



# Dayton Asthma Alliance

2018 — Annual Report to the Community



# Our story

Over the past several years there has been a greater emphasis on how one's environment impacts his or her health. Research has suggested that a significant portion of a child's health can be attributed to his or her environment. For certain chronic conditions, such as asthma, the environment in which a child lives, learns and plays needs to be free from asthma triggers for a child to achieve optimal health. Creating a healthy environment requires collaboration among a broad variety of organizations outside of health care, such as education, business and community development. Comprehensive programs involving partnerships between health care and community groups have become more common nationwide to assist children and caregivers in managing asthma successfully. The Dayton Asthma Alliance is one such initiative that was formed to positively impact the health and wellness of children with asthma in the Dayton area, by focusing on the most at-risk populations.



**Cover photo:**

Victoria Dudley and her four boys – read her story on page 5

“Creating a healthy environment requires collaboration among a broad variety of organizations outside of health care, such as education, business and community development.”

## Influential factors

Multifaceted factors influence whether or not a child with asthma achieves optimal health.

- **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.** 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.

To have the greatest impact the Alliance identified three strategic focuses our work in these areas.

- Ensuring asthma-friendly environments
- Enhancing access to high quality health care and supportive social services through clinical-community linkages
- Educating and equipping 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

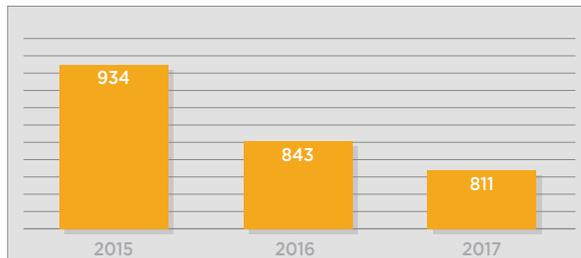
## Collective impact

The Dayton Asthma Alliance uses the collective impact model to address complex community challenges. In this model, the group works to have a common agenda, common progress measures, mutually reinforcing activities, communications and a backbone organization. Dayton Children's Hospital is the backbone organization for the Dayton Asthma Alliance.

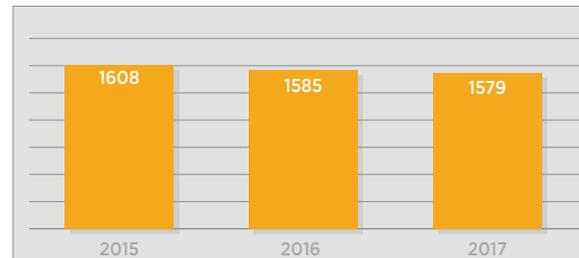
## Dayton Asthma Alliance Partners

- Allergy and Asthma Centre of Dayton
- CareSource
- Community Health Centers of Greater Dayton
- Dayton Children's Center for Community Health and Advocacy
- 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
- Wright State University College of Nursing & Health

Inpatient stays and observations for asthma



Emergency department visits by year for asthma



# A Head Start on asthma education

## Scope of problem

According to the Centers for Disease Control and Prevention (CDC), 6.2 million children suffer from asthma. Asthma disproportionately impacts children of color and children from lower socioeconomic status.

More than 1 in 5 black children in Ohio have been diagnosed with asthma. In Ohio, adults with an annual household income of \$15,000 or less are more likely to have asthma than adults with incomes \$35,000 and above.

Improving the home environment is crucial in addressing the common triggers that cause asthma. Through a partnership between Miami Valley Child Development Centers, Inc. (MVCDC) and Dayton Children's, many more homes are being evaluated for common asthma triggers. In this program, home visitors from the MVCDC home-based program are trained on common asthma triggers including smoking, dust, pets and animals, mold, odors and irritants. They learn common ways to address these issues including regular vacuuming, disposing of food or garbage and avoiding strongly scented products. Households in Montgomery, Clark and Madison counties are part of this program.

The home visitor's unique relationships with families through their weekly evaluations enable

them to gain the trust of families to work on health-related issues. The home visitors use a checklist to identify triggers in the home and provide families with basic education 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 complete a 4-week follow-up and document the changes made.

