



## Dental Health

Mouth and throat diseases, from cavities to cancer, cause pain and disability for millions of Americans. This fact is disturbing because almost all oral diseases can be prevented. In addition, cosmetic changes in the appearance of the teeth may be an issue. Among smokers, for example, 28% report moderate and severe levels of tooth discoloration compared to 15% of non-smokers.<sup>153</sup>

Tooth decay is significant problem for both children and adults. Among children, 20% of those who are 2-4 years old, 50% of those 6-8 y, and nearly 60% of those 15 y old have tooth decay.<sup>154</sup> Low income children are disproportionately affected with about 1/3 having untreated decay, which can lead to pain, dysfunction, absence from school, underweight, and poor appearance. Tooth decay is also a problem for older adults who have retained most of their teeth.

Despite an increase in tooth retention, tooth loss remains a problem among older adults. National data show an improvement in tooth loss among adults >60 y of age with only 25% having no natural teeth during the period 1999-2002 compared with 31% during 1998-1994.<sup>155</sup> Loss of teeth is due primarily to tooth decay and advanced gum disease. In Missouri during 2002, the age-adjusted percentage of persons  $\geq 65$  years old who have most of their natural teeth (loss of 5 or fewer teeth) was 44.6%, while 26.4% had lost all their natural teeth.<sup>156</sup>

Oral cancers also pose a threat to the health of adults with about 28,000 cases of mouth and throat cancers being diagnosed each year. Nearly 7,200 people die annually from these cancers.

In 2004, Americans made about 500 million visits to dentists and an estimated \$78 billion was spent

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<sup>153</sup> Alkhatib MN et al. 2005. Smoking and tooth discoloration: findings from a national cross-sectional study. *BMC Public Health* 5:27. [www.biomedcentral.com](http://www.biomedcentral.com).

<sup>154</sup> Centers of Disease Control and Prevention. 2005. Oral health. Preventing cavities, gum disease, and tooth loss, 2005. [www.cdc.gov/nccdphp](http://www.cdc.gov/nccdphp).

<sup>155</sup> Beltran-Aguilar ED et al. 2005. Surveillance for dental caries, dental sealants, tooth retention, edentulism, and enamel fluorosis- United States, 1988-1994 and 1999-2002. *MMWR* SS-3:1-44.

<sup>156</sup> Centers for Disease Control and Prevention. 2003. Retention of natural teeth among adults – United States, 2002. *MMWR* 52:1226-1229.



on dental services. Yet, 4.7 million children 2-17 y of age (7%) had unmet dental needs because their families could not afford dental care.<sup>157</sup> Thirty-five percent of uninsured children have had no dental contact for more than 2 years compared with 17% of children on Medicaid and 13% of children with private health insurance. Twenty-three percent of uninsured children have unmet dental needs compared with 4% of children with private insurance and 9% of children with Medicaid. Hispanic children are 1.6 times as likely as white children and 1.4 times as likely as black children to have had no dental contact for more than 2 years.

The 2004 Health Assessment Survey commissioned by the Kansas City Health Department found that 60% of respondents had dental health insurance.<sup>158</sup> Of those with dental insurance, 67% had it through their employer, 25% through a governmental program, and for 8% it was self-purchased. Of all respondent households, 55% had all members covered and 45% had either no one covered or had a portion of the household not covered, usually adults.

Among the Kansas City survey respondents, 75% reported having had a dental check-up in the prior 2 years while 2% reported never having dental check ups. In addition, 33% of respondents did not have their teeth cleaned on a regular basis. Of those that did have their teeth cleaned, 90% were seen at a dental office, 4% at the University of Missouri's School of Dentistry, 5% at community health centers, and 0.6% at other venues. Seventy-six percent of respondents reported usually or always brushing their teeth at least twice a day.

The National Oral Health Surveillance System reported that 60.6% of Missourians visited a dentist or dental clinic within the past year, 62.0% had their teeth cleaned within the past year, 33.8% of persons 65+ y of age had lost all of their teeth, 23.0% of 3<sup>rd</sup> grade students had untreated tooth decay, and that 14.0% of 3<sup>rd</sup> grade students had one or more sealants on their permanent 1<sup>st</sup> molar teeth ([www.cdc.gov/nohss](http://www.cdc.gov/nohss)). Also, 82.0% of Missourians using public water systems are receiving fluoridated water.

Only 1% of the 2,700 dentists in Missouri are enrolled in Medicaid and the Missouri Children Health

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<sup>157</sup> National Center for Health Statistics. 2006. Summary health statistics for US children: National Health Interview Survey, 2005. National Center for Health Statistics, *Vital Health Stat* 10(231), 138 p. [www.cdc.gov/nchs](http://www.cdc.gov/nchs).

<sup>158</sup> Kansas City Health Department. 2004. 2004 Health Assessment Survey. [www.kcmo.org/health](http://www.kcmo.org/health).



Insurance Program. These low percentages result in a shortage in the Kansas City region of dentists willing to accept children on MC+/Medicaid. In 2003, Citizens for Missouri's Children released a report, *Dental Care Counts, Decay in the Heartland: A Crisis for Kansas City Children*. According to that report, only 15% of dentists in the region will accept children with this type of insurance. This translated into 1 dentist for every 923 children enrolled in MC+/Medicaid. As a result, less than one-third of eligible children are screened for dental problems. The report also stated that the health care maintenance organizations the State of Missouri contracts with also have low dental screening rates. Statewide, Missouri is failing to meet to minimal federal Medicaid obligations for dental screenings.

One of the major complications of diabetes is periodontal disease. Adults with diabetes have both a higher prevalence of periodontal disease and more severe forms of the diseases, contributing to impaired quality of life and substantial oral functional disability. In addition, periodontal disease has been associated with development of glucose intolerance and poor glycemic control among adults with diabetes. Behavioral Risk Factor Surveillance System (BRFSS) data show that nationally 67% of dentate adults with diabetes had a dental visit during the preceding 12 months.<sup>159</sup> For Missouri, the rate was 61.4% and for Kansas 78.7%. The Year 2010 national objective is to have 71% of dentate adults with diabetes have an annual dental visit.

Kansas City is fortunate to have the only dental school in the state located in the community on the campus of the University of Missouri. Of the local health departments serving the Missouri side of the metropolitan area, only the Clay County Health Department has a dental health program. The Platte County Health Department does provide emergency dental services.

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<sup>159</sup> Eke PI et al. 2005. Dental visits among dentate adults with diabetes – United States, 1999 and 2004. *MMWR* 54:1181-1183.