

How to Choose the Right Air Purifier

A guide to selecting the best air purifier for your home

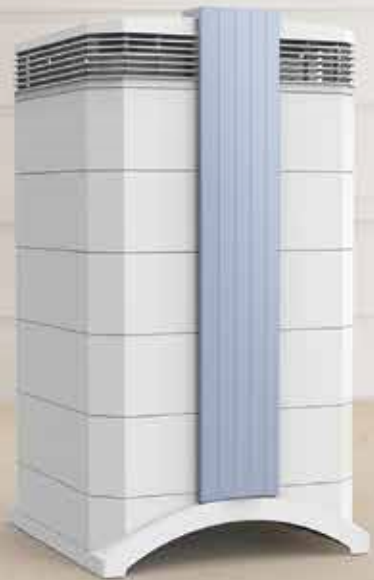


Table of Contents

Why Indoor Air Quality (IAQ) is important	1
Indoor air is often more polluted	2
Poor IAQ is a serious health risk	3
What's in the air?	4
Particles vs. Gases	5
Particles and why size matters	6
Let's talk about gases	9
How air purifiers work	10
Technologies for removing particles	11
Technologies for removing gases, odors and chemicals	14
Which ratings should you trust?	20
Clean Air Delivery Rate (CADR)	21
CADR rating system weakness	22
HyperHEPA Technology	25
Is "True HEPA" truly the gold standard?	27
HyperHEPA filtration technology	28
Why choose IQAir?	29

Why Indoor Air Quality (IAQ) is important

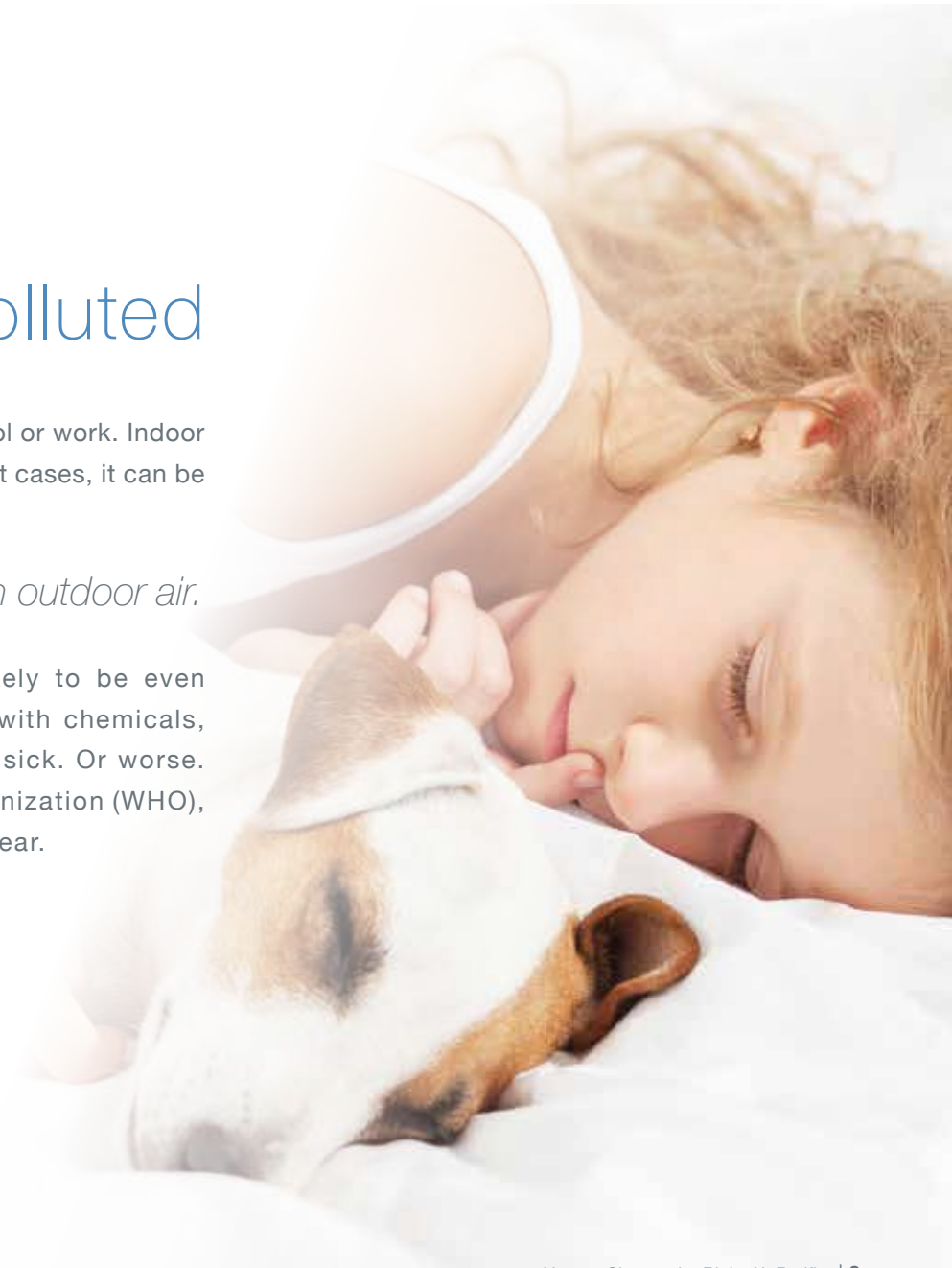


Indoor air is often more polluted

Most of us spend about 90% of our time indoors, whether at home, school or work. Indoor air is generally 2 to 5 times more polluted than the air outside. In the worst cases, it can be as much as 100 times more polluted.

Indoor air is generally 2 - 5 times more polluted than outdoor air.

In other words, as unhealthy as the air may be outside, it's likely to be even more unhealthy indoors. The indoor air we breathe can be filled with chemicals, particles, mold, viruses and other contaminants that can make us sick. Or worse. According to leading health agencies such as the World Health Organization (WHO), household air pollution prematurely kills millions of people every year.



Poor IAQ is a serious health risk

Negative health effects caused by breathing polluted indoor air can occur quickly. These short-term health effects often arise after a single exposure to a pollutant. Examples include

- Headaches
- Dizziness
- Irritation of the eyes, nose and throat

It's critical to take action to reduce indoor air pollution, even if you aren't currently experiencing any symptoms.

Long-term health effects of indoor air pollution, including respiratory diseases, heart disease and even cancer, may show up only after its prolonged and continued exposure. This is why it's critical to take action to reduce indoor air pollution, even if you aren't currently experiencing any symptoms.





What's in the air?

