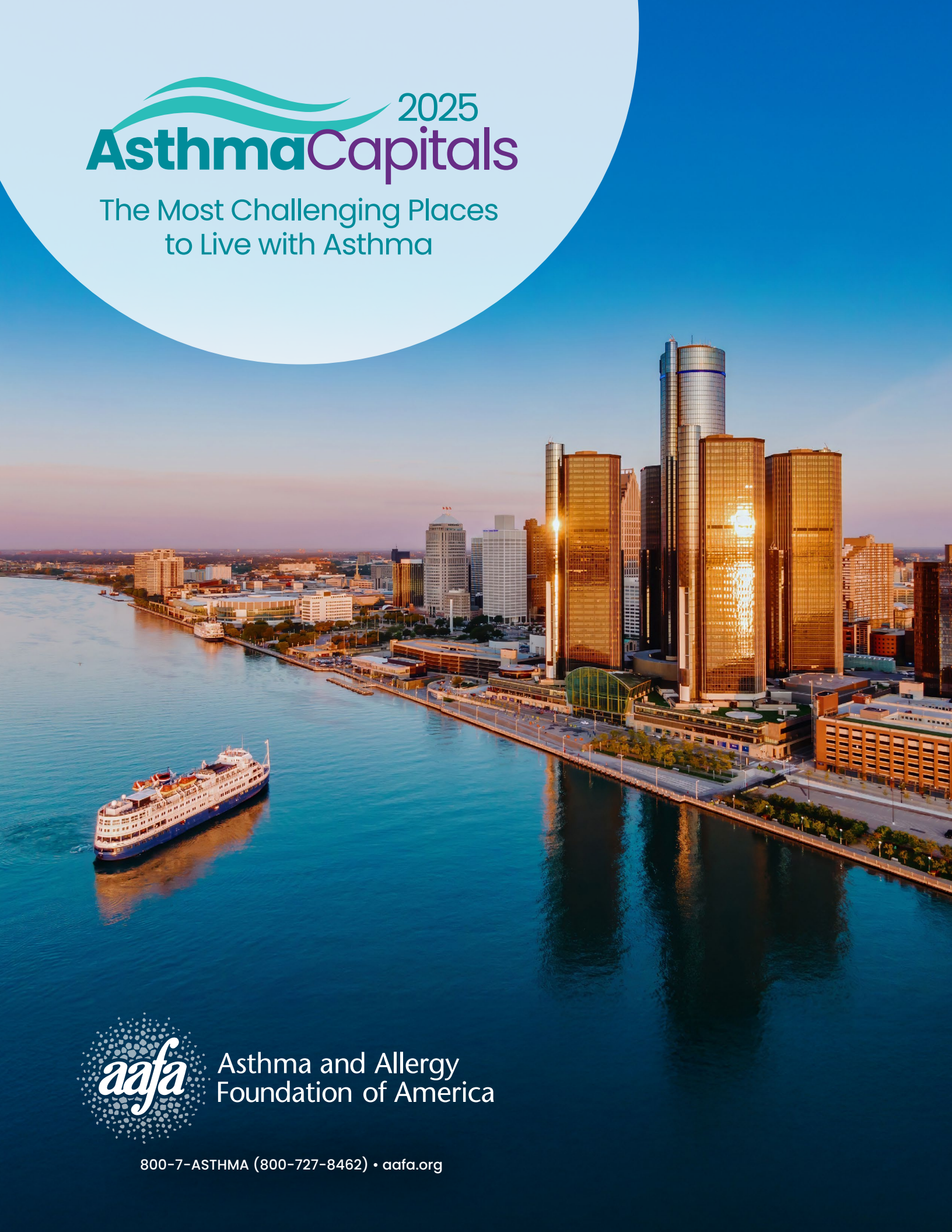
2025 Asthma Capitals

The Most Challenging Places to Live with Asthma



Asthma and Allergy Foundation of America

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2025 Asthma Capitals

Available online at asthmacapitals.org

Suggested Citation
Asthma and Allergy Foundation of America, (2025). *2025 Asthma Capitals.*
Retrieved from **asthmacapitals.org**.

Media Inquiries
For media and related inquiries, contact **media@aafa.org**.

Acknowledgements
The 2025 Asthma Capitals report is an independent research project of the Asthma and Allergy Foundation of America and made possible by support from Amgen, AstraZeneca, Chiesi, GSK, and Sanofi and Regeneron.

AAFA also thanks Komodo Health and Pollen Sense, LLC for additional support for data used in this report.

The views and opinions expressed in this report are those of the AAFA authors and do not necessarily reflect the policies or positions of the sponsors or other individuals, organizations, or companies.

AAFA would like to thank Dr. Mitchell Grayson for serving as medical research advisor on the report's methodology. We are grateful to our advocates and partners who shared their personal stories for this report. And lastly, this comprehensive report would not be possible without the dedication of the AAFA staff responsible for this report: Hannah Jaffee, Melanie Carver, Sanaz Eftekhari, Lynne Bosma, Tanya Bumgardner, Nicole Gaghan, Kimm Rafferty, and Andy Spears.

About This Report
AAFA publishes the Asthma Capitals™ report to raise awareness about the nationwide impacts of asthma. The report analyzes asthma data across the United States and ranks cities by the most critical of health outcomes – asthma prevalence, emergency department visits due to asthma attacks, and asthma-related mortality. The outcomes are not weighted equally. The report also examines asthma risk factors that influence the outcomes.

AAFA only evaluates the top 100 populated places (based on metropolitan statistical areas or MSAs) in the contiguous ("lower 48") states for this report. MSAs are cities and their surrounding areas (like suburbs and nearby rural areas). The report does not reflect:

- Cities and areas not in the top 100 list by population size
- Completely rural areas that are not located within a metropolitan statistical area
- Anchorage, Alaska and Honolulu, Hawaii due to lack of matching data with other cities, counties, states

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Introduction

Asthma remains one of the most common chronic diseases in the United States, affecting more than 28 million people. While many people manage their asthma successfully, others face ongoing challenges that can disrupt daily life, limit opportunities, and increase the risk of health complications. Where a person lives plays a significant role in shaping asthma outcomes.

AAFA's Asthma Capitals report ranks 100 cities in the contiguous U.S. based on three outcomes factors: **asthma prevalence**, **emergency department (ED) visits for asthma**, and **deaths due to asthma**. The report also discusses risk factors that contribute to these outcomes: poverty, indoor and outdoor air quality, access to specialist medical care, pollen allergy, medicine use, tobacco policies, and the rate of uninsured residents. Together, these factors help explain why some communities experience higher levels of asthma burden than others.

The data in this report includes the 100 most populated U.S. cities (metro areas), and does not include information from Alaska, Hawaii, Puerto Rico, or tribal nations. The residents of these areas are greatly affected by asthma, but more data is needed to get a better picture of the impact.

This year's findings highlight the ongoing influence of environmental and social conditions—from longer pollen seasons to barriers in health care access—that affect how well people are able to manage their asthma.

We hope this report serves as a resource for action. Community leaders and advocates can draw on the data to raise awareness, mobilize support, and press for local solutions. Policymakers can use it to guide investments in healthier housing, cleaner air, and health care access. Health care providers and public health agencies can apply the insights to strengthen education, prevention, and management programs.

By identifying areas of highest burden and pointing to contributing factors, the Asthma Capitals report aims to inform solutions that improve outcomes and support healthier, more equitable environments for people living with asthma.

About the Asthma and Allergy Foundation of America (AAFA)
Founded in 1953, AAFA is the oldest and largest non-profit patient organization dedicated to saving lives and reducing the burden of disease for people with asthma, allergies, and related conditions through research, education, advocacy, and support. AAFA offers extensive support for individuals and families affected by asthma and allergic diseases, such as food allergies and atopic dermatitis (eczema). Through its online patient support communities, network of regional chapters, and collaborations with community-based groups, AAFA empowers patients and their families by providing practical, evidence-based information and community programs and services. AAFA is the only asthma and allergy patient advocacy group that is certified to meet the standards of excellence set by the National Health Council. For more information, visit **aafa.org**.

Understanding September's Asthma Spike

September is a challenging month of the year for people with asthma. More asthma attacks, emergency department visits, and hospital stays occur in September than in any other month. The third week—known as **Asthma Peak Week**—is typically the worst.

Why? Because many asthma triggers converge at the same time:

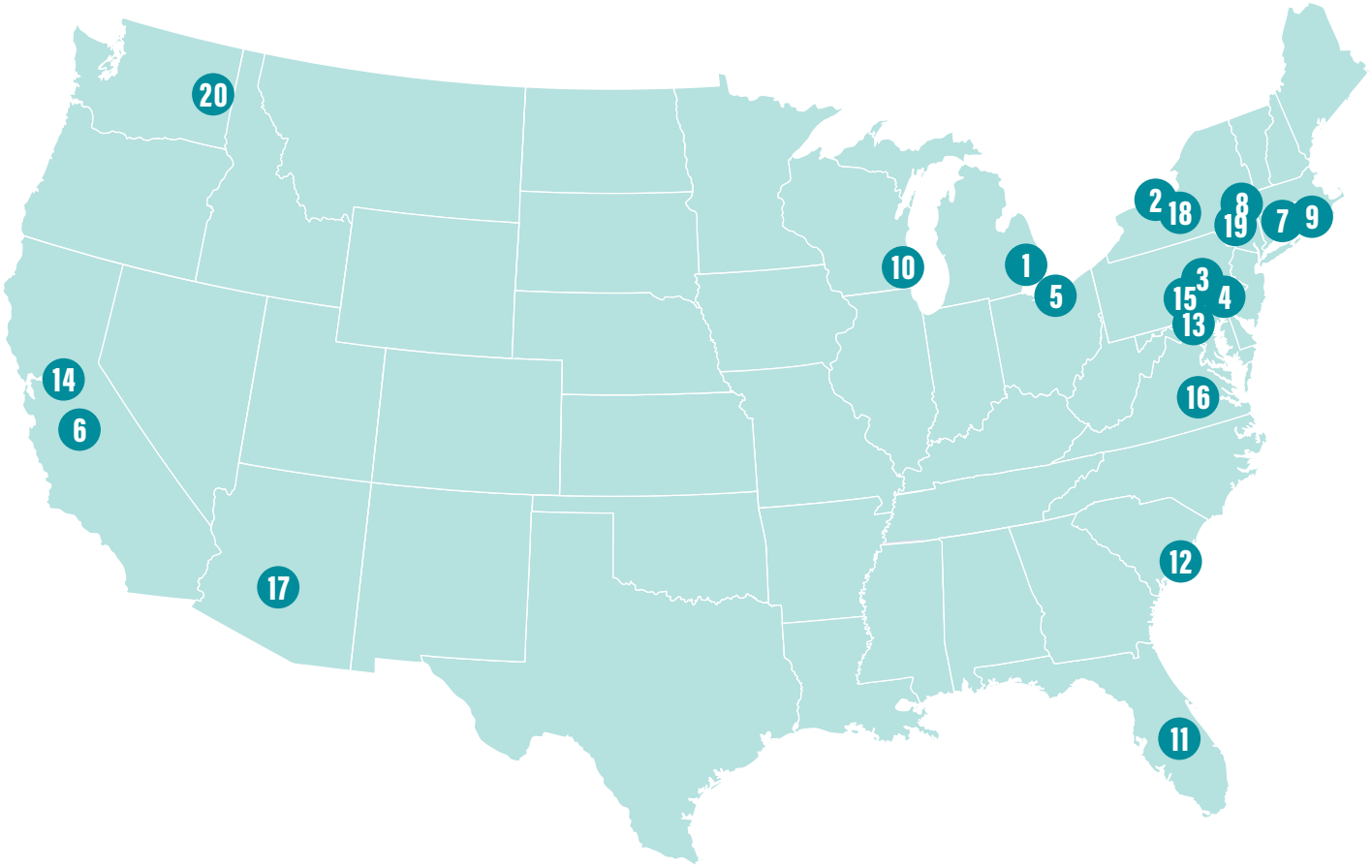
- **Ragweed pollen:** The most common fall allergen peaks in September. For people with allergic asthma, exposure to ragweed pollen can trigger asthma symptoms.
- **Mold growth:** Wet leaves, fall rains, and lingering humidity create perfect conditions for mold. Mold spores irritate airways and can worsen asthma and allergies.
- **Back-to-school illnesses:** Crowded classrooms can increase the spread of respiratory infections like flu, COVID-19, RSV, and colds. Children often bring these illnesses home, affecting families and older adults.
- **Poor indoor air quality in schools:** Many school buildings have inadequate ventilation and may contain allergens such as dust mites, mold, and chemical irritants from cleaning products.
- **Extreme weather:** Sudden temperature changes, lingering heat and humidity, thunderstorms, and wildfire smoke all add to the burden on lungs.

