A WORD FROM
AAFA’s CEO

The underserved are a priority for us at AAFA. We are determined to save lives and advance issues to improve quality of life for our community. Join us as we fight for cures, patient rights and access to care. In our online community you can learn disease management, trigger avoidance and allergen control. We’ll keep you up to date through our newsletters and blogs to provide the latest news, recalls and research developments. Visit aafa.org to stay connected, get involved or support this critical work. We are in this together.

To your good health,

Kenneth Mendez
CEO and President

ALLERGIC ASTHMA:
When Allergens Make It Hard to Breathe

The word “allergen” may bring to mind things that make you sniffle and sneeze. Common allergens are pollen, dust, cockroaches and pet dander. But for the approximately 15 million Americans who have allergic asthma, allergens can trigger additional swelling in the airways and make it hard to breathe.

Allergic asthma means allergens trigger asthma symptoms. Allergens cause an allergic reaction because your immune system thinks they are harmful. Your immune system responds by releasing immunoglobulin E (or IgE). Too much IgE can trigger swelling of your airways. This can trigger an asthma episode.

Allergic asthma is a subtype of Type 2 asthma. Type 2 is most common in people with severe asthma. If you were diagnosed with asthma as a child, you most likely have allergic asthma.

Allergy treatments may improve your asthma. Reducing your exposure to allergens can help as well. An allergist can do allergy tests to confirm your allergies.

Your treatment may involve both asthma and allergy treatments. Allergy medicines and immunotherapy (allergy shots) may help reduce your allergic asthma symptoms. If you have severe uncontrolled allergic asthma, your doctor may recommend Xolair®. It is an injected biologic treatment that targets the IgE antibodies in your immune system.

It is important to reduce allergens in your home, work and school environments. Ask family members, teachers and employers to help you keep common areas allergy and asthma friendly.

An allergic asthma management plan includes asthma medicines, allergy treatments and controlling allergens. The right plan can help you breathe easier.
Founded in 1953, the Asthma and Allergy Foundation of America (AAFA) is the oldest and largest nonprofit patient organization dedicated to improving the quality of life for people with asthma, allergies and related conditions through education, advocacy and research. AAFA provides practical information, community-based services and support. AAFA offers a free online support community to help you:

• Learn more about managing asthma and allergies
• Find support from people who understand
• Stay up to date on the latest research and treatments

AAFA is proud to welcome Richard K. Murray, MD, FACP, as our new board chair. Dr. Murray has served as a leader on AAFA’s board of directors since 2016.

Dr. Murray is a pulmonary critical care physician. He was a University of Pennsylvania faculty member and physician leader at Merck & Co., Inc. Currently, he is a fellow at the Advanced Leadership Initiative at Harvard University. He is also the Chief Medical Officer of Spire Health.

Embracing a New Vision

Dr. Murray’s appointment as board chair comes at a time when AAFA is embracing a new strategic vision to better serve people with asthma and allergic diseases. Our new strategic plan builds on our 65 years of service and embraces a shift toward better supporting underserved communities.

The priorities in our new plan align with the vision to be recognized as the most trusted ally serving the asthma and allergy community. As a leading patient advocacy organization, we are dedicated to saving lives and reducing the burden of disease for people with asthma and allergies through support, advocacy, education and research.

“I am honored and thrilled to lead the board of directors at AAFA,” said Murray. “In this critical moment for patient rights, it is more important than ever to advocate for the fundamental rights of access to care, clear food labeling and all the issues AAFA fights for.”
There’s asthma, and then there’s severe asthma. Asthma at any level takes special care and management. But severe asthma requires even more.

About 5 to 10% of people with asthma don’t respond to standard treatment. They may continue to have symptoms during the day and wake up at night due to their asthma. This is called severe persistent asthma.

If you have severe asthma, you know it can be limiting. But by partnering with your doctor, the two of you can create a management plan to reduce asthma episodes and regain activities asthma may have kept you from doing.

Knowing if your severe asthma is under control is an important part of managing your asthma. Ask yourself these questions:

• Do you have asthma symptoms more than two times a week?
• Do you wake up at night with asthma symptoms more than two times a month?
• Are you unable to do all your usual activities?
• Do you need your quick-relief inhaler for symptoms more than two times a week?
• Do you need to take oral corticosteroids two or more times a year?

