



**Idaho Oral Health Plan
2008 - 2013**

Acknowledgements

The Idaho Department of Health and Welfare appreciates everyone that participated in the development of the Idaho Oral Health Plan.

Be Inspired

Be Inspired

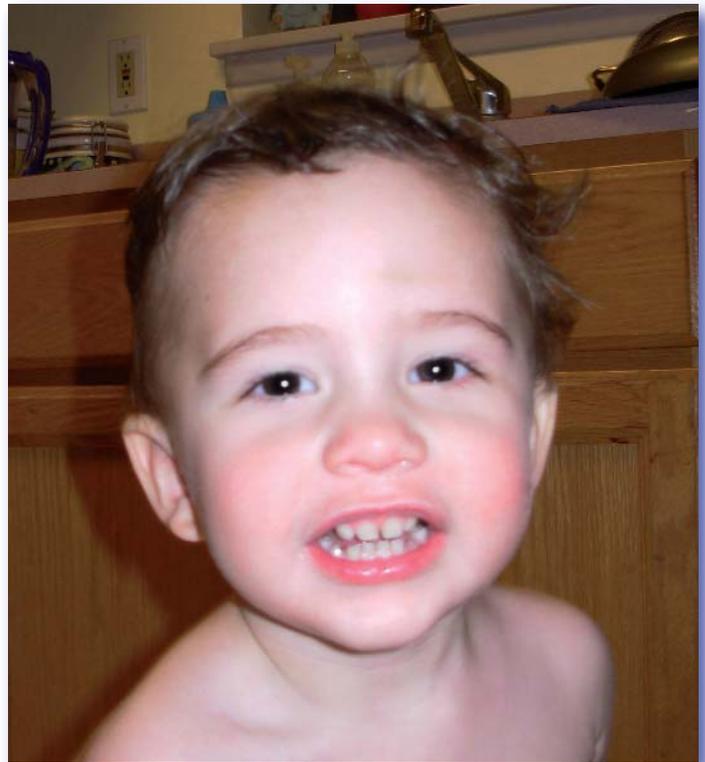
Prevalence and Cause

Dental caries affects more than one-fifth of U.S. children ages 2-4, 50% of children ages 6-8, and nearly 60% of children at age 15. Almost 90% of dental caries develops in the pits and fissures on the occlusal surfaces of the teeth. Three out of four children will suffer from dental caries before they graduate from high school.

Dental caries is the result of a bacterial infection which leads to the loss of minerals from the enamel and dentin, the hard substances of the teeth. This can lead to loss of tooth structure, inadequate tooth function, unsightly appearance, infections and tooth loss. Dental caries is the most common childhood disease and occurs five to eight times more frequently than asthma or hay fever. More than 51 million school hours are lost each year to dental-related illness. Lower income children suffer nearly 12 times more restricted-activity daily because of dental caries than children from higher-income families. One in ten children go to school troubled by the effects of dental caries, these include sleep disturbances, inability to study, difficulty concentrating and decreased social activities.³

Oral disease or dental caries affect not only the health of the oral cavity but can also be detrimental to the overall health and well-being of individuals. Oral health is part of total physical health and research shows associations between chronic oral infections and low-birth-weight, premature birth, periodontal disease, diabetes, heart, and lung disease. Toothaches are associated with significant morbidity and high economic costs.⁶

Data from the third National Health and Nutrition Examination Survey indicated that 85% of adults have experienced dental caries and 30% had not received treatment.⁵ The most common area for dental caries in adults are the root surfaces. Root caries affects 50% of adults 75 years or older. The most common reasons for tooth loss are dental caries and periodontal disease. Women tend to have more tooth loss than men. Blacks are three times more likely than Whites to have tooth loss.⁴



Idaho Demographics

Idaho is a large geographical state of 82,413 square miles with high desert, forests, rugged mountains, open plains, and large valleys. In 2006 the state population was 1,466,465. From 2000 to 2006 the population grew by 13%. The mountain states (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) experienced more growth than any other region in the U.S. during that time. Between 2000 and 2006 the Hispanic population increased by 37,180 people (representing a 37% increase). In 2006, the population distribution of Idaho by race and ethnicity was:

Race/Ethnicity	% of Population	Number
White	96.2	1,410,951
Black	0.9	10,178
Native American	1.6	21,951
Asian/Pacific Islander	1.4	17,524
Hispanic	9.5	123,900

Idaho has 44 counties. Of those, nine are classified as urban with a population center of at least 20,000; 19 counties are classified as rural with 6.0 persons per square mile; and 16 counties are classified as frontier with less than 6.0 people per square mile.