With so many triggers overlapping, it becomes harder to keep airway inflammation under control. Preparation and prevention are key. AAFA encourages people with asthma to take steps early in September to reduce risks:

- **See your doctor or asthma specialist:** Review your symptoms, medicines, and asthma triggers.
- **Create or update an Asthma Action Plan:** Follow your treatment plan closely and know what steps to take if symptoms worsen.
- **Stay up to date on vaccines:** Flu, COVID-19, RSV, and pneumococcal vaccines can reduce respiratory illness risks that worsen asthma.
- **Improve indoor air quality:** Use proper ventilation, change HVAC filters regularly, and consider HEPA air purifiers in schools and homes. Look for Certified Asthma & Allergy Friendly® products to help limit exposure to allergens and asthma triggers in your home.
- **Limit exposure to outdoor triggers:** Track local pollen and air quality forecasts and adjust outdoor activities on high-risk days.

By taking proactive steps, individuals, families, and communities can reduce the impact of Asthma Peak Month.

Map of the Top 20 Most Challenging Places to Live with Asthma in 2025



These are the top 20 Asthma Capitals for 2025 based on estimated asthma prevalence, emergency department visits due to asthma, and asthma-related fatalities. The burden of asthma falls heavily in Northeastern states. The full list of top 100 cities can be found on page 7 in this report.

1. Detroit, MI
2. Rochester, NY
3. Allentown, PA
4. Philadelphia, PA
5. Cleveland, OH
6. Fresno, CA
7. Hartford, CT
8. Albany, NY
9. Providence, RI
10. Milwaukee, WI
11. Lakeland, FL
12. Charleston, SC
13. Baltimore, MD
14. Sacramento, CA
15. Harrisburg, PA
16. Richmond, VA
17. Phoenix, AZ
18. Syracuse, NY
19. Poughkeepsie, NY
20. Spokane, WA

2025 Asthma Capitals™

Overall Rankings ■ Worse Than Average ▲ Average ● Better Than Average

(Factors are not weighted equally. Total scores are rounded for the purposes of this chart.)

2025 Overall Ranking	Overall	Metropolitan Area	Total Score *(Avg. 56.83)*	Subtotal: Estimated Asthma Prevalence	Subtotal: Crude Death Rate for Asthma	Subtotal: ED Visits for Asthma
1	■	Detroit, MI	100.00	■	■	▲
2	■	Rochester, NY	94.91	■	▲	▲
3	■	Allentown, PA	90.49	■	▲	■
4	■	Philadelphia, PA	89.94	■	■	▲
5	■	Cleveland, OH	84.45	■	■	▲
6	■	Fresno, CA	83.44	■	■	▲
7	■	Hartford, CT	83.10	■	■	▲
8	■	Albany, NY	81.66	■	▲	●
9	■	Providence, RI	78.37	■	▲	▲
10	■	Milwaukee, WI	78.14	●	■	■
11	■	Lakeland, FL	76.43	■	▲	▲
12	■	Charleston, SC	75.68	■	▲	▲
13	■	Baltimore, MD	74.71	▲	■	▲
14	■	Sacramento, CA	73.83	■	▲	▲
15	■	Harrisburg, PA	72.74	■	▲	▲
16	■	Richmond, VA	72.09	▲	■	▲
17	■	Phoenix, AZ	71.23	■	▲	▲
18	■	Syracuse, NY	70.30	■	▲	▲
19	■	Poughkeepsie, NY	69.93	■	▲	▲
20	■	Spokane, WA	69.17	■	▲	▲
21	■	Worcester, MA	68.80	■	▲	▲
22	■	Tucson, AZ	68.43	▲	■	▲
23	■	Virginia Beach, VA	67.31	■	●	■
24	■	Scranton, PA	67.21	▲	▲	▲
25	▲	New York, NY	65.89	▲	■	▲
26	▲	Los Angeles, CA	65.52	■	▲	▲
27	▲	Albuquerque, NM	65.42	▲	▲	▲
28	▲	Omaha, NE	65.25	▲	■	▲
29	▲	Columbia, SC	64.20	■	▲	▲
30	▲	Stockton, CA	63.86	▲	▲	■
31	▲	Washington, DC	63.27	▲	■	▲
32	▲	St. Louis, MO	62.32	●	■	▲

Overall Rankings ■ Worse Than Average ▲ Average ● Better Than Average

(Factors are not weighted equally. Total scores are rounded for the purposes of this chart.)

2025 Overall Ranking	Overall	Metropolitan Area	Total Score *(Avg. 56.83)*	Subtotal: Estimated Asthma Prevalence	Subtotal: Crude Death Rate for Asthma	Subtotal: ED Visits for Asthma
33	▲	Orlando, FL	62.21	■	●	▲
34	▲	Greenville, SC	62.09	■	▲	▲
35	▲	Cincinnati, OH	62.03	▲	▲	▲
36	▲	Dallas, TX	61.04	▲	▲	▲
37	▲	Toledo, OH	60.41	▲	▲	▲
38	▲	Miami, FL	60.37	▲	▲	▲
39	▲	Atlanta, GA	59.49	▲	▲	▲
40	▲	Bakersfield, CA	59.24	▲	▲	▲
41	▲	Riverside, CA	59.16	▲	●	▲
42	▲	Memphis, TN	58.31	●	■	■
43	▲	Indianapolis, IN	58.30	▲	▲	▲
44	▲	Pittsburgh, PA	57.61	▲	▲	▲
45	▲	San Francisco, CA	57.55	▲	●	▲
46	▲	Las Vegas, NV	57.34	▲	▲	▲
47	▲	Jackson, MS	56.94	▲	■	▲
48	▲	Palm Bay, FL	56.50	■	●	●
49	▲	Louisville, KY	56.22	▲	●	■
50	▲	Nashville, TN	56.06	▲	▲	●
51	▲	Dayton, OH	55.40	●	▲	■
52	▲	Bridgeport, CT	55.21	▲	▲	▲
53	▲	Minneapolis, MN	55.05	▲	▲	▲
54	▲	New Orleans, LA	54.72	▲	▲	▲
55	▲	San Diego, CA	54.32	▲	●	▲
56	▲	Oxnard, CA	53.78	▲	●	▲
57	▲	Columbus, OH	53.17	▲	●	■
58	▲	San Jose, CA	52.00	▲	●	▲
59	▲	Wichita, KS	51.62	●	▲	▲
60	▲	Oklahoma City, OK	51.05	●	■	■
61	▲	Chicago, IL	51.02	▲	▲	▲
62	▲	Seattle, WA	50.78	▲	▲	▲
63	▲	New Haven, CT	50.76	▲	■	▲
64	▲	Ogden, UT	50.75	●	▲	▲
65	▲	Baton Rouge, LA	50.33	▲	●	▲
66	▲	Akron, OH	49.94	●	▲	▲

Overall Rankings ■ Worse Than Average ▲ Average ● Better Than Average

(Factors are not weighted equally. Total scores are rounded for the purposes of this chart.)

2025 Overall Ranking	Overall	Metropolitan Area	Total Score *(Avg. 56.83)*	Subtotal: Estimated Asthma Prevalence	Subtotal: Crude Death Rate for Asthma	Subtotal: ED Visits for Asthma
67	▲	Buffalo, NY	48.70	●	▲	▲
68	▲	Portland, OR	47.51	●	▲	▲
69	▲	Denver, CO	47.05	▲	●	●
70	●	Tulsa, OK	46.73	▲	▲	▲
71	●	Grand Rapids, MI	46.21	●	●	▲
72	●	Boston, MA	46.17	●	▲	▲
73	●	Daytona Beach, FL	45.98	●	▲	▲
74	●	Kansas City, MO	45.93	●	▲	▲
75	●	El Paso, TX	45.91	●	●	▲
76	●	Greensboro, NC	45.27	●	▲	▲
77	●	Chattanooga, TN	45.08	●	■	●
78	●	McAllen, TX	44.18	▲	●	▲
79	●	Jacksonville, FL	43.41	●	▲	▲
80	●	San Antonio, TX	43.06	▲	▲	●
81	●	Raleigh, NC	42.80	●	●	▲
82	●	Madison, WI	42.48	●	●	■
83	●	Salt Lake City, UT	42.14	●	▲	▲
84	●	Tampa, FL	42.07	●	●	▲
85	●	Augusta, GA	41.70	●	▲	▲
86	●	Austin, TX	41.70	▲	●	●
87	●	Sarasota, FL	41.34	●	▲	●
88	●	Charlotte, NC	41.19	●	▲	▲
89	●	Colorado Springs, CO	39.05	▲	▲	●
90	●	Fayetteville, AR	38.31	●	▲	▲
91	●	Birmingham, AL	38.13	●	▲	●
92	●	Cape Coral, FL	37.98	▲	●	●
93	●	Durham, NC	37.48	●	▲	▲
94	●	Knoxville, TN	37.01	●	●	▲
95	●	Houston, TX	36.08	●	●	●
96	●	Boise, ID	35.90	●	●	●
97	●	Winston-Salem, NC	34.22	●	▲	▲
98	●	Little Rock, AR	33.89	●	▲	▲
99	●	Provo, UT	31.42	●	●	▲
100	●	Des Moines, IA	28.22	●	●	▲

Regional Rankings ■ Worse Than Average ▲ Average ● Better Than Average

(Factors are not weighted equally. Total scores are rounded for the purposes of this chart.)

NORTHEAST						
2025 Regional Rankings	**Overall**	**Metropolitan Area**	**Total Score**	Subtotal: Estimated Asthma Prevalence	Subtotal: Crude Death Rate for Asthma	Subtotal: ED Visits for Asthma
1	■	Rochester, NY	94.91	■	▲	▲
2	■	Allentown, PA	90.49	■	▲	■
3	■	Philadelphia, PA	89.94	■	■	▲
4	■	Hartford, CT	83.10	■	■	▲
5	■	Albany, NY	81.66	■	▲	●

SOUTH						
2025 Regional Rankings	**Overall**	**Metropolitan Area**	**Total Score**	Subtotal: Estimated Asthma Prevalence	Subtotal: Crude Death Rate for Asthma	Subtotal: ED Visits for Asthma
1	■	Lakeland, FL	76.43	■	▲	▲
2	■	Charleston, SC	75.68	■	▲	▲
3	■	Baltimore, MD	74.71	▲	■	▲
4	■	Richmond, VA	72.09	▲	■	▲
5	■	Virginia Beach, VA	67.31	■	●	■

MIDWEST						
2025 Regional Rankings	**Overall**	**Metropolitan Area**	**Total Score**	Subtotal: Estimated Asthma Prevalence	Subtotal: Crude Death Rate for Asthma	Subtotal: ED Visits for Asthma
1	■	Detroit, MI	100.00	■	■	▲
2	■	Cleveland, OH	84.45	■	■	▲
3	■	Milwaukee, WI	78.14	●	■	■
4	▲	Omaha, NE	65.25	▲	■	▲
5	▲	St. Louis, MO	62.32	●	■	▲

WEST						
2025 Regional Rankings	**Overall**	**Metropolitan Area**	**Total Score**	Subtotal: Estimated Asthma Prevalence	Subtotal: Crude Death Rate for Asthma	Subtotal: ED Visits for Asthma
1	■	Fresno, CA	83.44	■	■	▲
2	■	Sacramento, CA	73.83	■	▲	▲
3	■	Phoenix, AZ	71.23	■	▲	▲
4	■	Spokane, WA	69.17	■	▲	▲
5	■	Tucson, AZ	68.43	▲	■	▲

Asthma Health Outcomes

AAFA ranks cities based on 3 health outcomes: asthma prevalence (how many people have asthma), asthma-related emergency department (ED) visits, and asthma-related mortality (death) rates. The outcomes are not weighted equally.

