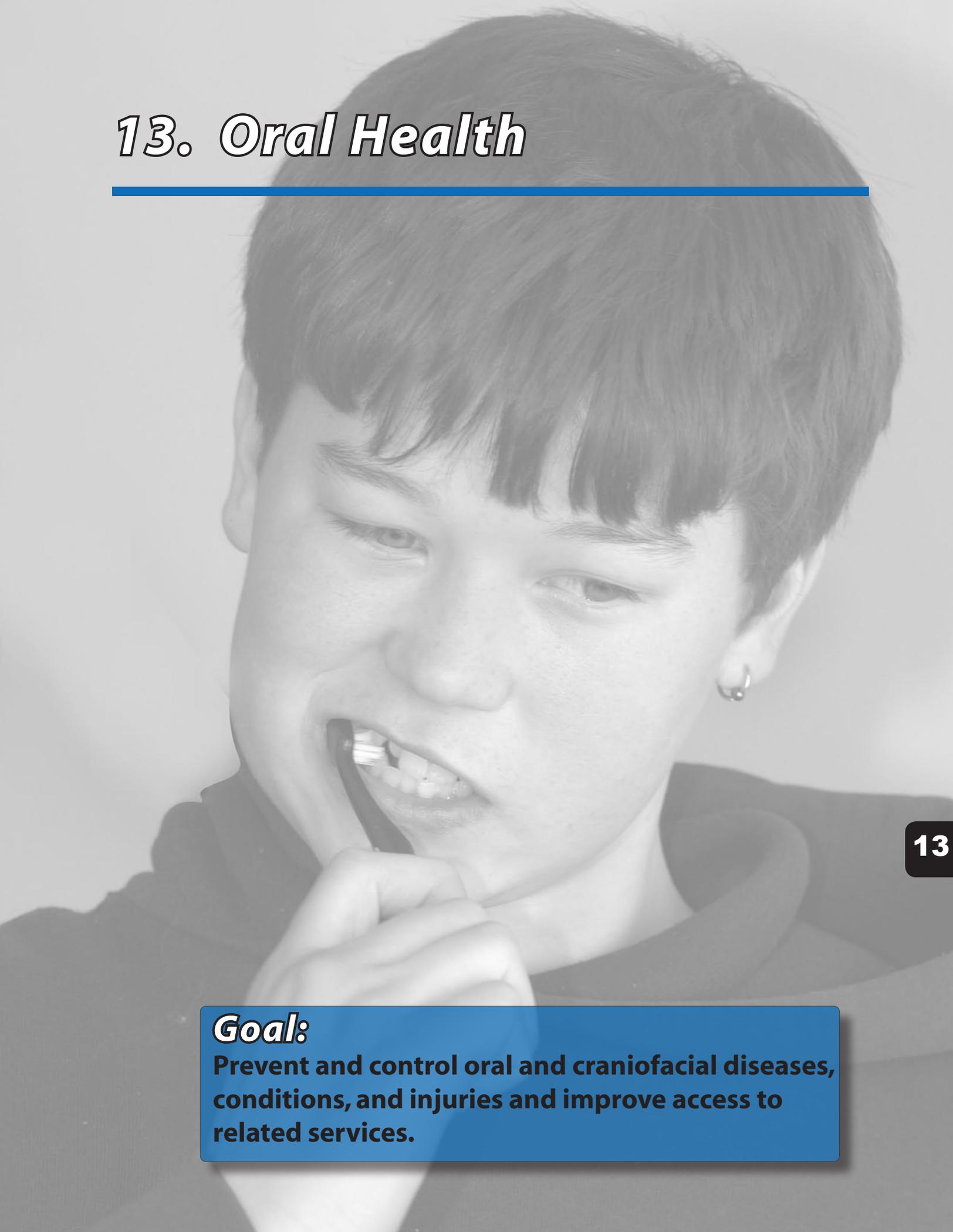


# 13. Oral Health

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***Goal:***

**Prevent and control oral and craniofacial diseases, conditions, and injuries and improve access to related services.**

## 13. Oral Health

Health Goal for the Year 2010: Prevent and control oral and craniofacial diseases, conditions, and injuries and improve access to related services.					
	Indicator	Alaska Data Source	U.S. Baseline	Alaska Baseline	Alaska Target Year 2010
1	Reduce the proportion of children & adolescents who have dental caries in their primary or permanent teeth.				
	6-8 year olds	Special Dental Survey	52% (1988-94)	Developmental	
	15 year olds	Special Dental Survey	61% (1988-94)	Developmental	
2	Reduce the proportion of children and adolescents with untreated dental decay.				
	6-8 year olds	Special Dental Survey	29% (1998-94)	Developmental	
	15 year olds	Special Dental Survey	20% (1988-94)	Developmental	
3	Reduce the proportion of adults age 65 to 74 that have lost all permanent teeth (edentulous).	BRFSS	26% (1997) NHIS	26% (1999)	20%
4	Increase the proportion of oral and pharyngeal cancers detected at the earliest stage (Stage 1, localized).	DHSS, DPH Cancer Registry	38% (1997)	34% (1997)	50%
5	Increase the proportion of children aged 8 who have received dental sealants on their permanent molar teeth.	Special Dental Survey	23% (1988-94)	Developmental	
6	Increase the proportion of the population served by community water systems with optimally fluoridated water.	DEC	66% (2000)	43% (2000)	66%
7	Increase the proportion of adults and children who visited a dentist in the last year.				
	Adults aged 18 or older	BRFSS		70% (1999)	80%
	Adults and children aged 2 and over	Special Dental Survey	44% (1996) MEPS	Developmental	
8	Increase the proportion of children and adolescents under age 19 at or below 200% of federal poverty level who received any preventive dental service during the past year.	Medicaid Data	20% (1996) MEPS	24%	50%

