moms throughout the state. New mothers were asked questions about behaviors prior to conception such as tobacco and alcohol use and about health care and education received during pregnancy. Questions also were asked about behaviors after the baby was born such as infant health care, car seat use, sleep position, and mother's physical activity and nutrition.

- At-least half of pregnant women did not receive information from their physician on the importance of care of their teeth and gums (South Dakota New Mom's Survey, 2007).
- Nineteen percent of pregnant women had problems with their teeth and gums during their pregnancy; however, 62% were able to see a dentist for treatment (South Dakota New Mom's Survey, 2007).
- South Dakota physicians that do in fact include information on oral health during the prenatal exams reported that they conduct an assessment to determine the oral health status of the woman (55%) (Status of Prenatal Care in South Dakota Report, 2005).

Access to Care Highlights

- From 2004 through 2008, the Dakota Smiles Mobile Dental Program visited 49 South Dakota communities and served 7,600 children. The total value of the care provided was over $3 million dollars. It was the first dental visit for 25% of those seen during that timeframe (Delta Dental of South Dakota, 2008).
- South Dakota hospital emergency rooms do not have policy in place to care for dental emergencies and lack specific dentists and/or oral surgeons to refer patients to (Emergency Room Dental Care Report, 2006).
- Since the late 1980's, the number of available dentists has decreased from 57/100,000 to 48/100,000. This trend is likely to continue since dental school enrollment remains steady; however, many current dentists are nearing retirement (Healthy People 2010, 2005).
- Sixteen of the 66 counties (24%) in South Dakota do not have a Medicaid enrolled dentist (South Dakota Department of Social Services, 2008).



South Dakota Demographics

South Dakota is one of the least densely populated states in the nation with 754,844 people living within its 75,955 square miles – an average population density of 9.9 people per square mile (2000 Census). Over half (34) of the state's 66 counties are classified as frontier (population density of less than six persons per square mile) while 29 are considered rural (population density of six or more persons per square mile but no population centers of 50,000 or more). Three counties are classified as urban (have a population center of 50,000 or more). Of the state's total population, 88.7% are White (of which 99.3% are White alone, not Hispanic or Latino), 9.0% are Native American and the remaining 2.3% are classified as some other race.

Percent of Population Under the Federal Poverty Level for Reservation Counties in South Dakota

County (Reservation)	100% of FPL	200% of FPL
Dewey (Cheyenne River)	33.6%	66.0%
Ziebach (Cheyenne River)	49.9%	72.1%
Buffalo (Crow Creek)	56.9%	79.9%
Shannon (Pine Ridge)	52.3%	77.7%
Todd (Rosebud)	48.3%	73.4%

According to the 2000 Census, 13.2% of South Dakotans live below 100% of the federal poverty level (FPL) compared to 12.4% for the nation. Over 33 % (33.1%) of South Dakotans live under 200% of the FPL compared to 29.6% for the nation. When looking at poverty levels for counties on Indian reservations in the state, these numbers are significantly higher with the four largest reservations in the state representing the five poorest counties in South Dakota.

According to the 2000 Census, 26.8% of the state's population are children (under the age of 18) while 6.8% are age four or younger. Over 41% (41.5%) of the state's female population is considered to be of childbearing age (aged 15 through 44). South Dakota resident pregnancies totaled 11,846 in 2004 (21 of those were to women not in the 15-44 year age range). Pregnancies were estimated by totaling resident births (pregnancies producing at least one live birth), fetal deaths and abortions.

Children's Oral Health: Third Grade Screening Results

During the 2005-2006 school year, the South Dakota Department of Health conducted a statewide oral health survey of third grade children in public, private and Bureau of Indian Affairs (BIA) elementary schools. Thirty-three elementary schools were randomly selected and 32 agreed to take part in the survey. Volunteer dentists and hygienists screened those children who returned a positive consent form. A total of 656 children returned the questionnaire/consent form and 643 were screened (66% of all third grade children enrolled in the 32 participating schools).