Estimated Asthma Prevalence

Over 28 million people living in the United States have asthma.[1,2] This equals about 1 in 12 people. Prevalence rates differ significantly by socioeconomic status, race, ethnicity, age and sex.
The cities with the highest estimated asthma prevalence† are:

Overall Asthma Capital National Ranking	Asthma Prevalence Ranking	Metropolitan Area
2	1	Rochester, NY
1	2	Detroit, MI
8	3	Albany, NY
3	4	Allentown, PA
7	5	Hartford, CT
4	6	Philadelphia, PA
6	7	Fresno, CA
5	8	Cleveland, OH
15	9	Harrisburg, PA
9	10	Providence, RI

†For each city included in the 2025 Asthma Capitals, AAFA obtained an estimated asthma prevalence for its respective MSA. For this report, asthma prevalence is estimated using claims data for individuals who sought asthma care at any point in the 2024 calendar year. While this is not an exact measure of prevalence, it helps provide data that can be compared from city to city. Other prevalence estimates, such as those from the CDC, use self-reported data through surveys.

Emergency Department Visits

Asthma can trigger severe symptoms that require a visit to the ED. Increased ED visits are a sign of poor asthma control. Nationally, asthma accounts for nearly 1 million emergency department visits each year.[3] **The cities with the highest asthma-related ED visits† are:**

Overall Asthma Capital National Ranking	Emergency Department Visits Ranking	Metropolitan Area
10	1	Milwaukee, WI
49	2	Louisville, KY
42	3	Memphis, TN
23	4	Virginia Beach, VA
82	5	Madison, WI
3	6	Allentown, PA
60	7	Oklahoma City, OK
30	8	Stockton, CA
51	9	Dayton, OH
57	10	Columbus, OH

†For each city included in the 2025 Asthma Capitals, AAFA obtained the total number of ED visits where an asthma ICD-10 code was included in a diagnosis field, for the respective census-designated metropolitan statistical area, or MSA, for calendar year 2024. Analysis included estimating the ED rate per 10,000 asthma patients.

Asthma-Related Mortality

On average, between 9 to 11 people in the U.S. die from asthma each day. Nationally, there were 3,190 deaths attributed to asthma in 2023.[4] There hasn't been meaningful improvement in these numbers in the last decade. In 2020, deaths due to asthma rose for the first time in 20 years but have since returned to pre-pandemic levels.[5] **The cities with the most asthma-related deaths† are:**

Overall Asthma Capital National Ranking	Asthma-Related Deaths Ranking	Metropolitan Area
13	1	Baltimore, MD
32	2	St. Louis, MO
16	3	Richmond, VA
47	4	Jackson, MS
42	5	Memphis, TN
77	6	Chattanooga, TN
25	7	New York, NY
6	8	Fresno, CA
4	9	Philadelphia, PA
22	10	Tucson, AZ

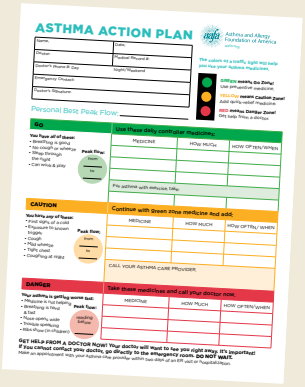

Baltimore, MD

†For each city included in the 2025 Asthma Capitals, AAFA obtained the estimated asthma-related crude death rate per 100,000 people for its respective county from 2019-2023 (most recent available data).

To reduce the risk of death from asthma, it is important to:

- Have access to asthma medicines and take them as prescribed
- Seek medical care if symptoms occur more than twice per week
- Avoid or reduce exposure to asthma triggers
- Learn the signs and symptoms of asthma, including early warning signals
- Have an Asthma Action Plan and take quick action according to the plan

If someone's life is in danger, seek emergency care immediately. An Asthma Action Plan can help identify when asthma is a medical emergency. Visit **aafa.org/actionplan** to download a sample plan.



Risk Factors That Can Worsen Asthma or Influence Asthma Rates

A risk factor is any attribute, characteristic, or exposure of an individual that increases the likelihood of developing a disease, like asthma. While the risk factors outlined in this report are not calculated as part of the overall ranking, they are important to address as they contribute to rates of asthma prevalence, emergency department visits, and deaths.

These are some of the top risk factors for asthma:

- Poverty
- Lack of health insurance
- Lack of access to specialists
- Exposure to air pollution
- Pollen allergy
- Smoking (cigarettes, cigars, vapes)
- Asthma quick-relief medicine use*
- Asthma control medicine use*

**High numbers of prescriptions for asthma medicines can indicate a larger population managing persistent asthma or more frequent severe or uncontrolled asthma.*

Risk Factor: Poverty

Socioeconomic status plays a major role in the development of asthma and a person's ability to manage it. Persons living below 100% of the Federal Poverty Level are more likely to have asthma than people living at any percentage above the poverty level.[6] **These cities have the highest rates of poverty†:**

Overall Asthma Capital National Ranking	Poverty Ranking	Metropolitan Area
78	1	McAllen, TX
54	2	New Orleans, LA
85	3	Augusta, GA
47	4	Jackson, MS
1	5	Detroit, MI
4	6	Philadelphia, PA
13	7	Baltimore, MD
32	8	St. Louis, MO
65	9	Baton Rouge, LA
40	10	Bakersfield, CA

†For each city included in the 2025 Asthma Capitals, AAFA obtained the poverty rate for its respective county. The estimates range from 7.2% to 26.9%.

Risk Factor: Lack of Health Insurance

Access to health care plays an important role in managing asthma symptoms, preventing exacerbations, and promoting better quality of life. For patients managing a chronic condition like asthma that requires medicine year-round, having insurance is often a big help. However, insurance itself can also be costly. These costs may vary depending on employment status and whether the job offers health insurance as a benefit and pays any of the costs. Other options include marketplace health insurance and government-sponsored insurance, like Medicare or Medicaid. Upcoming changes in coverage of public insurance may impact health insurance rates in future years. **These cities have the highest number of uninsured residents†:**

Overall Asthma Capital National Ranking	Lack of Insurance Ranking	Metropolitan Area
78	1	McAllen, TX
36	2	Dallas, TX
75	3	El Paso, TX
95	4	Houston, TX
80	5	San Antonio, TX
92	6	Cape Coral, FL
38	7	Miami, FL
60	8	Oklahoma City, OK
11	9	Lakeland, FL
70	10	Tulsa, OK

†For each city included in the 2025 Asthma Capitals, AAFA obtained the uninsured rate for its respective county. The estimates range from 3.1% to 30.2%.

Risk Factor: Lack of Access to Specialists

Successful asthma management requires coordination of care between the person with asthma and their health care team. In addition to a primary care doctor, a person with persistent asthma might need to be in the care of a specialist. Pulmonologists, allergists, and immunologists, for example, can provide specialized care for people with asthma and may have more experience treating patients with severe asthma or allergic asthma than a primary care physician. **These cities have the lowest ratio of asthma specialists to asthma patients†:**

Overall Asthma Capital National Ranking	Fewest Specialists Ranking	Metropolitan Area
40	1	Bakersfield, CA
6	2	Fresno, CA
24	3	Scranton, PA
19	4	Poughkeepsie, NY
11	5	Lakeland, FL
41	6	Riverside, CA
64	7	Ogden, UT
48	8	Palm Bay, FL
46	9	Las Vegas, NV
8	10	Albany, NY

†For each city included in the 2025 Asthma Capitals, AAFA obtained data on specialists per 10,000 asthma patients.

Risk Factor: Exposure to Air Pollution

Poor air quality can negatively affect everyone's health. Research shows that air pollution can make asthma worse and trigger asthma symptoms.[7] It also causes increased rates of emergency room visits, hospital admissions, and school absenteeism related to asthma. Air pollution includes gases, smoke from fires, volcanic ash, dust particles, emissions from transportation, and other substances that can harm the lungs. **These cities all received an F rating from the American Lung Association's 2025 State of the Air Report for high ozone days and particle pollution†:**

Overall Asthma Capital National Ranking	Metropolitan Area
17	Phoenix, AZ
6	Fresno, CA
40	Bakersfield, CA
26	Los Angeles, CA
41	Riverside, CA
14	Sacramento, CA
63	New Haven, CT
31	Washington, DC
61	Chicago, IL
43	Indianapolis, IN
1	Detroit, MI

Overall Asthma Capital National Ranking	Metropolitan Area
27	Albuquerque, NM
46	Las Vegas, NV
5	Cleveland, OH
4	Philadelphia, PA
83	Salt Lake City, UT
99	Provo, UT
64	Ogden, UT
62	Seattle, WA
82	Madison, WI
10	Milwaukee, WI

†For each city included in the 2025 Asthma Capitals report, AAFA obtained the grades for high ozone days and particle pollution for the respective county. Grades were averaged to produce an overall grade, ranging from A to F.

People spend about 90% of the time indoors, whether at school, home, or in the workplace.[8] Indoor air can be up to 5 times more polluted than outdoor air. Buildings can trap harmful air pollution and other asthma triggers inside.

Due to limited data at the MSA level, AAFA's Asthma Capitals report does not rank cities based on indoor air quality or housing quality as a risk factor for asthma. But this is a critical area to address in housing policy, building maintenance, school environmental policies, and workplace accommodations.

Climate Change-Related Threats Fuel Asthma Crises Nationwide:

- Warming climates foster longer growing seasons with more pollen—a major asthma trigger
- High temperatures (including heat waves) cause airways to tighten and narrow; raise levels of air pollutants like ozone and particulate matter; and trap air pollution at the ground level (smog)
- Cold temperatures irritate the airways and trigger asthma
- Extreme weather events like thunderstorms, hurricanes, and other windstorms cause bursts of pollen and can expose people to increased mold or small airborne particles
- Asthma-related ED visits increase when communities are exposed to wildfire smoke

Annual cases of asthma are expected to rise as the climate warms. This makes it more important than ever to support policy changes that mitigate the effects of climate change.

Risk Factor: Pollen Allergy

In the U.S., about 1 in 4 adults and 1 in 5 children have seasonal allergies such as pollen allergy.[9] Pollen is a common allergen that can cause allergic asthma (asthma triggered by allergens). **These cities have the highest pollen scores†:**

Overall Asthma Capital National Ranking	Pollen Ranking	Metropolitan Area
6	1	Fresno, CA
14	2	Sacramento, CA
58	3	San Jose, CA
30	4	Stockton, CA
40	5	Bakersfield, CA
86	6	Austin, TX
42	7	Memphis, TN
60	8	Oklahoma City, OK
80	9	San Antonio, TX
78	10	McAllen, TX

AAFA also releases an annual Allergy Capitals report using data from tree, weed, and grass pollen counts in cities across the country. Visit **allergycapitals.org** to learn how your city ranks and what to do if you live in an Allergy Capital and have pollen allergies. Wichita, Kansas, ranked #1 on the 2025 Allergy Capitals report.

†For each city included in the 2025 Asthma Capitals, AAFA obtained daily pollen counts for each growth form (tree, grass, and weed) for the most recent calendar year (2024). Data were obtained from Pollen Sense, LLC Automated Particulate Sensors (APS). These sensors automatically image particulate matter collected from ambient air and use a neural network algorithm to identify individual pollen species and calculate daily pollen counts. Using these daily pollen counts, AAFA calculated the number of days each MSA had within the "high" or "very high" levels for each growth.

Risk Factor: Smoking Cigarettes, Cigars, and Vapes

Tobacco smoke and e-cigarette aerosol can be especially harmful to people who have asthma. About 1 in 5 adults with asthma smoke tobacco products.[10] Smoking is not only harmful to the person doing the smoking but also to people nearby who inhale secondhand smoke or come into contact with thirdhand smoke. People with asthma are at greater risk of harm from tobacco products. Children who live with smokers have more frequent asthma attacks. More than 40% of children who go to the emergency department for asthma live with smokers.[11] **These cities do the least to protect their residents and visitors from tobacco smoke and have fewer smoke-free laws†, comparatively:**

Overall Asthma Capital National Ranking	Metropolitan Area
60	Oklahoma City, OK
70	Tulsa, OK
77	Chattanooga, TN
42	Memphis, TN
15	Harrisburg, PA
94	Knoxville, TN
50	Nashville, TN
23	Virginia Beach, VA

†For each city included in the 2025 Asthma Capitals, AAFA obtained data on whether there was a 100% smoking ban for cars with minors, non-hospitality workplaces, restaurants, bars, and multi-unit housing.