"This program supports the MVCDC initiatives to improve attendance and work with the whole family to support the learning child," says Anita Biles, director of health and nutrition, Miami Valley Child Development Centers, Inc.

This partnership also ensures asthma friendly environments and offers educational opportunities to families and the community around asthma which is a key focus area of the Dayton Asthma Alliance.

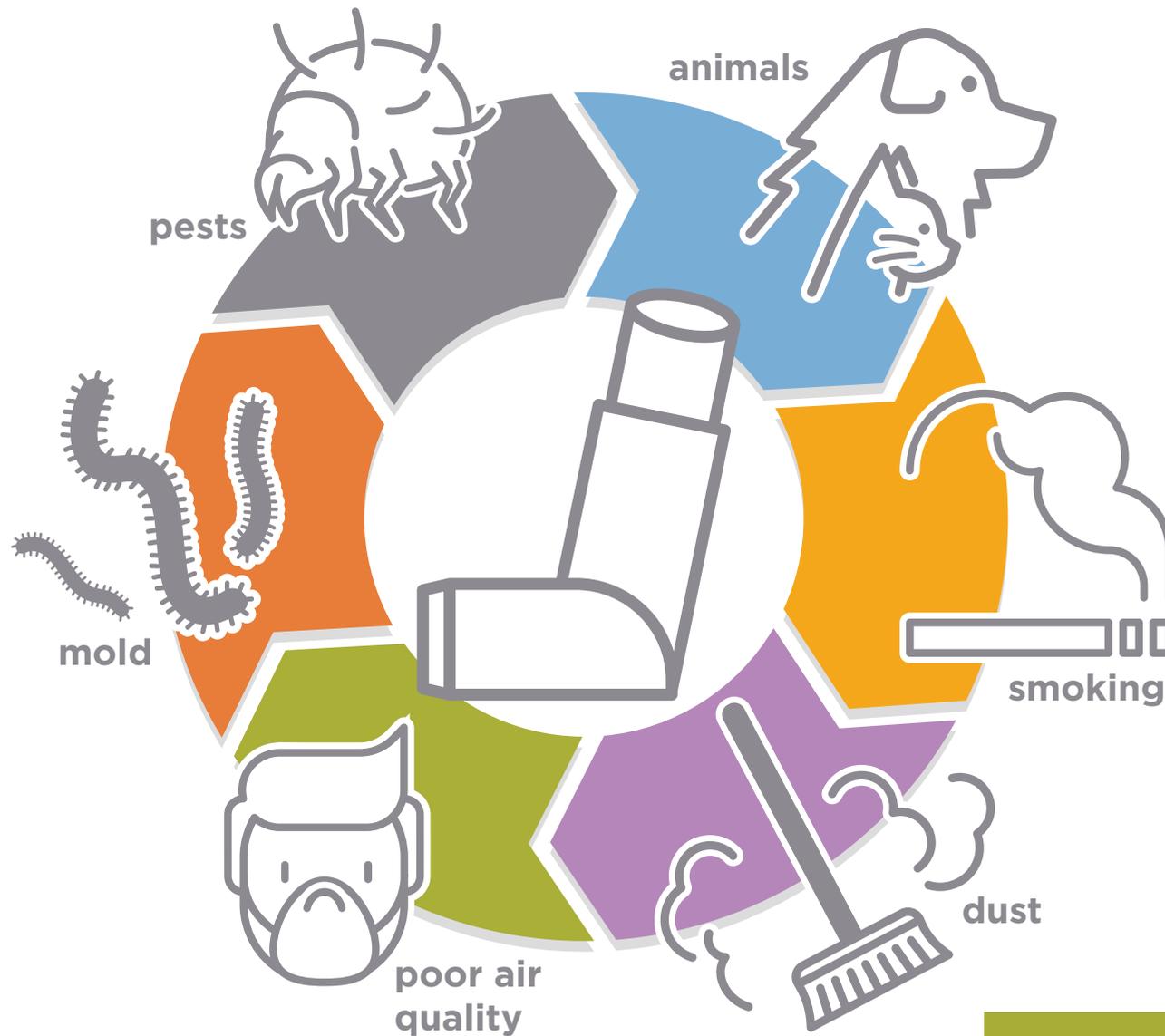
This year, 100 families participated in this program. Initial outcomes of the program are a reduction in indoor smoking, the use of green cleaners and the completion of home repairs.

