

ECC in Boston children aged 1 to 3 years

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Objective: To describe the prevalence of Early Childhood Caries (ECC) in 1-3 year old children seeing primary care pediatricians at two urban medical centers in Boston.

Methods: For this study, ECC is defined as at least one upper primary incisor that is decayed, missing, or filled due to caries; white lesions were recorded separately. A convenience sample (N= 536) of children presenting for well-child visits was recruited between Feb. 2003 and Sept. 2004. A non-invasive clinical examination was then conducted by a dental hygienist using a penlight and a disposable mirror to determine clinical presence or absence of ECC.

Results: Overall, of the 536 subjects at both sites, 52% were male; 15 % were Hispanic; 55 % were 1 year old, 27% were 2 years old and 15% were 3 years old. Race varied by site with 17 % White, 77% Black, and 6% Asian at site #1 and 56% White, 35% Black and 8% Asian at site #2. ECC was found in 4% of the subjects at site #1 and 5.5 % at site #2. Of the subjects with ECC, 24% were 1 year olds, 57% were 2 year olds and 19% were 3 year olds. 62 % of those with ECC were male, 9.5% were Hispanic, 71% Black, and 29% White. In addition, white lesions were noted in 3% of the subjects.

Conclusion: The prevalence of ECC at both sites was found to be comparable to the NHANES III. However, the prevalence varied by race, age, and sex. These results suggest that the overall prevalence of ECC among our urban hospital based sample is similar to national figures, but the information about variation among subgroups of the sample suggest potential populations to concentrate future interventions to prevent ECC.