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Oral Cancer Prevalence in Virginia

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Oral Cancer Prevalence in Virginia

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Purpose. Oral and pharyngeal cancer affects 30,000 Americans a year and kills one fourth of those diagnosed. The primary risk factors for oral cancer are past or present cigarette and tobacco usage, and alcohol consumption in conjunction with tobacco use. Even though the prevalence of oral cancer is relatively low in the younger age groups, this group is most likely to benefit from intervention programs designed to change risky behavior such as smoking, and to prevent oral cancer in the later years. The goal of the study was to identify high-risk target areas for an oral cancer prevention program in Virginia.

Methods and Materials. The specific objectives were to analyze the 1986 to 2001 Oral Biopsy Database from the Virginia Commonwealth University School of Dentistry for diagnosed cases of oral cancer. To test the hypothesis that Hampton Roads, Virginia would be a high-risk target area, diagnoses were correlated with the 11 zip-code regions in Virginia to identify specific geographical areas with high numbers of oral cancer cases. The oral cancer data set consisted of 4,712 cases. Frequencies and cross-tabulations were calculated for all the variables using Statistical Package for Social Scientists software (SPSS Inc., version 10.1, Chicago, IL).

Results. Results indicated that the Hampton Roads region had the second highest number of squamous cell carcinomas, with 231 total cases. The Richmond area had 435 cases, almost twice as many.

Conclusions. Therefore, Hampton Roads and Richmond are high-risk target areas that would benefit from an aggressive oral cancer prevention and intervention program in its public schools.