

Borckardt, D., CHP; Gadsden, L., COP; Holdgate, N., COM; Morris, M., CDM; Murray, K., CHP;  
Pennella, D., CDM; Senn, T., COM; Taylor, A., CHP; Dr. Duncan, Faculty Advisor

### SC Oral Health Facts

#### Oral Cancer

Prevalence: 9<sup>th</sup> most common cancer in SC; 98% invasive prior to detection; 2<sup>nd</sup> in nation for OC deaths

Risk Factors: 90% attributable to use of tobacco, alcohol, or both; HPV 16 and 18

Cost to Prevent vs. Treat: Prevent: Free (don't smoke) to HPV vaccine costing \$600 over 6 months, Treatment: Chemo \$10K-\$30K per treatment, Radiation: \$7K-\$8K each, Surgery: \$54 / min for 12-16 hours.

Environmental Role: Risk Factors have cumulative effect

Family History: Heredity not a major causative role

#### Caries

Prevalence: Most common chronic disease of children age 5-17 years; 85% of US adults have one tooth with decay or a restoration for previous decay

Risk Factors: No Fluoride in drinking water; high consumption of sugar-containing foods

Cost to Prevent vs. Treat: Save \$38 in treatment for every \$1 invested in community water fluoridation; sealants save \$15 per molar in treatment

Environmental Role: Family income; diet; personal hygiene habits

Family History: Some genetic role in immune properties in saliva and crevicular fluid; family hygiene habits tend to pass to offspring

#### Periodontal Disease

Prevalence: Leading cause of tooth loss; 90% have some degree of periodontal disease by age 50

Risk Factors: Poor Hygiene; poorly controlled diabetes

Cost to Prevent vs. Treat: Cost of normal oral hygiene and regular professional maintenance vs. cost of periodontal therapy by Periodontist.

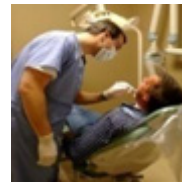
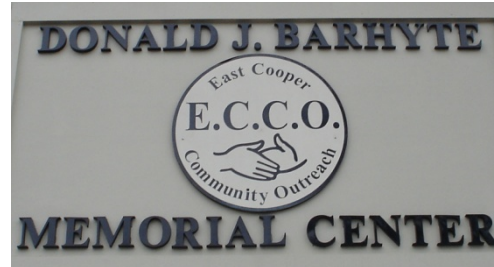
Environmental Role: Diet; oral Hygiene; income

Family History: Some genetic factors in susceptibility to certain bacteria

### Prevention Rationale and Barriers

**Rationale:** Nearly 100% of oral disease is preventable; oral disease is the fourth most expensive to treat; preventive measures have drastically reduced caries in the population

**Barriers:** Lower socioeconomic class with generational poverty; inadequate/no insurance; transportation; language; basic needs override preventive considerations



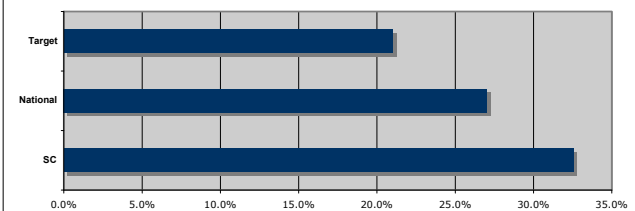
**Community Partner: E.C.C.O.**

The East Cooper Community Outreach dental clinic pledges to provide the ECCO community with invaluable emergency, restorative, and preventive services within a compassionate, caring atmosphere.

### Role of Interprofessional Collaboration

**An interprofesional approach could improve outcomes by:** Improving oral hygiene and other home care; preventing/stopping the use of tobacco products (educate patients on what cancer lesions look like/what to look for); increasing the number of patient encounters and thereby increasing the likelihood of education/prevention; improving access to care through schools, free clinics, etc.

Untreated Caries in Children Aged 6-8 Years



### Recommendations for Change

**Individuals:** Regular visits to a dentist (twice per year); practice proper oral care (regular brushing/flossing)

**Providers:** Educate patients about proper brushing, flossing, and the signs and symptoms of downward oral health (bleeding gums, tooth sensitivity, etc.)

**Payers:** Increase Medicaid reimbursement rates for dentists; recognize oral health as a part of primary health care and integrate oral health into the general health care system

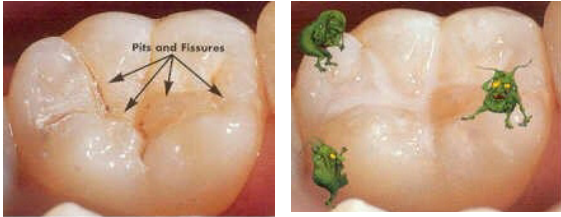
**Communities:** Use fluoridated water (for each \$1 spent we save \$38 on dental treatment costs; 100 million Americans are without fluoridated water)

**Policymakers:** Increase school-based dental prevention programs; obtain resources for a sustainable dental public health program; further develop the dental workforce through provider incentive programs for treating underserved areas

### References

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**Recommendations/Questions for Future Study:** We recommend that MUSC Administration investigate the possibility of developing a plan which would use our own College of Dental Medicine to become the primary source of dental preventative care for all MUSC students. Also, future scholars should have a service project with their community partners.



<http://montrealkidsdentist.com/index.html>