If you answered yes to any of these questions, your asthma may not be under control. Talk to your doctor about creating a new plan to control your asthma.

Learning more about managing severe asthma can also improve your health. Take AAFA’s free self-paced online course: Severe ASTHMA Care for Adults. Using animations, handouts and videos, it tackles topics unique to severe asthma to help you achieve better quality of life:

• Different types of severe asthma (including severe allergic asthma)
• How to get the right diagnosis and treatment plan
• Treatment options for severe asthma
• The physical, emotional and financial impact of severe asthma

Sign up to take the course: aafa.org/severeasthmacare

ASTHMA Care for Adults

Knowing how to manage asthma is important for better health and quality of life. You can reduce missed work and school days. You can reduce or prevent hospitalizations. You can do more of the activities you enjoy.

We want to help you improve your health and manage your asthma to the fullest. We offer a free self-paced online course called ASTHMA Care for Adults.

Enroll now: aafa.org/asthmacare

This comprehensive program covers a full range of topics everyone with asthma needs to know.

We also offer a printed facilitated version for asthma educators.

Learn more: aafa.org/ac-kit

If you have severe asthma, you can then expand your knowledge with our Severe ASTHMA Care for Adults course.

This course was produced by AAFA with support provided under a cooperative agreement with the U.S. Centers for Disease Control and Prevention, National Center for Environmental Health, Atlanta, Georgia. Its contents are solely the responsibility of AAFA and do not necessarily represent the official views of the U.S. Centers for Disease Control and Prevention.
A Promising Life Cut Short

Cameron Jean-Pierre passed away on January 1, 2019 at 11 years old when he inhaled airborne proteins of cooking fish. His parents, Steven and Jody, had no idea that just inhaling the protein could cause this tragedy.

Cameron was diagnosed with an allergy to fish at age 4. He had allergic asthma and was also allergic to peanuts, lima beans and wheat. His parents, as well as family on both sides, were diligent to ensure Cameron did not eat or touch fish. They also made sure his asthma was controlled.

On New Year’s Day, Cameron visited different family members. His extended family thought he had returned home and didn’t expect him again, so they cooked saltfish – a popular Caribbean dish. He first got a haircut with his dad. But when they returned to his grandma’s house, he soon started wheezing. Cameron asked his dad for the nebulizer, but it provided no relief.

“Daddy, I can’t breathe,” Cameron said. “Daddy, I love you.”

“Try to relax,” said Steven. “Take deep breaths.”

“Daddy, I think I’m dying,” Cameron said as he kissed his dad twice.

“Don’t say that!” Steven shouted. “The ambulance is coming. Just hold on.”

The ambulance arrived and gave Cameron epinephrine, but he perished at the hospital.

“I feel like I was cheated. I want a do-over,” Jody said. “If we are blessed to have another child, I will do it differently. I will do my own research to ensure we have all the facts.”

We at AAFA are heartbroken from this loss. Our goal is to better educate the public to prevent this type of tragedy from happening. Many people don’t know it is possible for fish proteins to become airborne while fish is cooking. This can trigger an allergic reaction in people who are allergic to fish. Having asthma can also increase the severity of anaphylaxis, a severe allergic reaction.

Steven and Jody cared for Cameron as best as they could with the information they were given. This story shows how important it is for people managing food allergies and asthma to get the education and support they need.

If you have asthma and food allergies, carry both your quick-relief inhaler and epinephrine auto-injectors with you at all times. And if you have a reaction and aren’t sure if it is asthma or anaphylaxis, use epinephrine. Epinephrine can treat both anaphylaxis and an asthma attack.

To learn more about this story, visit: aafa.org/cameron
The Asthma and Allergy Foundation of America has four regional chapters that provide a variety of services, educational programs and support.

**AAFA Alaska Chapter**
toll-free 800-651-4914
aafaalaska.com

**AAFA Michigan Chapter**
toll-free 888-444-0333
aafamich.org

**AAFA New England Chapter**
781-444-7778
asthmaandallergies.org

**AAFA St. Louis Chapter**
314-645-2422
aafastl.org

Looking for help near you? There are 48 AAFA-affiliated educational support groups around the U.S. To find a group near you, visit: aafa.org/groups

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The natural history of disease refers to the progression of a disease process in an individual over time, in the absence of treatment. In asthma and allergies, the natural history tends to begin with dry skin and follow this course:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Onset and Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry skin</td>
<td>Begins at birth</td>
</tr>
<tr>
<td>Eczema/atopic dermatitis</td>
<td>First few weeks or months of life</td>
</tr>
<tr>
<td>Food allergies</td>
<td>First few months or years of life</td>
</tr>
<tr>
<td>Rhinitis/nasal allergies</td>
<td>After age 3</td>
</tr>
<tr>
<td>Asthma</td>
<td>First few months to years of life</td>
</tr>
</tbody>
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Wheezing may start early in life and be related to viral infections but can progress into asthma.

