

fresh AAIR™

asthma & allergy friendly®
Certification Program Special Edition



Asthma and Allergy Information Resource • Fall 2019

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This issue is for people who manage asthma, dust mite allergy, pollen allergy, animal dander allergy, atopic dermatitis (eczema), rhinitis (nasal allergies).

IS YOUR HOME MAKING YOU SICK? Why a Healthier Indoor Environment Is Important



Your home should be a haven for you and your family. But unfortunately, it may be filled with allergy and asthma triggers that can impact your health.

Common allergens found in homes include animal dander, dust mites, pests, pollen and mold. Common irritants found in homes include volatile organic compounds (irritating gases), formaldehyde, phthalates, ozone, dust and airborne particles like smoke.

Allergens and irritants trigger asthma, eczema, nasal and eye allergies. 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 in your airways or other parts of your body and other symptoms. Irritants can trigger swelling as well. When this happens in the airways or nose, it causes more mucus production – making it harder to breathe.

Effective treatment plans include using taking medicines as prescribed and reducing exposure to triggers.

It is important to know how to properly reduce allergens and irritants in your home. Regular, thorough cleaning is required – but you may need to wear a mask and/or gloves to protect yourself. There are also products that can help you trap and remove allergens and irritants. For example, if you are allergic to dust mites, having an effective barrier on your mattress and pillow is essential to prevent them from multiplying in your bed. In this special edition issue, the Asthma and Allergy Foundation of America (AAFA) joins with Allergy Standards Limited (ASL) to explain how to identify products that can help improve the health of your home.



INDOOR AIR POLLUTION IS A PUBLIC HEALTH ISSUE

Indoor air can be up to **five times more** polluted than outdoor air.
- U.S. Environmental Protection Agency

3.8 million deaths are attributed to household air pollution annually.
- World Health Organization

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This issue of freshAAIR™ is a special edition to highlight the **asthma & allergy friendly®** Certification Program.

Helping Families Overcome Asthma and Allergies



Asthma and allergies are two of the most common chronic health conditions in the United States. The impact of these conditions extends beyond physical health - they can be detrimental to relationships, finances, careers and emotional health.

Most allergy and asthma symptoms can be managed and prevented. Reducing exposure to substances in the environment around us that trigger allergy and asthma symptoms is important. Eliminating indoor triggers is a great place to start. We spend 90% of our time indoors. Healthier home environments are vital to keeping us healthier.

For more than 65 years, the Asthma and Allergy Foundation of America has provided programs and services to address the needs of people and families affected by asthma and allergies. We advocate for policies and programs that help improve indoor environments in homes and schools. We educate people about asthma and allergy triggers and how to manage these triggers. Through our partnership with Allergy Standards Limited, we have the only science-based program that establishes standards to reduce indoor allergy and asthma triggers.

It is our vision to be your trusted ally to help you improve your health. AAFA offers a free online support community to help you:

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

We invite you to join us: aafa.org/join

A handwritten signature in black ink, appearing to read 'Kenneth Mendez', written over a white background.

Kenneth Mendez
CEO and President,
Asthma and Allergy Foundation of America

Founded in 1953, the Asthma and Allergy Foundation of America is the oldest and largest nonprofit patient organization dedicated to saving lives and reducing the burden of disease for people with asthma and allergies through support, advocacy, education and research. AAFA provides easy-to-understand information, community-based services and programs.

An Award-Winning Partnership



As an emergency medicine doctor in Ireland, I saw firsthand the worry and fear in families' eyes as their loved ones struggled to breathe.

Something as mundane as vacuuming a floor could lead to an emergency. Patients and families did not have the resources and tools needed to reduce their

exposure to triggers in their homes.

I co-founded the international standards body, Allergy Standards Limited, to address some of these needs. In 2006, we partnered with the Asthma and Allergy Foundation of America to launch the **asthma & allergy friendly**[®] Certification Program in the United States.

All products in our program are independently tested by certified laboratories, meeting strict criteria that we've developed in partnership with AAFA.

We have CERTIFIED over 50 million products to date with scientific tests to ensure the products meet our **asthma & allergy friendly**[®] standards to reduce asthma and allergy triggers.

This year, the **asthma & allergy friendly**[®] Certification Program won a US-Ireland Research Innovation Award from the Royal Irish Academy and the American Chamber of Commerce, Ireland. It is a testament to a strong partnership with a strong purpose.

The strength of our program relies on best-in-class test methods and assurance that products have been evaluated for efficacy and impact on the home environment. This empowers consumers with asthma and allergies to make informed choices.

Dr. John McKeon
CEO, Allergy Standards Limited



HYPOALLERGENIC: Science or Marketing Hype?

It's common to see the term "hypoallergenic" on many products and services. It's a word many consumers have become comfortable with. It makes some believe anything with this label is better for them and less likely to trigger asthma and allergy symptoms.