## Our impact

**100** MVCDC families participating

**10** MVCDC staff participating

# Most common triggers found in homes



"I took part in the green cleaning experience and found it to be very effective in the everyday tidying of my home. I used vinegar in my mop water and enjoyed the way it took the smell out of my floor. I used it as an odor remover for pet stains in my carpet. I used the mixture of baking soda, vinegar and dishwashing liquid for my bathroom surfaces and enjoyed how fresh it was when I was done. And finally we decided to start smoking outside instead of inside. We have noticed an improvement in our children's breathing and overall health. I would definitely recommend the green cleaning method to others."

- MVCDC Home-Based Program parent participant

## Our impact



121

children coached in  
Open Airways



35

parents educated



1,700

Dayton Public Schools  
employees trained

# Open Airways in Dayton Public Schools

Children with asthma are of great concern to Dayton Public Schools as approximately 14 percent of their population has parent- or physician-identified asthma. Poorly controlled asthma symptoms can lead to limits on activity, missed school for children, missed work for caregivers, psychological troubles and social issues. In addition, children with asthma have frequent visits to the school clinic, at times requiring 911 calls, emergency department visits and hospital admissions.

Dayton Public Schools started a comprehensive school-based asthma program in 2015, partnering with Wright State University, Cedarville University and Dayton Children's. The goal was to design a program that

would provide better asthma self-management skills. Since then, there have been more than 1,700 Dayton Public School employees trained in the basics of asthma.

The program continues and in Fall 2017, Dayton Children's trained 63 student nurses from Wright State University and Cedarville University in the American Lung Association's Open Airways for Schools (OAS) curriculum which is an evidence-based asthma-management program for children to help them manage their asthma. In turn, the student nurses were placed in all 17 Dayton Public elementary schools and coached 121 children with asthma through a series of five OAS program sessions.

Six parent sessions were held with 35 parents in attendance. Parents learned about asthma management and asthma triggers. Parents were then invited to receive a home visit by a community health worker to identify asthma triggers in the home. The community health worker also screened the family for other social needs they might have to improve health outcomes.

"This partnership provides our staff, students and families with the basic information they need to effectively manage asthma," says Dawn Abbott, RN, director of health services, Dayton Public

Schools. "The more we can proactively address asthma the greater likelihood we have in making sure children with asthma can spend more of their time in the classroom."

# Home visits to help manage asthma

In December 2017, Victoria Dudley, a single mother of four boys all under the age of six, attended a parent asthma meeting at Cleveland Elementary School.

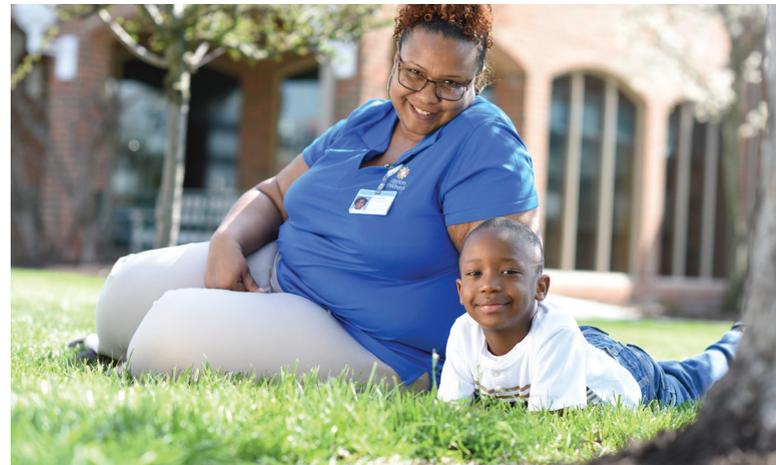
“Two of my boys suffer from asthma,” says Victoria. “I went to the parent meeting to learn more about what I could do to help manage their asthma better.”