Sixty-six percent of the children had cavities and/or fillings (decay experience) and 33% of the children had untreated dental decay (cavities). Dental decay is a significant public health problem for South Dakota's children (Table 1). Thirty-nine percent of the children did not have dental sealants.

In 2006, 61% of the third grade children screened had dental sealants compared to 50% in 2003. Seventy percent of American Indian children had dental sealants in 2006. During the last three years, the prevalence of dental sealants has increased dramatically in South Dakota. While dental sealants are a proven method for preventing decay, many of South Dakota's children have not received this preventive service (Table 2).

Thirty-three percent of the children were in need of dental care including 6% that needed urgent dental care because of pain or infection. A large proportion of South Dakota's children are in need of dental care (Table 1). Compared to white non-Hispanic children, a significantly higher proportion of American Indian children have decay experience (62% vs. 84%) and untreated decay (28% vs. 51%).

Forty-one percent of children that participate in the free/reduced price school lunch program had untreated decay compared to only 27% of children not eligible for the program. Low income children have poorer oral health (Table 3).

Table 1
Oral Health of South Dakota Third Graders by Race and Ethnicity

Variable	Percent of Children (95% Confidence Interval)		
	White Non-Hispanic (n=501)	American Indian (n=56)	Other Minority Children (n=33)
With Private Insurance	58.3 (54.6-62.0)	20.7 (12.3-32.4)	37.9 (20.7 – 57.7)
Eligible for FRL	20.5 (17.6-23.6)	37.9 (55.5-78.3)	54.5 (36.4 – 71.9)
With Dental Visit in Last Year	83.3 (80.4-86.0)	66.9 (55.1-78.0)	60.6 (42.1 – 77.1)
Caries History	61.9 (58.2-65.5)	84.3 (77.0-90.5)	57.6 (39.2 – 74.5)
Untreated Decay	28.2 (24.9-31.6)	50.5 (41.5-59.7)	39.4 (22.9 – 57.9)
Dental Sealants	63.0 (59.4-66.5)	70.0 (61.2-78.0)	48.5 (30.8 – 66.5)
Treatment Urgency None Early Urgent	 70.6 (67.1-73.8) 52.0 (43.0-61.2) 60.6 (42.1-77.1)	 26.2 (23.1-29.6) 31.9 (24.1-41.2) 36.4 (20.4-54.9)	 3.2 (2.1-4.9) 16.1 (10.2-23.8) 3.0(0.1-15.8)

Table 2
Comparison of Oral Health Status Indicators to Healthy People 2010 Objectives, 2003 & 2006

Variable	Percent of Children (95% Confidence Interval)		
	South Dakota 3rd Grade 2003	South Dakota 3rd Grade 2006	HP 2010 Objective 6-8 yr old children
Caries History	66.9 (60.8 – 73.0)	65.6 (62.5 – 68.6)	42
Untreated Decay	30.2 (22.8 – 37.5)	32.9 (29.9 – 35.9)	21
Dental Sealants	49.6 (44.2 – 55.0)	61.1 (57.2 – 64.8)	50
8 Year Olds Only			
Dental Sealants	52.7 (43.8- 61.7)	57.6 (50.1 – 64.8)	50

Table 3
South Dakota Third Graders Eligible for Free and/or Reduced Price Meal Program