**BRFSS** - Alaska Behavioral Risk Factor Surveillance System. All US BRFSS data are age-adjusted to the 2000 population; the Alaska BRFSS data have not been age adjusted, so direct comparisons are not advised. See Technical Notes.

**NHIS** - National Health Interview Survey

**DHSS** - Alaska Department of Health and Social Services

**DPH** - Alaska Division of Public Health

**DEC** - Alaska Department of Environmental Conservation

**MEPS** - Medical Expenditure Panel Survey

## Overview

Oral diseases are among the most prevalent health problems in the United States. Dental caries are the most common disease of childhood, five times more prevalent than asthma, the second most common disease of childhood. The first-ever Surgeon General's report on Oral Health, released in May 2000, identified the current situation as a "silent epidemic" of dental and oral health that burdens some population groups, especially low-income children and elderly Americans.<sup>1</sup> The report also highlighted oral health as a "mirror of general health and well-being" and discussed the association between oral health problems and other health problems such as diabetes.

The most common forms of oral disease are dental caries (cavities) and gingivitis and periodontal disease (chronic diseases of the gums and supporting hard tissues of the teeth). These diseases are so common that many individuals accept them as inevitable and expect to lose their teeth eventually, even though most tooth loss is preventable.

The primary focus of oral health is keeping the teeth and hard and soft tissues of the mouth free from disease. Although dental care is most often associated with cleaning and care of the teeth, care of the hard and soft tissues that support the teeth is just as important. In adults, loss of periodontal attachment to teeth plays an increasing role in tooth loss. More tooth loss is associated with periodontal disease than dental caries for adults over 60 years of age.

The focus on teeth and supporting structures, however, often limits individual perceptions of oral health. Oral health includes correction of congenital defects (e.g., cleft lip and cleft palate) and early detection of tumors, including cancer of the oral cavity and pharynx, and a thorough oral and extraoral examination of the oral cavity and lymph nodes. Avoidance of tobacco products is a key strategy to reducing the incidence of oropharyngeal cancer.

Low-income individuals also have a higher incidence of dental decay. Alaska low-income individuals often have diets high in processed foods and refined sugars. They frequently have less access to dental care either because of distance or cost. Further, active caries in adult caregivers often result in early transmission of the bacteria causing tooth decay in young children.

Low-income children are the most commonly identified group needing increased access to dental care and focused prevention strategies aimed at controlling this chronic, infective process.

Low-income elderly also experience disproportionate problems with dental disease. Medicare generally does not cover most dental treatment, including routine dental exams. Elderly people often experience recession of the gums exposing the root surfaces of the teeth, which can undergo decay. Some of the elderly also experience physical disabilities with decreased dexterity for brushing and flossing teeth. Further, they can be taking medications that decrease salivary output (dry mouth) and experience higher decay as a result. While there have been several decades with decreases in the loss of all teeth, a 1997 survey still found that 26 percent of persons aged 65-74 had lost all teeth.<sup>2</sup> The loss of all teeth at advanced age can make it difficult for individuals to adapt to dentures and can contribute to poor nutrition.

## Status and Trends in Alaska

### Disparities

Preliminary data from the 1999 Indian Health Service Oral Health Survey indicates the Alaska Native dental clinic user population has more than twice as many decayed or filled teeth as non-Natives.<sup>3</sup> The current situation in rural Alaskan villages is similar to the situation faced in the United States prior to World War II. Historically, a number of studies documented the low decay rates in Native populations in Alaska.<sup>4,5,6,7</sup> The traditional diet of Natives in most of Alaska was rich in protein and fats and very low in sugars and other fermentable carbohydrates. Studies conducted since the 1920s have documented the relationship between dental decay and increased ingestion of refined sugar and other carbohydrates in the Native population. These changes in diet, limited access to fluoridated water supplies for drinking water, and limited access to dental providers in rural Alaska are factors contributing to high rates of dental decay in these areas.

Further, as recently highlighted by the Alaska Native Tribal Health Consortium, many villages also have high rates of soda consumption. In response to these high rates the Consortium has begun a campaign to reduce soda consumption.

## 13. Oral Health

Frequent ingestion of soda contributes to tooth decay through two mechanisms:

- Sugar: non-diet sodas are a major source of sugar; and
- Acidity: most sodas, like citrus drinks, have a relatively low pH (they are acidic).

These factors combined promote acid production by bacteria in the mouth as well as demineralization of the enamel of the teeth due to the low pH of these drinks.

