

## **Behavioral Risk Factor Surveillance System (BRFSS)**

Although appropriate home oral health care and population-based prevention are essential, professional care is also necessary to maintain optimal dental health. Regular dental visits provide an opportunity for the early diagnosis, prevention, and treatment of oral diseases and conditions for people of all ages, and for the assessment of self-care practices.

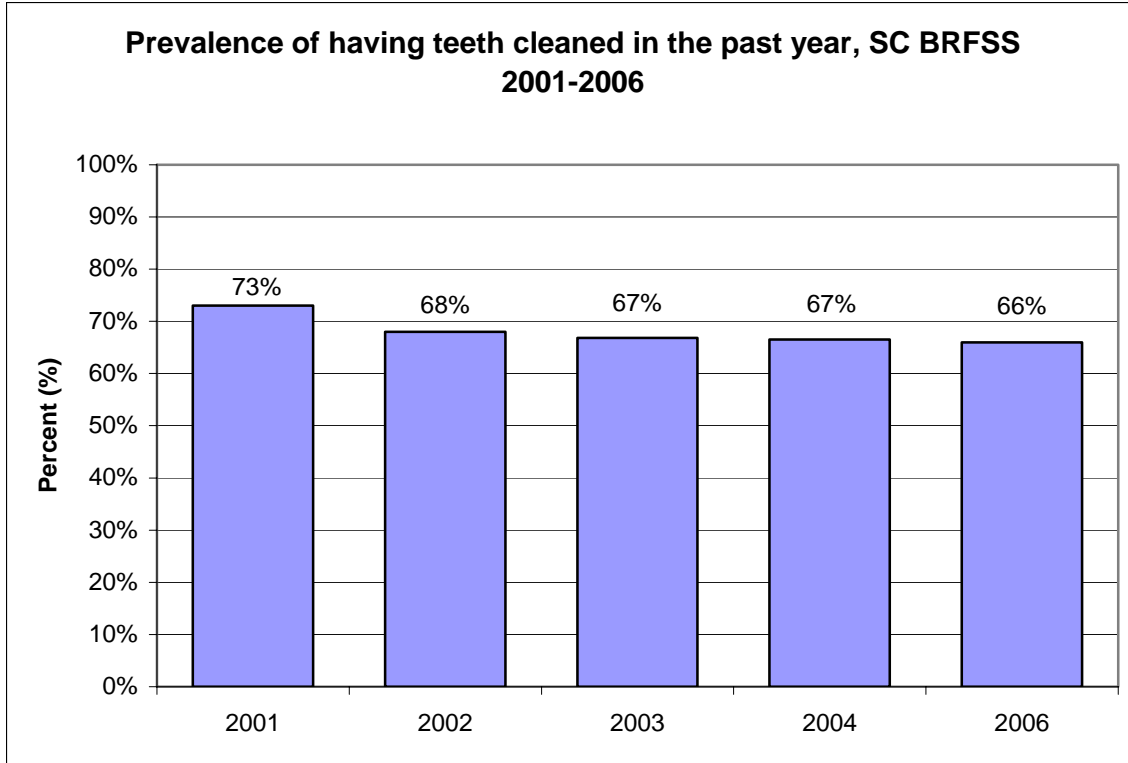
Adults who do not receive regular professional care can develop oral diseases that eventually require complex treatment and may lead to tooth loss and health problems. People who have lost all their natural teeth are less likely to seek periodic dental care than those with teeth, which, in turn, decreases the likelihood of early detection of oral cancer or soft tissue lesions from medications, medical conditions, and tobacco use, as well as from poor-fitting or poorly maintained dentures.

BRFSS is a nationwide, randomly sampled telephone survey that is done every year. It asks questions about a variety of health topics, including oral health. Because the same questions are asked in the same way each year, it is possible to do an analysis across time of the BRFSS data to see trends in oral health care.

