



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

JAN 02 2013

The Honorable Martin O'Malley
Governor
100 State Circle
Annapolis, MD 21401-1991

The Honorable Joan Carter Conway
Senate Education, Health & Environmental
Affairs Committee
2 West Wing, Miller Senate Office Building
Annapolis, MD 21401-1991

The Honorable Maggie McIntosh
House Environmental Matters Committee
House Office Building, Room 251
Annapolis, MD 21401-1991

Children's Environmental Health and Protection Advisory Council
Dr. Clifford Mitchell and Dr. Jed Miller, Co-Chairs
201 W. Preston Street
Baltimore, MD 21201

RE: HB 420 (Ch. 366) of the Acts of 2002 -
2012 Legislative Report of the Maryland Asthma Control Program

Dear Governor O'Malley, Chair Conway, Chair McIntosh, Dr. Mitchell and Dr. Miller:

Pursuant to HB 420, Chapter 366 of the Acts of 2002, the Department of Health and Mental Hygiene is directed to submit this annual legislative report on the activities of the Maryland Asthma Control Program.

If you should have any questions or comments, please do not hesitate to contact Ms. Marie Grant, Director of Governmental Affairs at 410-767-6481.

Sincerely,

Joshua M. Sharfstein, M.D.
Secretary

Enclosure

cc: Ms. Laura Herrera
Ms. Michelle Spencer
Ms. Donna Gugel
Ms. Marie Grant
Ms. Sarah Albert, MSAR # 1594

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**MARYLAND DEPARTMENT OF HEALTH & MENTAL
HYGIENE
PREVENTION AND HEALTH PROMOTION
ADMINISTRATION**

**MARYLAND ASTHMA CONTROL PROGRAM
2012 ANNUAL REPORT
HB 420, CHAPTER 366 OF THE ACTS OF 2002**

**MARTIN O'MALLEY
GOVERNOR**

**ANTHONY G. BROWN
LIEUTENANT GOVERNOR**

**JOSHUA M. SHARFSTEIN, MD
SECRETARY
DEPARTMENT OF HEALTH & MENTAL HYGIENE**

Background

Pursuant to HB 420, Chapter 366 of the Acts of 2002, the Department of Health and Mental Hygiene is directed to submit this annual legislative report on the activities of the Maryland Asthma Control Program.

Asthma is a serious, but controllable, chronic lung disease caused by airway inflammation and constriction, which results in wheezing, chest tightness, coughing and shortness of breath. Individuals with asthma can typically manage their condition through: the avoidance of triggers (e.g., dust mites, cockroaches, pet dander); the appropriate use of medications; and routine primary care, with specialty consultation as needed. Uncontrolled asthma can lead to frequent and often preventable emergency department visits, hospitalizations, and even death. An estimated 535,500 Marylanders are affected by asthma. Asthma is a chronic health problem with high prevalence, morbidity, and mortality rates throughout Maryland and nationwide. Public health interventions are essential to reduce both the health and financial burden of asthma.

In 2002, Health-General Article, §13-1701 through 13-1706, Annotated Code of Maryland, established the Maryland Asthma Control Program in statute, mandating the Department of Health and Mental Hygiene (the Department) to assume responsibility for developing a statewide asthma surveillance system and an asthma control plan. Furthermore, the statute directs the Department to partner with community groups, other State and local agencies, schools, and other asthma stakeholders to implement asthma control policies and interventions. Since its inception, the Asthma Control Program has made substantial progress in improving the infrastructure to promote asthma control in Maryland.

The Asthma Control Program's goals are to: (1) decrease the prevalence of asthma and the occurrence of its complications in Maryland; and (2) decrease disparities in health outcomes related to asthma in all parts of the State. The Asthma Control Program has developed an asthma control plan, built a surveillance system, and implemented several initiatives in an effort to achieve these goals.

The Department's former Family Health Administration, Center for Maternal and Child Health administered the Asthma Control Program until June 2012. Currently, the Asthma Control Program is administered within the Environmental Health Bureau of the Prevention and Health Promotion Administration. Funding for asthma activities is primarily provided by a grant awarded by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC) to address asthma from a public health perspective. Currently, the Program is in the fourth year of funding of a five year CDC funding cycle which provides continued support for its asthma control activities.