That high dental decay rates have persisted over several generations often creates a social environment where dental visits are expected to be painful, teeth are expected to be lost and lower value is placed on taking care of teeth (brushing and flossing). In order to reduce the rates of dental decay and tooth loss, education programs must focus on limiting foods high in sugar and the need for proper home dental care, nutritious diet and regular dental visits.

### Caries (Cavities)

Tooth decay (caries) is perhaps the most prevalent infectious disease known. Except in its early stages, it is irreversible and cumulative. Nationally, the prevalence of caries has declined dramatically since the 1940s, so that now only half of school age children have any decay in their permanent teeth. This change nationally is largely due to community water fluoridation, use of fluoridated dentifrice, topical application of fluoride by dentists as part of routine dental visits and the placement of pit and fissure dental sealants by dentists to protect the grooves in teeth from decay.

While these trends present a picture of a major health success of the 20th century, the reduction in caries has not been universal. As discussed previously, low-income populations still experience significant caries activity. Besides causing pain, dental problems can result in failure to thrive for infants and toddlers and are estimated to account for almost 52 million missed school hours annually for school-aged children. Premature loss of primary molars due to caries often results in problems of alignment of the permanent dentition (malocclusion).

There is relatively little information available on Alaska's incidence of caries. A 1989 study of 3-5 year old children enrolled in Alaska's Head Start Program found 55 percent of children screened had untreated dental decay, found evidence of baby-bottle tooth decay (early childhood caries) in 25 percent of Native

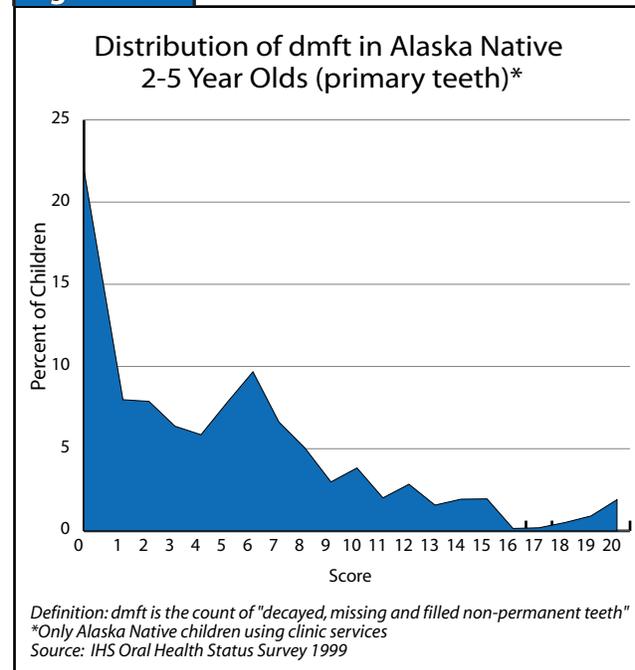
children and 4 percent of non-Native children, and 20 percent of all teeth in these children had evidence of past or present caries<sup>8</sup>

Preliminary data from the 1999 Indian Health Service Oral Health Survey in dental clinics indicate the following for Alaska Native children using dental clinic services (not necessarily representative of all Alaska Native children):

- 77% of 2-4 year olds have dental caries experience in their primary teeth.
- 95% of 6-8 year olds have dental caries experience in their primary or permanent teeth.
- 83% of 15 year olds have dental caries experience in their permanent teeth.
- 60% of 2-4 year olds have untreated dental caries in their primary teeth.
- 66% of 6-8 year olds have untreated dental caries in their primary or permanent teeth.
- 67% of 15 year olds have untreated dental caries in their permanent teeth.
- 51% of 35-44 year olds have untreated dental caries in their permanent teeth.
- 74% of 8 year olds have received at least one dental sealant on their permanent molar teeth.
- 70% of 14 year olds have received at least one dental sealant on their permanent molar teeth.

The "experience" that an individual has had with dental caries is most often referred to in the dental litera-

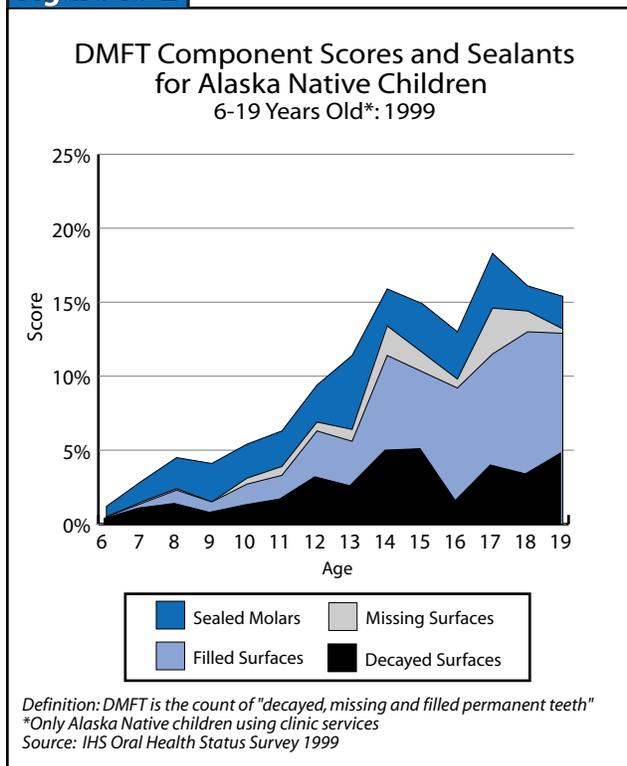
**Figure 13-1**



ture as a dental caries history or experience “score”. This score is summarized by the number of decayed (D), missing due to caries (M), and filled (F) permanent teeth (T) - - DMFT score (or dmft score in the case of primary teeth). Scoring of decay, missing and filled tooth surfaces (DMFS for the permanent dentition) provides a more detailed description on the extent of caries activity. However, both of these scoring systems are often confusing to non-dental professionals trying to interpret the data.