Variable	Percent of Children (95% Confidence Interval)		
	< 20% of Students Eligible for FRL (n=333)	< 20-49% of Students Eligible for FRL (n=195)	> 50% of Students Eligible for FRL (n=115)
White Non-Hispanic	89.4 (86.2-92.0)	82.7 (77.6-86.9)	33.0 (27.1-39.4)
With Private Insurance	63.3 (58.6-67.7)	46.4 (40.2-52.5)	32.2 (23.2-42.0)
With Dental Visit in Last Year	85.7 (81.4-89.3)	74.0 (67.1-80.0)	71.4 (57.8-82.7)
Eligible for FRL	16.7 (13.4-20.5)	33.2 (27.6-39.1)	59.9 (50.5-68.5)
Caries History	57.8 (53.2-62.3)	66.4 (60.6-72.2)	80.0 (74.3-84.9)
Untreated Decay	27.4 (23.4-31.7)	39.1 (33.4-45.3)	36.5 (30.3-43.0)
Dental Sealants	63.9 (59.3-68.2)	56.5 (50.4-62.5)	67.8 (61.4-73.7)
Treatment Urgency			
None	73.7 (69.4-77.6)	21.0 (17.5-25.1)	5.3 (3.5-7.8)
Early	56.7 (50.5-62.5)	41.1 (35.2-47.1)	2.2 (0.8-4.7)
Urgent	64.4 (57.9-70.5)	25.6 (20.0-31.5)	10.0 (6.6-14.7)

The state of South Dakota has exceeded the Healthy People 2010 objective for dental sealants. Unfortunately, significant progress must still be made in terms of caries history and untreated decay if South Dakota is to meet the other two objectives. About 66% of third grade children screened in South Dakota had experienced dental caries, much higher than the HP2010 objective of 42%. Almost 33% of the South Dakota children had untreated caries compared to the HP2010 objective of 21%. More than 61% of the third grade students screened had dental sealants compared to the HP2010 objective of 50%. Figures 1-3 compare the oral health of South Dakota's third grade children with the oral health of third grade children from several other states. Each of the states on the graphs collected data in a manner similar to South Dakota.

Figure 1
Prevalence of untreated decay in third grade children stratified by state