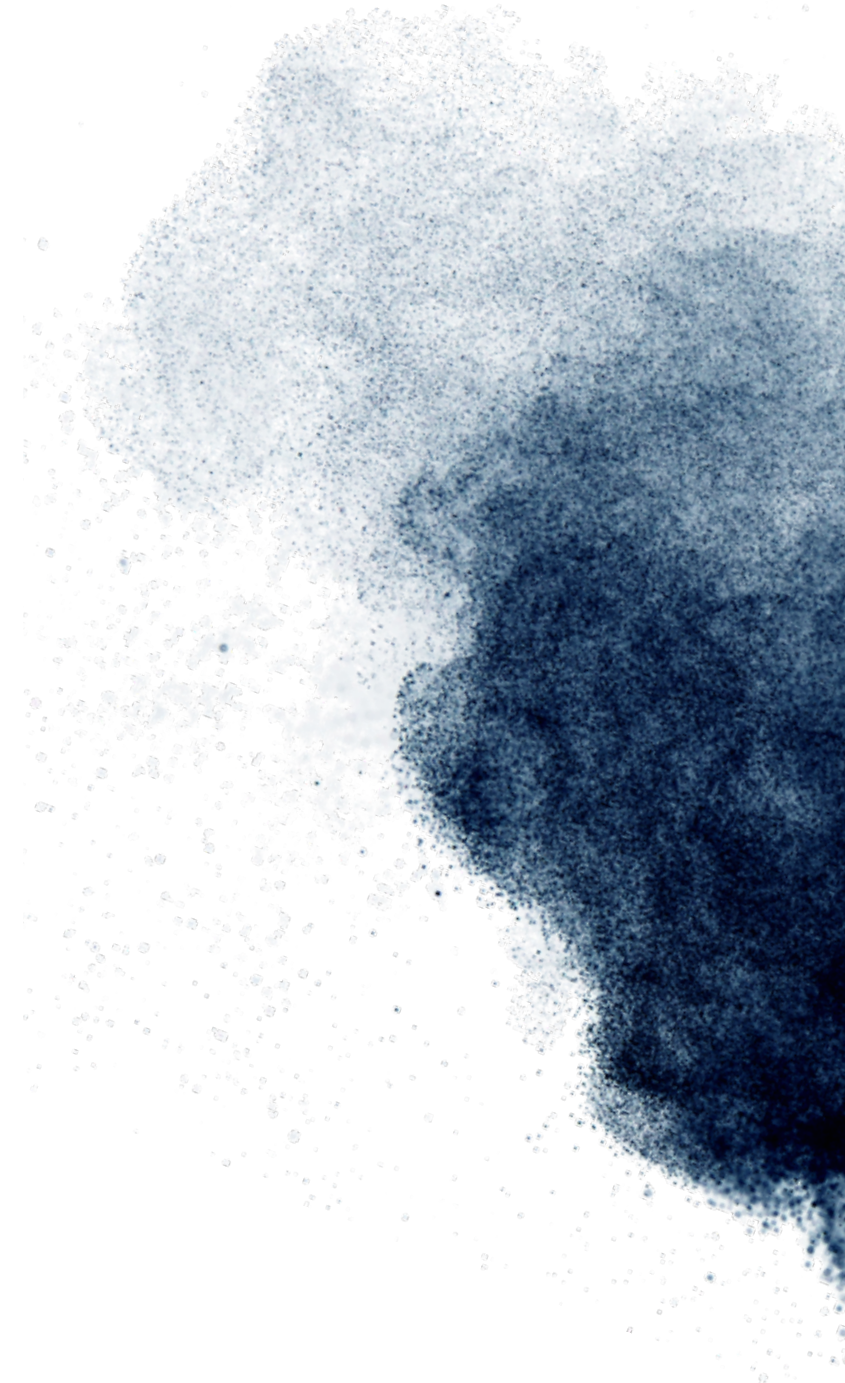


Particles vs. Gases

There are two distinct types of pollutants in indoor air: particles and gases.

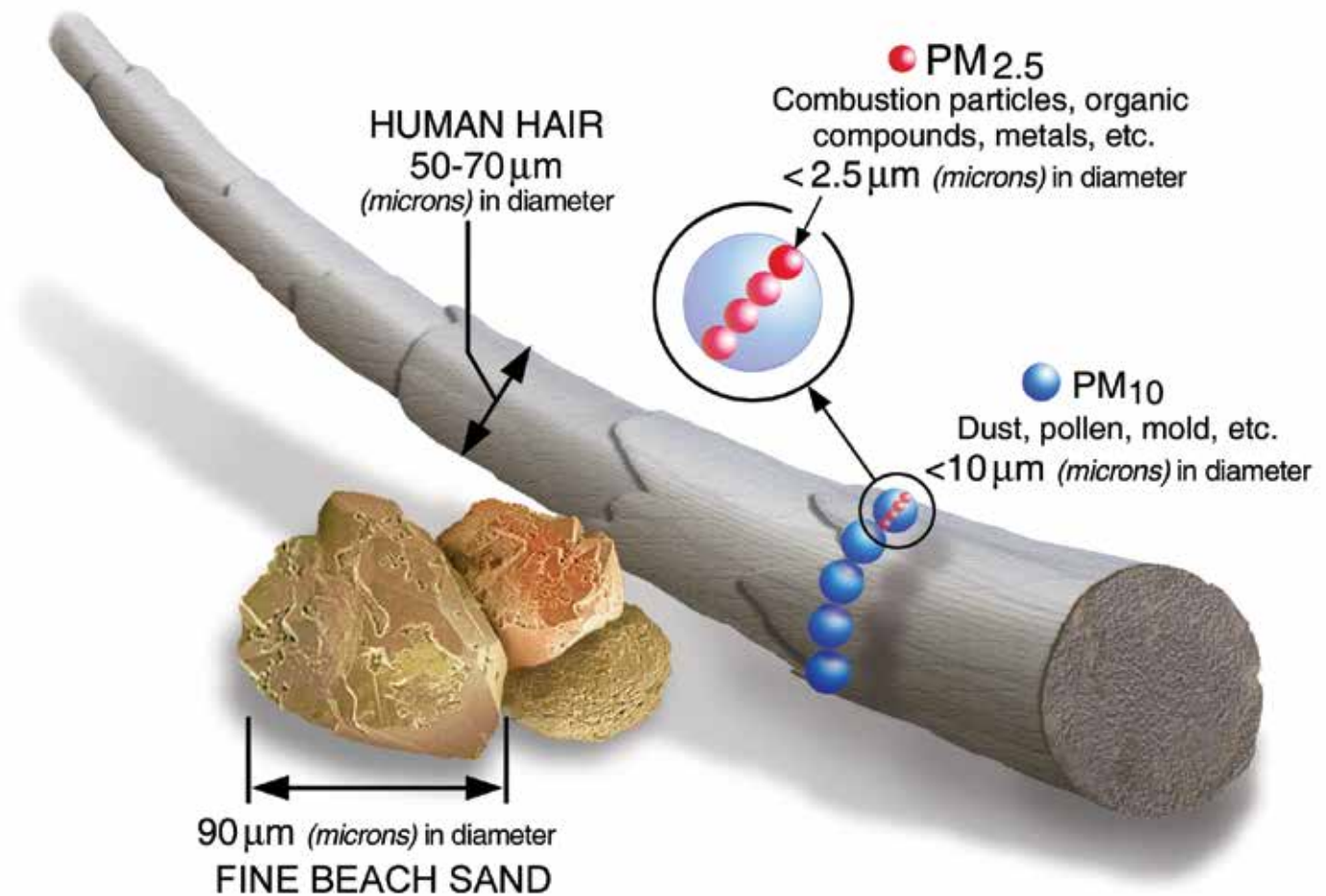
Both can be dangerous to breathe. Particles have a solid or liquid physical state. The smallest particle is approximately 0.003 microns in diameter. Gases can be substantially smaller than 0.003 and maintain a gaseous physical state. Some pollutants — such as tobacco smoke — are made up of both particles and gases. The technology for removing particles and gases are different. Therefore, even if the sole pollutant is cigarette smoke, there needs to be two technologies to remove cigarette smoke from the air.