Figure 13-1 shows preliminary dmft for primary teeth for 2-5 year old Alaska Native children using dental clinic services. Figure 13-2 shows the DMFT component scores for permanent teeth in Native children age 6-19 (dental clinic users).

**Figure 13-2**



### Early Childhood Caries (ECC)

Early childhood caries, or baby bottle tooth decay, is a condition of rampant caries in the primary teeth of infants and toddlers. This condition is caused by frequent and prolonged exposure of the teeth to sugar along with the bacteria *Streptococcus mutans* and can occur in children by age one. This is often the result of a child going to bed with a bottle or drinking at will from a bottle during the day. Milk, as well as fruit juices and soft drinks, contributes to this condition.

ECC can predispose children to malocclusion (misalignment of teeth) and increased risk for future caries in primary and permanent teeth. Extensive tooth decay and related pain and infection can cause eating, learning and speech problems for children.

Another factor associated with early childhood caries is the mother's oral health. The bacteria that cause tooth decay are usually transmitted to the infant from the mother. Dental caries is an infectious disease, and reducing the mother's cavity causing bacteria will limit the amount of bacteria passed on to her baby.

Alaska Native children have high rates of ECC. A 1985 study of 3-5 year old children in nine Alaskan villages found rates of ECC from 44 percent to 85 percent.<sup>9</sup> A 1989 study of children enrolled in Head Start found the rate of ECC in Alaska Native children at 25 percent as compared with 4 percent for non-Native children.<sup>8</sup> Young children with untreated dental caries may develop poor eating habits, speech problems, and socialization problems related to low self-esteem. Children who experience early childhood caries are at increased risk for future dental caries.

ECC is largely preventable by:

- Never putting the child to bed with a bottle.
- Transitioning to a cup for ingestion of liquids by age 12 months (use of tippy or small cups at earlier ages can assist this transition).
- Reducing sugar consumption.
- Parents or caregivers cleaning teeth with a small toothbrush or moist cloth for young children and assisting or supervising older children in brushing their teeth. Studies have shown even children up to age 10 can use assistance in brushing.
- Parents examining primary teeth for evidence of decay especially on the outside and inside surfaces of the four upper front teeth.
- Reducing mother's cavity-causing bacteria.

### Gingivitis and Periodontal Disease

Gingivitis and periodontal disease affect the hard and soft tissues supporting the teeth. Associated symptoms include bleeding around the teeth, pain, infection, tooth mobility, and ultimately tooth loss. Periodontal disease is the major cause for loss of teeth in adults aged 60 years and older. Fourteen percent of adults aged 45 to 54 have severe periodontal disease (measured as 6 millimeters of periodontal attachment loss around a tooth/teeth). By age 65-74 twenty-three percent of this age group have severe periodontal disease. Early detection is critical in minimizing the con-

## 13. Oral Health

sequences of this disease. Tobacco use, especially cigarette smoking, is a significant risk factor for periodontal disease, accounting for up to half of all cases of periodontitis.<sup>10</sup>

Information on gingivitis and periodontal disease is not available in Alaska for the general population. A survey conducted in 1991 by the Alaska Area Native Health Service found rates for dental clinic users for “moderate to severe” periodontal disease in the Native 35-45 age group to be over 17 percent.<sup>11</sup> Preliminary data from a similar survey conducted in 1999 showed that about 12 percent of Alaska Native dental patients age 35-45 had severe periodontal disease.<sup>3</sup>

### Edentulous Individuals

Nationally, the number of edentulous individuals (individuals who have lost all of their natural teeth) has been declining. Many edentulous individuals are under the impression they no longer need dental care services once they receive dentures. Dental care is still needed to ensure proper fit of the dentures, which reduces loss of alveolar bone (the bone ridge of the jaws that supports the dentures). Further, these dental exams can detect and provide treatment for other diseases of the hard and soft tissues (e.g., candidiasis) and should include examination for oropharyngeal cancer. The 1991 Oral Health Survey conducted by the Alaska Area Native Health Service reported 20 percent of all Natives using the dental clinic aged 35 and above were edentulous in one or both dental arches.<sup>11</sup>

### Cleft Lip and Cleft Palate

Cleft lip with or without cleft palate is one of the most common birth defects, occurring at a rate of 1-2 cases out of 1,000 births. The highest rate of cleft lip/palate is found in American Indian/Alaska Native populations, where as many as 1 infant in every 350 live births is affected.<sup>12</sup> In whites it affects 1 out of 600 live births and is least common among African-Americans (1 out of 1,850 live births).<sup>1</sup>

Because there is no craniofacial center in Alaska, the state sponsors pediatric Cleft Lip and Palate Clinics to serve its residents. In FY2001, ten clinics were held at four sites--Anchorage, Bethel, Juneau and Fairbanks. During a clinic visit, a multidisciplinary team of providers offers comprehensive evaluations and treatment planning for children with craniofacial anomalies. Those with cleft lip/palate can receive their treatment and procedures in Alaska; those with

more complex craniofacial conditions usually need to seek treatment at a large craniofacial center. Clients in the State of Alaska clinics are followed from birth to age 21 years or until they complete treatment. During the past year, 128 clients received evaluations, including 26 new clients.