The natural history of allergic diseases is referred to as the **Atopic March or the Allergic March**. Allergic diseases can have a big negative impact on a person’s quality of life and can be serious and even life-threatening. So, is there anything we can do to stop the march from progressing?

**Primary prevention** is an intervention designed to stop the development of disease before it starts. It aims to reduce the chance of developing a disease.

There is some evidence the atopic march is preventable. Steps include:

- Protecting a baby’s skin very well from birth with moisturizers or petrolatum ointment may reduce the risk of atopic dermatitis (eczema)
- Exposing infants to peanut powder or diluted peanut butter between 4 and 6 months old can reduce the risk of peanut allergy by up to 80%
- Avoiding exposure to tobacco smoke, pollution and certain viruses may help prevent the development of asthma

Researchers continue to study different ways we can prevent the development of eczema, allergies and asthma.

If you or your child develop one or more allergic conditions, it is important to have a plan for treatment, as well as a plan to reduce exposure to your allergens and triggers. Work with your doctor to make a treatment plan.
ARE YOU CONTROLLING ALLERGENS IN YOUR BEDROOM?

We spend approximately one-third of our time in our bedrooms. Dust mites and mold – both of which are common indoor allergens – thrive in furniture, carpets and bedding. They love moisture! You can reduce these allergens by taking some simple steps including regular cleaning and using CERTIFIED asthma & allergy friendly® products.

**Protect and maintain your bedding.**
- Cover your mattresses and pillows with CERTIFIED allergen-barrier covers. This includes box springs.
- Replace your pillows every 2 years. After two years, 10% of the weight of your pillow can be from dead dust mites and their droppings. You can’t see them, but they are there.
- Replace your mattresses every 10 years.
- Wash sheets, pillow cases and blankets weekly in hot, soapy water (130 degrees F). Dry them in a hot dryer cycle.
- Vacuum your mattress weekly.

**Use CERTIFIED air filters in your central furnace and air conditioning unit. Or use a CERTIFIED portable air cleaner in your bedroom.**

**Clean your bedroom floors weekly.**
- If possible, remove carpet. Dust mites can’t grow on hard surfaces like wood floors.
- If you can’t remove carpet, be sure to vacuum weekly with a CERTIFIED vacuum. Also have your carpets professionally cleaned by a CERTIFIED company a few times per year.
- Remove shoes and clutter to keep your floors clear.

**Keep pets out of your bedroom to reduce pet dander in your bedding.**

**Know when to have your windows open or closed.**
- Keep your windows closed during high pollen times or during bad outdoor air quality alerts.
- Check your bedroom windows for condensation (water) during the winter. You may need to open the window for short periods to improve air circulation. Remove any mold growth promptly.
- Use washable window treatments.

**Reduce moisture in your bedroom.**
- Keep the humidity in your home less than 50%.
- Run a fan in your bathroom at least 15-20 minutes after showering.
CERTIFIED Products Make an Impact Through Philadelphia Healthier Homes Initiative

The Community Asthma Prevention Program (CAPP) at Children’s Hospital of Philadelphia (CHOP) supports families of children with asthma. They provide education and support for families with asthma in Philadelphia. This includes classes, home visits and even supplies to help reduce asthma triggers.

Philadelphia ranked fourth in the United States as the most challenging place to live with asthma in AAFA’s 2018 Asthma Capitals report. This is due to high asthma prevalence, air pollution, poverty and number of asthma fatalities.

Recently, the asthma & allergy friendly® Certification Program collaborated with CAPP to create the Philadelphia Healthier Homes Initiative. Thirty families in Philadelphia received CERTIFIED Rabbit Air purifiers and Protect-A-Bed supplies. Each family had recently been to the emergency room due to asthma and needed extra support. AAFA created a short film featuring some of the families and doctors at CHOP. It highlights asthma in Philadelphia and how CERTIFIED products can create a healthier home. You can watch at: aafa.org/phillyhealthierhome

To Make Or Not Make Your Bed?