Urban: Ada, Bannock, Bonneville, Canyon, Kootenai, Latah, Madison, Nez Perce, and Twin Falls.

Rural: Bear Lake, Benewah, Bingham, Blaine, Bonner, Boundary, Cassia, Elmore, Franklin, Fremont, Gem, Gooding, Jefferson, Jerome, Lewis, Minidoka, Payette, Teton, and Washington.

Frontier: Adams, Boise, Butte, Camas, Caribou, Clark, Clearwater, Custer, Idaho, Lemhi, Lincoln, Oneida, Owyhee, Power, Shoshone, and Valley.



Burden of Oral Health

Cost

In 2004, Americans made about 500 million visits to the dentist. The estimated cost for the dental services was \$78 billion. Oral disease is the fourth most expensive disease to treat and expenditures for dental services make up 5% of the nation's health expenditures. Approximately 108 million Americans lack dental insurance whereas 44 million lack medical insurance.⁵ Children that do not have dental insurance are two and one half time less likely to receive dental treatment than children who are insured. In a three year study of Medicaid reimbursement for dental related emergency room visits versus preventive services determined that the emergency room visits cost a total of \$6,498 compared to \$660 for preventive services per person per year. Preventive interventions are predicted to provide a cost savings of \$66-\$73 per tooth surface. Regular screenings and early intervention could provide a savings of 7.3% per year.

Disparities

Oral health status in the United States tends to vary on the basis of socioeconomic status and the level of untreated dental caries varies greatly among different ethnicities and races. Among Black children in Idaho ages 6-8, 36% have tooth decay compared to 26% of White children. Hispanic children (43%) have a significantly higher decay rate compared to non-Hispanic children (26%). Nationally, 23% of children have dental sealants placed in their permanent teeth; however this rate drops drastically to 3% among low income children.⁵ Oral cancer rates differ by race as well. The five year survival rate for oral cancer in Blacks is 34% compared to 56% for Whites.

The prevalence of destructive periodontal disease is greater among persons with lower educational attainment; 39% among those with less than a high school diploma, 28% among high school graduates, and 15% among college graduates.⁴ Additionally, 39% of persons with less than a high school education are totally edentulous.⁵

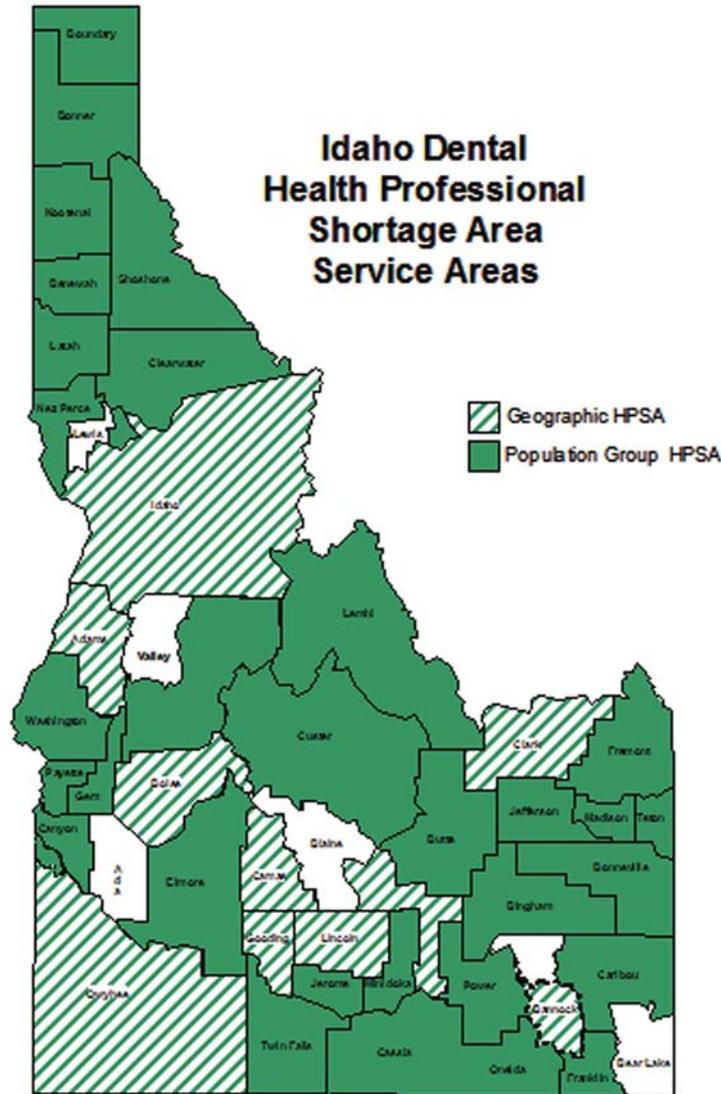
Barriers to dental care include cost, lack of dental insurance, the lack of providers available to the underserved population, and fear of the dentist. Other factors include a lack of oral health literacy, particularly the connection between oral health and overall health.

