



ORAL HEALTH DATA AND EVIDENCE-BASED RESEARCH

Pregnant Women

- ❖ Pregnant women with periodontal disease may be up to eight times more likely to deliver prematurely, and over 18% of preterm low birth weight babies may be attributable to periodontal disease.^{1,2}
- ❖ The average costs during the first year of life for a preterm baby are more than ten times that of a baby born at full term; the cost of an average preterm birth is \$50,000 in the first year of life.³
- ❖ More than 25% of all pregnant women have periodontal disease. Managing periodontal disease requires comprehensive treatment procedures such as scaling and root planing in addition to preventive care.¹
- ❖ Mothers can spread oral bacteria to their babies, putting baby at risk for developing tooth decay. Reducing bacteria in a mother's mouth through dental care during pregnancy significantly reduces her risk of developing oral diseases and spreading decay-causing bacteria to her baby.⁴

Individuals with Diabetes

- ❖ As diabetes affects the peripheral vascular system, persons with diabetes are more susceptible to periodontal (gum) disease and tooth decay.⁵
- ❖ With dental treatment, diabetics had an average reduction of 33% in annual hospital admissions, and an annual average of 13% fewer physician visits.⁶
- ❖ Diabetics receiving periodontal treatment experienced a \$1,814 reduction in annual medical costs.⁶
- ❖ Studies show that diabetics who receive adequate treatment for periodontal disease can better manage their blood sugar levels.⁷

Individuals with Chronic Health Conditions

- ❖ Studies suggest that patients with periodontitis may have an increased risk of developing cardiovascular disease.^{8,9}
- ❖ Several species of bacteria that cause periodontitis have been found in the atherosclerotic plaque in arteries in the heart and elsewhere, which can lead to a heart attack.¹⁰
- ❖ Studies have shown that periodontitis may enhance the risk of respiratory disease.¹¹
- ❖ Researchers found that men with gum disease were 49% more likely to develop kidney cancer, 54% more likely to develop pancreatic cancer, and 30% more likely to develop blood cancers.^{12,13}
- ❖ Vulnerable patients in the intensive care unit (ICU) who received enhanced oral care from a dentist were at significantly less risk for developing a lower respiratory tract infection, like ventilator-associated pneumonia, during their stay, research shows.¹⁴

Dental-Related Emergency Room Use

- ❖ In 2009, dental conditions were responsible for an estimated 830,590 visits to the ER nationwide, which was nearly a 16% increase from 2006.¹⁵
- ❖ Emergency room visits for dental problems doubled between 2000 and 2010, from a reported 1 million cases of mostly adults in 1999-2000, and 2.3 million cases in 2009-10.¹⁶

Children

- ❖ Dental disease is the most common childhood disease— five times more common than asthma.¹⁷
- ❖ Children under 6 years of age enrolled in Medicaid and treated for ECC in a hospital setting represent less than 5% of those receiving dental care, but consume up to 45% of the dental resources.¹⁸
- ❖ Only 45.7% of Virginia's Medicaid-enrolled children are getting dental care.¹⁹
- ❖ 47.4% of 3rd graders in Virginia have or had a (untreated or treated) cavity experience.²⁰
- ❖ Students miss as many as 51 million hours of school each year because of dental problems.²¹
- ❖ Children who have their first preventive dental visit prior to age one have average dental costs roughly 40% lower than those who have their first visit after age one.²²

