

Moving Forward

Unfortunately, the burden that asthma places on the lives of Connecticut residents has increased since 2005. Behavioral Risk Factor Surveillance System (BRFSS) survey data analyses showed that approximately 9.2% of adults and 11.3% of children in Connecticut had current asthma in 2010. These prevalence estimates are higher than the 2005 BRFSS current asthma prevalence estimates, which were that 8% of adults and 10.5% of children in Connecticut had asthma. In Connecticut adults from 2005 - 2010, current asthma prevalence was highest for females, non-Hispanic Blacks, and 18 - 24 year olds. In Connecticut children from 2005 - 2010, current asthma prevalence was highest for males, children 5 - 17 years old, and non-Hispanic Blacks.

Despite well-established standards for asthma care and management and wide availability of inhaled asthma medications, asthma hospitalization and ED visit rates in Connecticut increased between 2005 and 2009 (see Tables 5 and 7). Among Connecticut residents from 2005 - 2009, adult asthma hospitalization rates were highest for females, persons aged 65 years and older, and Hispanics. For the same time period, child asthma hospitalization rates were highest for boys, children under five years old, and non-Hispanic Blacks. In 2009, the overall asthma hospitalization rate was highest for persons who lived in New Haven. With regard to asthma ED visits from 2005 - 2009, adult asthma ED visit rates were highest for: females, 18 -24 year olds, 25-34 year olds, and Hispanics. During the same five-year period, child asthma ED visits rates were highest for boys, children under five years old, and Hispanics. The 50.9% increase in asthma ED visits among Hispanic children from 2005 to 2009 is of particular concern. In 2009, the asthma ED visit rate was highest for people who lived in Hartford.

What explains the increase in events of asthma hospitalization and ED visits in Connecticut during 2005 - 2009? Findings of the Asthma Call-back Survey (ACBS) suggest that there may have been differences in provision of asthma care, management, education, and/or treatment that contributed to the observed overrepresentation of certain groups in the 2005 - 2009 hospitalization and ED visit data. Although the Asthma Action Plan (AAP) is emphasized in the NAEPP guidelines, 2007 - 2009 ACBS findings show that only approximately 34.3% of Connecticut residents with current asthma have ever been given an AAP by their health care providers. Also, supporting the need for improvements in adherence to national asthma management guidelines is the 2007 HUSKY A data which show that the provision of follow-up care to publicly-insured children within two weeks of asthma hospitalization or Asthma ED visits was lacking.

The increase in asthma prevalence, hospitalizations, and ED visits in Connecticut, in concert with underuse of AAPs and late or absent hospitalization/ED follow-up care, indicate that more efforts to improve the asthma self-management education of individuals and encourage clinicians and healthcare systems to adhere to national asthma management guidelines are needed. However, to

understand why ongoing activities are not more effective, additional information is needed. For example, poor provider/patient communication due to lack of access to language interpretation may contribute to underuse of AAPs in Connecticut and/or difficulty scheduling post-discharge follow-up visits. However, examination of this hypothesis is limited because information on primary language is not included in the hospital discharge data set provided to the DPH.

The gaps in our understanding of asthma in Connecticut point to the need for data sources beyond the ones that are currently available. In the absence of the availability of more sociodemographic data like primary language in large data sets, smaller studies could provide some idea of what is going on. Findings from research studies, such as the work conducted in Rhode Island and Puerto Rico on factors associated with disparities in ED use among Latino children with asthma (Canino et al., 2012), could be used to improve existing interventions and inform new ones. More data on outpatient asthma visits would help to refine estimates of asthma prevalence and comorbid diagnoses. Discussions surrounding an all payer claims database (APCD) have begun in Connecticut. This database would contain information on procedural codes, thus allowing for collection of data on asthma education provided by clinicians.

Current Activities

The DPH Asthma Control Program is committed to decreasing the burden of asthma in Connecticut through program activities and collaboration with stakeholders. The surveillance data presented in this report are the bases for program activities and also serve to inform community and healthcare organizations that are helping people with asthma to breathe more easily and enjoy more productive lives. Some of the activities currently underway include:

- *Easy Breathing Program*. Educates medical providers in the appropriate diagnosis and medical management of asthma patients based on national best practice guidelines.
- *Putting on AIRS (AIRS)*. A free, in-home, patient self-management education and environmental assessment program. Local health departments lead the six regions that offer the program.
- *Provider Consensus Statement*. Endorses reimbursement to providers for following the National Asthma Education and Prevention Program (NAEPP) and the National Committees for Quality Assurance's Patient-Centered Medical Home (PCMH).
- *Asthma Action Plan (AAP)*. Electronic and paper versions of the AAP in English and Spanish for health care providers to complete and give to their patients.
- *Five Cities Fact Sheet*. An update of a previous publication about the disproportionately higher rates of asthma morbidity, mortality, and cost in Connecticut's five largest cities (Bridgeport, Hartford, New Haven, Stamford, and Waterbury).

The Way Ahead

In 2011, the DPH was awarded the Coordinated Chronic Disease Prevention and Health Promotion Grant by the CDC. The purpose of this grant is to integrate existing DPH chronic disease programs - Asthma Control, Comprehensive Cancer, Diabetes Prevention & Control, Heart Disease & Stroke Prevention, Tobacco Use Prevention & Control, and Nutrition, Physical Activity & Obesity - into a Chronic Disease Unit that will more efficiently address chronic disease prevention, health promotion, risk factor reduction, and barriers to health care. It is envisioned that integration of these programs will:

- Enhance DPH's ability to: collect appropriate data on chronic disease morbidity, mortality, and associated risk factors; analyze these data; and disseminate findings widely.
- Foster comprehensive strategies that promote improvement of the social and physical environments in which Connecticut residents live, work, and play.
- Spur dialogue and collaboration with healthcare systems and health care providers about the delivery and accessibility of high-quality care and screening for chronic diseases.
- Promote strategies to improve community-clinical linkages to increase referral of patients to programs that improve chronic management.

In late 2011, the DPH was awarded funding through the Affordable Care Act in the form of the Community Transformation Grant (CTG). The goal of the CTG is to build capacity at the state and county levels to reduce chronic disease rates and address health disparities. CTG-funded activities in five Connecticut counties will allow communities to develop and/or enhance strong sustainable infrastructure and prevention efforts through policy, systems and environmental change. The CTG strategic areas - tobacco free living, active living/healthy eating, and quality clinical services - intersect with asthma control and management activities.

As the DPH moves toward integrating chronic disease programs, focus will be on the elimination of health inequities and increasing state and local level capacity for chronic disease reduction. There will be more opportunities to collect richer, more accurate information on the Connecticut populations which are disproportionately affected by asthma. Moreover, collaboration with a wider array of stakeholders will enhance the Asthma Control Program's ability to disseminate state and town level asthma data, and communicate with the health care providers, policy makers, advocates, and others who are interested in decreasing the burden of asthma in Connecticut.