

SOUTHERN CALIFORNIA CHILDREN'S HEALTH STUDY

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The Children's Health Study (CHS) involves 5600 children living in 12 Southern California communities selected to have the least and most polluted air. The study began in 1993 and has involved annual evaluation of children who were in the 4th, 7th, and 10th grades at study onset. O_3 , NO_2 , PM_{10} , $PM_{2.5}$, and acid vapor are measured on a regular basis in each of the 12 communities. Health status has been assessed by monitoring school absences, by annual measurement of lung function, and by questionnaire assessment of various respiratory symptoms and conditions such as

asthma and bronchitis. Although data collection will continue through 2001, certain preliminary results are presented and discussed. These include: 1) a negative relationship between PM , NO_2 , and acid vapor and lung function growth, 2) a strong association between O_3 and school absences for acute respiratory disease, and 3) demonstration that asthmatics are highly sensitive to pollution levels not affecting non-asthmatics. The results have potentially important policy and public health implications.