Risk Indicator: Asthma Medicine Use

Both control medicines (sometimes called "controllers") and quick-relief medicines (sometimes called "rescue inhalers") may be necessary for optimal asthma management.

Quick-relief medicines help relieve asthma symptoms as they happen. These medicines act fast to relax the constricting smooth muscles around the airways. This allows the airways to open up so air can flow through them.

Frequent use of a quick-relief medicine (like albuterol) may indicate a higher number of asthma episodes and lack of asthma control. **Quick-relief medicine use is highest in these cities†:**

Overall Asthma Capital National Ranking	Asthma Quick-Relief Medicine Use Ranking	Metropolitan Area
10	1	Milwaukee, WI
82	2	Madison, WI
90	3	Fayetteville, AR
57	4	Columbus, OH
20	5	Spokane, WA
49	6	Louisville, KY
83	7	Salt Lake City, UT
32	8	St. Louis, MO
99	9	Provo, UT
97	10	Winston-Salem, NC

†For each city included in the 2025 Asthma Capitals, AAFA obtained the total number of quick-relief medicine prescriptions for the respective census-designated metropolitan statistical area, or MSA, from 2024. Analysis included estimating the prescription rate per patient prevalence.

Control, or controller, medicines help prevent and control asthma symptoms. There are several kinds of asthma control medicines, including inhaled corticosteroids and biologics **(see page 27)**. Asthma control medicines are prescribed for persistent cases of asthma. A high number of these prescriptions may indicate that a city's residents have more severe or uncontrolled cases of asthma. **Asthma control medicine use is highest in these cities†:**

Overall Asthma Capital National Ranking	Asthma Control Medicine Use Ranking	Metropolitan Area
10	1	Milwaukee, WI
90	2	Fayetteville, AR
82	3	Madison, WI
63	4	New Haven, CT
57	5	Columbus, OH
49	6	Louisville, KY
97	7	Winston-Salem, NC
52	8	Bridgeport, CT
99	9	Provo, UT
88	10	Charlotte, NC

†For each city included in the 2025 Asthma Capitals, AAFA obtained the total number of controller medicine prescriptions for the respective census-designated metropolitan statistical area, or MSA, from 2024. Analysis included estimating the prescription rate per patient prevalence.

SPOTLIGHT: Access to Asthma Care

Managing asthma requires access to effective treatment, consistent medical care, and healthy environments. Yet many people struggle to access the care they need.

Where someone lives, the type of insurance they have, and the administrative rules that shape their health coverage all influence how well their asthma is managed. When care and services are out of reach, the consequences add up: delayed treatment, preventable emergency visits, and unnecessary hospital stays. Children lose learning time when they miss school, and adults risk job stability and financial strain when they miss work.

Barriers to asthma care and treatment contribute to significant differences in asthma outcomes that are captured in AAFA's Asthma Capitals report.

Specialists and Primary Care

Effective asthma management begins with access to the right clinicians and specialists. Many people with asthma rely on primary care doctors (or advanced practice providers like nurse practitioners or physician assistants). These clinicians often diagnose asthma, prescribe medicines, and offer an ongoing follow-up plan. But for many people—especially people with more severe or poorly controlled asthma or with a suspected allergic trigger—specialist care can make a significant difference. Allergists and pulmonologists can provide advanced diagnostic testing, offer advanced therapies, and create individualized management plans.

Yet access to specialist care varies dramatically. In rural areas, people may have to travel hours to see a specialist. Even in big cities, families can still struggle to find care if there aren't enough specialists in their neighborhood or if doctors don't accept their insurance, like Medicaid. Long wait times are common, sometimes stretching weeks or months.

AK

Specialist access is especially limited in Alaska, where many communities are remote and far from major health centers. Many communities are not connected to the road system, requiring residents to travel by plane or rely on medical evacuation flights to reach care. This can mean hundreds of miles of travel and costs that are often not fully covered by insurance. These barriers make it harder for people with asthma to receive timely diagnoses, advanced treatments, and the ongoing care they need to stay healthy. With only 9 board-certified allergists and immunologists practicing across the entire state, Alaskans with asthma often depend on primary care practitioners—such as pediatricians, family practice providers, nurse practitioners, and physician assistants—for care. Limited access to specialists means people with asthma may face delays in diagnosis and treatment. To help fill this gap, **AAFA Alaska Chapter** hosts an annual medical conference that brings nationally recognized experts to local providers. Now in its 20th year, the conference equips frontline clinicians with up-to-date training in asthma and allergy care and strengthens the quality of care available to people in the state.

Insurance Coverage

Most people in the U.S. get their health insurance in 1 of 3 ways:

- **Employer-sponsored coverage:** People receive insurance through their jobs, where their employer helps pay for it. Spouses and dependents can often be added to the coverage.
- **Government programs:** People receive insurance through programs like Medicare for adults 65 and older and some younger people with disabilities or chronic conditions, Medicaid for people whose household income is below certain limits (though each state gives its Medicaid program its own name), or TRICARE for military families.
- **Individual/marketplace plans:** People buy their own insurance coverage and pay for it themselves.

In an AAFA study of 804 adults with asthma, only 25% of respondents indicated they "always "used their asthma treatments as prescribed. The top reasons for lack of adherence were financial, including high medication costs, inability to afford treatment, and lack of insurance coverage.[12]

Insurance status is one of the strongest predictors of consistent access to asthma care. People without insurance or with limited coverage may struggle to access certain services and face steep costs for routine office visits, emergency care, and medicines. Even people with insurance often confront high deductibles and copays.

Asthma medications can be expensive, particularly newer, more targeted options. People with asthma may choose to ration their inhalers, delay refills, or skip doses to save money because they can't afford their asthma medications as prescribed. In some cases, families must choose between asthma medicine and other household expenses. These financial pressures lead to worse asthma control, higher risks of asthma attacks, and greater reliance on emergency care.

Recent changes to government insurance options like Medicaid may put people in this program at risk of losing coverage.

Medicaid Coverage

Medicaid offers a safety net for many people with asthma whose household income falls below certain government-set limits. Nearly half of all children with asthma get their health insurance through Medicaid, and adults on Medicaid are 2 times more likely to have asthma than adults with private insurance. Federal legislation passed in July 2025 will create new barriers to qualify for Medicaid and this may take that lifeline away for some people, or place additional burdens on these individuals to keep their coverage.

Nonpartisan projections indicate the Medicaid cuts imposed by the new law may result in around 16 million people losing health insurance coverage by 2034,[13] including nearly 2 million people with asthma. Experts also project other consequences:

- Rural hospitals will close faster.[14] Rural hospitals provide access to care and treatment for many people with asthma.
- With fewer hospitals/clinicians as a fall out from these cuts, even people on private insurance will experience adverse impacts to their care, including loss of access to treatment and a potential rise in emergency room visits.[15]

Medicaid cuts passed in the recent federal bill are expected to go into effect toward the end of 2026.

Although Medicaid cuts have not yet taken effect, experts warn they could undo recent progress in asthma care. This is especially concerning in **Detroit (#1 Asthma Capital)**, where **AAFA Michigan Chapter (AAFA-MI)** is leading a multi-year Health Equity Advancement and Leadership (HEAL) intervention. The program combines self-management education, access to specialty care, home environment assessments, and wellness support to help adults better control their asthma.

By the end of 2025, 90 Detroit-area residents will have taken part in the program. Most participants report high social and financial barriers—56% are on Medicaid, and 51% have household incomes below $25,000. Within just 6 months of being in the program, HEAL Detroit participants reported measurable improvements in asthma control, daily functioning, and quality of life:

- Asthma control: The number of participants with well-controlled asthma improved by 21%, jumping from 34% at baseline to 41% at 6 months of being in the HEAL program.
- Attendance (presenteeism): Consistent work and school attendance improved by 28%. At 6 months, nearly half of participants (46%) reported no missed work or school days, up from 36% at baseline.
- Less emergency care: More participants had fewer or no emergency room or unplanned health care visits. At 6 months, emergency room or unplanned health care visits decreased by 33%.

These results show how targeted investments in Detroit households are not only improving health outcomes today but also laying the groundwork for lasting community benefits—progress that is now at risk.

Formularies and Administrative Barriers

Even when people have health insurance, coverage does not guarantee full access to quality care and treatments. Health plans rely on formularies—the lists of medicines they will cover—and on rules that determine how and when those medicines can be dispensed. Insurance companies hire Pharmacy Benefit Managers (PBMs) to create formularies and manage these restrictions. PBMs are unique to the U.S. health care system.

PBMs operate as intermediaries between employers, insurance companies, drug companies, and pharmacies to help contain costs associated with prescription drugs to health plans, though PBMs' effectiveness at reducing costs is debated.[16] PBMs possess enormous bargaining powers. They use that power to decide which drugs are included on formularies, the level of patient cost-sharing (such as co-pays), and the rules around use. Additionally, insurers and PBMs are often owned by the same companies, giving them even more influence.[17] Three large PBMs control nearly 80% of the U.S. market.[18]

PBMs can set coverage policies using "utilization management" tools **(see page 23)**. This means they can:

- Require **step therapy ("fail first")**, forcing patients to try and "fail" lower-cost drugs before accessing newer treatments.
- Mandate **prior authorization**, delaying prescriptions until additional paperwork is provided and approved.

- Impose **quantity limits**, restricting how many inhalers a patient can receive per month or year (and in some cases, over a patient's lifetime).
- Force **non-medical switching**, where patients are switched to a different medication within the same drug class, sometimes without notice. Not all drugs within the same class work the same for everyone.

Formulary policies are intended to manage costs for health insurance companies and employers, but critics argue that PBMs contribute to high drug costs and limited access. Their focus on keeping monthly premiums low does not always match patients' need for affordable and consistent medications.

For people with asthma, this mismatch creates real obstacles: delays in treatment, interruptions in care, uncertainty about which drugs will be covered, denials that require lengthy appeals, and unpredictable out-of-pocket costs. These barriers can discourage patients from filling prescriptions or staying on their medications, leading to worse asthma control, more severe attacks, and higher long-term costs from preventable emergency visits and hospitalizations.

Research shows, for example, that sudden changes in available asthma inhalers have been linked to increased emergency department visits and hospital stays.[19] When coverage changes or access is delayed, patients who rely on a specific inhaler or biologic are often left scrambling to find alternatives.

Here's what it can mean for people needing certain types of medication:

- Your insurance might not cover a less expensive generic drug
- You might be forced to use a drug that doesn't work as well for you
- You could face higher out-of-pocket costs if you want the cheaper option

Here's what you can do:

- Ask your doctor if there's a less expensive alternative that's covered
- Check if your insurance has different cost-sharing for different pharmacies
- Look into patient assistance programs from drug companies
- Consider appealing your insurance's coverage decision if a cheaper option isn't covered

Lawmakers are starting to address this complicated system.[20,21] There is bipartisan support for increased transparency around how PBMs make money, ensuring that patients get the savings when drug companies offer discounts (or rebates), and preventing PBMs from charging different prices from different people.

Potential policy solutions include:

- Requiring PBMs to pass any cost savings negotiated as part of rebates directly to patients
- Increasing transparency in pricing and formulary design
- Limiting "fail first" and other restrictive coverage policies
- Ensuring patient and provider choice of medication within drug classes

These changes could help formularies focus more on helping patients get the medicine they need quickly and affordably, instead of just helping insurance companies and employers keep their costs low. To fix high drug prices in the U.S., everyone—insurance companies, drug makers, PBMs, employers, and lawmakers—needs to work together to put patients first.

The tragic death of 22-year-old Cole Schmidtknecht in Wisconsin sheds light on the human cost of PBM-driven pricing practices. Cole was prescribed a maintenance inhaler that helped keep his asthma under control for years. In January 2024, he was unable to afford his refill when the price jumped unexpectedly from around $70 to over $500. He died from asthma 11 days after leaving the pharmacy without his maintenance inhaler. His parents are now advocates for PBM reform.

PBMs—who act as intermediaries between employers, insurance companies, drug companies, and pharmacies—play a major role in deciding which medicines are covered, what people pay for their medicines, and whether generics or brand-name products are accessible. Drug companies give rebates or discounts calculated as a percentage of a medicine's list price in exchange for being included on a PBM formulary.