Genetic counseling is an integral part of management of patients with cleft lip and palate. All children with cleft lip and cleft palate or cleft palate alone have the opportunity for genetic counseling and evaluation through the Alaska Genetics Clinic, one of the specialty clinics in the state Section of Maternal, Child and Family Health. Children with bilateral cleft lip and palate (12%), those with a family history of cleft disorders, or children with other congenital anomalies are referred to the Genetics Clinic by the cleft palate clinic coordinator.

### Oral Cancer

Oral and pharyngeal cancer is the 7th most common cancer among all men, the 4th most common cancer among African American men, and the 14th most common cancer among all women. Approximately 31,000 new cases of oropharyngeal cancer are diagnosed each year and approximately 8,100 Americans die each year from this disease. More than 75 percent of these cases are attributable to use of tobacco. Risk for these cancers are increased by 6-28 times in current smokers. Alcohol is an independent risk factor for these cancers and when combined with tobacco use accounts for 90 percent of all oral cancer.<sup>13</sup>

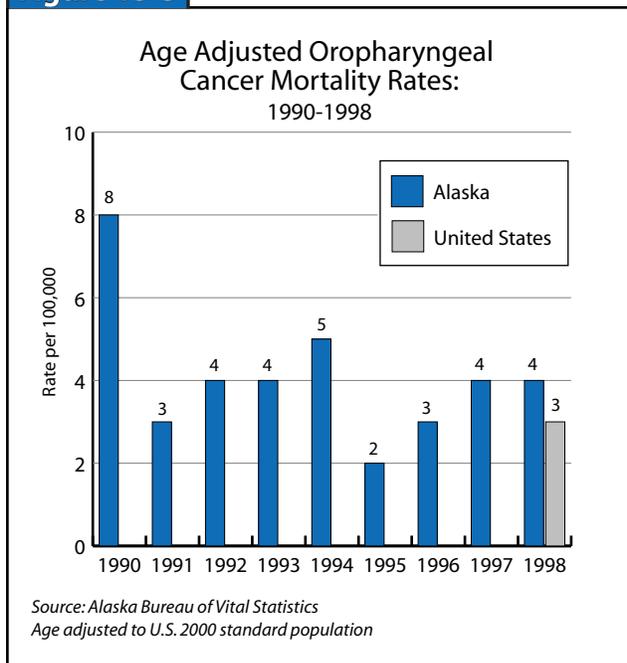
While many other cancer survival rates have increased over the last twenty years little change has been seen in the survival rate for these cases - - largely due to late detection of the cancer. The 5-year survival rate for this cancer is 81 percent when detected in the localized stage, yet only 35 percent of the cases are detected at this stage. The current 5-year survival rate for these cancers are 56 percent for white patients and 34 percent of African American patients. Therapy is aggressive and tends to significantly lower the quality of life.

The tongue is the most common site for oral cancer. These cancers are primarily diagnosed in the elderly and began to be seen after the fourth decade of life in high-risk groups.

Oropharyngeal cancer is not one of the most common forms of cancer in Alaska, but it is of concern due to its poor prognosis and the high incidence of risk fac-

tors, such as tobacco and alcohol use, in this state. Mortality rates for this cancer are higher than the national average (Figure 13-3). There is also a disparity in the mortality rates between Alaska Natives when compared with whites. The rate for Alaska Natives is 8 per 100,000 population compared to 3 per 100,000 for whites.

**Figure 13-3**



Avoidance of tobacco products, eating a diet rich in fruits and vegetables, and abstaining from alcohol, or drinking in moderation will reduce risk of oropharyngeal cancers. Further improvement in survival rates for this cancer is largely geared toward education of individuals and providers in oral cancer examination. Visual examination must be supplemented with feeling for hard lumps in the mouth and inflamed lymph nodes in the region of the neck. Individuals can assist detection through self-examination. Dental providers are in a unique position to detect this cancer early and efforts are aimed at these health professionals to increase awareness and oral cancer examinations as part of routine dental examinations.

### Fluoridation

Community water fluoridation is the single most effective and efficient means of preventing dental caries in children and adults, regardless of race or income level. Water fluoridation has been recognized as one of the top ten achievements in public health within the past century.

