

# Background

## How to use this burden document

The main section of this online document contains summarized statewide data on oral diseases, preventive measures, workforce, and dental services. The appendices contain more detailed information, including technical notes and data sources, a glossary of terms, additional data tables, and county oral health profiles. Web addresses are available to get to related documents, such as the 2005 Smile Survey and others.

When appropriate, state data are compared to national public health objectives, such as the Healthy People 2010 (HP2010) oral health objectives.

*(Disclaimer: This report was completed in July 2007. Some web links may have changed since then).*

## What are the most common oral (dental) diseases?

Oral diseases are of several types, including dental caries (decay or cavities), periodontal (gum) disease, tooth loss, oral cancer, oral lesions, and cleft lip and palate. Among these, dental caries and periodontal disease are the most common and prevalent among children and adults, not only in our state but also nationally and worldwide.

### Dental caries

Dental caries is the most common chronic disease in children, five times more common than asthma and seven times more common than hay fever.[1] Left untreated, dental caries can lead to unnecessary pain and suffering, sleepless nights, social embarrassment, mood swings, poor performance and learning at school, missed days at work, and expensive treatment, among other problems.

Dental caries is considered both an infectious and a chronic disease. It is infectious because it is caused by several bacteria, especially *Streptococcus mutans*, and it is transmissible between mother and baby. It is chronic because of its close relationship to genetics, environmental factors such as availability of insurance, exposure to fluoride, etc., and behaviors such as consumption of sweets, poor oral hygiene etc.

### Periodontal disease

Periodontal diseases vary from initial gingivitis (bleeding gums) to periodontitis (bone destruction and loosened teeth). If untreated, periodontitis can lead to tooth loss.

Periodontal diseases are also common among adults and are linked to a variety of other chronic diseases, such as diabetes and cardiovascular diseases.

The risk factors for oral diseases are basically the same ones that affect several other chronic diseases: diet and nutrition, hygiene, smoking, alcohol, and lack of access to care. Poverty represents the greatest threat to health overall. [1]

## What does our state look like?

- **Population.** Washington's estimated population in 2005 was 6,256,400. Seventy-two percent of the population growth over the past decade occurred in western Washington, where the majority of the population lives. Most of the state's rural counties are located in eastern Washington. Rural county residents tend to have lower median household incomes, higher poverty rates, and higher unemployment rates than do people living in more urban areas.
- **Race and ethnicity.** The majority of the state's population (81.8percent) reported its race as white and non-Hispanic. But the state's other race and ethnic populations increased rapidly in the last decade, especially in some counties. Counties with large proportions of Hispanics are in rural areas of eastern and central Washington (Adams, Franklin, and Yakima counties), but the largest number of Hispanics live in King, Pierce, and Snohomish counties. African Americans and Asian/Pacific Islanders are predominantly located in the urban areas west of the Cascade Mountains; about 50 percent of each of these populations in Washington resides in King County alone. Representatives of 29 federally recognized American Indian tribes live in Washington, with varying populations and land areas. (Please see the Technical notes and data sources section of the Appendix for a discussion of how this document identifies racial and ethnic groups across different data sources).
- **Languages.** About 15 percent, or 168,000 of Washington's children ages 5-17 years, speak a language other than English at home. Of these children, 43 percent speak Spanish, 29 percent speak Asian and Pacific Islander languages, 26 percent speak other Indo-European languages, and four percent speak other languages. A similar figure of 14 percent (about 512,000) of the adult population ages 18-64 years does not speak English at home.
- **Family income.** In 2006, an estimated 22.1 percent of Washington households had a family income below 200 percent of the Federal Poverty Level (FPL), compared to 24.5 percent in 2004, and 18.8 percent in 2002. An estimated 8.0 percent of households had an income below 100 percent of the FPL. [2] In 2004, an estimated 38 percent (about 640,985) of children in Washington were living below 200 percent of the FPL. Another 19 percent (about 322,188) of children were estimated to be living below 100 percent of FPL, and 10 percent (about 169,573) were living at or below 50 percent of FPL.[3]
- **Women at reproductive age.** Nearly 22 percent, or 1.3 million of the estimated 5.9 million people in Washington in 2000, were women of reproductive age (15-44 years). A state forecast predicts that over the next 30 years, as the children of "baby boomers" reach adulthood, the number of women of reproductive age will increase substantially. The school-age population (5-17 years) is expected to remain stable through 2010 and then gradually increase. In 2004, an estimated 1.1 million children ages 5 to 17 years lived in Washington State.[4]
- **Health and dental insurance.** The percentage of Washington residents without health insurance is increasing. Among the general population (under age 65 years), 8.4 percent reported being uninsured in 2002, 9.9 percent in 2004, and 9.3 percent in 2006 (an 11 percent increase from 2002). In 2006, the percentage of uninsured children was 4.4 percent, amounting to more than 68,000 uninsured children in Washington.[5] About 90.7 percent of Washington adults had some type of private or public dental insurance coverage in 2006.[2]