Maryland Asthma Plan

The Asthma Control Program worked with a Statewide Planning Task Force to complete the State's first Asthma Control Plan in 2004. The *Maryland Asthma Plan* provided a common vision for individuals, organizations, and communities to address the burden of asthma in Maryland and served as a roadmap to implement local and statewide actions based on best

practices of medical and environmental asthma management. In April 2009, the Asthma Control Plan was revised to reflect the latest best practice standards, a better understanding of asthma epidemiology in Maryland, stakeholder concerns, and the important role of stakeholders and partners in addressing asthma. The Maryland Asthma Control Program collected input from key stakeholders throughout the State to include in the revised plan, *Maryland Asthma Control Plan for 2010-2015: An Action Agenda*. The Action Agenda can be found at: http://fha.dhmh.maryland.gov/mch/Documents/Asthma_Action_Agenda.pdf. Throughout the past year, the Maryland Asthma Control Program has shared the plan with partners and stakeholders throughout the State to ensure all asthma activities are strategically aligned and addressed. The Maryland Asthma Coalition and its associated workgroups are focused on implementing the goals, objectives and activities as outlined in the *Action Agenda*.

Maryland Asthma Surveillance

Surveillance is one of the foundations of the Asthma Control Program. Surveillance data includes prevalence estimates, emergency department visit rates, hospitalization rates, mortality rates, health disparity ratios, data on asthma-related health behaviors, and data on asthma-related health care costs. This data is collected, analyzed and reported from the CDC Behavioral Risk Factor Surveillance System (BRFSS), the BRFSS Asthma Call Back Survey, the Youth Tobacco Survey (YTS), the Youth Risk Behavior Survey (YRBS), the Maryland Health Services Cost Review Commission's (HSCRC) hospital discharge dataset, and the Maryland Vital Statistics Administration dataset (VSA). Asthma reports are created from these analyses and are available on the Maryland Asthma Control Program website: <http://fha.dhmh.maryland.gov/mch/SitePages/asthma.aspx>.

Statewide, in 2010, approximately 535,500 (12.4%) Maryland adults and 216,000 (16.4%) Maryland children had a history of asthma.¹ Of those, approximately 359,000 (8.4%) adults and 155,500 (11.9%) children currently had asthma.² The current asthma prevalence in children is significantly higher in Maryland (11.9%) compared with the United States (8.4%).³ In 2010, Maryland had 72 asthma-related deaths (12.6 deaths per million) where asthma was an underlying cause, and an additional 206 deaths (36.2 deaths per million) due to asthma as an underlying or contributing cause.⁴

Poorly managed asthma takes a financial toll. In 2010, charges for hospitalizations due to asthma totaled over \$66 million; charges for emergency department visits due to asthma totaled an additional \$26 million. These 2010 costs resulted from 37,523 asthma-related emergency department visits (65.5 per 10,000 residents) and 10,143 asthma-related hospitalizations (17.6 per 10,000 residents). The asthma hospitalization rate in Maryland has increased about 13.5% from 2001 to 2010, and has continued to remain higher than the nationwide rates since

¹ The Office of Health Policy and Planning, Maryland DHMH. Maryland Behavioral Risk Factor Surveillance System Data, 2000-2010. Baltimore, MD: Maryland DHMH; Accessed in 2011.

² The Office of Health Policy and Planning, Maryland DHMH. Maryland Behavioral Risk Factor Surveillance System Data, 2000-2010. Baltimore, MD: Maryland DHMH; Accessed in 2011.

³ Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System (BRFSS) National Asthma Rates Database, 2000-2010. Atlanta; GA: CDC BRFSS; Accessed 2012.

⁴ United States Census Bureau via Maryland State Data Center, Maryland Department of Planning. Baltimore, MD: Accessed in 2012.

2005. This combined cost of \$92 million dollars is largely preventable with proper asthma care and control.

An analysis of data from 2004-2010 for children (0 to 18 years old) with persistent asthma was conducted to report on asthma health care utilization specifically out-patient, non-emergency department clinical visits with specialists and primary care providers. The analysis also focused on pharmaceutical usage in persistent asthmatic children to help understand the relationship between the process of care (out-patient visits) and certain outcomes, specifically emergency department visits and hospitalizations. Additionally, the Maryland Asthma Burden/Surveillance report was published in August 2012. The full report is available upon request to the Department. Data briefs and surveillance reports are shared with Maryland Asthma Coalition members, State and local agencies, schools and other stakeholders to highlight trends, showcase progress, and determine unmet needs.

Health disparities exist with respect to asthma prevalence and outcomes. Asthma affects persons of all ages, races, ethnicities, and genders. However, children, minorities, women, and those of lower socioeconomic status and lower education levels bear the disproportionate burden of asthma. African-Americans die from asthma at a rate that is over twice as high as Caucasians and African-American children are more likely than white children to be diagnosed with asthma. In general, children less than five years old have disproportionate numbers of asthma-related hospitalizations and emergency department visits compared to older persons with asthma. The data that is analyzed based on the Medicaid population will allow the Maryland Asthma Control Program to target efforts to this population.