PBMs have an incentive to select costlier medicines because PBMs get paid for their services by keeping a portion of the rebate. Employers take their share of the rebate, too, so their health insurance expenses become lower. This creates misaligned incentives that can raise costs for people at the pharmacy counter since rebates are kept by the PBM and insurance company. For people who need medication the most, rebates could be used to reduce patient out-of-pocket costs, but rarely are.

When formularies exclude lower-cost generics, or when medications are suddenly reclassified, people can face abrupt and unaffordable price hikes. This is what happened to Cole.

In the wake of their loss, Cole's parents have turned their grief into advocacy. They are calling on lawmakers to reform PBM practices, increase transparency, and ensure that life-saving medicines like inhalers are accessible and affordable. Their story underscores why policy debates about formularies and PBMs are not abstract—they are questions of life and death for millions of people living with chronic conditions like asthma.

Cole with his mother, Shanon and father, Bil

Utilization Management

Insurers and PBMs use utilization management (UM) techniques that directly affect access. UM is a broad term that refers to tools an insurer might use to help ensure access to proper care and required services while controlling costs. There are several tools used for UM, including prior authorization, step therapy, quantity limits, and mid-year formulary changes.

Common Utilization Management (UM) Tools
UM is a broad term that refers to tools an insurer might use to help ensure access to proper care and required services while controlling costs

Tool	Definition	What It Can Mean for People with Asthma
Prior Authorization	A process that requires approval from the health plan (insurance company) before a service or prescription can be provided.	Delays in getting prescribed inhalers or biologics; treatment interruptions if paperwork is not renewed on time.
Step Therapy	A process that requires patients to "fail" on less expensive (often generic) drugs before getting access to newer, more expensive drugs.	Being forced to try older or less effective inhalers first; risk of worsening symptoms and more ER visits while waiting to access the right treatment; delay in access to newer treatments like biologics.
Quantity Limits	A restriction on the number of doses or prescriptions a patient can receive within a set period (month, year, or even lifetime), regardless of individual medical needs.	Running out of medication before the end of the month; not having enough inhalers on hand for emergencies; added stress about refills.
Mid-year Formulary Changes	Occurs when health plans or PBMs change their preferred drug(s) and/or remove coverage of existing treatments when new drugs come to market. These changes may also lead to non-medical switching, where patients are forced to switch medications for financial reasons rather than clinical ones.	Having to switch to a new inhaler or biologic suddenly, even if the current one works well; possible loss of asthma control due to differences in medication effectiveness or delivery devices.

Prior authorization is a common hurdle, requiring clinicians to submit extensive documentation before a prescription is approved. This is a way for the insurance company to double check that patients "meet criteria" for the medication as set. For example, they may require documentation of abnormal lung function testing before authorizing a prescription for an inhaled steroid for asthma. These requests can take days or weeks to process, and in many cases, they may need to be renewed every few months. The result is a cycle of paperwork and delays that interrupts continuity of care.

Step therapy, sometimes called "fail first," is a rule that dictates the order in which patients must try treatments. Often, this requires people to try lower-cost medicines before they can get the treatment their doctor originally prescribed. This is meant to make care more "cost-effective," but

it takes a one-size-fits-all approach. It can contain costs in the short term, but if a more severe case is forced to use less effective medicine just because of cost, it actually costs more over time because it delays more effective treatment, worsens asthma outcomes, and adds costs related to other non-medication services like emergency care or hospitalization.

For asthma, step therapy may force patients to start with older inhalers or oral medications before they are allowed to try newer inhalers or biologics—even when their doctor believes the newer option is best. If the cheaper medicines do not work, patients may get sicker, need more care, and still end up on the original prescribed treatment. The value of a medication is not always tied to its cost—a more expensive drug has more value (e.g., "more bang for the buck") if it works better to prevent poor outcomes in the short- and long-term than less expensive drugs. Sometimes the higher-cost option saves money overall by preventing serious attacks and avoiding costly hospital visits.

Biologics—advanced medicines that target the underlying inflammation causing asthma—illustrate this problem. Under many insurance plans, including Medicaid and Medicare, patients often cannot access biologics until their disease becomes more severe. But earlier access to biologics could help keep asthma under control and prevent it from progressing.[22] In the long run, that approach may save money, particularly in Medicaid populations where asthma tends to be more severe.

Quantity limits are another UM tool, which limits the number of inhalers or doses people can receive in a given month, regardless of their individual needs. This also may mean that 90-day supplies from mail-order suppliers of medications are preferred, making it harder to refill a medication on a monthly basis from a local pharmacy. Sometimes lifetime limits may even exist for certain products.

Mid-year formulary changes generally occur when new prescription drugs come to market and an insurer and/or PBM change their preferred drug and/or remove coverage of the existing treatment from their formulary altogether. Insurers and PBMs argue these changes are necessary to allow patients access to the most innovative and effective treatments. For patients, however, mid-year formulary changes may result in **non-medical switching (NMS)**. NMS happens when a patient and clinician are forced to change the prescribed treatment solely for financial considerations placed by the insurer. These switches often assume that one drug within a class can just be changed to another. While sometimes this practice makes no difference, other times, these drugs may not work equally as well, causing issues that result in the patient becoming sicker and needing additional care because of the switch.

In some cases, health plans combine UM strategies above in different ways. For example, **Specialty Administrative Drug (SAD)** lists are restrictive formularies used by many insurers, including Medicare. These lists often require prior authorization or step therapy. For people with asthma, this may mean delays in getting the right inhaler, biologic therapy, or combination medicine—even if the doctor prescribes it immediately. This barrier can be especially problematic in severe asthma, where timely initiation of biologics is critical.

Together, these UM restrictions may leave people with asthma more vulnerable to uncontrolled symptoms and sudden flare-ups because of difficulties in getting the right medication.

Because each state program (like Medicaid) and each private insurer sets its own rules, access varies widely across the country. A person in one state may face multiple rounds of denials before accessing a biologic, while a person with the same condition in another state may get approval quickly. This patchwork system contributes to unequal asthma outcomes from one community to the next.

Benefit Design and Cost Sharing

Even when asthma medicines are covered by insurance, the way health plans are designed often determines whether people can actually afford them. Benefit design refers to the rules that set patient costs—through deductibles, copays, coinsurance, and coverage tiers. These structures have a direct effect on whether people with asthma can fill prescriptions or keep up with ongoing treatment.

Common Benefit Design and Cost Sharing Tools
Benefit design refers to how health plans structure costs for patients, which can affect whether people can afford their prescribed asthma treatments

Tool	Definition	What It Can Mean for People with Asthma
High-Deductible Health Plans (HDHPs)	Plans that require patients to pay thousands of dollars out-of-pocket before coverage begins.	Patients may need to pay the full cost of inhalers or biologics up front, leading some to delay or skip filling prescriptions.
Tiered Formularies	Drugs are grouped into tiers (generic, preferred brand, non-preferred brand, specialty), each with different copay or coinsurance levels.	Effective or necessary asthma medicines may fall into higher tiers, leaving patients with much larger monthly costs.
Copay Accumulators	Programs that prevent manufacturer coupons or assistance from counting toward a patient's deductible or out-of-pocket maximum.	Patients believe they are making progress toward meeting their deductible, only to face full drug costs once assistance runs out.
Copay Maximizers	Programs that redirect the maximum value of manufacturer assistance to the insurer rather than reducing patients' long-term costs.	Patients may not directly benefit from manufacturer coupons and still face high costs after assistance is applied.

These policies lead to a cycle of skipped doses, rationed inhalers, or delayed refills—decisions that can worsen health outcomes and lead to costly emergency care visits.

Federal legislation passed in July 2025 makes significant changes to cost-sharing in Medicaid and private coverage. For adults enrolled through Medicaid expansion, states are now required to impose copayments of up to $35 per service, a shift that increases out-of-pocket expenses for many low-income individuals who previously had little or no cost sharing.[23] The law also introduces more frequent renewal and reporting requirements, raising the risk that people may temporarily lose coverage and face higher costs for care. In the private market, the new law allows people with high-deductible health plans to use Health Savings Accounts (HSAs) to pay for direct primary care (DPC) memberships, and it permits these plans to cover DPC services before the deductible. While this may make routine care more predictable and affordable for some, the law overall creates new financial burdens for Medicaid enrollees while offering more flexibility to higher-income populations with HSAs.[23]

Pharmacy and Supply Chain Challenges

Beyond insurance, pharmacy access creates additional barriers for people with asthma. Independent and community pharmacies, especially in rural or medically under-resourced areas, may not carry specialty inhalers or biologic medicines. Patients are often directed to mail-order or specialty pharmacies instead, which can mean delays in starting treatment or interruptions in therapy. Patients may also face challenges coordinating refills, shipping schedules, or prior authorizations.

The fragility of the drug supply chain further complicates access. There have been several instances of albuterol shortages in the U.S. in recent years.[24] Other shortages, such as certain inhalers or steroid medications, have also added strain to patients. These shortages highlight how even patients who follow their treatment plans and have insurance coverage remain vulnerable to disruptions outside their control.

Looking ahead, experts warn that consolidation among pharmacy chains, reliance on international suppliers, and increasing pressure on independent pharmacies may make these problems worse. For people with asthma, stable and timely access to medications is critical. Ensuring a more resilient supply chain and protecting community-based pharmacy access are critical steps to prevent gaps in care.

Addressing Access Barriers Through Policy Solutions

Making asthma care better means finding ways to help people get the treatment they need while also keeping costs under control. Many different groups are involved in this problem: patients, doctors, insurance companies, PBMs, lawmakers, and drug companies. Each group sees the problem differently and has their own ideas about solutions.

Here are some approaches that could help make asthma care better:

- **Making paperwork easier:** Right now, doctors must fill out many forms to get medicines approved for patients. We could make this process faster while still making sure patients get safe, appropriate care. For example, by reducing prior authorization requirements and step therapy mandates.
- **Making prices clearer:** Patients and doctors often don't know how much medicines will cost until they go to the pharmacy. Making prices easier to understand could help people plan better. For example, by improving PBM rebate transparency and formulary decision disclosure.
- **Paying for results, not just services:** Instead of just paying doctors and hospitals for each visit or test, we could pay them more when patients actually get healthier. For example, by implementing value-based payment models and outcome-linked reimbursement.
- **Getting more specialists to areas that need them:** Many places, especially rural areas, don't have enough asthma specialists. We need to find ways to get more doctors to these places or use technology to help patients connect with specialists far away. For example, by addressing provider shortages in medically underserved areas and expanding telemedicine access.
- **Making sure medicines are always available:** Sometimes important asthma medicines run out or become hard to find. We need better planning to prevent these shortages. For example, by strengthening pharmaceutical supply chain resilience and taking steps to prevent drug shortages.

The best solutions will come when all of these different groups work together. Each stakeholder must keep patients' needs at the center while also making sure the health care system can keep working for everyone who needs it.

SPOTLIGHT: Biologics For Asthma

Asthma affects people in different ways. For some, quick-relief inhalers and daily controller medicines are enough to keep symptoms under control. For others, asthma remains difficult to manage even with multiple medicines, leading to frequent flare-ups, missed school or work, and visits to the emergency department or hospital stays.

In recent years, a new class of treatment called biologics has become available for people with moderate-to-severe asthma. These medicines are not for everyone, but for certain people, they can make a meaningful difference in reducing symptoms, improving quality of life, and lowering the need for oral steroids.

Biologic drugs (or biologics) are specifically designed antibodies, which are proteins that are designed to block specific molecules in the human body. Asthma biologics work by disrupting cells or blocking specific molecules that trigger inflammation. Most biologics can be taken at home or given in a doctor's office every 1 to 8 weeks. They are given through an injection (shot) or intravenously (through an IV).

As of 2025, there are 6 biologics approved by the FDA for asthma—Xolair, Nucala, Fasenra, Cinqair, Dupixent, and Tezspire. Additional drugs are under development and may be available soon.