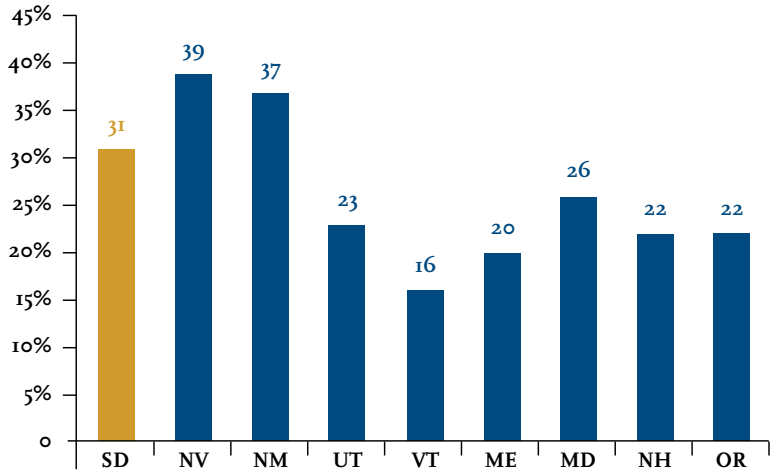


Figure 2
Prevalence caries experience in 3rd grade children stratified by state

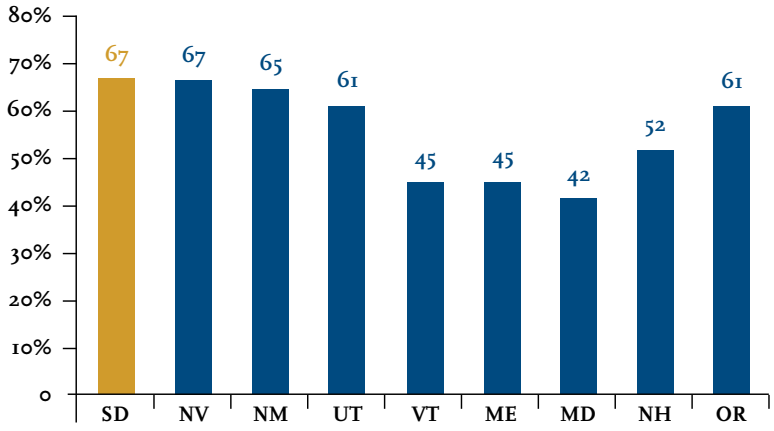
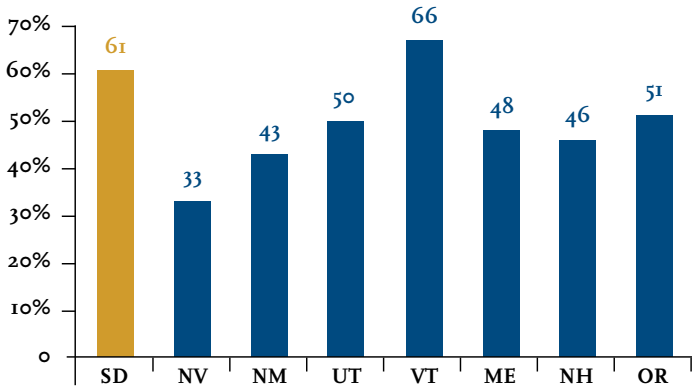


Figure 3
Prevalence of dental sealants in 3rd grade children stratified by state



Access to Dental Care

From 2004 through 2008, the Dakota Smiles Mobile Dentel Program visited 49 South Dakota communities and served 7,600 children. The total value of the care received was over $3 million dollars. It was the first dental visit for 25% of those seen during that timeframe (Delta Dental of South Dakota, 2008).

South Dakota hospital emergency rooms do not have policies in place to care for dental emergencies and lack specific dentists and/or oral surgeons to refer patients to (Emergency Room Dental Care Report, 2006). Sixteen of the 66 counties (24%) in South Dakota do not have a Medicaid enrolled dentist (South Dakota Department of Social Services, 2008).

Children eligible for Medicaid have difficulty accessing oral health care. In 2008, 68% of Medicaid children received no dental services. The focus of oral health efforts, to date, has been around children. The American Academy of Pediatric Dentistry recommends that a child's first visit occur by the age of one year; however, many parents, caregivers, and health professionals are not aware of the screening guidelines. In 2008, the Centers for Disease Control and Prevention (CDC) found that 25% of children entering kindergarten had tooth decay prior to entry.

Pregnancy and Oral Health

Emerging research highlights the infectious and contagious nature of oral bacteria. There may be a relationship between the poor oral health of expectant mothers and pre-term low birth weight babies (Jeffcoat et al., 2001). Nineteen percent of pregnant women had problems with their teeth and gums during their pregnancy; however, only 62% were able to see a dentist for treatment (South Dakota New Mom's Survey, 2007).

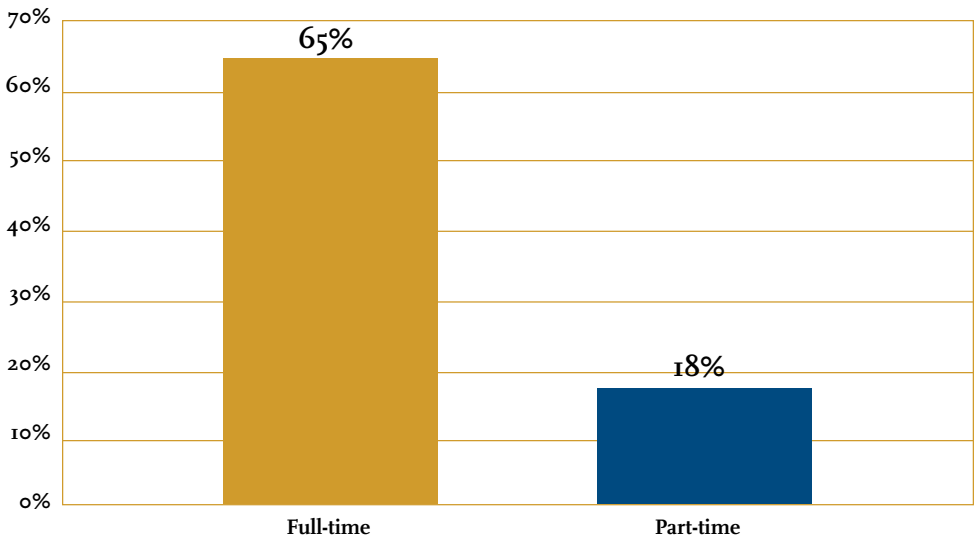
After birth, mothers may transmit the bacteria responsible for tooth decay to their infants and toddlers through the sharing of saliva. South Dakota physicians that do in fact include information on oral health during the prenatal exams report that they conduct an assessment to determine the oral health status of the woman (55%) (Status of Prenatal Care in South Dakota Report, 2005).

