



The Burden of Asthma in Delaware

Report Highlights

October 8, 2005

Prevalence of Asthma in Delaware

- In 2003, 11.7% of Delaware adults (about 72,000) reported having asthma at some time during their lives, according to the Delaware Behavioral Risk Factor Survey. About 7.5% (or 46,000 adults) currently have asthma.
- Delaware's prevalence is the same as the national prevalence for 2003.
- Asthma appears to be slightly more prevalent among young people. In the Delaware Youth Risk Behavior Survey for 2003, about 19% of high school students reported having been diagnosed with asthma; and 6.5% said they had an asthma attack in the past 12 months.

Health Care Impacts of Asthma

- Delaware's asthma-related hospital discharge rate in general is comparable to the national rate.
- Children under age 4 are more than twice as likely to be hospitalized with asthma than any other age group. They are about 4 times as likely to have an asthma-related hospitalization than adults. The report estimates about 3,000 asthma-related hospitalizations of young children a year.
- In Delaware, African American residents are hospitalized because of asthma at rates nearly three times greater than whites. Neither the lifetime nor the current prevalence rates have such a high level of disparity.
- There is no central registry of emergency room data, so the report examines data from two insurance plans – state employees and Medicaid. Medicaid members are almost three times as likely to use emergency room services for asthma treatment.
- In 2000 and 2001, the most recent years for which data are available, there were 17 deaths per year from asthma in Delaware.

Economic Impacts of Asthma

- Charges to Medicaid for asthma medications more than doubled, from \$4.4 million in 2000 to \$9.7 million in 2003. Total asthma-related Medicaid charges in 2003 were \$13.9 million.
- Total asthma-related claims from the state employee plan in 2003 were \$2.6 million.
- Total statewide charges for asthma treatment and medications could be as high as \$25 to \$30 million a year.
- Asthma also affects productivity and quality of life. According to the Delaware Behavioral Risk Factor Survey, about 23% of adults with asthma were unable to work or carry out daily activities for one or more days during the past month.

Environmental Factors

- Smoking and airborne pollution are major triggers for asthma symptoms.
- Eight years of evidence-based, comprehensive tobacco prevention and education programs in the state have resulted in significant reductions in cigarette smoking in our state. Prevalence of regular smoking among high school students – those who smoke on at least 20 days of every month – decreased from 15% in 2000 to 9% in 2004, according to the Delaware Youth Tobacco Survey. The state's strong Clean Indoor Act is protecting people with asthma from exposure to second-hand tobacco smoke.
- The Department of Natural Resources and Environmental Control (DNREC) monitors six air pollutants, and produces an Air Quality Index (AQI), which is available on the DNREC website. The report shows the number of days the AQI is rated unhealthy for sensitive individuals. New Castle County has the most days categorized as unhealthy. New Castle County has had *more than* 15 days classified as unhealthy in ten of the last 11 years. In contrast, Sussex County had *less than* 15 unhealthy AQI days in eight out of 11 years, and Kent County has had more than 15 unhealthy AQI days only once (in 1998).
- DNREC also monitors pollutants called Fine Particulate Matter, which are dangerous because they can penetrate more deeply into the lungs than large particles. Delaware has not been able to comply with the National Ambient Air Quality Standards for Fine Particulate Matter, because New Castle County's yearly average pollution level is greater than the standard.

- For both ozone and Fine Particulate Matter, New Castle County has the highest air pollution levels, while Kent County has the lowest air pollution levels.