This guide categorizes air cleaners by what they are designed to remove or impact: particles or gases.



Particles and why size matters

Airborne particles (also referred to as “particulate matter”) include particles that are “aerosolized,” or light enough to be carried in the air. Most airborne particles are invisible to the naked eye. Airborne particles are categorized into three sizes: coarse, fine, and ultrafine. For comparison, the diameter of a single human hair ranges from 17 to 181 microns.



Particles and why size matters

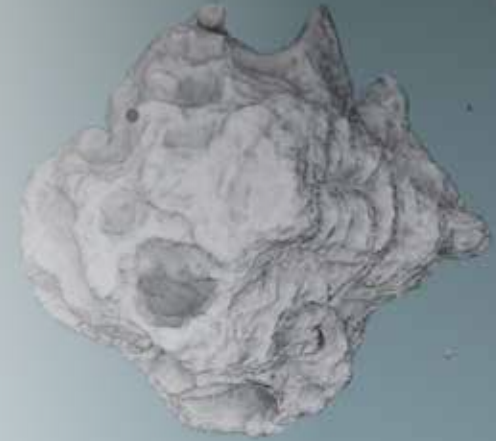
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Coarse particles (PM10) range 2.5 to 10 microns in diameter and represent less than 1% of all airborne particles. Examples include pollen, mold spores and insect parts. Coarse particles affect the nose, eyes and throat, but they generally are not inhaled directly into the lungs.

Fine particles (PM2.5) are smaller than 2.5 microns in diameter and represent about 9% of all airborne particles. Examples include household dust, bacteria and pet dander. Fine particles penetrate deep into the lungs.

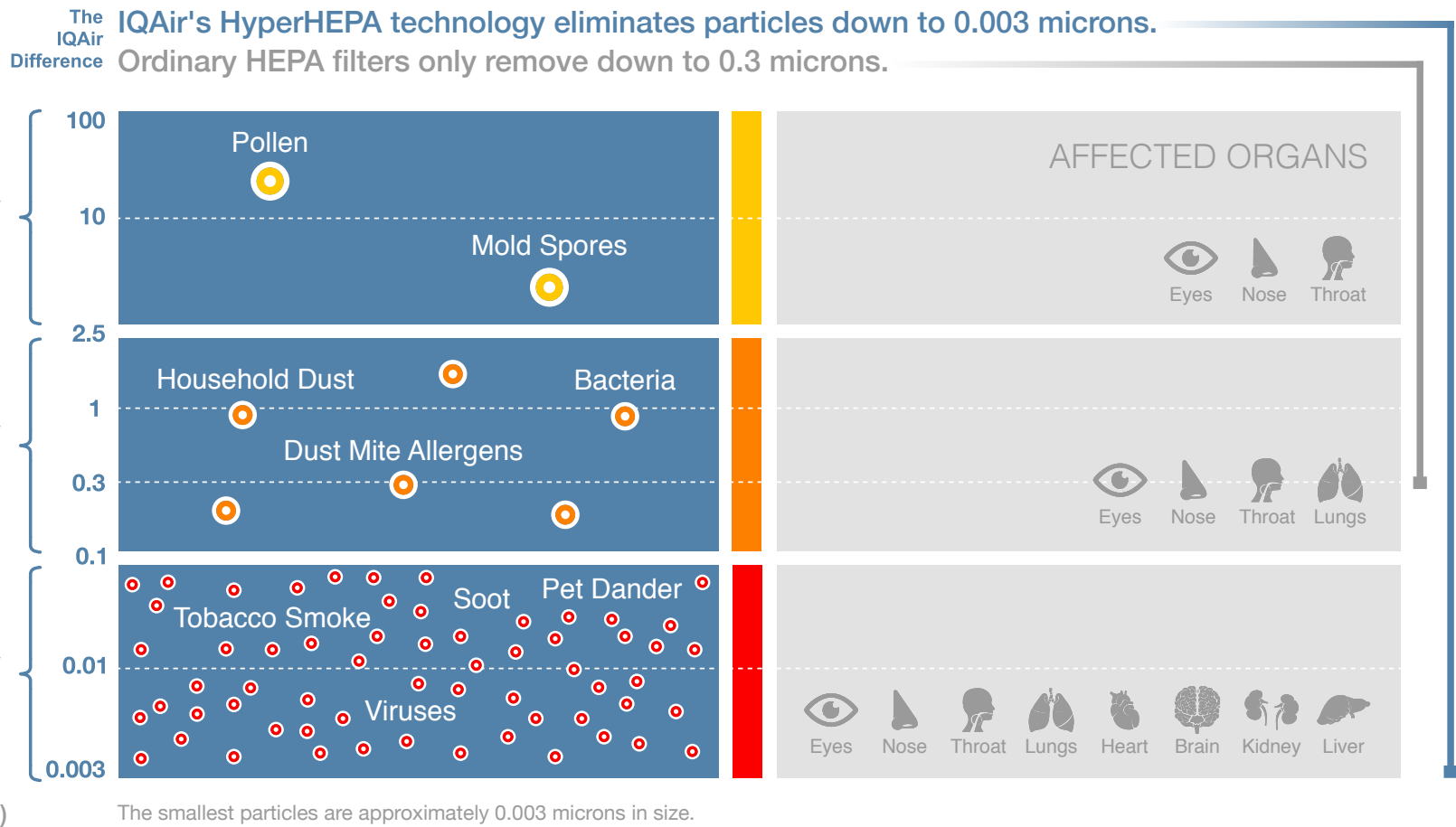
Ultrafine particles (UFPs) represent about 90% of all airborne particles. The primary source of UFPs is combustion from motor vehicles, refineries, industrial plants and even cooking. Viruses, tobacco smoke and diesel soot are also ultrafine particles. The small size of UFPs enables them to be easily inhaled, deposited into the lungs and absorbed into the blood.

Once absorbed into the blood, these pollutants are able to travel throughout the body to other organs.



Why particle size matters

The smaller the particles, the greater the potential for harm.



Let's talk about gases

Gaseous pollutant Sources include combustion from automobiles and other vehicles to paints, varnishes, cleaning products, pressed-wood furniture and even new carpets. Odors are generally gases, but can also be transported on particulates.

Volatile organic compounds (VOCs) are also gaseous pollutants. VOCs can be emitted by paint, furniture, household chemicals and other sources. Some VOCs can cause headaches, skin reactions, eye and respiratory tract irritation, and memory impairment. VOCs have also been linked to cancer. The most commonly found VOC in homes is formaldehyde.

