

Dayton Asthma Alliance

2017 — Annual Report to the Community





Forward

Twenty percent of a child's health is impacted by his or her environment. For certain chronic conditions, such as asthma, this percentage may be higher and the environment in which a child lives, goes to school and spends his or her free time needs to be free from asthma triggers. Comprehensive programs involving community-clinical linkages have become more common nationwide to assist children and caregivers in managing asthma and navigating the often complex health care system. Creating an environment that reduces exposure to triggers and supports a child's optimal health outcomes requires cross-sector community collaboration. With these goals in mind, the Dayton Asthma Alliance was formed.

The Dayton Asthma Alliance aims to positively impact the health and wellness of children with asthma in the Dayton area, focusing on the most at-risk populations.

Our Story

As an organization solely dedicated to the health of children in our community, Dayton Children's mission calls for us to not only care for children who walk through our doors, but also to work to improve the health and well-being of all children in our region. To provide a greater focus and impact on the health of children beyond our walls, Dayton Children's Board of Trustees approved the creation of the Center for Child Health and Wellness. The Center is designed to provide a population-based health approach and structure for coordinating and elevating focus on programs and policies that have the greatest impact for improving the health of the children in our region.

The flagship initiative of the Center is the creation of the Dayton Asthma Alliance. Asthma not only impacts children and their families, but we also know that addressing asthma requires clinical-community linkages to ensure optimal outcomes for children with asthma. The Dayton Asthma Alliance was created to engage local, state and other partner organizations to work collaboratively and implement a variety of strategic actions.

These actions take place in the community – outside of the hospital walls.

In May 2016, we officially launched the Dayton Asthma Alliance celebrating what partners can do together when they put children first. Through this report to the community, you are invited to explore what the Dayton Asthma Alliance has accomplished to date and learn the plans we have to continuously improve the health of children with asthma in our region.



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Guiding Principles & Strategic Focus Areas

To carry out its work, the Alliance has committed to using the following guiding principles.

Dayton Asthma Alliance Partners

- Allergy and Asthma Centre of Dayton
- CareSource
- Community Health Centers of Greater Dayton
- Dayton Children's Center for Child Health and Wellness
- Dayton Children's Division of Allergy and Immunology
- Dayton Children's Pulmonary Clinic
- Dayton Public Schools
- Greater Dayton Premier Management
- Medical-Legal Partnership for Children
- Miami Valley Child Development Centers, Inc.
- PriMed Physicians
- Public Health Dayton & Montgomery County
- ThinkTV
- WSU Center for Healthy Communities
- WSU College of Nursing & Health

- 1. Value of Health and Wellness.** We believe health and wellness have value to the individual, family and community; and therefore, advocate that all children deserve access to high quality health care and other supportive opportunities and services for them to reach their full potential.
- 2. Respect the Role of Family and Community.** We believe family and community groups, including schools, faith-based organizations and non-profit entities are influential factors in a child's health and need to be championed.
- 3. Embrace Multi-Sector Collaboration.** We believe a child's health and wellness are impacted by many factors, requiring solutions derived from an aligned, team-oriented approach involving partners with different perspectives, resources and expertise.

- 4. Emphasize Best Practices.** We believe success will be achieved using relevant evidence, best and promising practices, as well as proper evaluation techniques to measure our collective impact.
- 5. Honor Diversity.** We believe in communication, actions and solutions that honor the diversity of people in the community, are free of judgment and appreciate differences in cultures, languages and beliefs.
- 6. Promote High Standards for Discussion.** We believe the most effective collaboration will result from communication that is respectful, honest and transparent.

Influential Factors

Multifaceted factors determine whether or not a child with asthma achieves optimal health outcomes. These factors serve as the priority areas of focus for the Alliance.

- **Education.** Knowledge, attitudes, behaviors and support systems are all important to the child with asthma. Therefore, it is important that the child, family, faith-based institutions, schools and other community organizations receive proper education about asthma prevention and management.
- **Health care.** A child's medical management of asthma is impacted by access, affordability, adherence to nationally-recognized diagnosis and treatment guidelines, and referral to necessary community services.
- **Environments with Asthma Triggers.** Asthma symptoms are worsened by the presence of irritants and allergens found in the home, schools, other indoor areas and the ambient air.
- **Social Needs.** Children with asthma and their families have difficulty achieving optimal

health when basic social needs such as food, utilities and transportation are not met.

- **Clinical-Community Linkages.** Coordination of medical, public health, school and community-based activities can improve a child's access to preventive and chronic care services.

Strategic Focus Areas

To have the greatest impact and to ensure all children with asthma have the opportunity of optimal health outcomes, the Alliance has identified three strategic focus areas for our work.