What's Being Done

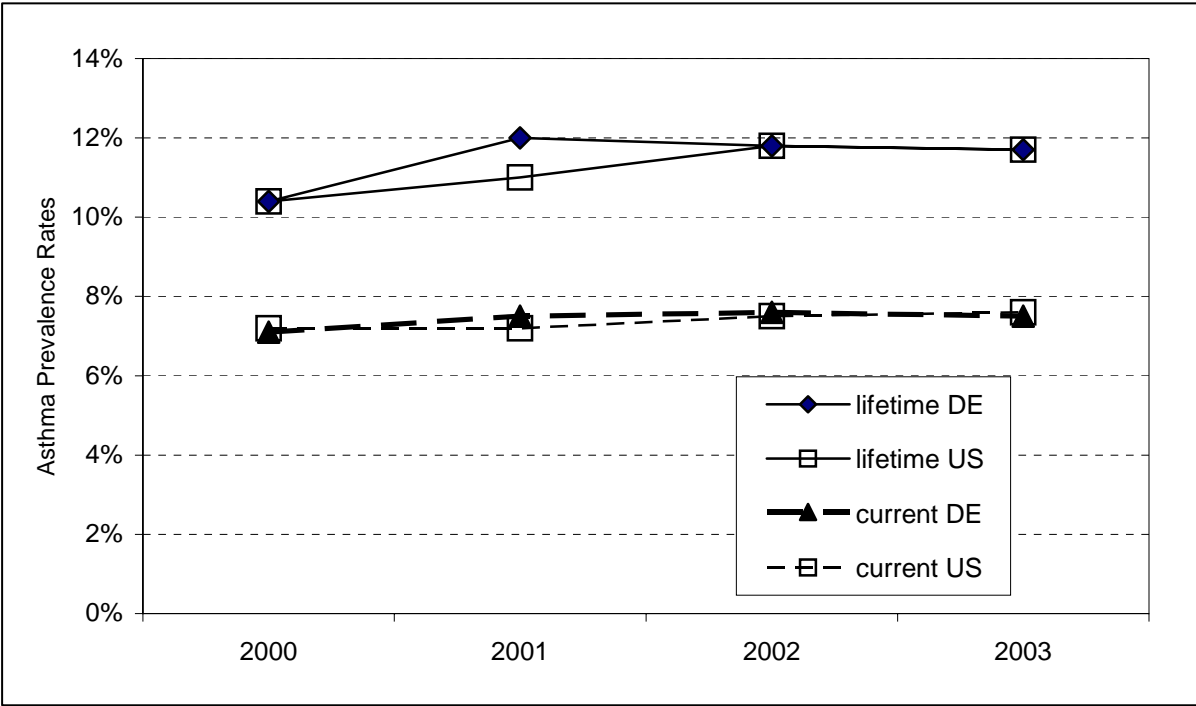
- The Delaware Asthma Consortium, which includes more than 60 members, provides an opportunity for health professionals, health care organizations, community organizations and asthma patients to share information and resources and to develop projects both individually and together to control asthma.
- The American Lung Association sponsors educational programs, provides educational materials, conducts Asthma Camps for Kids, and holds special events to raise awareness and support for asthma programs.
- An advisory committee was established for development of the *Burden of Asthma* report, and is being expanded to coordinate and plan follow-up activities. The committee included representatives from Delaware's Division of Public Health, the Department of Natural Resources and Environmental Control, the Delaware Asthma Consortium, Christiana Care Health System, and Quality Insights of Delaware.
- The Delaware General Assembly appropriated funding to support the *Burden of Asthma in Delaware* report and a limited pilot project to address asthma in a high-risk community.

Next Steps

- Use existing funds to develop a pilot program in a high risk community;
- Expand the advisory committee, and develop a strategic plan for addressing asthma in Delaware; and
- Seek grant funding to develop an asthma program.

Limitations of Data, and Information About Report: This is the first *Burden of Asthma* report produced in Delaware. It represents the best available data at the time the report was produced. Little or no Delaware-specific data was available about young children and asthma, and only limited data was available about health care charges and costs. Data sources for prevalence data are the Behavioral Risk Factor Survey (BRFS), conducted for the Division of Public Health; and the Department of Education's Youth Risk Behavior Survey (YRBS). The BRFS is an ongoing random-sample telephone interview survey of 4,000 Delaware adults age 18 and older. The YRBS is a school-based randomized sample of more than 3,000 Delaware students in public high schools. Data in both studies are weighted to adults for the probabilities of selection.

Lifetime and Current Asthma Prevalence Rates, 2000-2003 Delaware and U.S.



Data Source: U.S. Centers for Disease Control and Prevention (CDC), and Delaware Health and Social Services, Division of Public Health, Behavioral Risk Factor Surveillance System (BRFSS), 2000-2003.



Delaware Health & Social Services
Division of Public Health



Department of Natural Resources
and Environmental Control