But you may be surprised to find there is no regulation on how a product can be labeled "hypoallergenic." The U.S. Food and Drug Administration (FDA) says, "There are no Federal standards or definitions that govern the use of the term 'hypoallergenic.' The term means whatever a particular company wants it to mean."

In some cases, the word is just clever marketing. But people with asthma and allergies need the term to be backed by science. Their health depends on it.

This is why the **asthma & allergy friendly**[®] Certification Program is based on science. Products and services are tested in independent laboratories to see if they meet our strict scientific standards. If they pass all tests, they earn our certification mark to help consumers identify better choices for a healthier home.

Reducing exposure to triggers and allergens is critical to controlling asthma and allergy symptoms. And because of that, we need products and services backed by science, not marketing.

Learn more about the science behind our certification at aafa.org/certified.



The asthma & allergy friendly® Certification Process

AAFA and ASL conduct market research and listen to feedback from AAFA's asthma and allergy community about consumers' needs

How We Develop Standards

ASL reviews scientific research, clinical studies, related national and international standards and best practices

ASL conducts experimental product testing

ASL develops the standard for the product category, including strict criteria to which any products will be tested

The standard is sent to the board of directors for AAFA and ASL for review and approval

AAFA's independent medical scientific council reviews the proposed standard and provides expert feedback

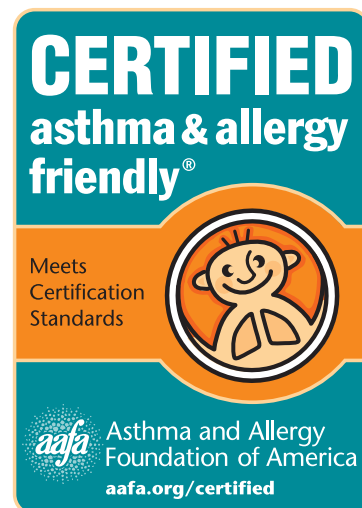
How We Test Products

Companies send their products to independent labs for testing. ASL manages the testing process to ensure strict guidelines are followed.

Products and companies are reviewed to see if their product is a good fit for the **asthma & allergy friendly®** Certification Program

Products must pass every test required in the standard in order to qualify for **asthma & allergy friendly®** Certification

Each CERTIFIED product has a certificate and is associated with a unique certification code.



aafa.org/certified

CONSUMER INSIGHTS: Wants, Needs and Beliefs

Consumer feedback is important to AAFA and ASL as we grow the **asthma & allergy friendly**® Certification Program.

Research plays a huge role in advancing solutions for managing asthma and allergies.

We conduct an annual survey of two audiences (called “samples”): the general public and AAFA’s

online community (includes people who live with asthma and allergies, caregivers and health professionals). The information we receive from your participation helps us build a better program. We share the results with manufacturers and retailers to show the importance of providing products and services that help consumers reduce their exposure to asthma and allergy triggers.

Of the 2019 survey respondents:



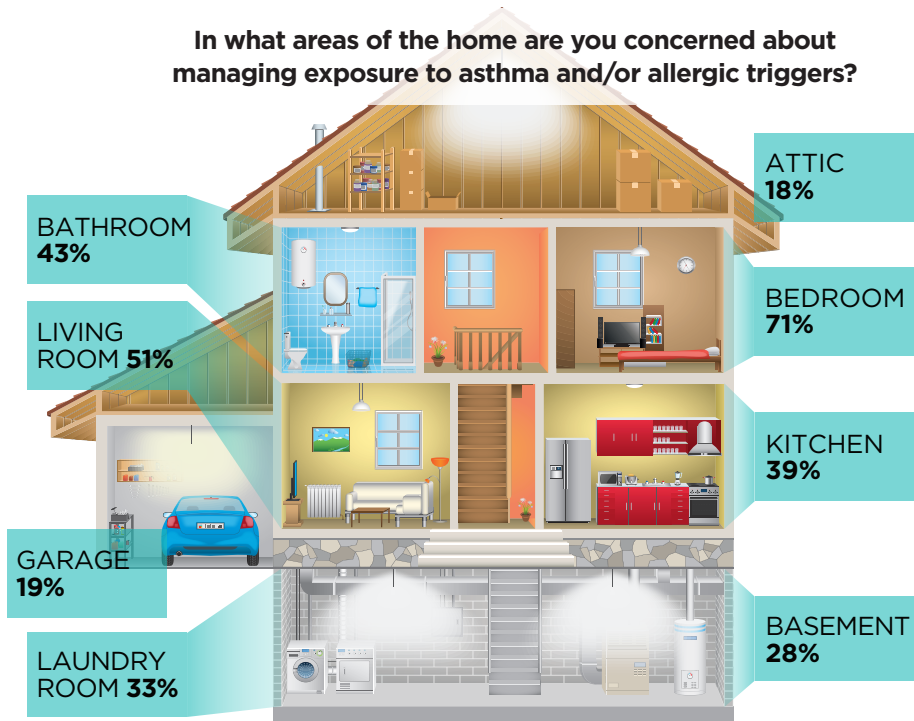
62%
have pollen allergies

37%
have dust mite allergies

42%
have asthma

29%
have mold allergies

In what areas of the home are you concerned about managing exposure to asthma and/or allergic triggers?