Dental Health Professional Shortage Areas

The Health Professional Shortage Area (HPSA) designation process is an effort to identify geographic areas or population groups with a deficit in primary care services. HPSAs are reviewed for Primary Care, Dental and Mental Health. Three criteria configure into a formula, resulting in a score that determines the degree of under-service. The following criteria must be met for a Geographic HPSA designation:

- The defined geographic area for the delivery of health services must be rational.
- A specified population-to-practitioner ratio representing shortage must be exceeded within the area.
- Resources in contiguous areas must be shown to be over-utilized, excessively distant, or otherwise inaccessible.

Currently, 35.7% of Idaho has a geographic HPSA designation in dental health, and 58.2% has a population group HPSA in dental health, for a total of 93.9% of the State's area having a designation (of one type or the other) in dental health. (see graphic below)



State Office of Rural Health and Primary Care, Division of Health, Department of Health and Welfare, 2008 – please contact (208) 334-5993 for updates

Idaho Data

In 2001, the Idaho Women, Infants and Children (WIC) Program conducted a needs assessment for Baby Bottle Tooth Decay (BBTD) among Idaho program participants who were 4 years old and younger. In the southwest and south central areas of Idaho, the BBTD rates were 30% and 29%

respectively. The needs statement also documents that in 2002 Idaho had 55,341 children from birth to age five enrolled in the Medicaid/CHIP program; of which, only 10% received any form of dental treatment and only 6% received any preventive dental services. The 2001 Idaho Smile Survey results determined 64% of Idaho 2nd grade children had experienced dental caries and 28% had untreated dental caries. In Idaho there is a large disparity between Hispanic and Non-Hispanic individuals and also between lower and upper levels of income. Among Hispanic 2nd grade students, 79% had dental caries; and of those children 52% had unmet dental needs. Among students participating in the Free and Reduced Lunch Program, 66% had dental caries and 32% had unmet dental needs.¹² Approximately 65% of the adults 18 and older in Idaho visited a dentist in 2006.

There are many barriers to accessing oral health care services.¹ The following is a brief list of potential barriers:

- Supply, distribution and practice patterns of dentists
- Federal and state policy and programmatic barriers
- Lack of Public Health Trained Dentists
- Lack of Public Knowledge about the importance of good oral health
- Lack of dental insurance



Idaho's Oral Health Profile¹⁴

Dental Visit

67% of the population visited the dentist or dental clinic within the past year.

Source: Idaho BRFSS (2004)

Teeth Cleaning

65% of the population had their teeth cleaned by a dentist or dental hygienist within the past year.

Source: Idaho BRFSS (2004)

Complete Tooth Loss

23% of the population age 65+ have lost all of their teeth.