Fluoride incorporated into the enamel structure on the tooth surface increases resistance to demineralization process with acid exposure produced by bacteria in the mouth. Subsequent to the peak acid exposure, fluoride also promotes the remineralization process of tooth surface enamel.<sup>14</sup>

Nationally, widespread exposure to fluoridated water, rinses and toothpastes are the primary factors responsible for reducing the prevalence of caries in school age children. Optimal fluoride levels for community water systems range from 0.6 to 1.7 parts of fluoride per million parts of water (ppm). Generally, the higher concentrations are recommended in northern climates where individuals tend to consume less water. The optimal range for Alaska is 1.1 – 1.7 ppm.

Information from the Alaska Department of Environmental Conservation (DEC) collected in 1993 indicated about 260,314 Alaskans, or about 47 percent of the population, were served by fluoridated community water systems. Information collected in 2000 indicates approximately 268,400, or 43 percent of the total population, is served by a fluoridated community water system.<sup>15</sup> More people were served in 2000 due to growth in Alaska's urban areas over the past seven years; however, the total percentage has dropped as many rural areas have discontinued fluoridating their water supplies. Reasons for rural areas discontinuing fluoridation include difficulties maintaining stable concentrations of fluoride in small water systems, the cost of fluoridation equipment and supplies, weekly lab testing costs of water samples, and safety concerns related to turnover and training of community water operators.

Continued population growth in Southcentral Alaska will likely stabilize the percentage of Alaskans with access to fluoridated water. Efforts around water fluoridation in these areas and other urban areas of the state should be to ensure fluoride is maintained at optimal levels. In rural areas with small community water systems, other methods of fluoride delivery should be implemented. These include ensuring access to fluoridated toothpaste, health providers dispensing fluoride drops or tablets, expansion in use of fluoride varnish on the teeth of young children, and exploring use of fluoride salts. Children living in areas without the benefit of fluoride may be assisted in reducing dental decay through use of fluoride drops or tablets, fluoride rinses and application of topical fluoride varnish.

# 13. Oral Health

## Dental Fluorosis

Dental fluorosis refers to a condition of hypo-mineralization of tooth enamel related to ingestion of water and other sources with high fluoride concentration as teeth are developing. The condition ranges from mild fluorosis with white, opaque flecking in enamel to severe fluorosis with pits in teeth and yellow and/or brown pigmentation of teeth (especially upper front teeth). The discovery of the caries reducing properties of fluoridated water were largely the results of the investigation of the cause of mottled enamel (“Colorado brown stain”) along with the finding of very low caries activity in individuals with these stains in their teeth.

A frequently named source contributing to dental fluorosis is ingestion of fluoridated toothpaste when young children brush their teeth. Dental public health professionals are supporting the manufacturing of pediatric fluoridated toothpaste with lower fluoride concentrations than adult toothpastes as one approach to this condition. Parental education is needed that children use only a “pea-size” drop of toothpaste on brushes and young children need parental assistance in brushing teeth. Parental help assists in reducing the amount of toothpaste used by young children and promotes better brushing.

## Dental Sealants

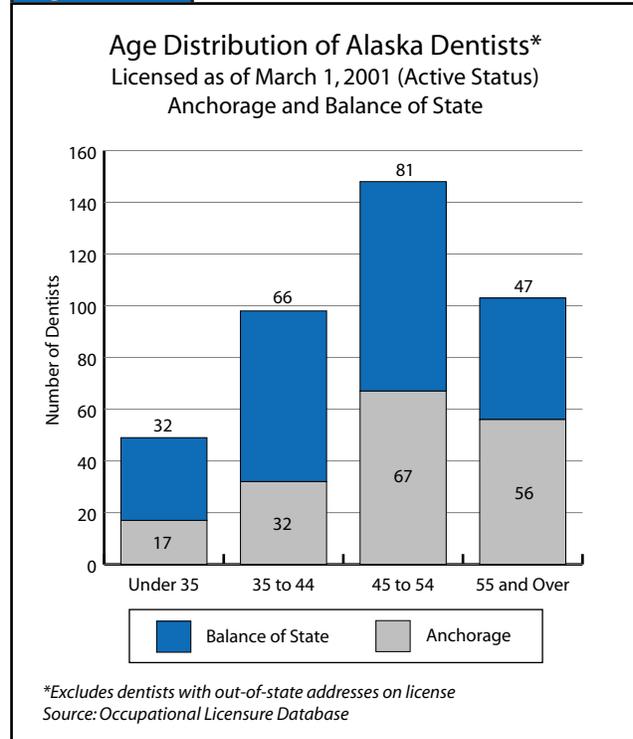
Dental sealants are thin plastic coatings that are applied to the chewing surfaces of molars to prevent tooth decay by creating a physical barrier against bacterial plaque and food. When combined with water fluoridation, which primarily protects the smooth surfaces of teeth, dental sealants offer the potential to eliminate dental caries. The sealants protect the pits and fissures in the teeth.<sup>16</sup> While sealants offer the potential to reduce caries, many parents remain unaware of this preventive treatment service.

## Provider Issues

Alaska, like the nation as a whole, has an aging dental provider work force. Data collected from the Division of Occupational Licensing indicates more than 25 percent of Alaskan dentists are age 55 and older and 20 percent have been in dental practice for longer than 25 years (Figure 13-4).<sup>17</sup> Over the next decade we can expect many of these dentists to reduce practice hours and retire. This is a concern given existing problems with access to dental services for low-income populations and in rural areas of the state. With a national shortage of dentists being forecast, it is likely the state will not experience an influx of

dentists to replace those leaving active practice unless steps are taken to attract dentists to the state (e.g., student loan forgiveness/repayment programs).