- Ensure asthma-friendly environments
- Enhance access to high quality health care and supportive social services through clinical-community linkages
- Educate and equip children, families and the community for asthma wellness

Impact Goals

Ultimately, the impact goals of our work are to:

- Reduce visits to the emergency department for asthma
- Reduce admissions for asthma
- Reduce school absence due to asthma

Within the strategic focus areas there are also 22 secondary and process goals which the Alliance tracks as common measures of performance. These secondary goal areas include:

- Improved education of children and families around asthma triggers and management
- Enhanced education of school personnel around asthma triggers and management
- Greater community resources provided to children and families to help manage asthma
- Improved primary health care of children
- Decreased environmental triggers

Collective Impact

The Asthma Alliance uses the Collective Impact model to address complex community challenges.

Common Agenda

Common Progress Measures

Mutually Reinforcing Activities

Communications

Backbone Organization



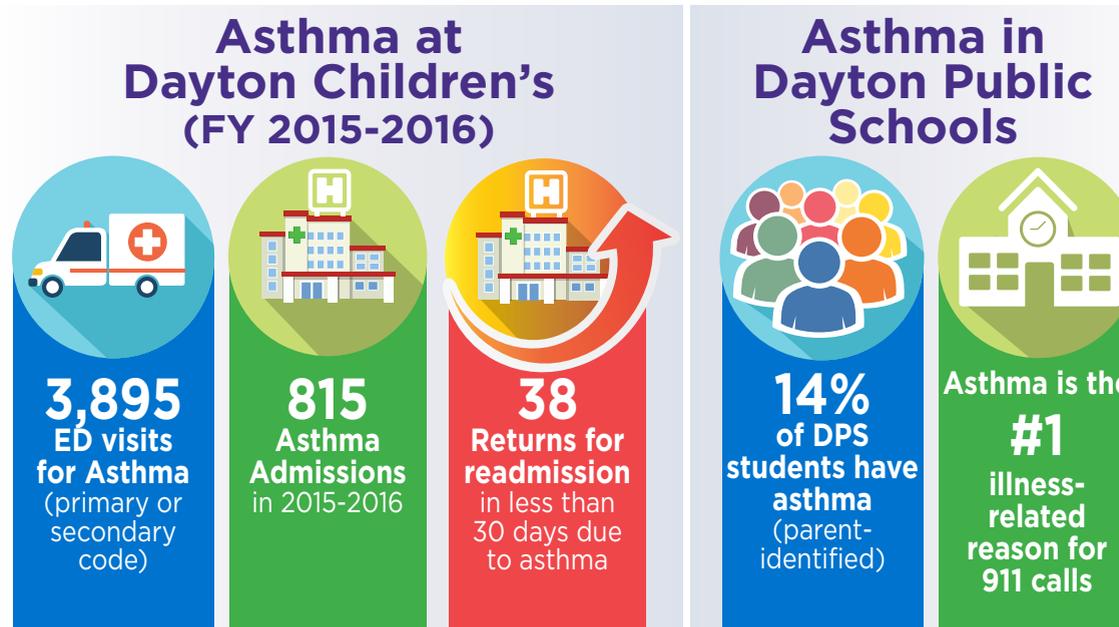
Scope of Problem

Children with asthma

- Are more likely to be in poor health and have unmet health needs
- Are reported to be more likely to have special health care needs
 - Need more medical care or educational services
 - Report episodes of fair or poor mental health

The Centers for Disease Control and Prevention (CDC) reports that asthma is the most common chronic disease of childhood, affecting 8.6 percent of children nationally and 9.4 percent of children in Ohio. Children with asthma are often limited in their ability to live to their fullest potential, have increased absences from school and are more likely to be hospitalized or even die. Economically, the CDC has also estimated that asthma costs the United States \$56 billion each year.

Historically, Ohio's asthma prevalence has exceeded national rates and recent data suggests that Dayton-area figures are even higher. In 2008 the Ohio Family Survey reported disparities regarding asthma prevalence are significantly impacted by personal income and race.



Get Text Alerts

ThinkTV, with support from the Physicians' Charitable Foundation of the Miami Valley, launched the asthma air quality forecast text alerts in Dayton. Parents, coaches, teachers and community members are invited to sign up for these alerts by texting "dayair" to 49798. Air quality forecasts will be sent on a daily basis for the coming day.

A Voice for Kids With Asthma

Nobody can tell the story of how asthma affects a child better than the child herself. On June 21-22, 2016, Victoria Lackey was that voice. This happy 8-year old was diagnosed with severe asthma when she was 3. With countless trips to the hospital involving X-ray machines and various treatments, Victoria believes that Dayton Children's saved her life. Victoria joined families from children's hospitals around the country in Washington, D.C., to advocate for children's health at the 12th Annual Speak Now For Kids Family Advocacy Day.