VOCs have also been linked to cancer.

Toxic gases such as carbon monoxide, sulfur dioxide, and oxides of nitrogen belong in this category. These gases can be fatal in large amounts. Even in small doses, they can cause respiratory problems and fatigue. Common sources of these gases in a building include heating systems or gas-fired appliances that are poorly maintained.



How air purifiers work



Technologies for removing particles

Filtration technology for particles is not the same as the technology that is used to filter gases and chemicals (addressed on Page 5).

There are several types of air cleaning technologies marketed to the public for removing particles from indoor air, including, but not limited to:

Mechanical air purifiers use filters to trap particles with a mesh filter typically woven of glass or specialty synthetic fibers. High Efficiency Particulate Air (HEPA) and HyperHEPA filters are in this category. Mechanical filtration is the safest and most effective method for removal of airborne particles.

Synthetic air filters use a charged media comprising synthetic fibers with an electrical charge to increase the “stickiness” of the filter. These fibers lose their charge over time, as particles “stick” to the filter and the filter becomes too “loaded.” In fact, the efficiency dramatically decreases as the filter becomes “overloaded” with particles, and the stickiness is reduced.



Technologies for removing particles (continued)

Electronic air purifiers: These devices use electrostatic attraction to trap particles. Ionizers generate ions that attach to airborne pollution particles, giving them a charge. The charge causes the particles to attach to nearby surfaces, such as a collecting plate in the device or to nearby walls or furniture. Even air purifiers that combine ionizers with filters or air-cleaning “plates” can release thousands of charged particles into a room.

Ion-generating air purifiers can increase the risk of particles being deposited into your lungs and absorbed into your bloodstream.

The U.S. Environmental Protection Agency (EPA) warns that ion-generating air purifiers can increase the risk of particles being deposited into your lungs. Ion-generating machines can also produce ozone as a byproduct (more on the dangers of inhaling ozone below). The American Lung Association specifically recommends avoiding machines that add ions or ozone to the air.



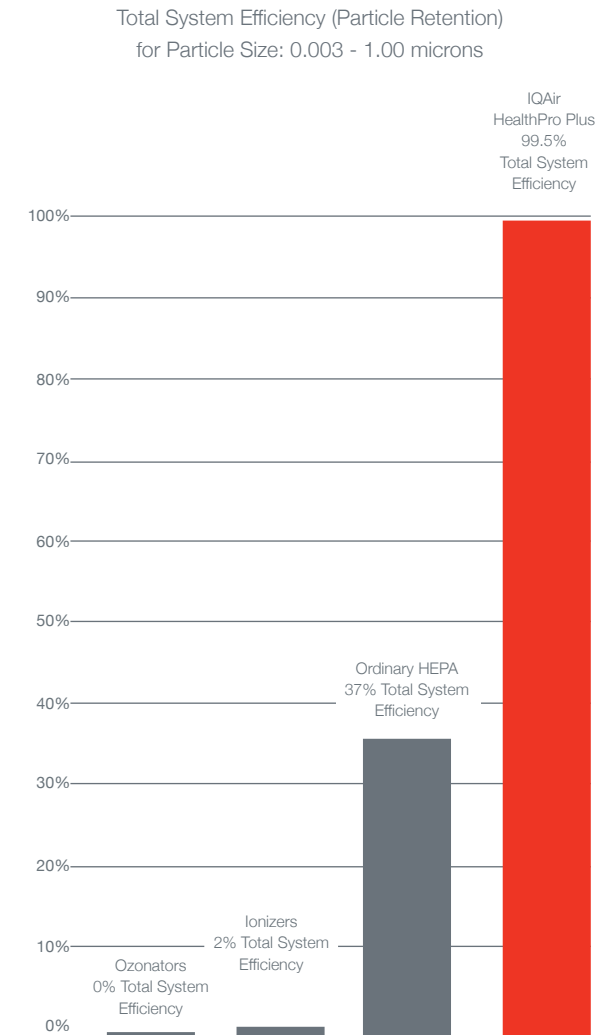
Technologies for removing particles (continued)

Ionizers: Similar to electronic air cleaners, ionizers (also called ion generators) use charged ions to clean air. However, where electronic air cleaners include collector plates, ionizers simply send charged ions into the air. These ions make the air “sticky,” meaning the ions attach to airborne particles so they become charged. This charge causes the particles to combine with larger particles and become too heavy to remain airborne. These particles can stick to nearby surface areas such as walls and furniture – including your lungs.

Hybrid air purifiers: These devices use both ionization and synthetic filters. First, hybrid air purifiers ionize airborne pollution particles. Then, the ionized, “charged” particles pass through a filter and “stick” to fibers in the filter. However, the above warnings about ionized particles still apply.

Bacteria and mold spores are often resistant to UV radiation.

Ultraviolet radiation (UV): Some air cleaners use ultraviolet (UV) light technology to irradiate indoor pollutants, although UV remove pollutants from the air. Ultraviolet germicidal irradiation (UVGI) is intended to irradiate viruses, bacteria and mold spores. This process is supposed to kill the “germ” and leave the particle airborne. However, bacteria and mold spores are often resistant to UV radiation.



Technologies for removing gases, odors and chemicals

Unlike solid particles, the atoms and molecules that make up gases are in a gaseous physical state and can move about at high speeds. They are also smaller in diameter than particulates. In fact, the average diameter is less than 0.001 microns. The technology needed in an air purifier designed to remove gases and chemicals is entirely different than the technology needed to filter particulates.

There are two main processes that remove gaseous pollutants: **adsorption** and **chemisorption**. It's helpful to know that "sorption" refers to a process of one substance becoming attached to another, and a "sorbent" is a substance that can collect molecules through sorption.

Adsorption is a process in which atoms or molecules adhere to the surface of the material known as an adsorbent (whereas absorption is the absorbing of molecules by a liquid or a gas) i.e. the adsorbent and the gas are physically bound together. The amount of gases the adsorbent can collect is a certain percentage of adsorbent weight, depending of the specific gas being filtered. Therefore, if the adsorbent properly selects for the gas: good weight - good adsorption. However, if the adsorbent poorly selected for the gas: good/low weight - poor adsorption.

Chemisorption occurs when gas or vapor molecules chemically react with a sorbent material or with reactive agents impregnated into the sorbent. This process occurs on the surface of the chemical sorbent and there is no adsorption that takes place. The chemical reaction leaves water and oxygen as airborne byproducts.



Technologies for removing gases, odors and chemicals (continued)

Materials for adsorption

Activated carbon (also called activated charcoal) is the most common adsorbent material used in air filtration. It can be made from many sources, including coal, coconut shells, and wood. Activated carbon in its granular form is effective due to its large surface area that allows it to adsorb many different compounds.