	AAFA Community (n=569)	General Public (n= 1002)	Total (n= 1571)
Aware of the asthma & allergy friendly ® Certification Program	61%	34%	43%
Would purchase CERTIFIED products	85%	51%	63%
Would recommend CERTIFIED asthma & allergy friendly ® products/services	72% (23% neutral)	46% (43% neutral)	55% (36% neutral)
Agree or strongly agree it is important that the home products/services they buy are safe for their family	92%	67%	75%
More likely to buy a product if it has an independent third-party certification (seal of approval) from a nonprofit organization like the Asthma and Allergy Foundation of America	89%	67%	75%



What are the signs of poor sleep hygiene?

Frequent sleep disturbances and daytime sleepiness are the most telling signs of poor sleep hygiene according to the National Sleep Foundation.

Sleep disturbances are commonly reported by people with asthma, eczema and allergies.

In 2017, AAFA conducted a research study called, "My Life With Asthma." The survey found that people with severe uncontrolled asthma reported:

- 34% wake up every night
- 29% wake up at night several times per week

Nighttime itching and scratching cause lost sleep for many people with atopic dermatitis (eczema) as well.

Adequate disease control through medical treatments is essential. Environmental interventions may also be needed to help improve sleep.

Dust mite exposure is a common trigger for asthma, allergies and eczema.

CERTIFIED asthma & allergy friendly® products are proven to reduce exposure to dust mites, meet standards for comfort and hold up to washing/cleaning requirements.

BEDROOM HYGIENE IS CRUCIAL FOR HEALTHY SLEEP HYGIENE

Dust mites and mold – common indoor allergens – thrive in places that trap moisture: furniture, carpets and bedding. This can impact your ability to sleep. You can limit the growth of these allergens by taking some simple steps. Regular cleaning and using **CERTIFIED asthma & allergy friendly®** products will help trap and remove dust mites and prevent mold growth.



Protect and clean your bed

- Replace pillows every two years. Use **CERTIFIED** pillows or zippered allergen protectors.
- Vacuum your mattress and box springs before covering them with **CERTIFIED** allergen-barrier covers. Replace your mattress every 10 years.
- Wash bedding weekly in hot, soapy water (130 F). Dry them on high.
- Leave your bed unmade to let it cool and air out. Warmth and moisture from your body encourage dust mite growth.
- No pets in the bedroom and never on the bed.



Improve air quality

- Change the air filters on your central furnace and/or air conditioning unit every three months. (**CERTIFIED** air filters and whole home air cleaners are available.)
- Use a **CERTIFIED** portable air cleaner in your bedroom.
- Keep windows closed during peak pollen times or during periods of high outdoor air pollution.



Reduce moisture

- Check your bedroom windows for condensation (water) during the winter. Remove any mold growth promptly.
- Use washable window treatments.
- Keep furniture away from walls, and check your closets regularly for mold growth.
- If you live in a wet climate, you may need a dehumidifier to keep the humidity levels below 50% in your room.
- Run a fan in your bathroom at least 15 to 20 minutes after showering.



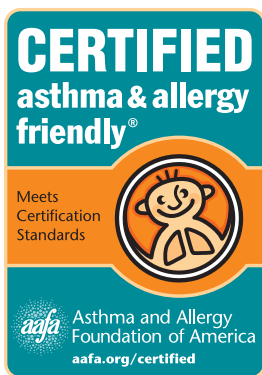
Clean your bedroom floors weekly

- If possible, remove carpet to reduce dust mites. **CERTIFIED** floors are easy to clean and keep asthma triggers to a minimum during installation.
- Vacuum carpet weekly with a **CERTIFIED** vacuum. Have your carpets professionally cleaned by a **CERTIFIED** company regularly.
- Remove shoes and clutter.



CERTIFIED Products Guide

Improve Air Quality and Reduce Exposure to Allergens and Asthma Triggers



The following products have earned the **asthma & allergy friendly®** certification as of September 2019. This means they were independently tested and confirmed to adhere to strict criteria. The products must meet all of the standards defined by Allergy Standards Limited and approved by the Asthma and Allergy Foundation of America. This list may change as products are added or removed. For more information, visit aafa.org/certified.

Look for this mark on product packages or company websites!