"Sometimes breathing is so hard," says Victoria. "I feel like a fish without water when I have an asthma flare-up." Victoria's uncontrolled asthma made her a perfect candidate for the new, comprehensive asthma care program at Dayton Children's.

"We know that environmental triggers play a significant role in asthma flare-ups," says Robert Cohn, MD, MBA, medical director of pulmonary medicine at Dayton Children's. "Addressing these triggers, along with consistently taking the proper medications is more effective than prescribing treatments alone."

Through this program and the resources available through Dayton Asthma Alliance, Victoria and her mother received a home visit where multiple environmental triggers that could impact Victoria's asthma were identified.

"Since the visits, Victoria has not had any asthma flare-ups, and I've learned a lot from the asthma program," says Astasha, Victoria's mother. "I've learned to avoid air fresheners and bleach and use green cleaning products instead. I am even trying to stop smoking. I want to have a safe environment to help Victoria breathe better."

Photo of Victoria Lackey and Astasha Ramsey visiting Congressman Michael Turner



Our Impact

Open Airways in Dayton Public Schools

“Participating in community and school-based health is important to me because it educates people about ways to prevent and manage health problems. By teaching these children and their families ways to manage their asthma, we are helping decrease costs to patients and hospital systems. We are helping them learn that they don’t always need to rush to the hospital if they can remember to use the tools we taught them! Prevention is key!” – Brittney Stenger, Wright State University nursing student

Poorly controlled asthma symptoms lead to activity limitations, school absenteeism by children, work absenteeism by caregivers, impaired psychosocial functioning and classroom time loss. In addition, children with asthma have frequent visits to the school clinic, at times requiring 911 calls, emergency department visits and hospital admissions. In 2008, 59 percent of children with asthma missed school—an average of four days per year—due to symptoms. Children with asthma are of great concern to Dayton Public Schools as approximately 14 percent of their population has parent or physician-identified asthma.

Through a comprehensive school-based asthma program, partners including Dayton Public Schools, Wright State University, Cedarville University and Dayton Children’s designed a program to improve the self-management of asthma. Dayton Public School nurses were trained by Dayton Children’s in the American Lung Association’s Open Airways Program (OASP) curriculum, which is an evidenced-based asthma-management program for children to help them manage their asthma. The school nurses then trained over 1,200 Dayton Public School employees on the basics of asthma.

Dayton Children’s also trained student nurses from Wright State University and Cedarville University in the OASP curriculum. In turn, the student nurses were placed in all 17 Dayton Public elementary schools and trained 297 children with asthma through a series of five OASP sessions. Eleven parent sessions were held with 72 parents in attendance. Parents learned about asthma management and asthma triggers. Then parents were invited to receive a home visit by a community health worker from the Wright State University Center for Healthy Communities to

identify asthma triggers in the home along with other social needs the family might have in order to improve health outcomes. The community health worker was trained to identify environmental triggers by an air quality specialist from the Regional Air Pollution Control Agency (RAPCA) at Public Health Dayton & Montgomery County. Short-term outcomes include a statistically significant improvement in Asthma Control Test scores indicating movement from under-controlled asthma to controlled asthma.

By the Numbers

297 Children trained in Open Airways

72 Parents trained on asthma management and triggers

18 Families receiving home visits

Healthy Homes

True partnerships leverage the strengths of everyone involved and work to accomplish common goals. The partnership between Miami Valley Child Development Centers, Inc. (MVCDC), and Dayton Children's is one exciting example. In this pilot project, 18 home visitors from the MVCDC home-based program were trained on common asthma triggers including smoking, dust, pets and animals, mold, odors and irritants. Common ways to address these issues included regular vacuuming, not leaving food or garbage out and the avoidance of strongly scented products. Training was provided by Dayton Children's and the Regional Air Pollution Control Agency (RAPCA) at Public Health Dayton & Montgomery County.

This pilot supported MVCDC initiatives to improve attendance and work with the whole family to support the learning child. This pilot also supports the Dayton Asthma Alliance focus areas of ensuring asthma friendly environments and offering educational opportunities to families and the community around asthma.

The home visitor's unique relationships with families through their weekly home visits enabled them to gain the trust of families to work on health-related issues. During home visits, the home visitors used a home health triggers checklist to identify triggers in the home and provided families with basic education in the form of handouts regarding smoking

cessation, home triggers and green cleaning. Families also received a "green cleaning" kit from Dayton Children's including a bucket, salt, vinegar and baking soda to experiment with green cleaning recipes. After four weeks, the home visitors completed a four week follow-up and documented changes made.

The Dayton Asthma Alliance is currently analyzing the results of this program. Initial findings are very promising as home visitors have documented many home environment changes including the reduction in indoor smoking, the use of green cleaners and the completion of home repairs.