Biologic Treatments Available for Asthma

	OMALIZUMAB (XOLAIR)	MEPOLIZUMAB (NUCALA)	BENRALIZUMAB (FASENRA)	RESLIZUMAB (CINQAIR)	DUPILUMAB (DUPIXENT)	TEZEPELUMAB-EKKO (TEZSPIRE)
Asthma Indication	Moderate-to-severe asthma and positive allergy test to perennial aeroallergen (allergic asthma)	Severe eosinophilic asthma	Severe eosinophilic asthma	Severe eosinophilic asthma	Moderate-to-severe eosinophilic asthma and OCS-dependent asthma	Severe asthma
Approved Ages	6+	6+	6+	18+	6+	12+
Mode of Administration	Subcutaneous injection (shot)	Subcutaneous injection (shot)	Subcutaneous injection (shot)	Intravenous infusion (IV)	Subcutaneous injection (shot)	Subcutaneous injection (shot)
Setting of Administration	Clinic or home	Clinic or home	Clinic or home	Clinic	Clinic or home	Clinic or home
Dosing Interval	Every 2-4 weeks	Every 4 weeks	Every 4 weeks for the first 3 doses, then every 8 weeks	Every 4 weeks	Every 1-4 weeks	Every 4 weeks
Molecule/ Target	IgE /Anti-IgE monoclonal antibody	IL-5/Anti-IL-5 monoclonal antibody	IL-5 receptor/ Anti-IL-5 receptor monoclonal antibody	IIL-5/Anti-IL-5 monoclonal antibody	IL-4 and IL-13/ Anti-IL-4R alpha monoclonal antibody	TSLP/Anti-TLSP monoclonal antibody

Abbreviations used: immunoglobulin-E (IgE), interleukin (IL), oral corticosteroids (OCS), thymic stromal lymphopoietin (TSLP). This table highlights only the asthma indications for these biologic medicines. Many of these drugs are also approved to treat other conditions, including food allergy, chronic urticaria, eczema, nasal polyps, and more.
Updated: September 2025

Who Is a Good Candidate for Biologic Treatment?

Biologics are a type of controller treatment. They are meant for people with moderate-to-severe asthma that remains uncontrolled despite standard asthma treatment, based on current care guidelines.

Asthma may be uncontrolled in people who:

Have asthma symptoms more than 2 times a week	Wake up at night with asthma symptoms more than 2 times a month	Need a reliever ("rescue") inhaler for symptoms more than 2 times a week	Need to take oral corticosteroids more than 1 time a year	Are not able to carry out their usual activities without difficulty breathing

Biologics are an add-on treatment. This means they are taken together with routine asthma controller medicine, like an inhaled corticosteroid. Over time, some people may be able to reduce their inhaled corticosteroid use. Asthma biologics do not replace quick-relief (rescue) medicines, such as albuterol. Biologics are not quick-relief medicines and will not work to stop an acute attack or symptoms.

By tailoring treatment to focus on the underlying biology that is driving asthma, biologics are a step toward "personalized medicine." This means care can be better matched to an individual's needs. Biologics can better target the areas of inflammation, often causing fewer side effects than broader drugs such as oral steroids.

What Are the Benefits and Potential Risks of Biologics?

There are many potential benefits of using a biologic to treat asthma. They include:

- Fewer asthma episodes and symptoms
- Fewer asthma-related trips to the emergency room or hospital stays
- Decreased use of oral corticosteroids (like prednisone)
- Lower dosage of other controller medicines (if recommended by a doctor)
- Improved lung function

Even though biologics are safe and work well for most people, side effects are still possible. This is true for all medicines and treatments. Common side effects of biologics include:

- Headache
- Local reaction where the biologic is injected
- Sore throat
- Tiredness (fatigue)
- Joint pain
- Skin rash

It is important for people with asthma to discuss the benefits and risks of treatment with their health care team. Oral corticosteroids (like prednisone) may cause significant short- and long-term side effects.[25] Biologics have fewer serious side effects than prednisone and should be considered for people who have uncontrolled asthma.[26]

In rare cases, biologics can also cause a serious allergic reaction called **anaphylaxis**. Certain treatments, like Xolair, have a black box warning.

What Are the Different Types of Moderate-to-Severe Asthma?

There are many types of asthma. Moderate-to-severe asthma can generally be categorized by **"type 2" (T2) inflammation** and "non-type-2" inflammation.

Eosinophilic asthma and **allergic asthma** are caused by type 2 inflammation. People with eosinophilic asthma have high levels of white blood cells called eosinophils. People with allergic asthma have an overly active immune response to common allergens, like dust mites or pollen. Eosinophilic and allergic asthma can overlap.

Non-type-2 asthma is also called non-eosinophilic asthma. Eosinophils are not present in the airway. Different types of white blood cells build up and cause inflammation. People with this type of asthma usually do not respond to typical asthma treatments.

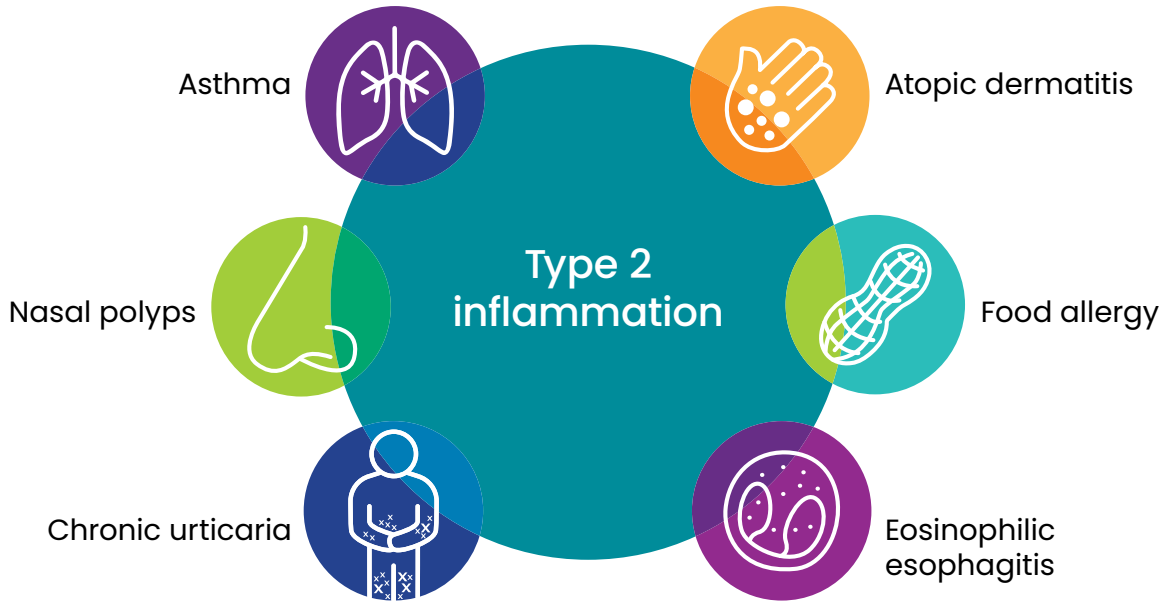
Currently, 6 biologics are approved by the FDA for moderate-to-severe asthma. Xolair is approved for allergic asthma. Nucala, Fasenra, and Cinqair are approved for eosinophilic asthma. Dupixent may work for type 2 asthma more broadly (allergic and eosinophilic). Tezspire may work for both type 2 and non-type-2 asthma.

Biomarkers can help identify the type of asthma. Examples of asthma biomarkers are IgE antibodies, eosinophils, and **fractional exhaled nitric oxide (FeNO)**. These biomarkers may be measured through blood or mucus samples or breathing tests. Certain biologics have biomarkers which allow a clinician to follow how well a person's asthma is responding to treatment.

What Role Does Inflammation Play?

Several conditions are driven by T2 inflammation.[27] Many biologics approved for asthma are also approved for other conditions that are driven by the same inflammation. For example, some can treat multiple conditions such as eczema, asthma, nasal polyps, and hives (among others).

Biologics work by disrupting cells or blocking specific molecules that trigger inflammation.



SPOTLIGHT: Health Equity

The Asthma Capitals report acknowledges that where a person lives can significantly impact their health. Social, economic, and environmental disadvantages play a role in determining asthma outcomes. Many of the top Asthma Capitals are also facing major challenges and inequities that lead to health disparities.

To shine a light on these issues, AAFA released the **Asthma Disparities in America** report in 2020. That report detailed wide gaps in asthma prevalence, access to care, and health outcomes, and offered strategies to address racial and ethnic inequities.[28]

Building on those findings, AAFA launched its **Health Equity Advancement and Leadership (HEAL)** initiative in 2022. HEAL is designed to reduce asthma deaths and illness among high-risk populations by pairing AAFA's national leadership with the knowledge and action of local communities. HEAL strengthens AAFA's commitment to narrowing health gaps in the places that carry the highest burden of asthma.

Through HEAL, AAFA has invested in local programs across the U.S. that improve health, reduce asthma symptoms, and enhance quality of life for people most affected by asthma and allergic diseases.

Timeline of AAFA support through HEAL grants:

- 2022–2023: First round of funding supported programs in **Detroit**, **St. Louis**, **Los Angeles**, and **Chicago**.
- 2023–2024: Expanded support included new programs in **New York City** and **Alabama**, along with a second round of investment in **Detroit**.
- 2025–2026: Third round of funding added three more efforts; a new program in **Allentown**, and statewide expansion of the Detroit program across **Michigan**, and additional resources for the **New York City** program.

AAFA's 2022-2026 HEAL Grant Recipients:

HEAL
HEALTH EQUITY
Advancement and Leadership

Detroit (#1 Asthma Capital): Led by the AAFA Michigan Chapter, the HEAL Detroit program delivers a holistic asthma management intervention. Participants receive comprehensive asthma self-management education, are connected with both an asthma specialist and a nutritionist, and undergo a virtual home environmental assessment conducted by a certified community health worker. Additional support includes healthy food boxes, virtual or in-person gym memberships, and asthma-friendly products for the home. In the third round of HEAL funding, this program was expanded statewide to serve people with asthma across Michigan.

Allentown (#3 Asthma Capital): Developed by the Health Promotion Council of Southeastern Pennsylvania (HPC), the EASE Allentown (Empowering Asthma Self-Management and Education) program uses an innovative outreach approach, working alongside the local health department and emergency medical services to serve older adults living with asthma and other chronic health conditions.

New York City (#25 Asthma Capital): Led by AIRnyc, the HEAL New York City program engages community health workers to deliver culturally relevant asthma care to Hispanic residents in the Bronx and surrounding areas. In many high-poverty neighborhoods of the South Bronx—where the majority of residents are Hispanic or Black—asthma death rates and overall burden remain consistently higher than in the rest of the city.

Los Angeles (#26 Asthma Capital): Led by Breathe Southern California (Breathe SoCal), the **Breathe Easier™ Asthma Management (BEAM)** program supports adults with asthma in medically under-resourced communities in Southeast Los Angeles County. Services include asthma education and home visits with trained asthma educators. When California's Department of Health Care Services launched CalAIM (California Advancing and Innovating Medi-Cal), BEAM expanded to include asthma home remediation services delivered by community-based organizations.

St. Louis (#32 Asthma Capital): In collaboration with the Foundation for Asthma and Allergy Impact and Rescue (AAIR) and St. Louis Oasis, the HEAL St. Louis program focused on adults aged 50 and older with asthma. The initiative provided group asthma management education in both virtual and in-person formats, along with home visits to help remediate asthma and allergy triggers.

Chicago (#61 Asthma Capital): Led by the American Lung Association (ALA) in Greater Chicago, the Environmental Improvements for Adolescents and Adults with Asthma (EIAAA) program offered asthma education, home visits, and resources for families managing asthma in the Chicago area. AAFA and ALA are also active members of the **Chicago Asthma Consortium**, further aligning efforts to improve asthma care across the city.

Alabama: Led by the Virtual Young Teen Asthma & Wellness Camp and the Alabama Asthma Coalition, the HEAL Alabama program was the first statewide HEAL initiative. The program expanded an existing virtual model by adding in-home asthma management visits and enhanced health education. The program also developed a community health worker network to address rural health disparities. This work is carried out alongside schools, local and state health departments, and other organizations and partners across Alabama.

Though each program site is conducting different interventions, the programs feature similar components that are proven to improve asthma outcomes and health: care coordination and support; asthma self-management education; environmental home assessment and tools; general health and wellness; and other tools and resource connections.