Air Cleaners

Commercial Grade

- **Fellowes** – AeraMax® Professional AM3 PC, AM3S PC, AM4 PC, AM4S PC Air Cleaner
- **Fellowes** – AeraMax® Professional AM IIS, IV, III, IVS

Portable

- **Dyson USA Inc.** – Pure Hot + Cool™ HP01 Purifying Heater + Fan
- **Dyson USA Inc.** – Pure Hot + Cool Link™ Purifying Heater
- **Dyson USA Inc.** – Pure Cool™ DP04 Purifying Desk Fan
- **Dyson USA Inc.** – Pure Cool™ TP01 Purifying Tower Fan
- **Dyson USA Inc.** – Pure Cool™ TP04 Purifying Tower Fan

- **Fellowes** – AeraMax® 100 Air Cleaner
- **Fellowes** – AeraMax® 190 Air Cleaner
- **Fellowes** – AeraMax® 200 Air Cleaner
- **Fellowes** – AeraMax® 290 Air Cleaner
- **Fellowes** – AeraMax® 300 Air Cleaner
- **Fellowes** – AeraMax® DX5 Air Cleaner
- **Fellowes** – AeraMax® DX55 Air Cleaner
- **Fellowes** – AeraMax® DX95 Air Cleaner
- **LG USA** – Puricare 360 Air Purifier
- **LG USA** – Puricare Air Purifier Round
- **LG USA** – Puricare Air Purifier Tower
- **LG USA** – Signature All-in-One Air Purifier and Humidifier
- **Rabbit Air** – Minus A2 Air Cleaner 700A
- **Rabbit Air** – Minus A2 Air Cleaner 780A
- **Rabbit Air** – Minus A2 Ultra Quiet HEPA Air Purifier



Air Filters

Car Cabin Air Filters

- **Mercedes-Benz USA** – Cabin Filter A205 830 0418
- **Mercedes-Benz USA** – Cabin Filter A292 830 0000

HVAC Furnace Air Filters

- **3M Inc** – Filtrete™ Healthy Living 1500

MPR Filter VLL70 Media

- **3M Inc** – Filtrete™ Healthy Living 1900 Maximum Allergen Reduction
- **3M Inc** – Filtrete™ Healthy Living 2400 Elite Allergen Extra Reduction Filter
- **3M Inc** – Filtrete™ Ultra Allergen Healthy Living 1500 Filter



Bedding

Comforters and Duvets

- **Allied Home** – Organic White Duck Down Comforter
- **Bloomingdale's** – My Down Alternative Blanket White
- **Bloomingdale's** – My Down Comforter
- **Bloomingdale's** – My Luxe Down Comforter, My Luxe Down Alternative Comforter
- **Bloomingdale's** – My Primaloft Down Alternative Comforter
- **BreatheWell™** – Asthma & Allergy Friendly Down Comforter
- **Great Sleep®** – Certified Asthma & Allergy Friendly® Comforter
- **Healthy Home™** – White Down Comforter
- **Live Comfortably®** – Cluster Fill Comforter, White Duck Down Comforter
- **Live Comfortably®** – Luxurious Organic Cotton Down Alternative Comforter, Organic Cotton Sateen Down
- **Luxeport** – LuxeportPURE Silk Duvet
- **National Allergy®** – BedCare Cotton Duvet Cover
- **SmartSilk™** – Comforter

Mattress Encasings

- **BreatheWell™** – 300TC Cotton Mattress Pad
- **Great Sleep®** – Certified Asthma & Allergy Friendly® Peachy® Mattress Pad
- **Healthy Home™** – 240TC Peachy Polyester Padded Mattress Pad
- **Hollander** – 300TC 100% Cotton Sateen Waterproof Mattress Protector
- **Hollander** – AAFA MSH Healthy Home 300TC Mattress Pad
- **Indo Count Industries Ltd.** – 325TC AllerCot Sateen 100% Organic Cotton Mattress Pad

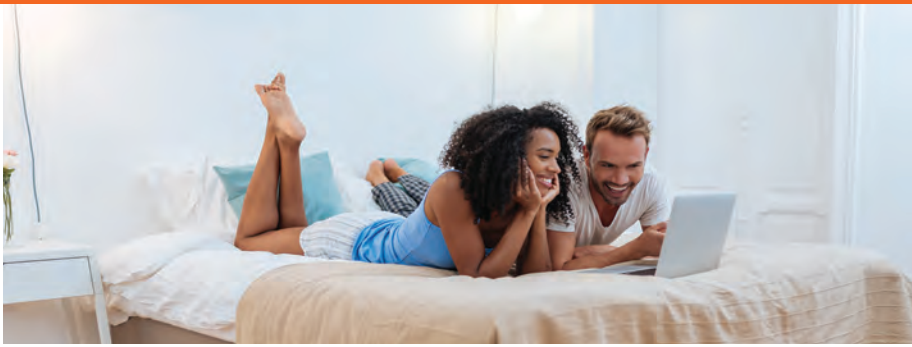
- **JCPenney Home** – Asthma & Allergy Friendly® Allergen Barrier Mattress Pad
- **Live Comfortably®** – Asthma & Allergy Friendly® Mattress Encasement
- **Luxeport** – Premium Silk Mattress Toppers
- **National Allergy®** – BedCare Cotton Mattress Cover
- **Protect-A-Bed** – AllerZip® Smooth Mattress or Box Spring Encasement
- **SmartSilk™** – 100% Cotton Mattress Cover, 233TC, Silk Filled, White (X12)
- **Welspun** – Active Anti-Allergen Mattress Pad with Nano Core™

