The Prevalence of Early Childhood Caries in Newark, New Jersey. N MATHIAS*, RG ROSIVACK, S VON HAGEN, M HOUPT. UMDNJ-New Jersey Dental School and Graduate School of Biomedical Sciences.

This study assessed the prevalence of dental caries in pre-school children in Newark, New Jersey. The subjects were enrolled in day care centers in a non-fluoridated, urban community and included 605 children ranging in age from 1.4 to 6.5 years. The children were examined by a single examiner using a mouth mirror and explorer with the aid of a portable dental light. Intra-examiner reliability was 98%. The criteria used to evaluate caries included the presence of "white -spot" pre-cavitated lesions as well as frank cavitated lesions according to the guide- lines set forth by the NICDR in 1999. The results revealed that 54% of the child- ren sampled exhibited dental decay ranging from white spot lesions to rampant decay. When white spot lesions were excluded, the caries prevalence was reduced to 47% of the sample. When white spot lesions were included, the mean deft was 3.5 for the entire sample and 6.5 in the caries positive group. Excluding white spot lesions the mean deft was 2.3 for the complete sample and 5.8 for the caries positive group. The teeth most affected by caries were the maxillary and mandibular second molars. White spot lesions were found predominantly on the maxillary central incisors. There were no statistically significant differences in caries prevalence between gender or race subgroups. In spite of declining national caries rates this population continues to exhibit a high rate of dental caries. This inclusion of precavitated white spot lesions in the deft score gives a more accurate assessment of caries prevalence.