

Asthma data in this survey were collected from Connecticut's school nurses. The survey asked for asthma prevalence data from school nurses in elementary, middle and high schools across Connecticut. Of 169 school districts, 138 responded, including 132 that have elementary school children.

■ SUMMARY OF FINDINGS

- The findings of this survey are based on data collected from 83% of all Connecticut school children in grades K-12.
- The number of children attending schools in school districts surveyed was 513,688. These children attended 1027 public and nonprofit schools during the 1999-2000 school year.
- 8.7% is the overall mean prevalence rate of asthma for school children in Connecticut, grades K-12. The mean rates of asthma prevalence by school level are:
 - 7.8% for elementary school children
 - 10.2% for middle school children
 - 9.4% for high school students
- Rates of asthma among elementary school children in school districts surveyed range from a low of over 3% to a high of just under 14%.
- All but 7 of 132 school districts surveyed have asthma prevalence rates among elementary school children that range between 4% and 12%. Of those 7, none had an asthma prevalence rate among its elementary school children as high as 14%.
- Asthma prevalence rates for elementary school children are consistent among urban, suburban, and rural districts. Whether a district is urban, suburban or rural makes no appreciable difference.

- **Asthma prevalence rates among Connecticut elementary school children in districts grouped by socioeconomic status (SES) are significantly different.** Based on a classification used by the Connecticut Department of Education to place school districts into socioeconomic groupings, called Education Reference Groups (ERGs), asthma prevalence rates rise from the highest SES grouping with the lowest prevalence rate of 5.5%, to the lowest SES grouping with the highest prevalence rate of 9%.
- **Asthma prevalence rates among Connecticut elementary school children in districts grouped by county are also significantly different.** Windham County has the highest prevalence rate of asthma and Fairfield County has the lowest rate.⁵

INTRODUCTION AND BACKGROUND

Asthma is a chronic, inflammatory and life-threatening disease of the airways that afflicts Americans of all ages, races, and ethnic groups. It is one of the few chronic diseases where the prevalence rates are increasing despite a better understanding of the disease and improved medical treatments.⁶ For example, the Pew Environmental Health Commission estimates that the 1993-95 prevalence rate of asthma among children, age 5-14 years, in the United States was approximately 7.6%, up from just over 4% in 1980.⁷ Despite more effective medical management, death rates for asthma continue to rise at a rate parallel to the rising rates of asthma prevalence.⁸ Of additional concern, the

⁵ According to 1990 U.S. Census Bureau data for the eight Connecticut counties, Fairfield County had the highest per capita income, while Windham County had the lowest per capita income.

⁶ Davies, R., Wang, J., Adelaziz, M., Calderon, M., Khair, O., Devalia, J. & Rusznak, C. (1997, Feb). New insights into the understanding of asthma. *CHEST: The Cardiopulmonary and Critical Care Journal*, 111, 2S-10S.

⁷ The Pew Environmental Health Commission. (2000). *Attack asthma*. Baltimore: Johns Hopkins School of Public Health, p. 10.

⁸ *Ibid*, p. 8.