Source: Idaho BRFSS (2004)

Lost 6 or More Teeth

44% of the population age 65+ have lost 6 or more teeth.

Source: Idaho BRFSS (2004)

Fluoridation Status

48% of the population on public water systems is receiving fluoridated water.

Source: CDC Water Fluoridation Reporting System (WRFS)

Dental Sealants

52% of 3rd grade students have one or more sealants on their permanent first molar teeth.

Source: State Oral Health Survey

Caries Experience

65% of 3rd grade students had caries experience (treated or untreated tooth decay).

Source: State Oral Health Survey

Untreated Tooth Decay

26% of 3rd grade students had untreated tooth decay.

Source: State Oral Health Survey



Idaho Needs Assessment Results Summary ¹⁴

Cost

The cost of dental treatment and services is one of the most common barriers. It does not matter if the patients are insured it is still a major factor for not getting dental care.

Access to Care

There are many rural areas in Idaho and dental patients often have a difficult time traveling to a dental care provider. If a patient is in need of specialty care they often have to travel to the more metropolitan areas, adding costs to patients' treatment.

Prevention, Early Detection, and Diagnosis

Prevention, early detection, and diagnosis of dental caries are the most cost effective ways to reduce the expense of dental treatment.

Quality of Life

Lack of dental treatment can affect a person's quality of life. The pain from dental caries can cause disturbances in sleep, impair concentration, and negatively impact social activities. Untreated dental caries may cause pain, dysfunction, absence from school or work, poor appearance, underweight, and even death.

Patient Issues

Patients need to be educated about the importance of oral health in relationship to overall health. They also need to be educated about the new advancements in dentistry to help reduce their dental fear.

Data

There is a need to continue administering regular Smile Surveys and the Oral Health Modules of the Idaho Behavioral Risk Factor Surveillance System (BRFSS) in order to evaluate if improvements are made in the access to dental care and treatment for the residents of Idaho.

Language and Cultural Barriers

There is a growing Hispanic population in Idaho and the language barrier continues to grow.

Idaho Oral Health Plan 2008-2013

Goals, Objectives, Strategies and Activities

Action Area: Change Perception and Increase Awareness

Goal 1: Educate legislators to establish oral health as a funded statewide priority

Objective 1.1: By 2012, provide education to 50% of the Idaho legislators about the magnitude of oral health problems in Idaho.

Baseline: N/A
 Data Source: IOHA Membership
 Notes: Objective 1.1 will be measured by the number of Idaho legislators who receive any education about the magnitude of oral health problems during each legislative session. The final methodology is yet to be determined, but it is anticipated that it will rely on IOHA membership to track legislative education.

Strategies and Activities:

- Educate members of the Idaho legislature about the magnitude of oral health problems in Idaho
- Develop and promote oral health strategies that are not tied to funding
- Develop and promote oral health strategies tied to funding
- Support the Idaho Oral Health Alliance in their mission to build political influence on oral health issues.

Goal 2: Integrate oral health into primary medical care, e.g., prenatal care, well-baby care.

Objective 2.1: By 2012, implement a sustainable plan in 3 OB/GYN and Family Practice Clinics in Idaho.

Baseline: N/A
 Data Source: IOHA Membership
 Notes: Objective 2.1 will be measured by the number of OB/GYN and/or Family Practice Clinics that implement and sustainable plan. The IOHA will need to define sustainable plan for this measure.

Objective 2.2: By 2012, work with the Idaho State Dental Association (ISDA) to encourage and/or assist them in the development of a policy recommending that children have their initial dental visit at age 1.

Baseline: No Current Policy
 Data Source: ISDA Policies Information
 Notes: Objective 2.2 will be a qualitative measure that involves documentation that the ISDA adopts a policy addressing initial dental visit age.