After filling out the Child Asthma Risk Assessment Tool (CARAT), the family found they were eligible to receive additional services from Dayton Children’s Hospital to help manage the children’s asthma.

The program offers home visits by a Dayton Children’s community health worker. During the visit, the community health worker helps the family identify asthma triggers in the home. Triggers could be mold, pests, animal dander or secondhand smoke. The community health worker teaches the families to mitigate the

asthma triggers while connecting them to additional resources including education, food, utility assistance and activities for the children (after school and summer programs) as needed. The community health worker also determines if the children have asthma action plans, medications and medical devices including inhalers. If the community health worker identifies clinical issues, she will relay them to the child’s doctor. Follow-up visits with the family ensure they are adhering to changed behaviors, mediating triggers as recommended and attending clinical appointments.

“As I was completing a home visit for Victoria, I noticed that there were no working smoking detectors in the home,” says Synthia Copher, community health worker at Dayton Children’s. Synthia partnered with the Dayton Fire Department who was willing to come out and install a working



David Dudley with Dayton Children’s community health worker, Synthia Copher

smoke detector free of charge. Victoria and her family received two smoke and one carbon monoxide detector.

In addition, Victoria received other resources including car seats, a vacuum, and mattress and pillow protectors to ensure all the children could be healthy and safe in their home and while traveling. Victoria has taken

recommendations for handling clutter and dusting by doing a deep cleaning of the home.

“I’m thankful for the home visit program at Dayton Children’s because I now know some of the things I can do to make my home safe for my children,” says Victoria.

“The Dayton Fire Department is taking a proactive approach to reducing risk in the community. Realizing over the years that the fire prevention office alone cannot reach all of our audiences, we seek to be involved in many partnerships throughout the community. When Synthia from Dayton Children’s reached out to us to put lifesaving smoke and carbon monoxide alarms into the homes of families they serve, we were eager to participate. We are not able to drive down the street and see which house is in need. By partnering with Dayton Children’s we have immediate knowledge of those members of the community in highest need and an ongoing relationship with a stakeholder who is equally interested in preventing injury and death. Through our partnership with Red Cross, Firehouse Subs, Dayton Firefighter’s Federal Credit Union, as well as many other partners and donors, we have been able to supply these necessary lifesaving tools. We continue to enjoy this partnership and look forward to many more community efforts with Dayton Children’s.”

- Jason Eckert, fire prevention specialist, Dayton Fire Department



Lisa Montgomery, MSN, RN, DPS school nurse on the MHU with a patient

### Our impact

**60** children served per month

**28** Dayton Public Schools served

# Health on the go

Beginning in January 2017, Dayton Public Schools (DPS) and the Community Health Centers of Greater Dayton (CHCGD) partnered to provide unprecedented care to students with asthma and related conditions. The CareSource Foundation provided the start-up funds for a clinic on wheels, the Mobile Health Unit (MHU). The unit is staffed by a DPS licensed school nurse, a DPS MHU driver/student escort, a CHCGD medical assistant and a CHCGD family nurse practitioner. Initially, the MHU provided care to students with asthma in all 17 DPS elementary schools on a rotating basis. Beginning in the fall of 2017, the MHU services were expanded to all 28 DPS schools.

“The MHU removes common barriers that families encounter like transportation and time away from work by bringing health care to children during the school day,” says Dawn Abbott, RN, director of health services, Dayton Public Schools. Slightly over a year into this endeavor, the mobile unit now

sees about 60 children with asthma each month.

“The MHU staff focuses on asthma care to enhance asthma self-management skills,” says Lisa Montgomery, MHU school nurse. Student education about all aspects of asthma care are taught in sequential age-appropriate lessons. A special focus is teaching the correct use of an inhaler/spacer, completing school medication forms, developing Asthma Action Plans and providing prescriptions for student inhaler/spacer use at school. The MHU staff communicates regularly

with the student’s primary health care provider to coordinate care.