Pillow Encasings

- **Bloomingdale's** – My Luxe Pillow Protector
- **Hollander** – 400TC Pillow Encasing Middle
- **Indo Count Industries Ltd.** – 325TC AllerCot Sateen 100% Organic Cotton Pillow Protector
- **Lauren Ralph Lauren** – 300TC 100% Cotton Pillow Protector
- **Live Comfortably®** – Certified Asthma & Allergy Friendly® Pillow Protector
- **Luxeport** – LuxeportPURE Silk Pillow Protectors
- **National Allergy®** – BedCare Cotton Pillow Cover
- **Protect-A-Bed** – AllerZip® Smooth Pillow Protector
- **SmartSilk™** – Pillow Protector Standard

Pillows

- **Allied Home** – Organic White Duck Down Pillow
- **Beautyrest®** – Asthma & Allergy Friendly™ Pillow
- **Beautyrest®** – Deep Rest™ Pillow Dual Pack



Pillows continued

- **Bloomingdale's** – My Flair Asthma & Allergy Friendly Medium Density Down Pillow, Ultra Luxe Down Alternative, My Luxe Firm Density
- **BreatheWell™** – Asthma & Allergy Friendly® Pillow, Memory Fiber Fill Pillow, Lite Loft Polyester Fiber Fill Pillow, Organic Cotton Cover Pillow
- **Cannon** Asthma & Allergy Pillow
- **Great Sleep®** – Asthma & Allergy Friendly® Firm and Medium Support Pillows
- **Home Accents** European Pillow
- **JCPenney Home** Allergen Barrier Pillow
- **Keeco** – Serta Perfect Sleeper Smart Defense Pillow White
- **Lauren Ralph Lauren** – Bronze Comfort White Down and White Down Pillow
- **Life at Home** Luxury 230TC Pillow

- **LiveComfortably®** – Certified Asthma & Allergy Friendly® Pillows: Down Alternative, LC Classics Memory Fiber, Medium Memorelle, Organic Cotton Down, Organic Cotton Duck Down, Premium, White Down
- **Nautica®** – Certified Asthma & Allergy Friendly®: Memory Fiber Body Pillow, Euro Pillow
- **Simmons** Allergy Protection Twin-Pack Pillows
- **SmartSilk™** Pillow
- **Welspun** – Active Anti-Allergen Pillow with Nano Core™ Technology

Sheets and Pillowcases

- **AQ Textiles LLC** – 500TC 100% Cotton Fitted Sheet with 18” Pocket Depth
- **AQ Textiles LLC** – Brookstone®Tech Advanced Sheet Sets
- **Indo Count Industries Ltd.** – 500TC Navy EverClean /Allercot Pillowcase and Sheet
- **Indo Count Industries Ltd.** – Allercot 400TC Fitted/Flat Sheet, Allercot Pale Aqua 400TC Pillowcase
- **Wicked Sheets** – 100% Polyester Fitted Sheet, Flat Sheet, Pillowcase



Cleaning Products

- **Bona US** – Bona Free & Simple® Hardwood Floor Cleaner
- **Endust®** – Free Dusting and Cleaning Spray
- **Guardsman US LLC** – Dusting Cloths



Flooring

- **Congoleum Corporation** – Cleo Flooring Range
- **Tarkett** – Acczent Flourish Vinyl Sheet, Acczent Vinyl Sheet
- **Tarkett** – Felt Flooring Range
- **Tarkett** – FiberFloor® Comfort Style® Collection
- **Tarkett** – Fresh Air™ Laminate
- **Tarkett** – (formerly Johnsonite's) iD Inspiration Luxury Vinyl, iQ™ Granit Vinyl Sheet & Tile, iQ™ Natural Vinyl Sheet, iQ™ Optima Vinyl Sheet & Tile
- **Tarkett** – Omnisports Range (6.5mm, 7.1mm, 8.3mm, 9.4mm), Greenlay and Tarkett Sport Multi-Poxy Adhesives
- **Tarkett** – Performa Flooring
- **Tarkett** – TruTex Flooring



Humidifiers

- **Dyson USA Inc.** - AM10 Humidifier



Insulation

- **Owens Corning Inc.** - Pure Safety® High Performance Insulation, Unfaced 3.5-inch Thick Batts, R-15



Laundry

Steam Clothing Care System

- **LG USA** - Baron Styler Steam Clothing Care System
- **LG USA** - Styler Steam Clothing Care System