Strategies and Activities:

- Develop a plan to implement an educational curriculum
- Identify medical and dental champions
- Train champions
- Implement a sustainable plan in OB/Gyn and family practices
- Establish exchange programs between medical and dental residency programs, nursing and dental hygiene programs
- Make non-dental provider oral health education part of contract negotiations with HD's.
- Mandate oral health continuing education for non-dental providers (MD, RN, etc)

- Involve Idaho State Dental Association to encourage and embrace policy of seeing children by age 1 for initial dental visit.
- Increase education about the importance of prenatal fluoride treatments, and follow up during well child visits and fluoride varnish placement, etc.
- Collaborate with obstetricians, nurse midwives, and other primary care medical providers to promote dental care and oral health education for pregnant women.
- Promote the incorporation of oral health education and preventive care information to existing birth and parent education classes and in other settings where women of childbearing age can obtain health related information.
- Provide a location for preventive dental services in WIC clinics and in other programs that provide services to children and families.

Goal 3: Provide effective consumer education.

Objective 3.1: By 2012, increase the amount of Idaho-specific data which are available to the public via the websites of the Idaho Oral Health Program, the Idaho Oral Health Alliance, and the Idaho State Dental Association.

Baseline: Will be determine by reviewing websites for Idaho data available to the public

Data Source: IOHP, IOHA, and ISDA websites

Notes: An initial review of educational materials should take place to develop a baseline which can then be compared with future website reviews to see if the amount of Idaho specific data has increased.

Strategies and Activities:

- Increase-Idaho specific oral health data that are accessible to the public.
- Increase oral health educational materials in a statewide clearing house.
- Incorporate oral health messages with other health messages that promote the integration of oral health, such as oral cancer prevention, and tobacco-use reduction efforts, diabetes and heart disease and the link to periodontal disease.
- Coordinate educational activities with state and national campaigns (children's dental health month, nutrition month, National Public Health Week, etc).

Goal 4: Increase Oral Health Literacy

Objective 4.1: By 2012, increase the amount of oral health educational materials that are available from a statewide clearing house.

Baseline: TBD

Data Source: TBD

Notes: If a statewide clearing house does not currently exist, objective 4.1 should be changed in order to reflect a need to create such a clearinghouse. If clearinghouse exists, then a review of existing materials should be undertaken and the results should be used as a baseline for increasing educational material availability.

Objective 4.2: By 2012, incorporate oral health messages with at least 10 other public health message delivery systems (i.e. other health program messages).

Baseline: N/A

Data Source: Documentation of oral health message inclusion from IOHA members.

Notes: Although other health program messages is undefined, IOHA membership should document and compile any success incorporating oral health messages into other public health program messaging systems.

Strategies and Activities:

- Promote early, comprehensive intervention involving a community approach to prevention.
- Increase-Idaho specific oral health data that is accessible to the public.
- Increase oral health educational materials in a statewide clearing house.
- Incorporate oral health messages with other health messages that promote the integration of oral health, such as oral cancer prevention, and tobacco-use reduction efforts, diabetes and heart disease and the link to periodontal disease.

Goal 5: Increase knowledge about the importance of oral health in relationship to overall health.

Objective 5.1: By 2012, increase the number of oral health educators who have been recruited and trained.

Baseline: TBD by IOHA membership

Data Source: TBD by IOHA membership

Notes: Once a baseline is established, it is recommended that objective 5.1 be rewritten as a SMART objective.

Strategies and Activities:

- Ensure all trained health professionals hold a basic level knowledge of oral health issues and early intervention as a component of overall health and well-being before exiting their professional training programs.
- Promote the provision of continuing education credits for non-dental professionals to encourage training in oral health promotion and dental disease prevention interventions.
- Recruit and train a group of oral health education trainers.
- Conduct a public awareness campaign

Objective 5.2: By 2010, develop a simple, consistent message about how oral health affects the body.

Baseline: N/A

Data Source: IOHA membership

Notes: Once a message has been developed, approval of IOHA should be acquired before the objective is considered met.

Objective 5.3: By 2010, utilize a simple, consistent message about how oral health affects the overall health of the body in at least one public education campaign implemented statewide.

Baseline: 0 messages utilized

Data Source: IOHA membership

Notes: Objective 5.3 should be considered met upon documentation of the utilization of message from Objective 5.2.

- Promote early, comprehensive intervention involving a community approach to prevention.
- Develop a simple, consistent message about how oral health affects the body and use in public education campaigns.
- Develop a Statewide social marketing campaign targeted to vulnerable populations.
- Increase-Idaho specific oral health data that is accessible to the public.
- Increase oral health educational materials in a statewide clearing house.