Chronic Disease and Oral Health

Other adults, in addition to pregnant women, also are in need of dental care. Survey data for South Dakota adults show that oral health issues among adults are significant, and dental disease is exacerbated by various chronic diseases (SD BRFSS 2003, 2005, and 2007). In 2006, 39% of adults with diabetes had been to the dentist in the past year (SD BRFSS, 2006). Among all adults in South Dakota, only 31% had visited the dentist or dental clinic within the past year for any reason (SD BRFSS, 2006). According to the United States Surgeon General's Oral Health Report (2000), "you cannot be healthy without oral health. Oral health and general health should not be interpreted as separate entities. Oral health is a critical component of health and must be included in the provision of health care and the design of community programs".

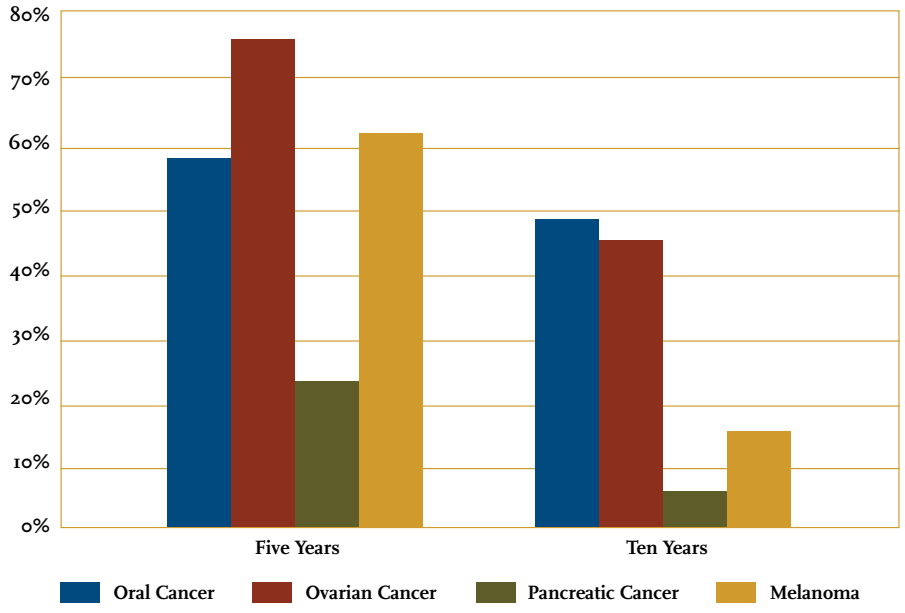
Those with dental insurance are almost one and a half times more likely to visit the dentist than those without dental insurance. In South Dakota, 65% of full-time employees are offered dental insurance; while only 18% of part-time workers are offered dental insurance.