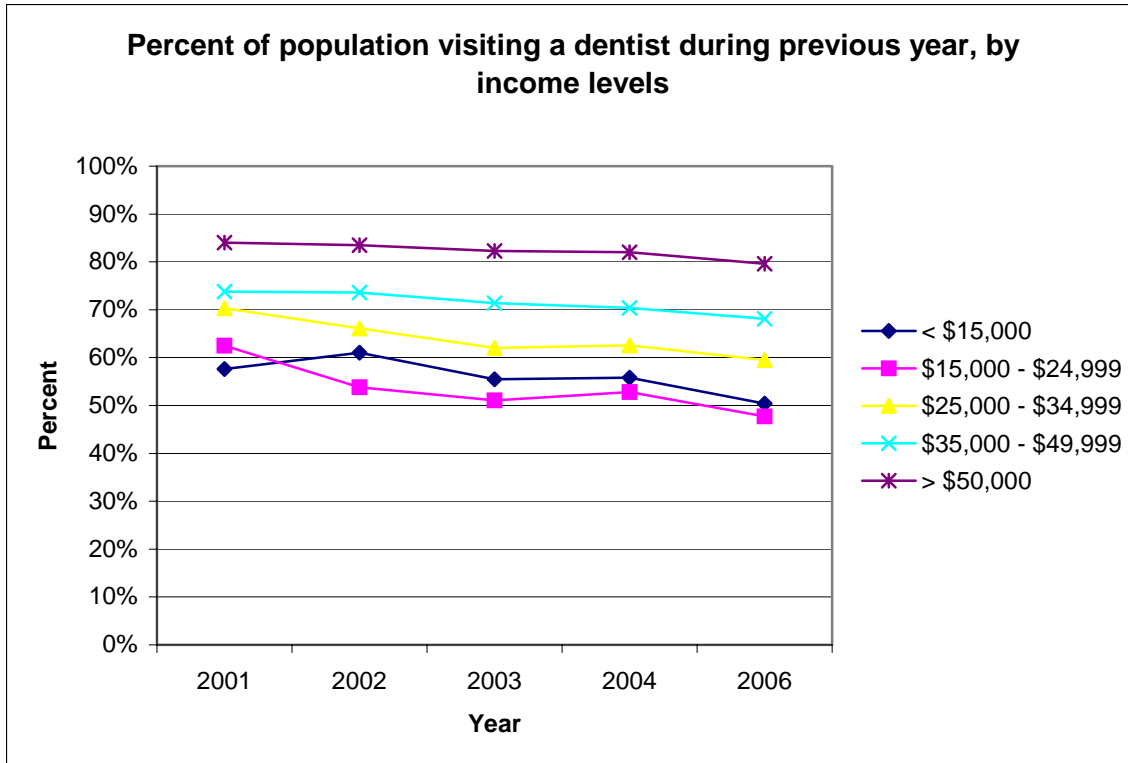
The BRFSS core asks three questions about oral health status:

1. *How long has it been since you last visited a Dentist or Dental clinic for any reason?*
2. *How many of your permanent teeth have been removed because of tooth decay or gum disease? Do not include teeth lost for other reasons, such as injury or orthodontics.*
3. *How long has it been since you had your teeth cleaned by a Dentist or Dental Hygienist?*

In general, South Carolina shows a decreasing trend of dental services received over the past five years. There was a significant decrease in the prevalence of having visited a dentist or dental hygienist in the past year between 2001 and 2006 for both genders, both races, for those earning less than \$35,000 per year, and for those with less than a high school education.



At all income levels, there is a significant decrease in the percentage of the population that has visited a dentist. For both 2001 and 2006, those respondents with a household income of more than \$50,000 per annum had a significantly higher prevalence of having visited a dentist or dental hygienist in the past year than any other income group. Those respondents with less than a high school education had a lower prevalence of a dental visit in the past year than any other education group for both survey years. There is no significant change in the percent of population that had any permanent teeth removed, at any income level.



Approximately 83% of those adults in South Carolina who had had at least one permanent tooth removed had a health care plan. This prevalence is no different than those respondents who reported having no teeth removed (83.6%). Older adults (55+) show a significant decrease in dental visits across five years. However, there is no change in the number of adults of any age who have had permanent teeth removed.

### Oral health and chronic disease

Diabetes is a known risk factor for both the development of oral disease and the prevalence of oral disease. This relationship holds true regardless of whether a person suffers from Type I diabetes (formerly known as juvenile diabetes, in which the body does not produce any insulin at all) or Type II diabetes (the more common form, related to obesity, in which the body does not produce enough insulin or produces it inefficiently).

South Carolina ranks among the top ten states in the nation for diabetes prevalence. Although the national prevalence of diabetes has increased by 30% since 1998, in South Carolina it has increased by 55%. Diabetes is a significant risk factor for having permanent teeth removed. Three-fourths of adults with diabetes have had at least one permanent tooth removed compared to approximately half of the non-diabetic adult population of South Carolina.

Cancer of the oral cavity or pharynx (oral cancer) is the fourth most common cancer in African American men and the seventh most common cancer in White men in the United States. Some groups experience a disproportionate burden of oral cancer. In South Carolina and nationally, African Americans are more likely than Whites to develop oral cancer and much more likely to

die from it. Cigarette smoking and alcohol are the major known risk factors for oral cancer in the United States, accounting for more than 75% of these cancers. The use of tobacco, including smokeless tobacco and cigars, also increases the risk of oral cancer.

The evidence is sufficient to consider smoking a causal factor for adult periodontitis; one-half of the cases of periodontal disease in this country may be attributable to cigarette smoking. Tobacco use substantially worsens the prognosis of periodontal therapy and dental implants, impairs oral wound healing, and increases the risk of a wide range of oral soft tissue changes. Among adult smokers, 58.5% reported having had at least one permanent tooth removed. This is significantly higher than among adult non-smokers.