Rhode Island
Public Health Brief
Oral Health

Rhode Island Experience  Oral health is a critical, but frequently overlooked, component of overall health and well-being. Good oral health is defined as being free from chronic mouth pain, oral cancers, periodontal gum disease, tooth decay, tooth loss, and other diseases that affect the oral cavity. Untreated oral diseases can progress and profoundly impact childhood development, adult workplace productivity, and quality of life. Increasing evidence implicates oral infections with other health problems, such as preterm or low birth-weight babies, heart disease, lung disease, diabetes and stroke among adults. Oral diseases are common among Rhode Islanders, however, improvements have been made over the past 10 years. In 2006, Rhode Island adopted the Rite Smiles program, which has increased access to dental care for children enrolled in Rite Care, a provision of preventative oral health services. As such, the percentage of Rhode Island older adults who have lost all of their natural teeth has decrease steadily. This trend is expected to continue, resulting in improved oral function and overall quality of life in senior adults.

Decay  Tooth decay (caries) is the most common chronic disease among children. Tooth decay occurs when acid produced by bacteria on the teeth leads to mineral loss and the formation of cavities. If left unchecked and untreated, dental caries can develop into loss of tooth structure, reduced tooth function, pain, infection, unpleasant appearance, and even tooth loss. Figure 1 shows the dental caries experience and untreated decay in children in Rhode Island. There are significant oral health disparities in Rhode Island by race/ethnicity and socioeconomic status. Racial/ethnic minority children and children attending schools with more students eligible for the Free and Reduced price School Meals (FRSM) program are more likely to experience dental decay and have treated tooth decay than their counterparts in more affluent communities. Although this disease is most common among children, people are susceptible to dental caries throughout their lives. Approximately one in five Rhode Island adults, or 22%, age 35-44, have reported having cavities or untreated tooth decay.

Tooth Loss  Teeth can be lost due to tooth decay or gum disease during adulthood; but also can be due to infection, injury, or through orthodontic or prosthetic services. Rhode Island adults maintain their teeth at more frequently than other states; with 69% of Rhode Islanders ages 35-44, reporting never having had a tooth extracted due to tooth decay or gum diseases, compared to 38% nationally. Comparatively, 13% of Rhode Islanders ages 65-74, reported having lost all their natural teeth; compared to 24% nationally. Rhode Island has been able to exceed the Healthy People 2020 targets since 2000 by reducing the rate of tooth loss. However, Rhode Island adults age 18 and older of minority

Figure 1. Oral Health Status of RI 3rd Grade Children by Race/Ethnicity and School Free and Reduced-price School Meals, (FRSM) 2010-11

Source: The Oral Health of Rhode Island’s Children (2012). RI Dept of Health Oral Health Program. Notes: NHW=Non-Hispanic White; FRSM %=Percentage of students eligible for free and reduced price school meals(FRSM). Schools are grouped based on the FRSM % ["Low FRSM % School" (<33.3%), “Middle FRSM % School” (33.3%-66.6%), and “High FRSM % School” (≥66.7%)].
races with lower education, and/or lower incomes are more likely to have reported tooth loss due to tooth decay and gum disease, compared to the rest of the state population.\(^1\)

**Oral Cancer** Oral cancers include cancer of the oral cavity and the pharynx, which is the area behind the mouth and nasal cavity. Oral cancer is the 8th most common type of cancer among men in the United States.\(^2\) In 2010, there were an estimated 36,540 new cases of oral cancers and 7,880 deaths from these types of cancer in the United States.\(^1\) Although the incidence and mortality rates have decreased slightly in the past few years, oral and pharyngeal cancers are still a major concern in Rhode Island, particularly for men.

**Opportunities for Prevention and Treatment** Many preventative opportunities and treatments are available for oral health concerns. Good oral hygiene is one of the most important habits to adopt early in life. Oral hygiene includes preventative measures, such as regular visits to the dentist for oral exams and cleanings, brushing teeth with fluoride toothpaste twice daily, replacing toothbrushes every 3 to 4 months, flossing to remove build up between teeth, and eating a balanced diet with limited between-meal snacks.\(^3\)

Additional important preventative measures are dental sealants and water fluoridation. Dental sealants are clear plastic coatings that provide a physical barrier to prevent decay formation and are applied to a child’s molars.\(^4\) Thirty-nine percent of third grade children have a dental sealant on at least one permanent molar in Rhode Island.\(^5\) It is recommended that the proportion of eight-year-olds receiving protective sealants be increased to 50 percent in order to meet national benchmarks.\(^6\)

Optimal level of fluoride adjustment in community drinking water has been shown repeatedly to be safe, inexpensive, and extremely effective at preventing tooth decay.\(^2\) Communities with fluoridated public water experienced almost 30 percent decreased childhood tooth decay over 3–12 years.\(^6\) Currently 88% of the Rhode Island population on public water receives fluoridated water.\(^7\)

Improved access to comprehensive oral health care for all Rhode Islanders is critical. More than a quarter (27%) of Rhode Islanders age 18-64 years old and 56% of Rhode Islanders age 65 years and older do not have any dental insurance.\(^1\) However, even among individuals who have dental insurance, coverage limitations vary and may restrict access to dental care which can result in high out-of-pocket costs. Dental utilization among Medicaid-enrolled children and adults is lower than that of privately-insured individuals and families. Rhode Island adults enrolled in Medicaid or who do not have dental coverage are significantly less likely than those with private insurance to receive preventive dental care (Figure 2). The Rhode Island Oral Health Commission has adopted the **Rhode Island Oral Health Plan 2011-2016** with the initiatives to develop and implement sound oral health policy and improve access to optimal oral healthcare services for all Rhode Islanders.\(^7\)

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