Carbon is “activated” when it goes through a steam activation process that creates an extremely porous structure. Like a miniscule sponge, activated carbon contains thousands of tiny cracks and pores. These are responsible for a very large internal surface area. Effective pre-filtration prevents pores from being unnecessarily clogged by particles. Lack of pre-filtration significantly reduces the life of the gas-phase media. The surface area exerts a physical force, which attracts many gas molecules and binds them to the surface of the carbon – the process of adsorption.

For an activated carbon filter to be effective, there needs to be a sufficient amount of carbon (determined by weight and surface area). This ensures that air passing through the filter is able to deposit its pollutant molecules with the activated carbon.

Zeolite is a “filler” that is substantially less expensive than activated carbon. Many room air purifiers that use activated carbon also use zeolite. In fact, there is no reliable scientific evidence to show that zeolite is able to remove any gaseous compound better than specialty impregnated carbons.



Technologies for removing gases, odors and chemicals (continued)

Which type of activated carbon is most effective?

There are two primary types of activated carbon used in air purification: coconut shell and coal-based.

Coconut-shell activated carbon is low-grade, inexpensive and widely available. Some allergy sufferers have reported to be allergic to dust from coconut shell carbon. It is also very soft and tends to generate dust during transport and sometimes even during usage. When compared with coal-based activated carbon, coconut shell carbon has fewer micropores, which are needed to remove odors and chemicals in concentrations common to the home environment.

For these reasons, IQAir chooses bituminous coal-based activated carbon for adsorption.

Coal-based activated carbon has an incredibly large internal surface area and is a more effective adsorbent than activated carbon made from coconut shells. Of the four major coal types (subbituminous, bituminous, lignite, anthracite), bituminous coal has the widest range of carbon content. For these reasons, IQAir chooses bituminous coal-based activated carbon for adsorption.



Technologies for removing gases, odors and chemicals (continued)

Degree of carbon activation

Another aspect which affects the effectiveness of activated carbon for indoor air quality issues is the degree of activation. Most activated carbon available today is designed for industrial applications, such as solvent recovery. For this application, the carbon is activated for the maximum amount of pores.

It's only the tiny micropores that are capable for removing odors and chemicals in concentrations typically found in homes.

While higher degrees of activation increases the adsorbent capacity of the activated carbon at very high pollution concentrations, it actually decreases its effectiveness to remove odors and chemicals at the typical concentrations found in the home environment. This is because the higher the activation degree of the carbon, the larger the pores. However, it's only the tiny micropores that are capable for removing odors and chemicals in concentrations typically found in homes. IQAir uses activated carbon that is activated in a way to preserve a maximum amount of micropores for best possible gas and odor control.

The effectiveness of an adsorbent may be enhanced when impregnated with chemical catalysts. Learn more about IQAir's impregnated chemical catalysts on page 31.



Technologies for removing gases, odors and chemicals (continued)

Materials for chemisorption

Chemisorption is a process for removing gases, odors, and chemicals that involves adsorption as well as additional chemical reactions on the sorbent surface. These additional chemical reactions improve effectiveness against specific contaminants.

Potassium permanganate permanently breaks down harmful pollutants such as formaldehyde, hydrogen sulfide, and sulfur dioxide into safe byproducts.

Potassium permanganate is an example of a chemisorbent used in high-performance gas-phase air purifiers. Potassium permanganate permanently breaks down harmful pollutants such as formaldehyde, hydrogen sulfide, and sulfur dioxide into safe byproducts.



Technologies for removing gases, odors and chemicals (continued)

Materials for chemisorption (continued)

Ozone-generators: There is a category of air cleaners that deliberately produce ozone as the primary cleaning mechanism. Ozone is a reactive gas comprising three oxygen atoms and is a primary component of smog. The EPA states that, when used at levels that are not dangerous, ozone has little potential to remove air pollutants. Inhaled ozone can irritate the lining of the respiratory system, causing coughing, chest tightness and shortness of breath. Long-term exposure can cause or worsen asthma and even lead to premature death. In fact, ozone generators are illegal in California.

Even when used at levels that are not dangerous, ozone has little potential to remove air pollutants.

Photocatalytic oxidation (PCO): PCO technology use UV lamps and a catalyst (a substance that causes a reaction) that reacts with the light. The most common catalyst used in PCO devices is titanium oxide. These cleaners are designed to destroy gaseous pollutants by changing them into harmless byproducts. When using titanium oxide as the catalyst, PCO devices are supposed to convert harmful gases into carbon dioxide (CO₂) and water. A common misconception about PCO is that they are more effective than activated carbon or other solid gas filters. However, the EPA states that currently available catalysts are ineffective against harmful gases. Also, PCO devices can produce harmful ozone as a byproduct.

Which ratings should you trust?

With so many claims, acronyms, jargon, who can you trust?



Clean Air Delivery Rate (CADR)

CADR ratings were developed by Association of Home Appliance Manufacturers (AHAM) in the 1980s as a way for the general public to navigate the claims made by air purifiers. AHAM is an organization representing household appliance companies whose products are intended to be sold in the U.S.

Brand new air purifiers are only turned on for 10-20 minutes.

The CADR rating is meant to be a standard represented by a numerical value that allows consumers to measure the effectiveness of stand-alone air purifiers (CADR ratings are not used for whole-house systems). Theoretically, it is a measurement of particles removed multiplied by the airflow rate (cubic feet per minute or cfm) passing through the device.

There are three CADR ratings given the AHAM seal: dust, pollen, and tobacco smoke. AHAM uses a test space of 1,008 cubic feet in its CADR performance reviews (11' x 11' x 8' room). Dust, pollen, and tobacco smoke pollutants are introduced into the test space, and brand new air purifiers are turned on for twenty minutes (testing for pollen ends after only ten minutes). After running for this short time, the remaining contaminants are tested and converted into the final CADR rating.



CADR rating system weakness

CADR only tests performance for no more than the **first twenty minutes of operation**, which provides no basis to evaluate long-term performance. The absurdly short test cannot account for the performance decline of most air purifiers over time. The majority of air purifiers offered by manufacturers belonging to AHAM start losing efficiency after only one hour of usage. In fact, a leading hybrid air purifier lost 50% of its efficiency after only 8 weeks of testing. To learn how IQAir tests for long-term efficiency, visit page 31.

A rating that does not measure the ability of an air purifier to eliminate the most numerous and most dangerous particles cannot be trusted.

CADR does not test performance against ultrafine particles – smaller than 0.1 microns – that make up more than 90% of all particles in the air and pose the most health risk. Many AHAM air purifiers have trouble filtering ultrafine particles effectively. A rating that does not measure the ability of an air purifier to eliminate the most numerous and most dangerous particles cannot be trusted.



CADR rating system weakness (continued)

CADR does not test effectiveness for harmful gases, chemicals or odors. Most AHAM air purifiers do not effectively reduce gaseous pollutants or odors, if at all. Consumers are left without knowledge whether the tested air purifier has any gas-phase filtration that is capable of removing harmful gases, chemicals, or odors such as ozone and VOCs. People who suffer from multiple chemical sensitivity (MCS) should never trust CADR ratings.

People who suffer from multiple chemical sensitivity (MCS) should never trust CADR ratings.