Washing Machines

- **LG USA** - All-In-One Front Load Washer/Dryer Combo with Turbowash™ WM3997HWA
- **LG USA** - Kenmore Elite 3155* Top Load Washer
- **LG USA** - LG Signature Large Smart Wi-Fi Enabled Front Load Washer WM9500HKA
- **LG USA** - Mega Capacity Top Load Washer with TurboWash® Technology WT7600HKA, WT7600HWA
- **LG USA** - Smart Wi-Fi Enabled Compact All-In-One Washer/Dryer WM3499HVA
- **LG USA** - Smart Wi-Fi Enabled Front Load Washer WM3700HWA, WM3700HVA, WM3900HWA, WM3900HBA
- **LG USA** - Smart Wi-Fi Enabled Front Load Washer Turbowash™ WM9000HVA
- **LG USA** - Smart Wi-Fi Enabled Top Load Washer with TurboWash3D™ Technology WT7900HBA
- **LG USA** - TurboWash™ Washer with Steam Technology WM4370HWA, WM4370HKA, WM8100HV



Paint

- **Benjamin Moore** - Natura® Premium Interior Paint
- **Samhwa Paints (KO)** - Samhwa Classy ATO Free Paints
- **True Value®** - EasyCare® Platinum 100% Acrylic Interior Paint: Eggshell, Flat Enamel, Satin Finish
- **True Value®** - EasyCare® Ultra Premium Acrylic Latex Interior Paint: Eggshell, Flat, Satin Finish
- **True Value®** - EasyCare® Ultra Platinum Colorants



Professional Cleaning Services

- **Stanley Steemer®** - Carpet Cleaning Chemical G-900 (Chemical A)
- **Stanley Steemer®** - Hardwood Professional Cleaning Service
- **Stanley Steemer®** - Professional Carpet and Upholstery Spotter
- **Stanley Steemer®** - Steam Cleaning Process
- **Stanley Steemer®** - Tile and Grout Professional Cleaning Service



Vacuum Cleaners

Canister Vacuums

- **Kenmore** – Elite 21814 Pet Friendly CrossOver™
- **Dyson USA Inc.** – Cinetic Big Ball Animal

Cordless Vacuums

- **Dyson USA Inc.** – Cyclone V10 Absolute, Cyclone V10 Motorhead
- **Dyson USA Inc.** – V6 Absolute, V6 Animal, V6 HEPA, V6 Mattress
- **Dyson USA Inc.** – V7 Trigger Pro
- **Dyson USA Inc.** – V8 Absolute, V8 Absolute / Animal
- **Dyson USA Inc.** – V10 Absolute Extra

Upright Vacuums

- **Bissell Homecare Inc.** – Sanitaire® EON™ Allergen Commercial Upright Vacuum
- **Kenmore** – 31140 Pet Friendly Upright Vacuum
- **Kenmore** – BU1005 Pet Friendly Bagged Upright Vacuum

- **Kenmore** – Elite 31150 Pet Friendly Upright Vacuum
- **Dyson USA Inc.** – Ball Animal 2
- **Dyson USA Inc.** – Ball Multi Floor 2
- **Dyson USA Inc.** – Cinetic Big Ball Animal + Allergy, Cinetic Big Ball Multi Floor
- **Dyson USA Inc.** – DC40 Multi Floor
- **Dyson USA Inc.** – DC65 Animal
- **Dyson USA Inc.** – Small Ball Multi Floor, Light Ball Multi Floor

Vacuum Parts/Tools/Accessories

- **Dyson USA Inc.** – Carbon Fiber Soft Dusting Brush
- **Dyson USA Inc.** – Flexi Crevice Tool, Mattress Tool, Tangle-Free Turbine Tool, Reach Under Tool

Water Based Filtration Vacuums

- **The Rainbow® Cleaning System** – Vacuum Cleaner with Water Filter



Whole Home Air Cleaners

- **Ingersoll Rand Inc.** – Trane CleanEffects™ / American Standard AccuClean™ Whole Home Air Cleaner



Did you know?

The National Institutes of Health guidelines state people with asthma should assess their home environment and improve indoor air quality.

The Asthma and Allergy Foundation of America joined with Allergy Standards Limited to create the **asthma & allergy friendly®** Certification Program. This program helps people make informed purchases for a healthier home. We test household products against strict standards. If products pass our tests, they earn the CERTIFIED **asthma & allergy friendly®** mark.

Improve Your Indoor Air Quality to Improve Your Health



Air quality is a measure of gases and small particles in the air that can be harmful to your lungs. Items in your home release gases and irritants into the air. Allergens (like dust mites and pet dander) also impact your air quality. Outdoor air pollution (traffic exhaust, wildfire smoke, smog, etc.) can make its way inside to worsen your indoor air quality.

What Can You Do to Improve Indoor Air Quality?

The best way to improve indoor air quality is to reduce the sources of allergens and irritants in your home. Here are a few tips:

- Establish regular cleaning routines. (You may need to wear a mask.)
- Remove strong scents like candles and harsh cleaners.
- Measure your home's humidity levels and keep below 50%.
- Replace carpets with solid surface flooring, if possible. Otherwise, vacuum weekly.
- Use a CERTIFIED **asthma & allergy friendly**[®] air cleaner and filters.

