

**TESTIMONY OF
CONNECTICUT HOSPITAL ASSOCIATION
SUBMITTED TO THE PUBLIC HEALTH COMMITTEE
Thursday, March 11, 2004**

SB 564, An Act Concerning Auto Emission Standards

The Connecticut Hospital Association (CHA) appreciates the opportunity to submit testimony in support of **SB 564, An Act Concerning Auto Emission Standards**, which would require the Commissioner of Environmental Protection to implement low motor vehicle emission standards being implemented in California.

Several studies have linked automobile emissions to exacerbation of asthma, including a compelling 2001 study published in the *Journal of the American Medical Association*. In that study, researchers from the Centers for Disease Control used the 1996 Summer Olympic Games in Atlanta to study the link between automobile traffic, air quality, and asthma. To minimize Atlanta traffic, the city added 1,000 buses for round-the-clock public transportation, closed downtown streets to private cars, and encouraged telecommuting or alternate-hour commuting during the games. Peak morning traffic decreased 22.5%, and air quality improved. Particulate matter, carbon monoxide, and ozone levels each decreased by 16% to 28% during the Games, according to the study. The effect on asthma was significant. The number of asthma-related acute care visits recorded for children ages 1 to 16 years dropped by more than 40% during the Games while non-asthma acute care visits varied by no more than 3.1% throughout the Games. The researchers concluded that decreasing automobile emissions through citywide changes in transportation and commuting practices, or through changes in automobile design, could have a huge impact on asthma in children. The study is only one of a growing body of research referenced below which suggest a link between automobile emissions and rates of asthma hospitalizations, particularly in children.

SB 564 is an important public health initiative that will benefit thousands of Connecticut residents with asthma. According to the most recent estimates available from the CDC, approximately 13.2% of adult Connecticut residents (343,960 individuals) have asthma. Although the CDC does not calculate the incidence of asthma among children, asthma causes an average of 8000 visits by children to Connecticut emergency departments every year and 1500 hospitalizations. Asthma also causes an average of 15,000 adults to seek care in Connecticut emergency departments annually and 3000 hospitalizations. Hospitalization rates for asthma are already higher in the Northeast United States, including Connecticut, than in other regions, despite similar regional prevalence rates.²

On behalf of Connecticut's not-for-profit acute care hospitals, we applaud the Environment Committee's leadership in raising this bill and thank you for your consideration of our position.

References

1. Friedman MS, Powell KE, Hutwagner L, Graham LM, Teague WG. Impact of Changes in Transportation and Commuting Behaviors During the 1996 Summer Olympic Games in Atlanta on Air Quality and Childhood Asthma. *JAMA*. 2001;285:897-905.
2. Homa DM, Mannino DM, Redd SC. Regional Differences in Hospitalizations for Asthma in the United States, 1988–1996. *Journal of Asthma*. 2002 Aug;39(5):449-55.

Additional References Linking Auto Emissions to Asthma

- Researchers in New York reported that after adjustments for age and poverty level, children hospitalized for asthma were more likely to live on roads with the highest tertile of vehicle miles traveled and were more likely to have trucks and trailers passing by within 200 meters of their residence compared to controls. (Lin S, Munsie JP, Hwang SA, Fitzgerald E, Cayo MR. Childhood asthma hospitalization and residential exposure to state route traffic. *Environmental Research* 2002 Feb;88(2):73-81.)
- Researchers in California reported children residing near high traffic flows were more likely than those residing near lower traffic flows to have two or more medical care visits for asthma than to have only one visit for asthma during the year. The results of this study suggest that higher traffic flows may be related to an increase in repeated medical visits for asthmatic children. (English P, Neutra R, Scalf R, Sullivan M, Waller L, Zhu L. (Examining associations between childhood asthma and traffic flow using a geographic information system. *Environmental Health Perspectives* 1999 Sep;107(9):761-767.)
- It has even been reported that eliminating identified residential risk factors, such as automobile emissions, would potentially result in a 39% decline in doctor-diagnosed asthma among US children <6 years old. (Lanphear BP, Aligne CA, Auinger P, Weitzman M, Byrd RS. Residential exposures associated with asthma in US children. *Pediatrics*. 2001 Mar;107(3):505-511.)
- Air pollution also has been linked with asthma attacks in children and adults. Although individual health risks of air pollution are relatively small, the public-health consequences are considerable. (Kunzli N, Kaiser R, Medina S, Studnicka M, Chanel O, Filliger P, Herry M, Horak F Jr, Puybonnieux-Textier V, Quenel P, Schneider J, Seethaler R, Vergnaud JC, Sommer H. Public-health impact of outdoor and traffic-related air pollution: a European assessment. *Lancet*. 2000 Sep 2;356(9232):795-801.)