**Figure 13-4**



With lower graduating class sizes than seen in earlier decades and a relatively strong United States economy creating a strong demand for cosmetic dental procedures, public sector dental programs are having a difficult time filling vacancies. This has already been evident with recruitment and retention of dentists in Alaska Native health corporation and tribal dental programs. These programs, along with community health center dental programs, will need to find incentives for recruitment of dentists to their programs. Student loan forgiveness programs are one of the major strategies being discussed by these programs.

## Current Strategies and Resources

The provision of dental services in Alaska is for the most part done by private, fee-for-service, dental professionals and Alaska Native non-profit health corporation (and tribal) providers. State agencies have limited involvement in oral health except by funding services through the Denali KidCare/Medicaid and Head Start programs and for specific initiatives (e.g., Maternal Child and Family Health’s surveillance and coordination of services for congenital defects). Com-

munity health clinics are taking a more active role in provision of dental services to low-income individuals; however, at this time most of these programs are in the early implementation phase for dental services. The Anchorage Neighborhood Health Clinic is the only clinic with a well-established dental program, although it is currently facing some difficulty in recruiting dentists for the program. The Interior Neighborhood Health Clinic (Fairbanks), Sunshine Clinic (Talkeetna) and Eastern Aleutian Tribe clinic are looking at establishing dental programs in 2001-2002.

Most dental clinics in Alaska that are managed by tribal organizations have active oral health promotion and disease prevention (OHP/DP) programs. Activities include:

- Sealant placement
- Fluoride varnish programs
- School fluoride mouthrinse programs
- Support of community water fluoridation
- OHP/DP education at chairside and in the community at health fairs, poster contests, school presentations, etc.
- Increased access to dental services for special populations such as Head Start, diabetics, pregnant women, etc.
- Denture fabrication clinics
- “Cavity Free Kids Club” promotions to celebrate success for children getting exams that have no new cavities.
- School toothbrushing programs with fluoridated toothpaste.

As mentioned above, the state supports oral health through the Head Start and Denali KidCare/Medicaid programs. The oral health focus of both of these programs is primarily directed toward dental screening and treatment of children and adolescents.

The Head Start Program provided dental screening services to 2,186 of the 3,351 children enrolled in the program in FY99. Of the 2,186 children screened, 734 (34%) needed dental follow up for untreated dental disease. Of the 734 children referred for additional treatment, 412 children (56%) completed dental treatment. The Medicaid program pays most of Head Start’s dental treatment services; these expenditures are included in the information on Medicaid expenditures discussed below.<sup>18</sup>

Most of Medicaid’s dental services are services provided to children and adolescents through the age of 20 (Early Periodic Screening, Diagnosis and Treatment – EPSDT). In FY00, the Medicaid program

provided about \$11.5 million in dental services to individuals under the age of 21 and another \$1.9 million in emergency dental services to adults enrolled in the Medicaid program.<sup>19</sup> Adult Medicaid dental services are limited to relief from pain, and are not for periodic examinations and restorative services.

Dental services provided to children enrolled in Denali KidCare/Medicaid are tracked as performance measures to the federal Health Care Financing Administration on a federal fiscal year (FFY) basis (October 1<sup>st</sup> – September 30<sup>th</sup>). In FY99, the Medicaid program provided dental services to 19,637 children, or 30 percent of the children enrolled in the program, with 15,354 children receiving preventive dental services. While Alaska is doing better than national statistics where less than 1 in 5 (less than 20%) children enrolled in Medicaid receive preventive dental services, high prevalence of caries in low-income children remains.<sup>20</sup> National statistics indicate 25 percent of children, mostly children living in low-income families, experience 80 percent of all dental decay occurring in permanent teeth.<sup>21</sup>

Disabled Adult Public Assistance clients frequently require extra dental services for oral health conditions exacerbated by the disability or its pharmacological treatment. The Alaska Mental Health Trust Authority has provided small individual grants to adults experiencing developmental disabilities or mental illness for dental care. Not all dentists are willing to care for disabled clients.

Increased access to dental services has been a high priority for the Medicaid program in recent years. During FY00 the Division of Medical Assistance (DMA) met with the state dental association in an effort to improve provider relations and communication. Efforts undertaken by DMA to improve the acceptability of the program to dentists include:

- improvements (streamlining) to dental claim processing;
- improving the dental provider enrollment form;
- encouraging more active involvement and communication between dental office staff and auditors in the compliance audit process;
- clarification of Medicaid dental policies to address misunderstandings about the program, including terms and conditions of the provider enrollment agreement and policies around discounted fee structures offered to non-Medicaid clients.

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While it is still too early to tell if these administrative and communication improvements in the Medicaid program will result in more active involvement of private dentists in Medicaid, the demographics of dentists, as discussed previously will likely limit significant private sector dental involvement in the program.