Maryland Asthma Coalition

The Maryland Asthma Coalition (the Coalition) promotes strong collaboration and partnership building among asthma stakeholders. Coalition members represent the healthcare community, public health agencies, health organizations, physician organizations, community health centers, and educational professionals. The Coalition's purpose is to provide a common vision for individuals, organizations, and communities to address the burden of asthma in Maryland through information sharing, networking and education. The Coalition's primary functions include advising the Department on asthma-related issues; facilitating networking opportunities between the various asthma stakeholders; increasing awareness of asthma and proper asthma management; and monitoring progress in achieving goals and objectives identified in the Maryland Asthma Plan. In the past year, the Coalition has met four times and carried out its work through four workgroups: Outreach and Communication, Provider Education, the Environment and the Patient, and Caregiver Outreach. Collaboration and partnerships have developed through the Coalition. An executive committee serves as an advisory board to both the Maryland Asthma Control Program and the Coalition.

Interventions to Reduce the Burden of Asthma in Maryland

The Asthma Control Program continues to support many interventions that contribute to a reduction in asthma-related morbidity and mortality. Activities are prioritized based upon populations with the greatest need, as identified by the asthma surveillance system. Those interventions include:

1. Reducing Asthma Disparities

Safe at Home Asthma Outreach Program

The Coalition to End Childhood Lead Poisoning leveraged existing resources and capacity to address issues of indoor environmental asthma triggers in homes, as well as supporting train the trainer programs. The Train the Trainer program was implemented with support from and in collaboration with the Maryland Asthma Control Program. This program works to increase asthma awareness, provide information on how to create and sustain a healthy home, and most importantly it empowers trained professionals, such as child care providers, health aids, and clinicians, to share knowledge regarding what constitutes a healthy home and ways to reduce asthma triggers in homes of children with asthma. Child care providers in Frederick and Prince George's Counties were trained along with health department nurses, case managers and school nurses from Wicomico County. The program has provided asthma education on environmental triggers of asthma to help families take control of their indoor environments by identifying and reducing asthma triggers within their homes.

2. Outreach and Education

University of Maryland

The Asthma Control Program has continued to partner with the University of Maryland to enhance and improve health education and case management for those with asthma. The University of Maryland Children's Hospital Breathmobile[®], with support from the Maryland Asthma Control Program, has expanded education and case management services within Baltimore City, where they provide care for asthmatic children in an effort to improve their quality of life and lower unnecessary health care utilization. Most recently, the Breathmobile[®] has hired a Spanish-speaking provider who is able to provide asthma education and management services to Spanish-speaking patients. Educational materials have been translated into Spanish to be distributed to Spanish-speaking parents and children accessing services provided by the Breathmobile[®].

Asthma Friendly School Initiative

Asthma affects many Maryland children and adolescents. During the third year of the Initiative, the Asthma Control Program partnered with local school districts and health departments to improve asthma awareness and trigger reduction in schools. 35 additional schools were designated as "Asthma Friendly" in June 2012; 9 schools have been re-designated (designations are current for two years). There are a total of 84 Asthma Friendly Schools in Maryland. The Initiative will continue throughout the 2012 - 2013 school year. The Maryland Asthma Control Program will evaluate the program during 2013.

"Asthma Friendly" Child Care

Asthma is one of the most common chronic diseases of childhood, with children under the age of four years most severely impacted. It results in frequent emergency

department visits and hospitalizations and can be deadly if not properly managed. However, with proper diagnosis and good asthma care, children with asthma should live normal, active lives. The Maryland Asthma Control Program, in collaboration with an interdisciplinary team of State and community partners, health and child care experts, has developed the *Asthma Friendly Child Care Initiative*. The goal of the *Asthma Friendly Child Care Initiative* is to encourage child care centers and family child care homes to create and sustain safe, supportive, and asthma-friendly environments by providing asthma management, reducing environmental asthma triggers in the child care environment, and providing asthma education and awareness programs for children and staff. Child care providers are trained on the Initiative objectives through a two hour training session. A binder with resource materials is distributed, along with a DVD that outlines the application and implementation process. As of November 2012, over 200 providers had attended a training session and expressed interest in becoming an “Asthma Friendly” Child Care site.

Local Health Departments

The Baltimore City Health Department receives funding from the Maryland Asthma Control Program to lead the Greater Baltimore Asthma Alliance (GBAA). The GBAA is comprised of many local university, health, and non-profit professionals, along with parents and caregivers of those with asthma. The GBAA has created a strategic plan to address the burden of asthma within Baltimore City and surrounding jurisdictions. This group meets monthly and has outreach events planned throughout the year. The GBAA is also credited with increasing the number of Asthma Friendly Schools in Baltimore City, publishing anti-idling brochures and educational materials, and hosting annual Asthma Awareness Day events in May.