Impact

Though the HEAL interventions are ongoing, enrollment and evaluation data to date show that HEAL is reaching and serving people experiencing a disproportionate burden of asthma. HEAL intentionally supports populations most affected by asthma disparities—including Black and Hispanic communities, as well as those who have low-income or rely on Medicaid. Current HEAL site participant data highlight this focus:

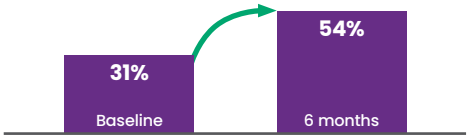
- 49% identify as Black or African American; 34% as Hispanic or Latinx
- 78% identify as women
- 53% report an annual household income of less than $25,000
- 60% receive Medicaid
- 24% receive Medicare

Across all HEAL sites, program participants complete a voluntary self-reported survey at baseline, and then again once they had been in the program for 3 months, 6 months, and 12 months. The survey collects data including:

- Asthma severity and control
- Quality of life
- Asthma care experience (health care team, treatments, etc.)
- Asthma management self-confidence
- Social determinants of household health needs (transportation, safe housing, etc.)

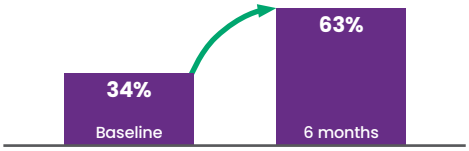
Within just 6 months, HEAL participants reported measurable improvements in asthma control, daily functioning, and quality of life. Key self-reported outcomes include*:

Well-Controlled Asthma



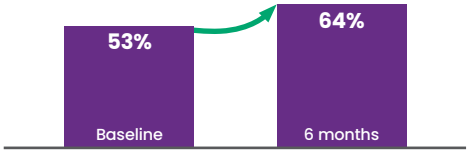
Report "well-controlled" asthma

Confidence in Asthma Management



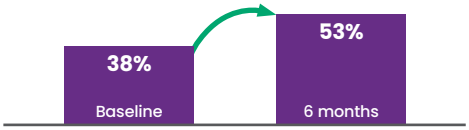
Are "very sure" they know how to manage their asthma overall

Consistent Work and School Attendance



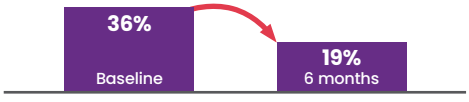
Report no missed school or work days

Full Engagement in Work or School



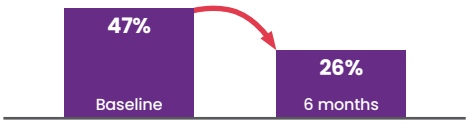
Report no days where asthma made job or school tasks difficult

Fewer Unplanned Visits to Health Care Providers



Report unplanned ER and health care provider visits in the last year

Less Daily Use of Rescue Inhalers or Nebulizers

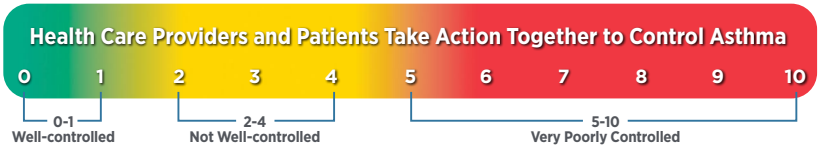


Report using their rescue inhaler or nebulizer every day

**Data as of August 21, 2025; n=118 participants who completed both the baseline and 6-month survey*

Validated assessments confirm these self-reported improvements. Using the Asthma Impairment and Risk Questionnaire (AIRQ™), participants' average scores improved from 4.1 at baseline to 2.8 at 6 months, showing a clear shift toward better asthma control.

AIRQ: Validated Tool for Asthma Control



Average baseline score: **4.1**
Average 6-month score: **2.8**

**Data as of August 21, 2025; n=118 participants who completed both the baseline and 6-month survey*

HEAL provides measurable health equity benefits—improving asthma control, restoring productivity, and helping more people with asthma live healthier, fuller lives.

Beyond HEAL Grants

In addition to providing funding and support to community-based organizations leading interventions on the ground, AAFA also leads other pilot projects and programs as part of our larger HEAL initiative:

- **Philadelphia (#4 Asthma Capital) –** The HEAL Philadelphia project aims to improve specialty care access for medically underserved patients. The pilot will employ a patient coordinator and community health workers to assist with appointment scheduling, reducing transportation barriers, and providing asthma education support.
- **Texas, including Dallas (#36 Asthma Capital) –** The HEAL Texas project aims to reduce Dallas-Fort Worth's high asthma burden (8.4% adult rate and 23.6% uninsured rate) through a free initiative that provides AI-powered respiratory monitoring, care coordination, and support services, including air purifiers, basic needs assistance, and AAFA's patient education materials. See **page 34** of the report for more details.
- **Denver (#69 Asthma Capital) –** The HEAL Denver project is an initiative studying pediatric asthma health disparities in the Globeville and Elyria-Swansea (GES) neighborhoods in North Denver. The project includes engaging local stakeholders and hosting an asthma roundtable. The project aims to identify barriers to asthma care and create practical solutions that advance health equity for children with asthma in the GES community.

AAFA's Health Equity Advancement and Leadership (HEAL) initiative is made possible through generous financial support from the **American College of Allergy, Asthma & Immunology**, **Amgen**, **AstraZeneca**, **Chiesi**, **Genentech**, **Novartis**, **Sanofi**, **Regeneron**, and **Viatris**. We are deeply grateful for their commitment to advancing health equity and improving asthma outcomes for communities that are most impacted.

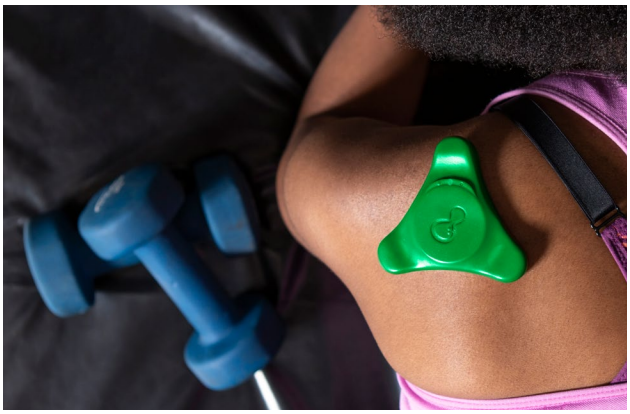
AAFA also thanks our **Asthma & Allergy Friendly®** Certification Program partners for their generous product donations that support families participating in HEAL programs:

- **Pegasus Home Fashions –** 230+ pillow sets
- **Rabbit Air –** 300+ air purifiers
- **Renegade Brands –** 930+ bottles of detergent

SPOTLIGHT: Bringing Innovation to Texas, Addressing High Asthma Burden

Dallas-Fort Worth ranks #36 in the most challenging places to live with asthma in the United States. In Dallas County, 8.4% of adults live with asthma, compared to the state average of 7.9%. The uninsured rate of 23.6% in Dallas was the second highest of all 100 cities analyzed in the Asthma Capitals report, creating significant barriers to asthma care for residents with limited or no access to health insurance.

As part of AAFA's Health Equity Advancement and Leadership (HEAL) initiative, AAFA is supporting the Dallas-Fort Worth community with the launch of HEAL Texas. This innovative collaboration with Health Care Originals (HCO), Genentech, and Rabbit Air addresses the unique challenges faced by adults living with asthma who have historically been left to manage their condition without adequate support.



The ADAMM wearable device measures health parameters for asthma and connects with the Nightingale platform.

The HEAL Texas program connects individuals to HCO's Nightingale Virtual Respiratory Care platform, which employs AI and a patented wearable device called ADAMM that lets individuals track symptoms like coughing and wheezing, helping to manage respiratory attacks early on. The platform includes a mobile app and network of pulmonologists, respiratory therapists, mental health therapists, and health coaches who give each individual personalized, holistic care. Nightingale also provides essential items through participation in the program, including Wi-Fi access, pest control, and food security.

To help improve indoor air quality and reduce exposure to asthma and allergy triggers, participants will also receive an Asthma & Allergy Friendly Certified air purifier and replacement filter from Rabbit Air, which has been an early supporter of AAFA's HEAL programs.

AAFA consistently hears from the Dallas-Fort Worth community about the barriers to asthma care for people with limited or no access to health insurance. The HEAL Texas program represents AAFA's continued commitment to addressing health disparities in communities that bear the heaviest burden of asthma.

The HEAL Texas program is made possible through support from **Genentech**. We thank Genentech for their leadership and dedication to reducing health disparities and improving asthma outcomes. We also thank **Health Care Originals** and **Rabbit Air** for their collaboration and contributions to this program.

SPOTLIGHT: Asthma & Allergy Friendly® Certification Creates Lasting Community Impact

Each year, the Asthma and Allergy Foundation of America (AAFA) releases the Asthma Capitals report to highlight the U.S. cities where it is most challenging to live with asthma. The ranking draws attention to the role that environment, access to care, and community resources play in shaping asthma outcomes. The report reminds us that solutions need action not just from health systems and policymakers, but also from companies whose products and services affect everyday life.

AAFA and Allergy Standards Limited (ASL) created the **Asthma & Allergy Friendly®** Certification Program to give families confidence in products tested to reduce exposure to asthma and allergy triggers and improve indoor air quality. Many of the companies behind these Certified products are extending their impact beyond the marketplace, investing in philanthropy and community initiatives that address asthma at its roots.

We are proud to work with manufacturers that demonstrate a commitment to science-backed products, meaningful community engagement, and leadership in environmental, social, and governance responsibility. From supporting wildfire recovery efforts with cleaner air solutions to helping schools and community centers create healthier indoor spaces, these initiatives show how corporate giving can contribute to better outcomes for families across the nation's most burdened communities.

3M Filtrete™: Improving Indoor Air Quality Where Families Need It Most

Filtrete™, developed by 3M, continues to demonstrate a strong commitment to creating healthier living environments for families affected by asthma and allergies. In 2024, the company donated more than 175,000 Certified **Asthma & Allergy Friendly** air filters to organizations nationwide. These donations supported communities recovering from wildfires, improved indoor air quality in low-income housing, and advanced education on clean air in medically under-resourced areas.

George Oliphant of George to the Rescue with AAFA CEO Kenneth Mendez

Beyond large-scale donations, 3M also brings its mission to life through community-based initiatives. Through partnership with George to the Rescue, 3M contributed to a home transformation and provided Filtrete air filters for the Fruhschein family, whose children live with asthma and allergies. The project ensured a healthier indoor space-highlighting how Certified products can make a tangible difference in daily life.

Headquartered in **Minneapolis (#53 Asthma Capital)**, 3M also invests in its local community and beyond, reinforcing its role as both an innovation leader and a philanthropic partner dedicated to improving indoor air quality for those who need it most.

Rabbit Air: Cleaner Air for Local Communities

Rabbit Air has made philanthropy and community giving a central part of their mission. For more than a decade, the company has worked alongside AAFA and the **Asthma & Allergy Friendly** Certification Program to support vulnerable populations affected by asthma and other respiratory conditions. From national programs to local initiatives, Rabbit Air's generosity reflects a deep commitment to health equity and cleaner indoor air for all.

When AAFA's Health Equity Advancement and Leadership (HEAL) program launched in 2022, Rabbit Air was among the first companies that supported the program with product donations. In total, Rabbit Air has provided over 300 Certified **Asthma & Allergy Friendly** air purifiers to HEAL participants Detroit, Los Angeles, St. Louis, Chicago, and Alabama.

"Thanks to Rabbit Air's generous donations, many families in AAFA's HEAL program and beyond can now enjoy the benefits of a high-quality air cleaner," shared Lynne Bosma, health equity director at AAFA. "These contributions have made a meaningful difference in helping people reduce exposure to asthma and allergy triggers, improving health outcomes and quality of life."

Beyond HEAL, Rabbit Air has partnered with AAFA and the Certification Program to deliver air purifiers to asthma clinics at leading pediatric hospitals. Donations have supported the Children's Hospital of Philadelphia Community Asthma Prevention Program, Children's National IMPACT DC Asthma Clinic, and Rady Children's Hospital in San Diego. These efforts ensure that children receiving care in high-risk communities have access to air purifiers that are scientifically tested to reduce exposure to asthma and allergy triggers.