Further dental health financing limitations include:

- Medicare only covers dental services as it relates to an authorized hospital inpatient stay (e.g., in conjunction with traumatic injury to the face). This has future implications with the increasing number of Medicare beneficiaries and successful prevention and treatment efforts that have allowed these individuals to retain most or all of their dentition.
- Adult dental coverage under Medicaid is limited to dental emergencies (relief of pain) at this time.
- Some private health insurance plans do not cover dental periodic examinations or restorative treatment in the benefit package. Other plans require substantial co-payment by the beneficiary for these services.
- Medicaid and other health coverage plans, even those that offer dental coverage, do not cover nutrition counseling services, a service that offers potential to address the role of diet in the caries process.

Further, access to dental care providers represents a significant barrier to individuals in rural and remote areas of the state. It is not uncommon for small villages to have a dentist visit the community one or two times a year. Generally, during these visits the emphasis is on emergency care and treatment needs, rather than periodic examinations and prevention efforts. With current staffing issues and vacancies in dental positions, services are often prioritized toward maintaining the service level for children. Further, in these situations the access issue often impacts the treatment plan for the dentist. Root canal therapy for an abscessed tooth may not be the best option when a dentist will not be available for ongoing care and/or emergency back-up coverage.

### Data Issues and Needs

Oral health needs assessment and surveillance has made little progress over the past decade. The Alaska Native Tribal Health Consortium conducts periodic oral health screening activities; however, Alaska still

lacks data representative of the state. Information on dental treatment is primarily limited to Medicaid data.

The DEC maintains a database of fluoridated community water systems. For water safety reasons, the primary concern of DEC is to detect and address fluoridation overfeed. However, test results should be made available to assess how well communities are doing at maintaining optimal fluoride concentrations to reduce dental decay.

### Related Focus Areas

A variety of objectives in other *Healthy Alaskans* chapters are linked to objectives in *Oral Health*.

- *Tobacco*
- *Nutrition*
- *Maternal, Infant, and Child Health*
- *Cancer*
- *Diabetes*

Decreasing tobacco use in Alaska will decrease oral diseases, including oropharyngeal cancer, thus linking *Oral Health* to *Tobacco* and *Cancer*. The objective to reduce the loss of teeth, dental decay, and caries is linked to nutrition because the loss of all teeth at advanced age can make it difficult for individuals to adapt to dentures and can contribute to poor nutrition. Diets low in processed sugars reduce the risk of dental decay. *Oral Health* and *Maternal, Infant, and Child Health* are linked. Dental caries is an infectious disease, and reducing the mother's cavity causing bacteria will limit the amount of bacteria passed on to her baby. Breastfeeding promotes oral health and prevents baby bottle tooth decay. People with diabetes are at increased risk for destructive periodontitis and subsequent tooth loss. Regular dental visits provide opportunities for prevention, early detection, and treatment of periodontal problems in persons with diabetes.

## Endnotes

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### Alaska

Alaska Dental Society

[www.alaska.net/~akdental/tooth1.html](http://www.alaska.net/~akdental/tooth1.html)

Alaska Optometric Physician Association

[www.ako.org/story.dbm?sid=feature](http://www.ako.org/story.dbm?sid=feature)

Alaska Early Hearing and Intervention Program

[www.infanthearing.org/states/alaska.html](http://www.infanthearing.org/states/alaska.html)

DHSS: Maternal, Child, & Family Health  
Special Needs Service Unit

[www.hss.state.ak.us/dph/mcfh/programs/SNSU.htm](http://www.hss.state.ak.us/dph/mcfh/programs/SNSU.htm)

Special Education Service Agency

[www.sesa.org/index.html](http://www.sesa.org/index.html)

## 13. Oral Health

### National

National Oral Health Surveillance System	<a href="http://www.cdc.gov/nohss/index.htm">www.cdc.gov/nohss/index.htm</a>
Surgeon General's Report on Oral Health	<a href="http://www.surgeongeneral.gov/library/oralhealth/">www.surgeongeneral.gov/library/oralhealth/</a>
National Institute of Dental & Craniofacial Research	<a href="http://www.nidcr.nih.gov/about/">www.nidcr.nih.gov/about/</a>
Indian Health Service Oral Health Initiative	<a href="http://www.ihs.gov/PublicInfo/PublicAffairs/Director/Initiatives/Oral2001Nov.asp">www.ihs.gov/PublicInfo/PublicAffairs/Director/ Initiatives/Oral2001Nov.asp</a>
American Dental Association	<a href="http://www.ada.org/public/index.asp">www.ada.org/public/index.asp</a>
Operation Bright Star	<a href="http://www.afva.com/">www.afva.com/</a>
The Early Hearing Detection and Intervention Program	<a href="http://www.cdc.gov/nceh/cddh/ehdi/ddscreen.htm">www.cdc.gov/nceh/cddh/ehdi/ddscreen.htm</a>
Special Education Service Agency	<a href="http://www.sesa.org/index.html">www.sesa.org/index.html</a>
Operation Bright Star	<a href="http://www.afva.com/">www.afva.com/</a>
The Early Hearing Detection and Intervention Program	<a href="http://www.cdc.gov/nceh/cddh/ehdi/ddscreen.htm">www.cdc.gov/nceh/cddh/ehdi/ddscreen.htm</a>