CADR does not distinguish whether an air purifier eliminates particles or deposits them on room surfaces. This is critical to note because it is precisely how ionizers work. As noted on page 12, the EPA warns that ion-generating air purifiers can increase the risk of particles being deposited into your lungs and absorbed into your bloodstream. Ion-generating machines can also produce ozone as a byproduct (more on the dangers of inhaling ozone below). The American Lung Association specifically recommends avoiding machines that add ions or ozone to the air. Much of the efficiency of AHAM air cleaners comes from depositing particles on room surfaces.

CADR rating system weakness

(continued)

CADR does not measure ozone filtration or production. As explained on page 19, there is a category of air cleaners that deliberately produce ozone as the primary cleaning mechanism. Ozone is a primary component of smog and can irritate the lining of the respiratory system, causing coughing, chest tightness and shortness of breath. Long-term exposure can cause or worsen asthma and even lead to premature death. Such a dangerous pollutant must be considered for a valid rating system.

IQAir does not consider CADR to be a valid methodology

For these reasons, IQAir does not consider CADR to be a valid methodology for evaluating air purifiers and does not participate in the rating program.

Room size ratings

Room size ratings are problematic because they are based on CADR ratings. According to AHAM, a CADR rating multiplied by 1.55 will provide the room size limit an air purifier can handle. This calculation is based on a ceiling height of 8 ft. For example, in theory, a 100 CADR air cleaner will clean a room size of 155 sq ft. Refer to the previous section about CADR ratings to learn why any calculation based on a CADR rating is invalid.



High Efficiency Particulate Air (HEPA)

The acronym “HEPA” stands for High Efficiency Particulate Air, a type of air filter that was originally designed in the 1940s to protect workers developing the atomic bomb. The filter was designed to control tiny particles that had become contaminated by radiation. HEPA filters work in mechanical air purifiers and are made with randomly arranged micro-glass fibers. As defined by the U.S. government, HEPA filters must remove a minimum of 99.97% of particles that are more than 0.3 microns in diameter to qualify as HEPA. Therefore, “HEPA” refers to both a type of filter technology as well as an efficiency standard.

Most so-called “HEPA” filters are never tested!

Due to the high efficiency, reliability and proven track-record, HEPA technology has become the industry standard for particulate filtration in critical environments, such as laboratories and hospital operating rooms.

However, there are no requirements that household air purifiers must be tested to meet HEPA standards. Recognizing the great marketing potential of the term “HEPA,” many manufacturers use the term “HEPA” to project a high-performance image onto their room air purifiers. The problem is there are no regulations regarding the use of “HEPA” in testing and labeling products. In other words, no independent body is required to test or verify the HEPA claim. Thus, most so-called “HEPA” filters are never tested!

High Efficiency Particulate Air (HEPA)

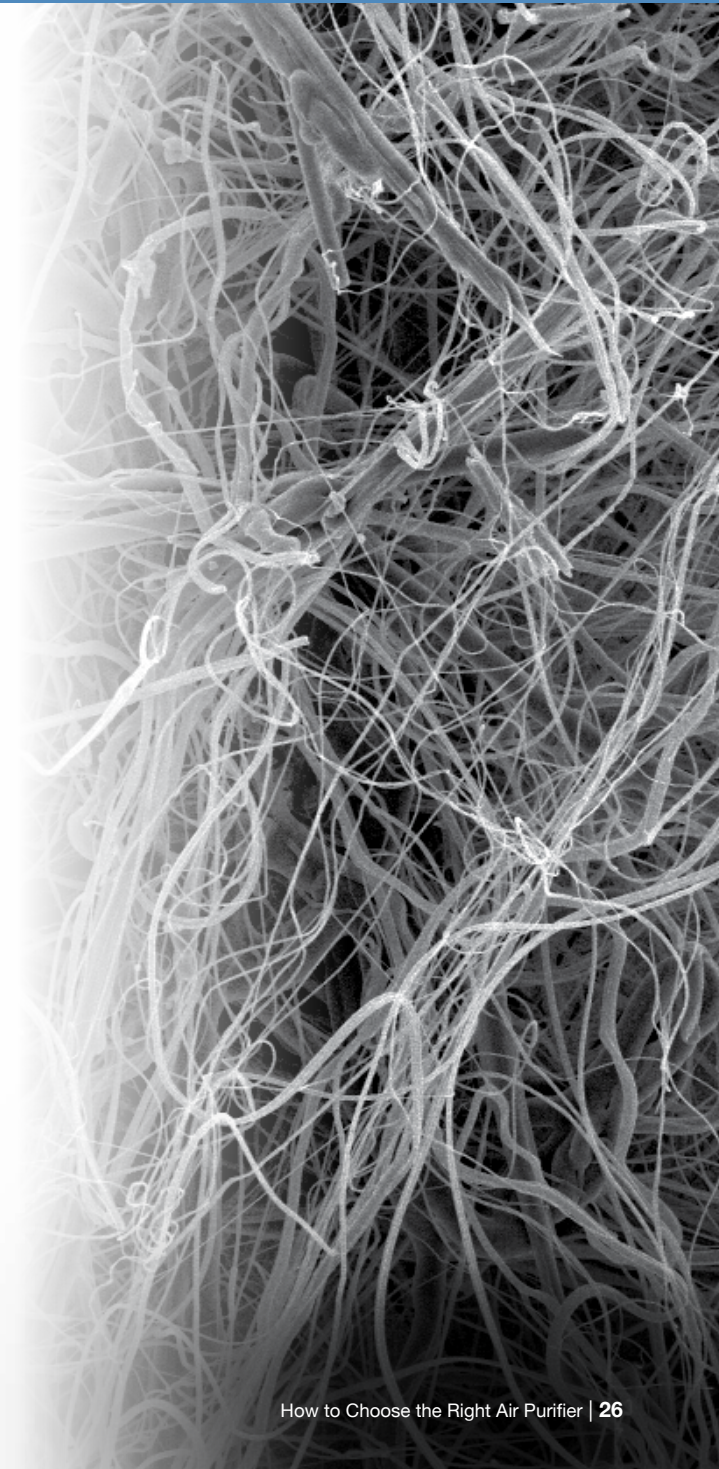
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To confuse consumers further, there are more and more types of HEPA claims entering the market. “True HEPA,” HEPA-type,” “HEPA-like,” “HEPA-style,” “99% HEPA” and “HEPASilent” are some of the HEPA claims consumers are faced with deciphering. To summarize, true HEPA refers to HEPA filters that claim to capture 99.97% of particles down to 0.3 microns. “True HEPA” is a marketing term designed to assure customers that their HEPA filters actually stand up to HEPA standards. The use of this term is also not regulated. HEPA filters are somewhat fragile, so there’s no guarantee a filter that passes HEPA standards will perform after manufacturing.

There’s no way to know how efficient – or inefficient – a filter using one of these terms is.

HEPA-type, HEPA-like, HEPA-style, 99% HEPA and HEPAsilent are all subpar versions of what truly constitutes a HEPA air filter and may never have been tested. Aside from doing your own testing, there’s no way to know how efficient – or inefficient – a filter using one of these terms is.

