

# Executive Summary



*Asthma is a chronic disease that affects growing numbers of children and adults in the United States. Little information is available as to the frequency with which it affects different communities. Preliminary work in some New England states suggests that school nurses are able to provide information at a community level to better characterize the distribution of asthma. Such information will enhance efforts to understand the causes of asthma and promote targeted interventions to prevent and treat the disease.*

*This study was designed to estimate the prevalence of asthma among children attending grades K-5 in Connecticut schools. A second goal was to obtain information regarding characteristics of school environments that may contribute to asthma or to asthma symptoms.*

# Summary of Findings

- Of 863 schools with grades K-5, 698 participated in this study, which represents 81 percent.
- Based on information from school nurses, 9.7 percent of K-5 students in Connecticut have asthma.
- Asthma affects more students in urban communities than in suburban and rural communities.
- While urban status appears dominant, socioeconomic status significantly affects asthma rates in communities. Children in poorer communities have higher rates of asthma than those in more affluent communities, even in rural areas of the state.
- School nurses have multiple sources of information about the health of students, can provide important information regarding asthma rates at a local level, and can play a role in developing a statewide and national asthma tracking system.
- While the causes of asthma are complex, involving multiple personal, home, and community factors, schools themselves may provide environments that can contain risk factors for asthma:
  - A majority of schools with grades K-5 in Connecticut have difficulties with water incursion into their buildings;
  - Over half of the schools renovate their buildings while students are present. Construction practices may increase asthma risk if guidelines for renovations during building occupancy are not implemented.
- The statewide rate of asthma estimated here, 9.7 percent, is higher than the rate estimated in a prior study conducted by Environment and Human Health, Inc. In 1999, the rate was estimated to be 7.8 percent among elementary school students. This change may reflect:
  - The fact that school nurses were surveyed later in the school year;
  - Increased recognition of asthma among students by physicians, parents, and school nurses; or
  - An increasing rate of asthma among elementary students in Connecticut.