Action Area: Increase Prevention and Expand Access**Goal 1:** Expand availability of dental services provided through community health center clinics.

Objective 1.1: By 2012, increase the number of Community Health Centers and local health departments with an oral health component to 65%.

Baseline: 44% of the Community Health Centers in Idaho have an oral health component.

Data Source: State Office of Rural Health September 2006

Notes: National Baseline is 34%

Strategies and Activities:

- Develop partnerships, promote interagency communication and seek funding
- Develop provider incentives and contract with community dentists to work one day per week in community health centers and other community settings
- Explore Medicaid reimbursement for clinical preventive services such as sealant placement and fluoride varnish.
- Explore the best practices in other states.
- Promote early, comprehensive intervention involving a community approach to prevention.
- Explore resources and partnerships
- Develop effective strategies for recruitment and retention of professionals who are providing dental public health services.

Goal 2: Effectively utilize the dental team already in place by collaborating between dental and medical professionals and educators.

Objective 2.1: Conduct annually at least one meeting providing continuing education for IOHA partners, dental and medical professionals, and other health groups.

Baseline: N/A

Data Source: IOHA

Notes: IOHA would just need to document the meeting and meeting minutes, etc.

Strategies and Activities:

- Conduct continuing education or partnership meetings between dental and medical professionals and other health groups
- Promote early, comprehensive intervention involving a community approach to prevention
- Support initiatives that maximize the ability of allied dental personnel (dental hygienists, expanded function dental assistants) to provide preventive services within the oral health infrastructure, and particularly in public and non-profit community-based oral health settings.

Action Area: Improve Service Delivery**Goal 1:** Increase Medicaid reimbursement rates for dental care and preventive services.

Objective 1.1: By 2012, provide education to 50% of the Idaho legislators about the magnitude of oral health problems in Idaho..

Baseline: N/A
 Data Source: IOHA Membership
 Notes: This is a repeat objective from the Change Perception and Increase Awareness Action Area. Objective 1.1 will be measured by the number of Idaho legislators who receive any education about the magnitude of oral health problems during each legislative session. The final methodology is yet to be determined, but it is anticipated that it will rely on IOHA membership to track legislative education.

Strategies and Activities:

- Highlight specific dental procedures that should be prioritized for increased reimbursement rates.
- Educate legislators about magnitude of oral health problem in Idaho
- Have providers see children by age one for an initial dental visit.

Goal 2: Improve Preventive Services

Objective 2.1: By 2012, reduce the number of untreated dental decay among Idaho children 6-8 years of age to 21%.

Baseline: 26%
 Data Source: CDC National Oral Health Surveillance System
 Notes: National Baseline is 29%

Strategies and Activities:

- Recruit and train a group of oral health education trainers.
- Education about the importance of prenatal fluoride, and follow up during well child visits.
- Promote early, comprehensive intervention involving a community approach to prevention.
- Implement an early childhood oral health system that links early childhood programs to oral health education and prevention services.

Objective 2.2: By 2012, increase to 45% the percentage of adults in Idaho who visited the dentist in the last year.

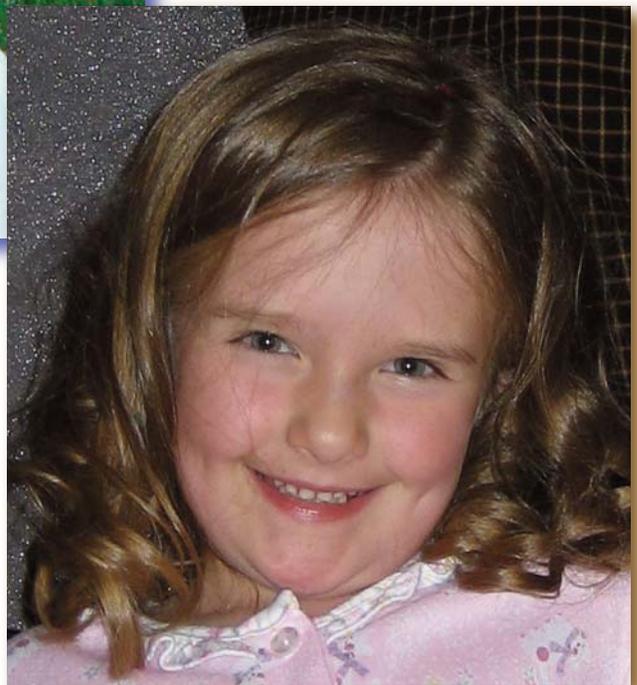
Baseline: 34.6% in Idaho
 Data Source: 2007 BRFSS
 Notes: National Baseline is 44%