June, a HEAL Program participant, receives a Certified air purifier from Rabbit Air

Headquartered in the **Greater Los Angeles area (#26 Asthma Capital)**, Rabbit Air has also responded to the region's pressing air quality challenges, including devastating wildfires. The company has strengthened ties with community organizations such as Breathe Southern California (Breathe SoCal) and worked directly with the City of Los Angeles, earning public recognition for its contributions. These initiatives highlight Rabbit Air's dedication to supporting its local community through both philanthropy and direct engagement.

"Clean air shouldn't be a luxury—it's a necessity," said Tamina O'Brien, senior team member at Rabbit Air. "We're proud to continue working with AAFA to bring clean air to communities that need it most. Supporting families affected by asthma through healthier indoor environments is a cause we deeply believe in."

Knauf: Supporting Chicago's Community Health Workers

In **Chicago (#61 Asthma Capital)**, Knauf North America, a manufacturer of Certified **Asthma & Allergy Friendly** insulation products, sponsored a unique initiative that placed education and empowerment at the center of asthma care. On June 27, the Chicago Asthma Consortium (CAC) hosted the "Building Knowledge, Building Health" forum for more than 100 community health workers (CHWs).

During the event, attendees packed 500 bags filled with asthma-related educational materials and resources that were distributed throughout Chicago schools, clinics, and community centers. The initiative was designed to equip frontline health workers with practical tools to help families manage asthma.

"Knauf is proud to support the Chicago Asthma Consortium and their critical work in asthma education and outreach," said Tim Cofran, Director of Marketing at Knauf. "Community Health Workers are everyday heroes, making a real difference in the health of underserved communities. We're grateful to support their efforts to strengthen neighborhoods, promote healthier living environments, and drive better outcomes for families."

"Through this collaboration, we were able to access and share valuable resources for healthy environments for vulnerable populations and further raise awareness about Certified products and practices that reduce asthma and allergy triggers in homes, schools, and community settings," said Rachelle Paul-Brutus, Executive Director of the Chicago Asthma Consortium. "Our vision behind this forum was to create a platform where CHWs are able to network, learn from each other, share experiences and encourage each other. They are the "Superheroes" for the most vulnerable and the CAC believes that we ought to give them the tools and the platform to be successful."

The initiative was inspired by Dr. Sharmilee Nyenhuis, Chair of the CAC Community Advisory Board, who has previously worked with the Certification Program on air quality research. Her vision and leadership helped bring this collaborative effort to life.

"Partnering with the Certification Program for the Chicago Asthma Consortium's Community Health Worker Forum has reinforced my belief in the power of community-driven health solutions," said Dr. Sharmilee Nyenhuis. "By equipping asthma community health workers with the tools and knowledge they need, we empower them to be catalysts for change—advocating for healthier homes and environments."

Kleenex® Air Filters: Helping Communities Impacted by the Los Angeles Wildfires

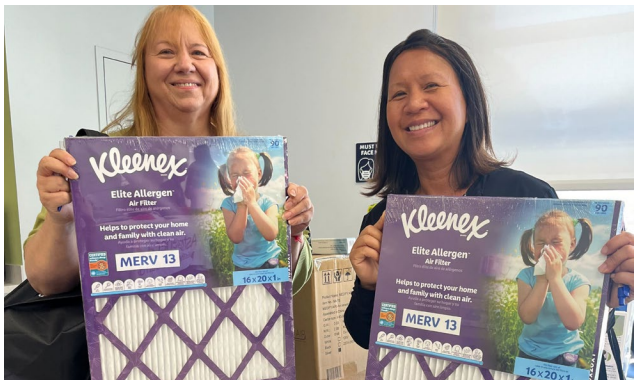
Kleenex®, a Kimberly-Clark brand with a line of air filters that meet the standards of the **Asthma & Allergy Friendly** Certification, is making a meaningful difference in California communities disproportionately affected by wildfires in **Los Angeles (#26 Asthma Capital)**. Kleenex donated newly certified Kleenex Elite Allergen MERV 13 Air Filters to support health-focused outreach.

The donated filters were facilitated through Breathe Southern California (Breathe SoCal), a nonprofit dedicated to improving lung health in medically under-represented communities.

Breathe SoCal distributed the filters during community health events communities, including a World Asthma Day fair, ensuring families in medically underserved neighborhoods had access to healthier indoor air solutions. Local leaders expressed gratitude, recognizing the importance of these resources in the wake of wildfires and seasonal allergen spikes.

"This thoughtful contribution will go a long way in ensuring the health and well-being of our community members in Southern California," said Gilmar Flores of Breathe SoCal.

The philanthropic gesture was particularly timely given the respiratory challenges many people with asthma and allergies face due to wildfire smoke and seasonal allergens.



National Allergy: Education, Engagement and Healthier Homes

National Allergy has long been a trusted resource for people managing asthma and allergies. They have provided educational materials to board-certified allergists to help educate patients, including practical tips and information on healthy home solutions. Patients also benefit from discount codes and product samples, making it easier to take proactive steps toward healthier living.

The company also partners with insurers such as Blue Cross and Blue Shield across the country, including several Asthma Capitals, providing educational emails and allergen-control product donations like pillow, mattress, and comforter covers.

Philanthropy and community engagement remain central to their mission. National Allergy has donated Certified products to support certification program events such as the AAAAI Annual Meeting, the largest gathering of asthma and allergy clinicians, and a recent Chicago event for community health workers. They have also contributed clean living personal care products and allergen-barrier bedding to Samuel's House, a shelter for women, children, and families in Key West, Florida. Together, these efforts show how everyday essentials, from fragrance-free products to allergen-proof bedding, can bring meaningful relief for families living with asthma and allergies.

Renegade Brands: Investing in Health Equity and Cleaner Environments

Renegade Brands has aligned its giving with AAFA's HEAL program, which works to reduce asthma disparities in communities across the country. To date, Renegade has donated more than 900 bottles of its **Asthma & Allergy Friendly** Certified Sweat-X Free & Clear laundry detergent to the HEAL initiative. These donations have supported families in cities such as Chicago, Detroit, and Los Angeles—areas where asthma rates are disproportionately high and access to resources can be limited.

In addition to its community donations, Renegade has engaged directly with the medical community. At major professional meetings including the American Academy of Allergy, Asthma & Immunology (AAAAI) and the American Academy of Dermatology (AAD), Renegade provided samples of its Certified laundry detergent to allergists, dermatologists, and other health care professionals. This outreach helps clinicians better understand the benefits of Certified products and share practical solutions with their patients. Renegade has also served over 10,000 senior living residents with certified detergent, offering healthier laundry care for those that are most vulnerable and received the Leadership in Senior Care Laundry Solutions from the certification program.

By supporting both families and health professionals, Renegade demonstrates a commitment to advancing health equity and raising awareness about healthier everyday choices.

A special thank you to our partners who donated Certified **Asthma & Allergy Friendly** products for the 2025 AAAAI Annual Meeting in San Diego, helping to showcase how science-backed solutions can make a difference: 3M Filtrete, Benjamin Moore, Blueair, Downlite, Kleenex Air Filters, Knauf Insulation, National Allergy, Rabbit Air, Renegade Brands, SIJO Bedding, and True Value.

True Value: Painting a Brighter, Healthier Future

Through its Paint a Brighter Future (PABF) grant program, True Value provides grants of **Asthma & Allergy Friendly** Certified paint to schools and community organizations across the U.S. Each year, PABF helps refresh classrooms, community centers, Boys & Girls Clubs, and other spaces where families gather, ensuring these environments are welcoming, inspiring, and healthier.

Managing asthma triggers in schools is critical, as poor indoor air quality can worsen symptoms and drive higher rates of absenteeism. By donating low-VOC, certified paint, True Value helps create healthier classrooms and supports better indoor air quality in schools across the country, including in many Asthma Capitals.

The scale of the program underscores its impact:		
2023	**2024**	**2025 (year to date)**
232 grants awarded	**200** grants awarded	**38** grants awarded
 gallons of Certified paint donated	 gallons of Certified paint donated	 gallons of Certified paint donated
Total product contributions exceed **$200,000**		

Efforts are ongoing, with more grants and certified paint projects planned for the year. By combining philanthropy with product stewardship, True Value shows how something as simple as a coat of paint can transform community spaces and contribute to healthier lives—especially in cities where asthma has the greatest impact.

About the Asthma & Allergy Friendly Certification Program

The **Asthma & Allergy Friendly** Certification Program is a unique, groundbreaking collaboration between the Asthma and Allergy Foundation of America (AAFA) and Allergy Standards Limited (ASL). The program tests and certifies products against strict standards to prove their suitability for people with asthma and allergies. Products passing these tests earn the **Asthma & Allergy Friendly** Certification Mark. The Certification Program works with retailers and manufacturers to offer consumers products for a healthier home.

Certified products include air cleaners, air filters, paints, bedding, vacuum cleaners, washing machines, cleaning products, and more. Visit **aafa.org/certified** for more information.

Methodology

The 2025 Asthma Capitals™ research and ranking is reported by the Asthma and Allergy Foundation of America (AAFA). The ranking is based on analysis of data from the 100 most-populated Metropolitan Statistical Areas (MSAs) in the contiguous 48 states as determined by the most recent U.S. Census Bureau population estimates (2023). The three (3) individual factors analyzed for the 2025 rankings are: estimated asthma prevalence; crude death rate from asthma; and emergency department visits due to asthma. Weights are applied to each factor and factors are not weighted equally. Total scores are calculated as a composite of all 3 factors, and cities are ranked from highest total score (city rank #1) to lowest total score (city rank #100).

Estimated Asthma Prevalence

For each MSA, AAFA estimated asthma prevalence using claims data for individuals who sought asthma care at any point in the 2024 calendar year. Data were obtained from the Komodo Health care Map for the most recent calendar year (2024). While this is not an exact measure of prevalence, it helps provide data that can be compared from city to city. Other prevalence estimates, such as those from the CDC, use self-reported data through surveys.

Crude Death Rate From Asthma

For each city, AAFA obtained the estimated asthma-related crude death rate per 100,000 people for the respective county using asthma ICD-10 codes as the underlying cause of death. Data were obtained from the CDC's WONDER Online Database for the most recent 5-year period (2019-2023).

Emergency Department Visits Due to Asthma

For each MSA, AAFA obtained the total number of emergency department visits where an asthma ICD-10 code was included as a diagnosis. Data were obtained from the Komodo Health care Map for the most recent calendar year (2024). Emergency department visits were calculated per 10,000 asthma patients using prevalence estimates.

Risk Factors

Data on the following asthma-related risk factors were obtained and analyzed; however, these data did NOT factor into the scores or rankings. Data are from the most recently available calendar year.

- Poverty rate - Estimated population living in poverty. Data were obtained from the United States Census Bureau Small Area Income and Poverty Estimates (2023).
- Uninsured rate - Estimated population without health insurance. Data were obtained from the United States Census Bureau Small Area Health Insurance Estimates (2022).
- Annual air quality - Pollution levels and number of unhealthy outdoor ozone days, scored on a scale of A (best) to F (worst). Data were obtained from the American Lung Association 2025 State of the Air Report, which analyzed air quality monitoring data from 2021-2023.
- Pollen allergy – Daily pollen counts for each growth form (tree, grass, and weed). Data were obtained from Pollen Sense, LLC Automated Particulate Sensors (APS) for the most recent calendar year (2024).
- Public smoking laws – Number of "100% smoke-free" public smoking bans as of July 1, 2025. Data were obtained from the American Nonsmokers Rights Foundation.
- Access to specialists - The number of asthma specialists per patient prevalence. Data were obtained from the Komodo Health care Map for the most recent calendar year (2024).
- Medication use – Number of long-term controller and quick-relief medication prescriptions per patient prevalence. Data were obtained from the Komodo Health care Map for the most recent calendar year (2024).

Limitations

Data presented in this report have limitations that AAFA would like to acknowledge. Asthma data that are comparable to other states are limited in Alaska and Hawaii; therefore, these states are not included in this report. Additionally, calculations for estimated prevalence are based on health care claims data, which may exclude people with asthma who do not seek health care. These prevalence estimates are also used in the calculations for ER visits per 10,000 asthma population, as well as controller and rescue medicine use. Finally, due to data limitations, asthma mortality data in this report is analyzed at the county level, and for the past 5 years, which differs from the analysis of the other two factors used in the rankings.

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Made possible by support from:

Asthma and Allergy Foundation of America

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