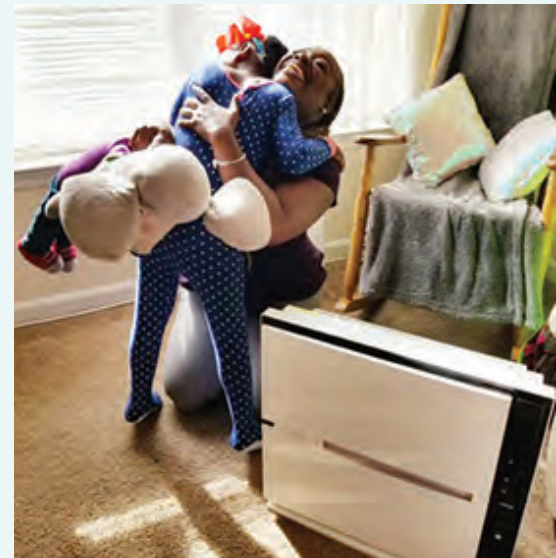
A healthier home can go a long way toward managing asthma and allergies indoors. For more indoor air quality tips, visit aafa.org/iaq.

CERTIFIED Products Make an Impact Through Washington, D.C. Healthier Homes Initiative

The IMPACT DC program of the Children's National Health System supports families of children with asthma. They provide education and support for families with asthma in the Washington, D.C. region. The program collaborates with other local organizations like Breathe Easy and Yachad to conduct home visits and provide supplies and home remediation to help reduce asthma triggers.

Washington, D.C., has a high prevalence of childhood asthma. This is related to the region's old homes, poverty rates and low-lying location surrounded by water. Mold and pollen are common triggers in the area.

Recently, AAFA collaborated with IMPACT DC, Breathe Easy and the **asthma & allergy friendly**[®] Certification Program to support families who had recently been to the emergency room due to asthma. Through donations from AAFA and companies with CERTIFIED products, families received inhaler spacers, Rabbit Air purifiers, True Value paint, 3M air filters, various bedding products from Hollander, Bona hardwood floor cleaner, Kenmore vacuums and Guardsman dusting cloths.



True Value.



HOLLANDER
SLEEP PRODUCTS

Bona Kenmore.



GUARDSMAN
Excellence in Furniture Care Since 1915

AIR CLEANERS: What You Need to Know



For many people, the health risks posed by indoor air quality can often be significantly higher than outdoor air. Animal dander, pollen, mold, dust mites and fumes released by cooking, burning fuel or cleaning products can all negatively impact your indoor air.

Air and Room Capacity

Before selecting an air cleaner, consider the size of the room so the air cleaner you select is powerful enough. A useful way to determine this is by an air cleaner's CADR rating. CADR, or clean air delivery rate, is the performance metric to indicate the effectiveness of an air cleaner. If you purchase an air cleaner with a CADR rating too low for your room, it will be ineffective. While CADR is a key measurement for selecting an air cleaner, MERV (minimum efficiency reporting value) is important for selecting the right filter. The MERV rating is a measure of the size of particles the filter will remove. HEPA filters are normally rated MERV 13.

PM2.5 vs. PM10

PM stands for particulate matter, and the number that follows it refers to the size of the particulate matter in microns. A micron is one-thousandth of a millimeter. (The period at the end of this sentence is about 400 microns!) The primary sources of these particles are cooking, automobile emissions, dust and fires. Larger inhaled particles are normally captured by the hairs in your nose, but particles of sizes less than PM10 can bypass this defense. The smaller the particle, the deeper it can make its way into your airways, and potentially the more damage it can cause. Particles that are defined as PM10 include dust, pollen and sea salt. Particles defined as PM2.5 are generally particles emitted from the burning of coal, wood, rubber and other materials.

Modes of Filtration

Air cleaners or air purifiers are designed to remove particulates and sometimes odors from the air we breathe. There are several ways they filter the air.

Media-based filter: Filters are generally ranked according to the particle size they trap. Over time, filters need to be replaced as they become clogged. The efficacy of a filter is dependent upon the integrity of the seals. Depending on how effective a filter is, it may be described as a HEPA (high energy particulate air) filter.

Electrostatic filters: As the particles in the air pass through the electrostatic filter, they receive a charge. This allows them to stick to metal plates in the air filter.

Activated carbon filters: These filters are made of porous carbon. As odors and gases pass through the carbon filter, they become trapped in the pores, unable to pass through. The pores may become clogged over time and will then need to be replaced.

Air Purification

Ionizers and ozone generators produce different types of molecules but work in a similar way. They produce ions or ozone which is released from the air cleaner/purifier to be distributed around the room. Allergenic particles normally floating around a room have a neutral or no charge, so when they encounter ions

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BUILDING AND REMODELING: Paint, Flooring and Insulation



Before you start a home building or renovation project, consider how the products you use or install may impact the overall health of your home. During construction, a lot of dust is generated and volatile organic compounds (VOCs) can be released. Recent studies have found an association between asthma episodes in children and exposure to home renovations (installation of new flooring or new interior paint). It's important to consider choosing materials that emit fewer gases or other asthma triggers. Also, family members (especially children, pregnant women or seniors) with asthma should not remain in the house during renovation projects.