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Works Cited

- ¹ "Periodontal Therapy Reduces Hospitalizations and Medical Care Costs in Diabetics." March 2012. M. Jeffcoat, J. Blum, and F. Merkel, School of Dental Medicine, University of Pennsylvania, Philadelphia, PA, United Concordia Companies, Inc. (UCCI), Harrisburg, PA. Based on three years of data.
- ² "Periodontal disease as a risk factor in pre-term low birth weight - An assessment of gynecologists' knowledge: A pilot study." Shenoy RP, Nayak DG, Sequeira PS. *Indian J Dent Res* 2009;20:13-6.
- ³ Retrieved from http://www.marchofdimes.com/peristats/pdfdocs/cts/ThomsonAnalysis2008_SummaryDocument_final121208.pdf.
- ⁴ Rozier RG, Sutton BK, Bawden JW, Haupt K, Slade GD, King RS. 2003. Prevention of early childhood caries in North Carolina medical practices: implications for research and practice. *Journal of Dental Education* 67(8), 876–85.
- ⁵ "Diabetes in Virginia." Virginia Department of Health, Office of Family Health Services, Diabetes Prevention and Control Project. (Updated 7/2011). Retrieved from <http://www.vdh.virginia.gov/ofhs/prevention/diabetes/documents/2012/pdf/Diabetes%20Burden%20Report1.pdf>
- ⁶ Periodontal Therapy Reduces Hospitalizations and Medical Care Costs in Diabetics. March 2012. M. Jeffcoat, J. Blum, and F. Merkel, School of Dental Medicine, University of Pennsylvania, Philadelphia, PA, United Concordia Companies, Inc. (UCCI), Harrisburg, PA. Based on three years of data.
- ⁷ "Improved Health and Lower Medical Costs: Why good dental care is Important." Cigna, 12/10. Retrieved from http://www.cigna.com/assets/docs/life-wall-library/Whygooddentalcareisimportant_whitepaper.pdf
- ⁸ "Study Finds Direct Association Between Cardiovascular Disease and Periodontal Bacteria." (February 7, 2005) National Institute of Dental and Craniofacial Research. Retrieved from <http://www.nidcr.nih.gov/Research/ResearchResults/NewsReleases/ArchivedNewsReleases/NRY2005/PRO2072005.htm>
- ⁹ "Periodontal Disease and Coronary Heart Disease Incidence: A Systematic Review and Meta-analysis." (2008 December). Humphrey, Linda, MD, MPH, Fu, Rongwei, PhD, Buckley, David I., MD, MPH, Freeman, Michele, MPH, Helfand, Mark, MD, MPH. *J Gen Intern Med.*; 23(12): 2079–2086. Published online 2008 September 20. doi: 10.1007/s11606-008-0787-6.
- ¹⁰ "Heart disease and oral health: Role of Oral Bacteria in Heart Plaque." (February 2007) Harvard Health Publications, Harvard Medical School. Retrieved from http://www.health.harvard.edu/press_releases/heart-disease-oral-health
- ¹¹ Sharma, Nikhil, and Shamsuddin, H. "Association Between Respiratory Disease in Hospitalized Patients and Periodontal Disease: A Cross-Sectional Study." (August 2011, Vol. 82, No. 8, Pages 1155-1160, DOI 10.1902/jop.2011.100582). *Journal of Periodontology*. Retrieved from <http://www.joponline.org/doi/abs/10.1902/jop.2011.100582>
- ¹² "Gum Disease and Other Systemic Diseases." American Academy of Periodontology. Retrieved from <http://www.perio.org/consumer/other-systemic-diseases>
- ¹³ "Gum Disease Link to Cancer Risk." (26 May 2008) BBC News. Retrieved from <http://news.bbc.co.uk/2/hi/7416672.stm>
- ¹⁴ Society for Healthcare Epidemiology of America. (2014, October 22). Proper dental care linked to reduced risk of respiratory infections in ICU patients. *ScienceDaily*. Retrieved October 30, 2014 from www.sciencedaily.com/releases/2014/10/141022103548.htm
- ¹⁵ "Healthcare Cost and Utilization Project (HCUP) – The Nationwide Emergency Department Sample for the year 2009 and 2006." Agency for Healthcare Research and Quality (AHRQ), Rockville, MD. Retrieved from <http://hcupnet.ahrq.gov>
- ¹⁶ National Hospital Ambulatory Medical Care Survey. Centers for Disease Control and Prevention. Retrieved from <http://www.cdc.gov/nchs/ahcd.htm>.
- ¹⁷ "A United Voice for Oral Health: Final Report and Recommendations from the Michigan Access to Oral Health Care Work Group." 2013 Update. Retrieved from http://www.smilemichigan.com/Portals/pro/ProDocuments/DonatedCare/united_voice_for_oral_health.pdf
- ¹⁸ "The Effects of Early Preventive Visits on Use, Costs, and Oral Health Status." October 27, 2011. J. Lee, DDS. Institute for Oral Health. <http://www.iohwa.org/2011-conference-oral-health/speakers/2011-IOHConf-DrLee.pdf>
- ¹⁹ "The State of Children's Dental Health: Making Coverage that Matters," Pew Center on the States, http://www.pewcenteronthestates.org/uploadedFiles/wwwpewcenteronthestatesorg/Initiatives/Childrens_Dental_Health/048_11_DENT_50_State_Factsheets_Virginia_052311_web.pdf
- ²⁰ "Caries Experience." August 2010. Center for Disease Control National Oral Health Surveillance System. Retrieved from <http://apps.nccd.cdc.gov/nohss/IndicatorV.asp?Indicator=2>.
- ²¹ "Oral Health in America: A Report of the Surgeon General." 2000, 2. U.S. Department of Health and Human Services, National Institutes of Health. Retrieved from <http://silk.nih.gov/public/hck10cv.@www.surgeon.fullrpt.pdf>.
- ²² "Early Preventive Dental Visits: Effects on Subsequent Utilization and Costs." (2004): 114 418-423. *Pediatrics*. M. Sauvage, J. Lee, J. Kotch, W. Vann, Jr.