Some so-called HEPA filters are made of ordinary synthetic fibers. Synthetic fiber media is a far less dense structure and is much less efficient at trapping particles than media made of fiberglass or specialty synthetic fibers. Other filters trying to be passed off as HEPA use electrostatic particle charging, or ionization. As discussed on page 12, technologies using ionization should be avoided because charged particles can pose a health threat. Also, particle-charging causes a trapping plate to quickly become “loaded,” and the air purifier efficiency often decreases by even 50% in just a few months.



Is “True HEPA” truly the gold standard?

The best-case scenario for filters that actually do achieve the HEPA standard is to filter particles down to 0.3 microns at 99.97% efficiency. As discussed on page 7, airborne particles are categorized into three sizes: coarse, fine, and ultrafine. The smallest particles – ultrafine – are the most abundant (90% of all airborne particles) and the most dangerous. Ultrafine particles range from 0.1 microns all the way down to 0.003 particles - the tiniest that exist. Ultrafine particles are so small that, once inhaled, move straight through the lung tissue and directly into the bloodstream. These dangerous particles then are carried with the blood to where ever it travels, including all major organs – even the brain!

Why does the industry tout 0.3 microns as the best in air purification?

HEPA filters, at best, test filter paper at 0.3 microns, but not the air purifier’s total system efficiency. Why does the air purifier industry tout 0.3 microns as the best in air purification? Why do so many manufacturers try to mislead the public into believing their filters can actually achieve a standard that doesn’t even begin to touch the smallest, most abundant, and most dangerous particles – ultrafines?

HyperHEPA filtration technology

There is one air purification company that has managed to solve the reliable performance problem. IQAir's patented HyperHEPA filtration technology is able to filter the dangerous and highly abundant ultrafine particles all the way down to 0.003 microns – that's ten times smaller than a virus and 100 times smaller than a HEPA filter in the best scenario.

IQAir's HyperHEPA filtration is tested and certified by an independent, third-party laboratory to ensure it is effectively filtering ultrafine particles down to 0.003 microns.



Why choose IQAir?



IQAir: the recognized leader

IQAir is the recognized leader in every category in which its products are offered. IQAir systems are the most powerful air purifiers in the world, all while being energy efficient and cost effective.

In addition to extraordinary research, development and design, IQAir is committed to reaching new levels of manufacturing precision and excellence. We manufacture all IQAir systems in our own state-of-the-art production facility in Switzerland. By using the highest quality components, a dedicated team of skilled craftspeople, and state-of-the-art manufacturing processes, we continue to build the best value and highest quality air cleaning products in the world.

Please visit page 36 to learn about IQAir's more than 50 years of air quality innovation.

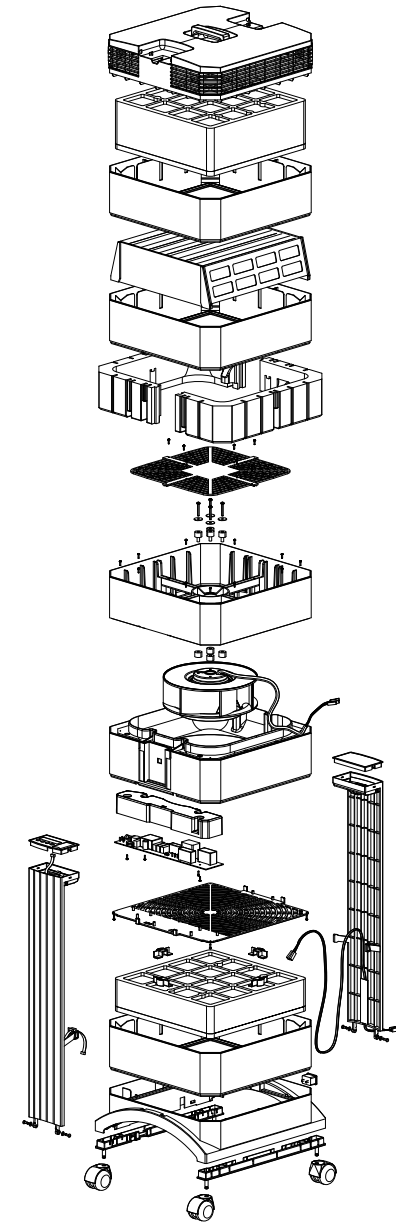


Why choose IQAir

Proven to fight ultrafine particles. IQAir's patented HyperHEPA® filtration technology is tested and certified to filter ultrafine particles all the way down to 0.003 microns – the smallest particles that exist – with a guaranteed efficiency of more than 99.5 percent. IQAir HyperHEPA filters last up to four years under normal conditions. And, while other air purifiers begin to lose their effectiveness the moment you turn them on, IQAir systems retain or increase efficiency over time.

Superior chemical, gas and odor filtration. In addition to superior particle filtration, IQAir provides the industry's leading protection against gases, odors and chemicals. IQAir's gas-phase filters use activated carbon from bituminous coal, not low-quality coconut shells or other sources. These gas and odor filters combine two types of media: one that adsorbs odors and gases and another that changes the pollutant to an oxidized form. This makes IQAir the ideal choice for controlling gases, odors and chemicals in the home.

Superior long-term performance. IQAir systems are more powerful than any other air purifiers around, yet they are energy efficient and cost effective. Most air purifiers are only tested for the first twenty minutes of total operation (see CADR testing on page 22). IQAir tests their systems for years to truly know the long-term performance level. While less expensive air filters only last weeks or months, IQAir HyperHEPA filters last up to four years under normal conditions. Other air purifiers begin to lose their effectiveness the moment you turn them on – IQAir systems actually retain or increase efficiency over time. And, IQAir room air purifiers feature a sophisticated control panel that alerts you when it's time to change filters, and not a moment earlier.



Which air purifier is best for me?

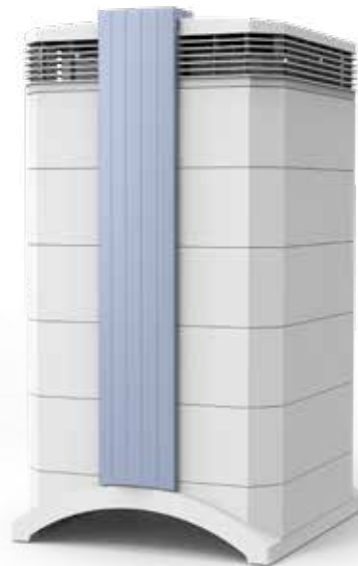
Visit our helpful Residential Help Me Choose at page iqair.com/home-air-purifiers/helpmechoose to quickly find the best solution for you. In a quick, three-step process, you'll check off your concerns such as:

- Airborne allergens (pets, dust, dust mites, mold spores, pollen)
- Asthma
- Tobacco smoke

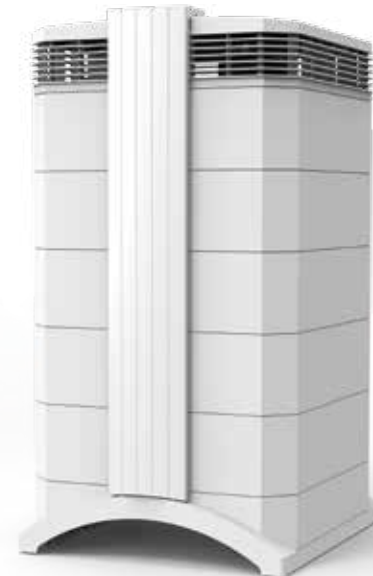
Step 2 asks the space you need your air cleaned. All you have to do in Step 3 is view your personalized recommendations. It's that easy!