“The MHU is just one example of how a unique partnership can improve access to health care for children,” says Gregory Hopkins, executive director, Community Health Centers of Greater Dayton. “This program helps to supplement the health care children with asthma may already be receiving through their primary care physician.”

A goal for the 2018-2019 school year is to expand health services beyond asthma care.



Tiffany Brown, FNP, from CHCGD gives a lesson on inhaler use

# A safe home for Heaven



Tiara Martin and her daughter, Heaven.

Tiara Martin and her daughter, Heaven, were referred to the Medical Legal Partnership for Children (MLPC) by Dayton Children's Hospital in July 2017. Heaven, age 8, suffered from severe asthma and had been hospitalized on many occasions with respiratory distress.

"Heaven's physician thought that her asthma was getting worse after we moved into our new apartment in May 2017," said Tiara. A community health worker from Dayton Children's did a home assessment, confirming the

apartment had visible mold, leaks and pests.

"I knew these would affect Heaven's health so I spoke to the manager to get them fixed but maintenance just painted over the areas of mold. Nothing was done to stop the mold from returning or to treat the apartment for the infestation," says Tiara. "After Heaven was released from the hospital, I began staying with my mother because the health department recommended that I shouldn't return to the apartment."

Tiara and her four children had nowhere else to go and she was still paying rent for the 12 month lease she had signed. At that point, she was referred to the MLPC.

"After I received Tiara's referral from Dayton Children's, I went to the apartment and saw firsthand these conditions," says Joe Warden, lawyer for the MLPC. "After meeting with Tiara, we prepared a proper notice to serve the landlord a breach of conditions. This is the first step in setting up a rent escrow account with the court to force the landlord to make repairs and correct conditions, before he or she gets the rent money."

Shortly after the apartment complex manager was served with this notice, the manager called Joe to tell him that they were going to fix the leak, tear out the carpet and put down tile, tear out and replace drywall, and treat for infestation.

"This of course was welcome news, but we also knew that Tiara should look for another place to rent. It was obvious that this basement unit was not where Heaven should be living," says Joe. "However, locating and securing another

place to live would take time. In the meantime we needed all of these repairs made quickly."

Joe continued discussions with the manager to ensure the repairs and pest treatments were being completed. The manager did give assurances that if Tiara choose to move, they would not seek any breach of the lease or money from her.

"In December 2017, we were able to move into a new apartment with no mold or infestation," says Tiara. "And thanks to the help of Joe and the MLPC, Heaven is doing better and my previous landlord did not take any type of legal action when I had to break the lease."

Joe and the team from the MLPC continue to work with Tiara, now on an educational case for Heaven who is having substantial school-related issues.

"By working with Heaven's school to help them better understand some of her health issues, we can ensure she gets the services she needs," says Joe. "I'm confident good things will happen for Heaven."

## What is the Medical Legal Partnership for Children?

Through the Medical Legal Partnership for Children, doctors and lawyers work together to identify legal and social issues which negatively impact child health and well-being, and address these issues through individual and systemic advocacy.

## ThinkTV text alerts

Asthma air quality forecasts  
Public Media Connect - ThinkTV  
Channels 16 & 14 in Dayton and CET,  
Channel 48 in Cincinnati - provide  
asthma air quality forecasts on  
a daily basis. To sign up for  
these text alerts:

**For Dayton area:**  
Text dayair to 49798

**For Cincinnati area:**  
Text PMC to 49798

# Improving patient outcomes

## Dayton Children's Health Partners, LLC

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.

As the Dayton Asthma Alliance works to improve the health of children in multiple settings, Dayton Children's has identified opportunities for improvement internally to help manage the care of children with asthma.

One such opportunity was reducing the number of missed asthma clinic visits.