The Montgomery County Department of Health and Human Services maintains the Latino Health Initiative to serve this fast growing population. The Latino Health Initiative has developed and implemented a program that specifically serves the needs of the Latino population with asthma. The program educates parents of children with asthma regarding proper management of asthma in their child. The program provides multi educational sessions, in Spanish, by community health nurses. Families are able to join the program with referrals from school nurses. The program is designed to increase the understanding of asthma management, implement culturally and linguistically appropriate interventions, and improve asthma-related health behaviors.

Asthma Among Older Adults

Persons greater than 65 years of age have substantially higher rates of asthma-related mortality than younger persons, although mortality is often preventable. The Asthma Control Program sought to develop and implement an intervention focused on the needs of elderly asthmatics. The Asthma Control Program partnered with the Asthma and Allergy Foundation of America-Greater Maryland/DC chapter to create a toolkit entitled “Asthma in the Older Adult: Tools for Better Health.” This toolkit’s target audience is health educators and other health professionals who work with older adults. This toolkit has been presented throughout the State at senior centers and other older adult venues by the staff of the Asthma and Allergy Foundation of America. These

hands-on presentations give staff and caregivers an opportunity to learn about specific asthma tools that can aid older adults in the positive management of their asthma.

3. Professional Development

Area Health Education Centers

The education of health care providers on the standard of care in asthma management decreases unnecessary asthma hospitalizations and increases patient self-management. The Maryland Asthma Control Program has partnered with the Area Health Education Centers (AHECs) in Western Maryland, the Baltimore area, and on the Eastern Shore to provide asthma education to healthcare providers in these specific areas of the State. The AHECs have sponsored CME (Continuing Medical Education) and CEU (Continuing Education Unit) presentations to educate primary care providers, nurses, social workers, pharmacists, and respiratory therapists on proper asthma management. These trainings, based on the NIH National Guidelines, give health care professionals the tools to provide quality standards based ambulatory care.

In 2012, the Maryland Asthma Control Program sponsored the Western Maryland AHEC to provide training sessions to over 125 providers, nurses, social workers and pharmacists. Follow up activities will be conducted to learn of any practice changes to asthma management based on training information.

Sustainability

The Maryland Asthma Control Program is undergoing a transition as it enters its next program year. Critical to this transition are the State Health Improvement Process (SHIP), the reorganization of the Department's Deputy Secretariat of Public Health Services, and the StateStat process that has focused attention on a need for more relevant metrics for the state's progress in controlling asthma. All of these factors will affect the sustainability of the Asthma Control Program.

In September 2011, the Department of Health and Mental Hygiene launched the State Health Improvement Process (SHIP). SHIP provides a framework for continual progress toward a healthier Maryland. A reduction in asthma emergency department visits is one objective included in SHIP. As highlighted in the preceding sections, the Asthma Control Program has also focused its efforts on the reduction of emergency room visits due to asthma. Throughout 2013, the Asthma Control Program will continue to educate clinicians, caregivers and parents on proper asthma management by working with local SHIP coalitions. The reduction in asthma emergency department visits has been a key objective and activity in 2012 and will continue to be a focus in 2013 by working with local coalitions.

The reorganization of the Department's Deputy Secretariat of Public Health resulted in the creation of a new Prevention and Health Promotion Administration (PHPA), in which the Asthma Control Program now resides in the Environmental Health Bureau. This move will more closely align the Asthma Control Program with the Bureau's Office of Healthy Homes and Communities. The goal is not to diminish the emphasis on improving asthma medical

management, but rather to improve and increase the program's efforts related to trigger reduction and environmental risk modification.

The Asthma Control Program recognizes the importance of developing plans to sustain existing efforts to reduce asthma morbidity and mortality, especially in communities with high rates of asthma disparities. Successful implementation of these plans will require a long-term holistic approach, and appropriate metrics to demonstrate that the goals are being met. To this end, this year the Asthma Control Program will begin to engage managed care organizations, local health improvement coalitions, Medicaid, and other stakeholders with the goal of scaling up and integrating the interventions described in this Annual Report across multiple jurisdictions. Part of this effort will be to define appropriate metrics to measure progress. These measures will become part of the Department's internal StateStat measures. As evaluation data from the individual interventions is developed in this project year, those data will be used to inform and refine the initiatives.

The Asthma Control Program will continue to strive to ensure that asthma is well managed among all populations. By following the goals, objectives, and strategies of the *Maryland Asthma Control Plan* and throughout SHIP, utilizing surveillance data for priority setting and evaluation, the Asthma Control Program hopes to contribute to a reduction in asthma morbidity and mortality throughout Maryland.