"We followed up with the trigger checklist and mom reports she is now smoking outside all the time on the patio. Mom also has started mopping the floors weekly and she is in the process of getting a leak in the bathroom repaired. Mom reports she has also utilized the green cleaning bucket and is excited to be able to clean on a budget."

- MVCDC Home-Based Program Home Visitor

Health on Wheels

Beginning in January 2017, Dayton Asthma Alliance partners, Dayton Public Schools (DPS) and the Community Health Centers of Greater Dayton (CHCGD) united to provide unprecedented care to students with asthma and related conditions. A clinic on wheels, made possible with funding from The CareSource Foundation, brings medical professionals to students within their schools, removing many of the barriers including time away from work and transportation that families encounter when obtaining health care for their child with asthma.



“Dayton Public Schools has made great strides in providing asthma health education and support to students, families, and school staff. The Mobile Health Unit is a culmination of those innovative efforts to “dream big” while addressing the district’s number one health concern,” said Virginia Noe, director of health services, Dayton Public Schools.

A DPS school nurse and a CHCGD family nurse practitioner are assigned to the unit to supplement the health care children with asthma may already be receiving through their primary care physician. The unit travels to all 17 DPS elementary schools on a rotating basis. The Mobile

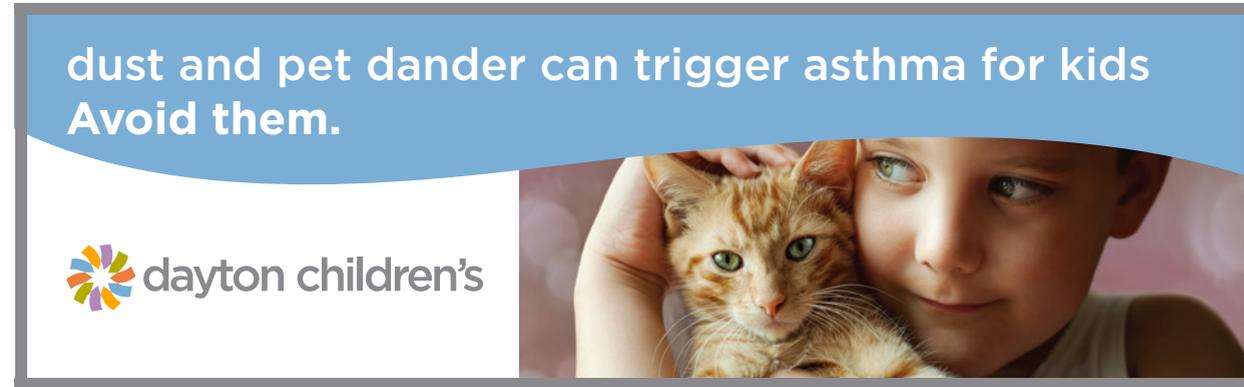
Health Unit staff provides exams, including diagnosis and treatment options for asthma, makes informed referrals and provides asthma education for the children and their parents or guardians.

“This partnership provides a unique opportunity for three organizations – Community Health Centers of Greater Dayton, Dayton Public Schools and The CareSource Foundation – to leverage their collective strengths and assets and to bring much needed health care services to students,” said Gregory Hopkins, executive director, Community Health Centers of Greater Dayton.

Bus Campaign

Another strategy employed by the Dayton Asthma Alliance was a social marketing campaign targeted at reducing asthma triggers. Funded by Dayton Children's Hospital, bus signage was purchased in zip codes with a high percentage of asthma visits. Messages about the importance of avoiding asthma triggers including mold, pet dander, pests and secondhand smoke were featured. Running in both fall 2016 and spring 2017, the bus campaign garnered more than one million impressions.

Bus ad example



Our Next Steps

The programs mentioned are just the beginning for the Dayton Asthma Alliance. Over the next year, we will continue with our current efforts and also continue to identify ways to improve health outcomes for children with asthma in a variety of settings.

The Dayton Asthma Alliance is supportive of policy and environmental changes such as Tobacco 21 legislation which would increase the age of purchase for tobacco products to age 21. We are also supportive of the no-idling program through the Regional Air Pollution Control Agency (RAPCA) at Public Health Dayton & Montgomery County.

The Dayton Asthma Alliance is also working closely with the Dayton Children's Health Partners, LLC – a newly launched clinically integrated network focused on aligning evidence-based practices within primary care offices to improve population health. Through this network, best practices in asthma management in primary care settings will be

shared and evaluated in order to improve population health for children with asthma.

The Dayton Asthma Alliance also participates in statewide efforts including the Ohio Department of Health Children's Hospital Asthma Collaborative to stay current on best practices.



Dayton Asthma Alliance

Dayton Children's Center for Child Health and Wellness

1 Children's Plaza
Dayton, OH 45404

(937) 641-3385