South Dakota Employees Offered Dental Insurance



Oral Cancer

Six percent of South Dakotans reported that they use chewing tobacco or snuff every day or some days (South Dakota BRFSS, 2007). Of the deaths due to lip, oral cavity, and pharynx cancer, tobacco use was a contributing factor in 63% of them (South Dakota Vital Statistics Report, 2007). In 2007, there were 16 deaths due to lip, oral cavity, and pharynx cancer. Ten of the 16 total deaths were directly due to tobacco use. Oral cancer has an 84% survival rate at one year post diagnosis; however, only 59% of oral cancer patients survive for five years, which is lower than the percentage of patients surviving ovarian cancer and melanoma. Dentists and primary care physicians can identify leukoplakia, which in the early stages can increase survival. Early detection, as with all cancers, is key to survival.

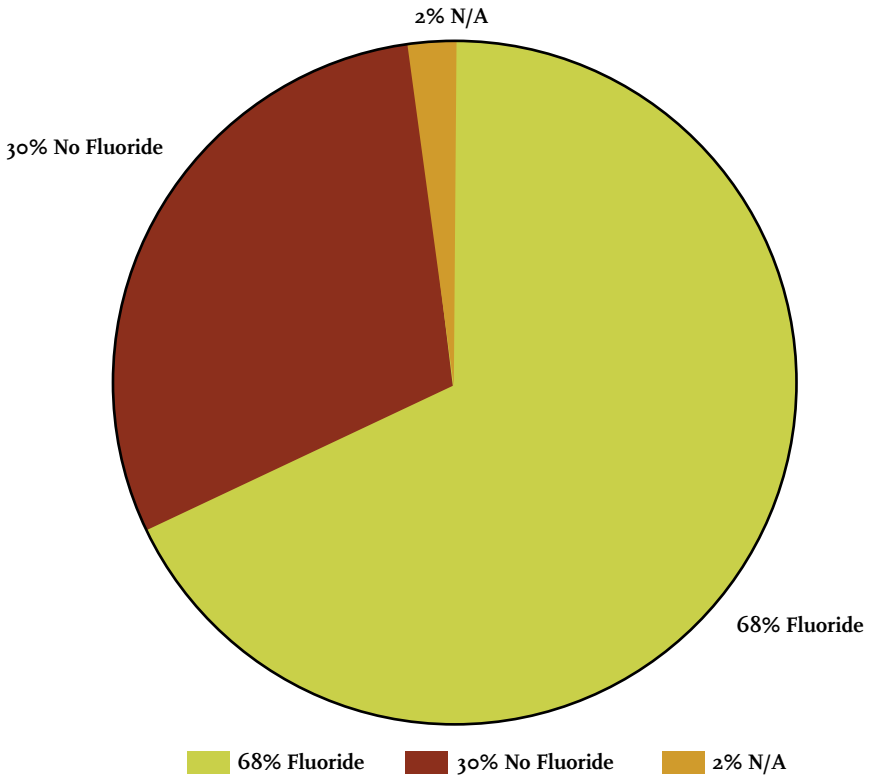


Community Water Fluoridation

Approximately 78% of South Dakota's population lives in communities that fluoridate their drinking water. Municipalities that serve over 500 residents are mandated to fluoridate the drinking water in accordance with EPA guidelines. South Dakota communities began fluoridating their drinking water supplies in the early 1970's. Fluoridation, recognized as one of the ten greatest public health achievements of the 20th century, is a safe and cost-effective means of preventing tooth decay. Today, over 78% of South Dakota residents served by public water systems have optimal levels of fluoride (on average, one part per million).

In 2002 the Aberdeen Area Indian Health Service, which serves South Dakota, North Dakota, Iowa, and Nebraska, began a water fluoridation initiative. The number of tribally owned and operated public water systems has grown to 72 (63 community water systems, and 9 non-community water systems). The service population for the Aberdeen Area is about 120,000 and 70,000 of those are served by a public water system. The other 50,000 get water from private wells, which may provide water with a low fluoride content. The good news is that as rural water systems expand their distribution lines, more people get fluoridated water and the need for private wells diminishes. Specific to South Dakota, 68% of the American Indian reservations have fluoridated water.