Objective 2.3: By 2012, increase the percentage of Idaho Community Health Centers that offer oral health services for poor children to 55%.

Baseline: 44% of Idaho Community Health Centers offer oral health services.
 Data Source: State Office of Rural Health September 2006
 Notes: National Baseline for preventive services is 20%

Strategies and Activities:

- Develop a proposal to address the scope of practice issues related to access, possibly through a pilot program.
- Conduct outreach to dentists to increase active participation in Medicaid.
- Develop an outreach plan to address dentists' barriers to participate in Medicaid.
- Research national standards for dental care of pregnant women.
- Support and expand school based oral health services.
- Increase the use of fluoride varnish in at risk populations.
- Implement an early childhood oral health system that links early childhood programs to oral health education and prevention services.
- Explore the use of portable dental delivery units to provide preventive services.



Action Area: Expand the Dental Workforce**Goal 1:** Expanded scopes of practice for other types of dental providers.

Objective 4.1: By 2012, implement a pilot school oral health screening system in at least 2 elementary schools in Idaho.

Baseline: TBD

Data Source: IOHA Membership

Notes: This objective will be met upon the implementation of 2 or more school-based oral health screening systems. The screening system should be developed in a manner which would allow it to be implemented on a statewide basis.

Objective 4.2: By 2012, promote a statewide policy that would allow dental hygienists to place fluoride varnish to at risk populations outside of the clinical setting.

Baseline: TBD

Data Source: IOHA Membership

Notes:

Strategies and Activities:

- Support and expand school based oral health services.
- Increase the use of fluoride varnish by allowing dental hygienist to place the fluoride varnish to at risk populations.
- Implement an early childhood oral health system that links early childhood programs to oral health education and prevention services.
- Implement a school screening system and use a uniform state screening program.
- Explore the current role of dental hygienists in schools and in facilities for the elderly.



References

1. Caries Experience. Centers for Disease Control and Prevention. Oral Health Surveillance System, <<http://apps.nccd.cdc.gov?nohss/bystate>>. Last updated May 3, 2006.
2. <<http://www.mchoralhealth.org/Seal/infro.html>>.
3. Doral, February 2008 Newsletter.
4. Centers for Disease Control, The Burden of Oral Disease, Chapter 4.
5. Online document ... <<http://www.healthypeople.gov/document/HTML/Volume2/21Oral.html>>
6. Smithwick, C., CHCS Purchasing Institute, Best Practices for Oral Health Access, September 29, 2005.
7. NIDCR Strategic Plan, The Burden of Oral Diseases.
8. Idaho Vital Statistics 2006, Idaho Department of Health and Welfare, Division of Health, Bureau of Vital Records and Health Statistics, 2008.
9. CDC Oral Health, Preventing Cavities, Gum Disease, and Tooth Loss, 2005.
10. News Release: First-Ever Surgeon General's Report on Oral Health Finds Profound Disparities in Nation's Population, May 25, 2000. U.S. Department of Health & Human Services.
11. World Health Organization, Oral Health: action plan to promotion and integrated disease prevention. Report by the Secretariat.
12. "Needs Statement," Lisa H. Penny, R.D.H., B.S., State of Idaho
13. Children's Dental Health Project, February 23, 2005.
14. Idaho – Oral Health Profile. National Oral Health Surveillance System. Centers for Disease Control and Prevention. <<http://www.nccd.cdc.gov/nohss/bystate.asp?staetid=16>>. Last updated August 1, 2006.