Paint

What is it that makes some paints better for the indoor environment than others? And what does it mean if a paint is CERTIFIED

asthma & allergy friendly[®]? It is not possible to make paint without using chemicals. We identify paints that do not contain ingredients that are unnecessarily harmful.

We look at three things when we test paints in an environmentally controlled chamber:

1. We paint a sample surface and measure all the VOCs released over 14 days to make sure levels remain low.
2. How well does the paint perform? Paints should stick to the wall properly, dry in a reasonable time and withstand scrubbing to clean a reasonable level of stain from them.
3. What are the chemical components of the paint and their concentrations? Are any of the chemicals known to irritate skin and/or eyes? If yes, are they present at a level low enough that they are unlikely to cause problems?



Flooring

Some types of flooring can release VOCs when installed, especially if they use an adhesive. And it is easier for

allergens to get trapped in some types of flooring. Our Certification Program tests and certifies luxury vinyl flooring, sheet vinyl flooring, vinyl tile, linoleum and sports flooring.

For hard surface flooring to be CERTIFIED **asthma & allergy friendly**[®], it must pass the following tests in an environmentally controlled chamber:

1. We measure the VOCs released for 14 days after installation. If the flooring is designed to be used with adhesive, we include the adhesive in the test, so that we accurately recreate the installation experience.
2. We introduce allergen-containing test dust into the chamber, allow it to settle and then clean it. We want to make sure that the allergen can be removed, and to make sure that allergen levels in the air do not increase substantially during cleaning.



Insulation

The release of VOCs from fiberglass insulation during and after application can impact people with sensitive airways.

Fibers, airborne particles and dust can be released during and after installation. And some insulation can support mold growth.

In order for fiberglass insulation to be **CERTIFIED asthma & allergy friendly**[®], it must undergo the following tests in an environmentally controlled chamber:

1. During the installation, we measure the amount of dust and small fibers that are released into the air. We agitate the dust and fibers during this test to mimic a person walking around near the insulation. We set strict limits on what is produced.
2. We measure all of the VOCs released from the insulation over 14 days to make sure levels remain low.
3. We place mold spores on pieces of insulation and keep them at a high temperature and humidity for four weeks to see if the mold spreads.
4. We do a detailed assessment of all the materials used to make the insulation and what concentration is present.



Are there paints, floors and insulation that are definitely safe?

Unfortunately, no. Given the variability between people and the variety of sensitivities and allergic responses that different people can have, it is simply not possible to say a product will not cause sensitivities for anyone. Our Certification Program aims to help you create a healthier indoor environment by reducing your exposure to asthma and allergy triggers. More information is available at aafa.org/certified.

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or ozone, they become charged and can stick to surfaces around the home. This removes them from the air. They can then be removed from these surfaces by normal day-to-day cleaning.

Ozone is a gas that is highly reactive. It can be formed naturally or as a result of human activity. If ozone is inhaled, it can travel all the way to the lower respiratory tract where it can damage your lungs. Many electrical devices (including air cleaners) produce ozone as a by-product. This cannot be avoided. **CERTIFIED asthma & allergy friendly**[®] air cleaners are tested to ensure that they don't produce harmful levels (greater than 0.05 parts per million) of ozone.

Ionizers release ions into the environment. Ions can be positively or negatively charged. Their main function in air cleaning is to pass their charge onto neutral air particles. By passing on this charge, it causes the particles in the air to stick to surfaces, removing them from the breathing zone. Research in the area of negative ions supports the safety of these ions. However, there is not as much research performed on positive ions. Anecdotal, unsupported research indicates that positive ions may have a detrimental impact on health. Air cleaners with an ionizing function must produce mostly negative ions to comply with certification.

UV light sources can sometimes be present in room air cleaners and in HVAC systems. UV light requires time

to kill microorganisms (bacteria, viruses, fungi), but it doesn't happen immediately.

Impact of Outdoor Air Pollution

Your indoor air is very much a function of your outdoor air. So if you live in an area with high outdoor air pollution, it transfers to your indoor environment. This will impact how often you need to change your filter and how long you need to run your air cleaner. For example, smoke from wildfires can contain a wide range of particles at very small size – as low as 0.4 micron. Carbon monoxide, a dangerous gas, can also be produced during fires, so you could use an air cleaner with a media-based HEPA filter (to capture particles as low as 0.3 micron) and some type of carbon or zeolite filter to capture any gases that may enter your indoor environment. Due to the high air pollution following fires, filters would need to be changed more regularly and air intake should be set to recirculate rather than using fresh air intake.

You can find a list of **CERTIFIED asthma & allergy friendly**[®] air cleaners, purifiers and filters and their features at aafa.org/certified



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SPECIAL EDITION:

Your indoor environment can expose you to many asthma and allergy triggers. In this special edition, we highlight our CERTIFICATION Program and how it helps support healthier indoor environments. The enclosed articles and product guide will help you reduce your family's exposure to asthma and allergy triggers.