Atem
#1 Personal Air Purifier



GC™MultiGas
#1 Air Purifier for MCS



HealthPro® Plus
#1 Air Purifier for Allergies and Asthma

The HealthPro[®] Plus

#1 Choice for asthma and allergy sufferers

No other air purifier has received more recognition for its ability to reduce allergens. The HealthPro Plus boasts a long list of first-place awards for the world's most advanced air purifier. Consumers Digest has awarded the HealthPro Plus its "Best Buy" award four times (2004, 2007, 2011, and 2014). The HealthPro Plus has also received acclaim from Newsweek, Wired and many other consumer publications.

The HealthPro Plus features IQAir's patented HyperHEPA filtration. While most air purifiers are only designed to filter large dust particles, those 0.3 microns and larger, HyperHEPA technology filters down to 0.003 microns, smaller than a virus, with a guaranteed minimum efficiency of over 99.5%. IQAir's HyperHEPA filtration has made the HealthPro Plus the top choice in hospitals around the world to remove airborne particulates such as the SARS virus, MRSA and tuberculosis.

The HealthPro Plus also contains IQAir's exclusive V5-Cell gas and odor filter. Many consumers are concerned with chemical vapors from household cleaners and other odors in their homes, but most air purifiers contain little or nothing to filter these irritants. The HealthPro Plus' V5-Cell filtration offers the most powerful gas and chemical filtration available in a residential air purifier.

Imagine the difference breathing virtually allergen-free air can make to your health.



GC™ MultiGas

#1 Choice for MCS, chemicals, odors and tobacco smoke

The GC MultiGas, with 12 pounds of gas-phase media, is the #1 choice for Multiple Chemical Sensitivity (MCS), chemicals, odors and tobacco smoke.

What's needed for efficient gas, odor and chemical removal is a combination of the correct media for a particular pollutant, sufficient contact time with the media, and sufficient particle pre-filtration. Most air cleaners provide ineffective gas phase and odor control because they do not include enough particle pre-filtration, do not contain enough media, and rely on activated carbon alone for gas phase filtration. Activated carbon alone covers only part of the gaseous pollutant range, mainly just VOCs.

The GC MultiGas by IQAir combines a HyperHEPA pre-filter with 12 pounds of gas-phase media – the result is effective reduction of airborne particles (including ultrafines) and high-performance gas, odor, chemicals, and tobacco smoke filtration.

The GC MultiGas combines the best filter media in the industry with superior IQAir design to provide unequal protection against gases, odors, chemicals and particles.



The Atem personal air purifier

The Atem is the most effective personal air purifier ever created. IQAir redesigned the patented HyperHEPA technology to fit into a easily portable, personal air purifier that fits into your carry-on.

Never before has air purification at this incredible level been available in a personal air purifier.

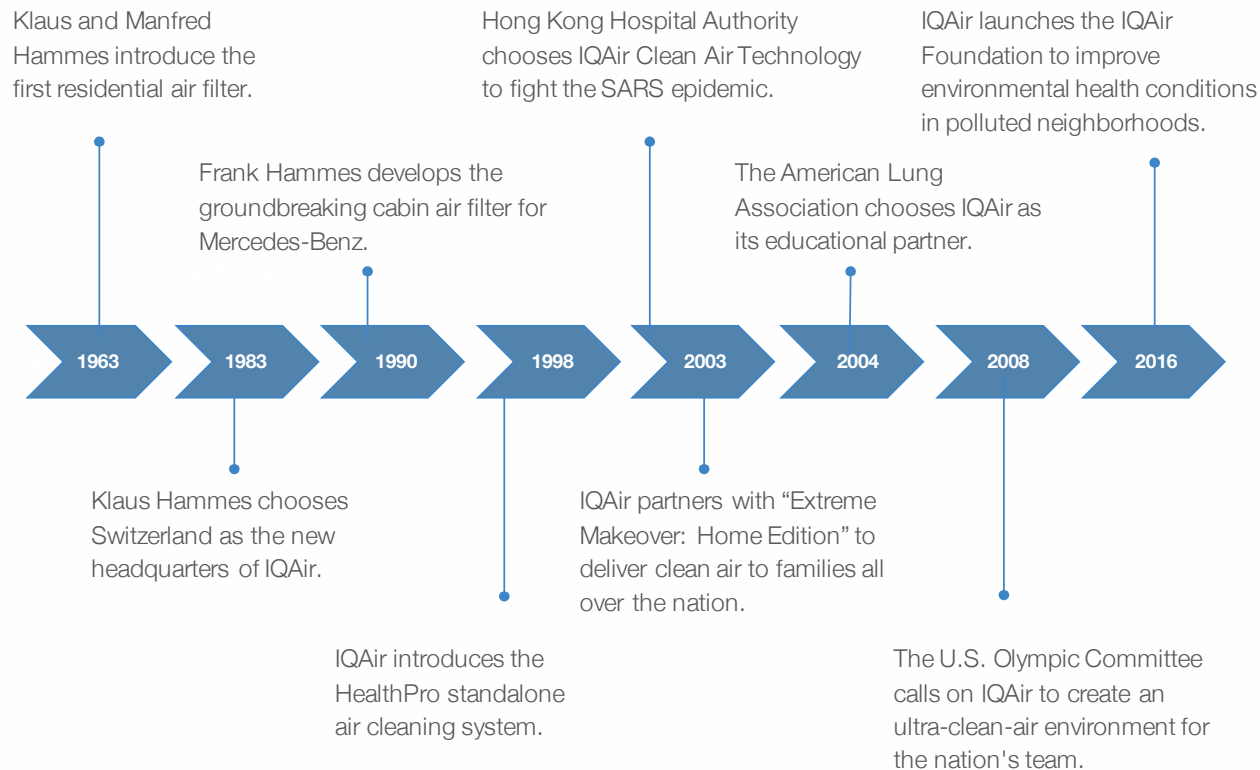
When you're not inside your home, the quality of the air you breathe is out of your control. The Atem shifts that power back to you. The Atem personal air purifier fits in most small bags and turns on with a touch. Simply plug it in and enjoy a steady stream of clean air, anywhere.



First in air quality.

No one has more experience than IQAir.

We're proud to say that after starting the industry more than 50 years ago, we remain the recognized leading experts in Indoor Air Quality.





IQAir's vision is to assist people in living longer, healthier lives by providing the very best air quality products in the world.

Learn more about the IQAir clean air experience.

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