The pulmonary team, led by Robert Cohn, MD, MBA, decided to take an alternative approach to their patients who were frequent no-shows. The team focused on chronic, high-risk asthmatic patients and determine why these patients were not attending their scheduled clinic appointments. The team monitored asthmatic patients with three or more no-shows in a rolling calendar year. Instead of dismissal from the clinic after three no-shows, which had been the previous practice, the focus was shifted to examining the barriers for not attending the appointment.

"We realized there was a lot

more behind those missed appointments," says Belinda Huffman, pulmonary health diagnostic coordinator at Dayton Children's. "We found that there were many barriers preventing families from not only attending their appointments but from being able to manage their asthma effectively."

Through a comprehensive approach to this problem, a multi-disciplinary adherence clinic team provided education, home care assessments, and worked with families to identify and overcome barriers to attending clinic appointments. Common issues identified included transportation and housing issues.

The team examined the impact of the new adherence clinic process at six months and one year. Initial results show an improvement in kept appointments, a decrease in asthma-related hospital stays and a decrease in emergency department visits for a group of high-risk asthma patients.

## Our impact

68

**High-risk asthma patients participated in the Adherence Clinic**

54%

**decrease in no shows**

83%

**reduction in ER visits**

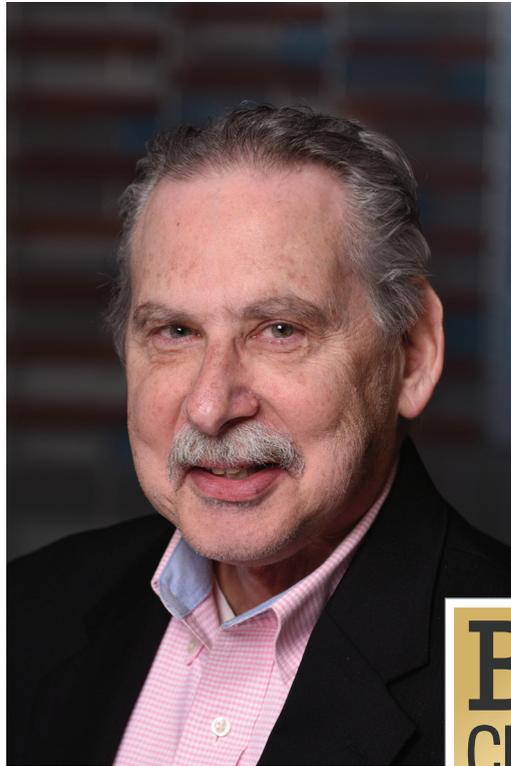
68%

**reduction in hospital admissions**

## Tobacco 21

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. Over the next several months, the Alliance will partner with Public Health Dayton and Montgomery County to conduct public awareness and education through social media, surveys and town hall meetings. Policies such as Tobacco 21 have proven effective in reducing smoking rates among teenagers and ultimately impacting their health for years to come.

# In memory of Robert Cohn, MD, MBA



In October 2017, the Dayton Asthma Alliance lost one of our truest champions in Dr. Robert Cohn. Dr. Cohn was a passionate and tireless advocate for children with asthma. He was a visionary dedicated to the advancement of medicine while understanding the vital role the social drivers of health played for children in our community.

It was thanks in part to Dr. Cohn's leadership as associate chief medical officer that Dayton Children's Hospital was named one of U.S. News & World Report 2018-19 Best Children's Hospitals in June 2018. The pulmonology division ranked in top 50 children's hospitals in the country. This designation shows that

Dayton Children's provides the best medical care in pulmonology for children with rare or life-threatening diseases. The U.S. News Best Children's Hospitals rankings rely on clinical data and on an annual survey of pediatric specialists. The rankings methodology factors in patient outcomes, such as mortality and infection rates, as well as available clinical resources and compliance with best practices. While it is just one measure that a family should use in choosing the right care for their child, it's another symbol parents can use to show them that Dayton Children's provides expert care.





**Dayton Asthma Alliance**

Dayton Children's Center for Community Health and Advocacy

One Children's Plaza  
Dayton, OH 45404

(937) 641-3385