That is the question. A 2005 study suggested that not making your bed was a good idea for people with dust mite allergies. The study claimed that making your bed traps warmth and humidity for dust mites to thrive. But by leaving your bed a mess, it is less inviting to dust mites. Other researchers and experts disagree. While leaving your bed a mess may help a bit, it is not enough to stop dust mites from thriving.

Millions of the tiny creatures live your bed. They prefer warm, humid environments (like your bed) and they feed on human skin cells. Dust mites can trigger skin rashes, eczema flares, allergy and asthma symptoms. Your bed needs effective allergen-barriers to prevent dust mites from populating in your pillows, mattresses, blankets and sheets. The asthma & allergy friendly® Certification Program tests bedding products to ensure they effectively block dust mites.
Asthma-Friendly Teamwork: Working With Your Employer to Create a Healthier Workplace

Even if you get your asthma triggers under control at home, you could still be exposed to triggers at work. This can make it hard to control symptoms. And since asthma is one of the top reasons why people miss work, it can benefit both you and your employer to make your workplace more asthma friendly.

Here’s a checklist you can share with your employer to review and see what asthma triggers you can control. Many CERTIFIED asthma & allergy friendly® products can be useful in your workplace, just like in your home.

- Create a smoke-free environment. If you allow smoking outside, create spaces away from doors, windows and common areas.
- Place doormats at entrances to reduce allergens, such as pollen, from being brought in.
- Have cleaning staff use scent-free cleaners.
- Restrict staff from wearing perfume, cologne or scented personal products.
- Keep trash in tightly covered containers to deter pests. Empty trash often.
- Use CERTIFIED filters on air conditioners and change them regularly.
- Keep doors and windows closed from 10 a.m. to 2 p.m. when pollen counts are high.
- Monitor humidity levels and use CERTIFIED dehumidifiers if necessary.
- Fix leaks promptly.
- Remove wet carpeting if not dry within 24 hours. Replace carpeting with CERTIFIED hard surface flooring, if possible.
- Vacuum rugs and carpets with a CERTIFIED asthma & allergy friendly® vacuum when employees with asthma aren’t around.
- Use pesticides when people with asthma are not present. Use a company that is Integrated Pest Management (IPM) certified.
- Shampoo rugs regularly from a CERTIFIED cleaning company.
- Post signs reminding employees to wash their hands to prevent the spread of colds and infections.
- Air out new office furnishings before bringing them into work areas. Pressed wood and plastic laminated products can release VOCs.
- Prevent outdoor fumes from coming inside. Don’t allow buses, cars and delivery trucks to idle on the premises.
- Keep outdoor landscaping free of fallen leaves and cut grass.

Other checklists are available in our online course for learning how to manage asthma at: aafa.org/asthmacare

Over 200 products CERTIFIED asthma & allergy friendly®!
aafa.org/certified

This checklist was produced by the Asthma and Allergy Foundation of America with support provided under a cooperative agreement (1 UE1EH001308) with the U.S. Centers for Disease Control and Prevention, National Center for Environmental Health, Atlanta, Georgia. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Centers for Disease Control and Prevention.
TIPS FOR PREVENTING ALLERGIC REACTIONS TO TREE AND GRASS POLLEN

First comes the tree pollen and then comes the grass pollen. And with it comes spring allergy season. This includes lots of sneezing, itchiness, stuffy noses and red, watery eyes. These symptoms are often referred to as “hay fever.”

Trees start producing pollen in the southern U.S. as early as January. Many trees throughout the country keep producing pollen through June. Both tree and grass pollen is very lightweight. Wind can carry it up to 500 miles.

It may be hard to avoid tree and grass pollen, but you can reduce your exposure. Check out these tips:

- **Check your local pollen count every day.** Limit time outside from 10 a.m. to 2 p.m. when pollen is high.
- **Keep windows closed.** Use central air conditioning.
- **Wash your bedding in hot, soapy water weekly.** Look for the CERTIFIED Mark on washing machines, pillows and bedding.
- **Start taking allergy medicines before tree and grass allergy season begins.** This can prevent symptoms.
- **Wear sunglasses and a hat.** This can help keep pollen out of your eyes and hair.
- **Dry your clothes indoors.** Don’t dry your clothes on an outdoor line.
- **Keep your lawn short.** Short grass is less likely to release pollen. If possible, have someone else mow your lawn.
- **Change and wash your clothes after outdoor activities.** Wear long pants if you will be in contact with grass.
- **Shower and shampoo your hair every night.** This can help keep pollen out of your bed.
- **Wipe off or brush your pets before they come inside.** Pollen can get in their fur.
- **Remove your shoes before entering your home.** It is also important to vacuum your floors at least once a week. Look for the CERTIFIED mark on vacuums.