Tribal Water Systems in South Dakota
Source: Aberdeen Area Indian Health Service, 2006



References

Aberdeen Area Indian Health Service. (2006) Water Fluoridation in South Dakota.

Centers for Disease Control and Prevention. (2007) Dental visits among dentate adults with diabetes- United States, 1999-2004. Morbidity and Mortality Weekly, 54 (46), 1181-1183.

Delta Dental Plan of South Dakota. (2008) Ronald McDonald Care Mobile Statistics.

South Dakota Head Start Association. (2008) Head Start Annual Profile.

Jeffcoat et al. (2001) Periodontal infection and preterm birth.
Journal of the American Dental Association, 132(7), 875-880.

South Dakota Department of Health. (2007) Behavioral Risk Factor Surveillance System.

South Dakota Department of Health. (2006) Emergency Room Dental Care Report.

South Dakota Department of Health. (2007) South Dakota New Mom's Survey.

South Dakota Department of Health. (2006) South Dakota Oral Health Survey.

South Dakota Department of Health. (2007) South Dakota Vital Statistics Report.

South Dakota Department of Health. (2005) Status of Prenatal Care in South Dakota.

South Dakota Department of Labor. (2005). South Dakota Labor Market Information Center. Retrieved January 4, 2007, from http://www.state.sd.us/dol/lmic/benefitsemployeeall.htm

United States Department of Health and Human Services. (2000). Oral health in America: A report of the Surgeon General. Retrieved March 14, 2007, from http://www.surgeongeneral.gov/library/oralhealth/

Appendix A

Glossary

ADA
American Dental Association

B-3 – Birth to Three Connections
Program provides services for families of children with developmental delays

Bright Start
Program for prospective parents to nurture a child's development

SD Board of Dentistry

CHAD
Community HealthCare Association of the Dakotas

CHS
Community Health Services

CSHCN
Children with Special Health Care Needs

DDSD
Delta Dental of South Dakota

Dental HPSA
Health Professional Shortage Area

Dental Wrap Around
Allows states to offer dental insurance to children who are privately insured but do not have dental coverage

DTRP
Dentist Tuition Reimbursement Program

DOE
Department of Education

DOH
Department of Health

DSS
Department of Social Services

ECC
Early Childhood Caries

ECE
Early Childhood Enrichment Program – Provides resources and trainings for parents and child care providers

EFDA
Expanded Function Dental Auxiliary

FQHC
Federally Qualified Health Clinic

Give Kids a Smile
Dentists nationwide donate dental care to children this day each year

HS/EHS
Head Start/Early Head Start

HOTT Program
Health Occupation for Today and Tomorrow – Introduces students to health occupations

I H S
Indian Health Service

LATI
Lake Area Technical Institute, Dental Assisting Program

Medical Occupations class
High school course offered to students to spur interest in health occupations

NPA
Nutrition and Physical Activity Program (DOH)

OHC
Oral Health Coalition

ORH
Office of Rural Health (DOH)

QuitLine
Program offers assistance with tobacco cessation

RHC
Rural Health Clinic

Satellite Office
Dentist serves another clinic other than the main office

SCHIP
State Children's Health Insurance Program – a federal government program that provides funds to states in order to provide health care for children

Scrubs camp
DOE program to introduce students to health careers

SDDA
South Dakota Dental Association

SDDHA
South Dakota Dental Hygiene Association

SETI
SouthEast Technical Institute, Dental Assisting Program

Sunshyne Smiles
Charitable orthodontic program

USD
University of South Dakota, Dental Hygiene Program

WDTI
Western Dakota Technical Institute, Dental Assisting Program

WIC
Women and Infant Children

ZANIYA Task Force
Project to develop a plan to provide access to affordable, comprehensive health insurance for all South Dakota residents. Zaniya is a Lakota term for "health and well-being". Additional information is available at http://Zaniya.sd.gov/

Great Faces. Great Smiles.

Thank you!

Oral Health Plan for South Dakota