**Most common types of trees that cause allergies:**
- Alder
- Ash
- Aspen
- Beech
- Birch
- Box elder
- Cedar
- Cottonwood
- Elm
- Hickory
- Mountain elder
- Mulberry
- Oak
- Olive
- Pecan
- Poplar
- Willow

**Most common types of grass that cause allergies:**
- Bermuda
- Johnson
- Kentucky
- Orchard
- Rye
- Sweet Vernal
- Timothy
ASK THE ALLERGIST
Your Questions, AAFA’s Answers

Question My mother has asthma due to allergies, and she coughs when she’s sleeping. Is that coughing due to asthma?

Answer There are many reasons a cough can occur. Common causes may include an underlying respiratory disease (such as asthma), postnasal drip (upper respiratory infections, allergies) and reflux. Your doctor can help determine the cause and appropriate treatment. Coughing at night can potentially be due to worsening asthma, even when symptoms do not occur during the daytime. I would suggest discussing this with your doctor.

CLIMATE CHANGE AND YOUR HEALTH

Extreme weather, wildfires and coastal flooding are some of the visible impacts of climate change happening today. But did you know that climate change can also affect your allergies and allergic asthma?

Warmer seasonal temperatures and more frost-free days are causing longer and more intense pollen seasons. Since 1995, the U.S. pollen season has increased from 11 days to 27 days. That’s more than two weeks of additional allergy symptoms, like nasal congestion and itchy eyes. Regional climates are changing too, bringing pollen producing plants into new areas where they may not have been present before.

The severity of pollen seasons is also getting worse due to climate change. Increased rainfall and CO₂ concentration in the atmosphere increases pollen levels. So not only is climate change causing longer pollen seasons, it is also contributing to higher pollen counts during that season.

Climate change is widely considered the greatest threat to public health in the 21st century, and it is affecting our health now. Join us in advocating for decisive climate action to protect human health, and contact us at advocacy@aafa.org to share how climate change is impacting you.
Traveling With Allergic Asthma

Adventures both near and far can create wonderful memories. If you or someone you are traveling with has allergic asthma, it is important to plan ahead for trips. This can result in a safer, healthier experience.

Get organized before you go.

- Create a packing list to help you remember everything you need.
- Make a list of current medicine names and dosages, as well as medical conditions.
- Refill your prescriptions and pick up over-the-counter medicines.
- Check if your health insurance plan covers doctor and/or emergency room visits in your destination.

Be prepared for an asthma attack.

- Always carry emergency medicines everywhere you go.
- Prepare or update a written Asthma Action Plan with instructions on what to do in an emergency.
- Inform your health care provider about your travel plans.
- Research and locate medical facilities including hospitals and pharmacies.

Pack carefully.

- Medicines with original labels.
- Health insurance card.
- Sanitizing wipes.
- Pillow and/or allergy-friendly pillowcase.
- Clean clothes.

Take care when traveling.

- Clean the seats, armrests and tray tables with sanitary wipes.
- If possible, select leather seats as cloth seats can be a magnet for dust and pet dander.
- Request seats in pet-free sections of a train or away from pets traveling by plane.

Consider where you stay.

- Research hotels and review their cleanliness ratings.
- If you consider home-sharing options, work with the homeowner to reduce allergens before you arrive.
- Request a room that is non-smoking, mold-free and pet-free.
- Ask for extra sheets and pillowcases to ensure they are clean.

For more tips about traveling with asthma and allergies, visit: aafa.org/travel
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Help Support Our Important Mission

Please help us improve the lives of people with asthma and allergies. With your donation, we can continue our critical mission to elevate the quality of life for those affected. Please visit aafa.org/givenow to support our work. Thank you.

Leave a lasting legacy of support by including AAFA in your will. Email info@aafa.org for more information.