Eliminate Indoor Air Pollution the Natural Way

The Safest, Most Efficient, Economical Air Purification Technology Available

As dangerous as polluted outdoor air can be to health, indoor air pollution actually poses a far greater health risk to you and your family. That's because, according to the Environmental Protection Agency (EPA), indoor air is two to five times more polluted than outdoor air on average, plus if you're like the typical person you spend an astonishing 80% of your life indoors. The health effects of indoor air pollutants range from short-term problems of eye and throat irritation to long-term illness of respiratory disease and cancer. Based on cancer risk alone, federal scientists have ranked indoor air pollution as one of the most important environmental problems in the US.

Here are more important facts to consider about indoor air pollution:

- A pollutant released indoors is 1000 times more likely to reach people's lungs than a pollutant released outdoors.
- Many homes have airborne pollutant levels 25 to 100 times that of the air outside the home.
- Americans spend 90% of their time indoors.
- Airborne pollutants from cleaning and personal care products you use in your home are three times as likely to cause cancer as pollutants from outside.
- 1500 hazardous substances can be found in the typical North American home.
- An estimated one out of every 15 homes in the United States has radon levels above 4pci/L, the U. S. Environmental Protection Agency-recommended action level. A recent report by the National Research Council estimates that radon is responsible for between 15,000 and 21,000 lung cancer deaths each year in the United States.
- Environmental tobacco smoke (ETS) also called *"secondhand smoke,"* a major indoor air pollutant, contains about 4,000 chemicals, including 200 known poisons, such as formaldehyde and carbon monoxide, as well as 43 carcinogens.
- About 50% of ALL illnesses are caused by or aggravated by indoor pollution.
- Homemakers may have a 55% higher risk of cancer than women working outside the home.
- Air pollution contributes to lung disease and lung cancer. Lung disease alone claims close to 335,000 lives in America every year and is the third leading cause of death in the United States. Over the last decade, the death rate for lung disease has risen faster than for almost any other major disease.
- 10,000,000 Americans have asthma. Asthma and asthma deaths have increased over 30% in the past 10 years.
- Thirty-three million Americans suffer from sinusitis (inflammation or infection of sinus passages).
- Biological pollutants such as molds, bacteria, viruses, pollen, dust mites, and animal dander promote poor indoor air quality and may be a major cause of days lost from work and school.

NEGATIVE IONS HELP IN THE WORKPLACE!

"... The introduction of negative ions increased the subjective rating of alertness, atmospheric freshness, and environmental and personal warmth. "Results indicated that subjects had faster reaction times and reported feeling significantly more energetic under negative Air Ion conditions than under normal air conditions." ~ *Influence of Negative Air Ions on Human Performance and Mood.*

It has been scientifically proven that positive ions can make some people very depressed. The benefits of exposure to relatively high concentrations of negative ions produced have been well documented over decades. Literally dozens of studies published in respected journals have concluded that negative ions can have a profoundly beneficial effect on both the mind and body.

"Fresh country air has negative ions that have been demonstrated to both treat and prevent depression."
Depression: The Way Out, by Neil Nedley, M.D. [REF]

Studies have shown that some people become **very depressed** when negative ion counts are very low, or in the wintertime (seasonal depression). A high negative ion exposure appeared associated with feeling better about self, less sensitive, and more responsive or innervated (energized). ~ August, 1982 issue of *Aviation, Space, and Environmental Medicine.*

Those especially vulnerable to the health risks of indoor pollutants include infants, the elderly, those with heart and lung diseases, people with asthma, and anyone who has developed extreme sensitivity to chemicals.

Making matters worse - these are often the people who often spend the most time indoors. The chart below outlines indoor air pollutants and the risk they pose to you and your family.

Indoor Air Pollutants		
Pollutant	**Major Indoor Sources**	**Potential Health Effects***
Environmental Tobacco Smoke	Cigarettes, cigars, and pipes	Respiratory irritation, bronchitis and pneumonia in children, emphysema, lung cancer, and heart disease
Carbon Monoxide	Unvented or malfunctioning gas appliances, wood stoves, and tobacco smoke	Headache; nausea; angina; impaired vision and mental functioning; fatal at high concentrations
Nitrogen Oxides	Unvented or malfunctioning gas appliances	Eye, nose, and throat irritation; increased respiratory infections in children
Organic Chemicals	Aerosol sprays, solvents, glues, cleaning agents, pesticides, paints, moth repellents, air fresheners, dry cleaned clothing, and treated water	Eye, nose, and throat irritation; headaches; loss of coordination; damage to liver, kidney and brain; various types of cancer
Formaldehyde	Pressed wood products such as plywood and particleboard; furnishings; wallpaper; durable press fabrics	Eye, nose, and throat irritation; headache; allergic reactions; cancer
Respirable Particles	Cigarettes, wood stoves, fireplaces, aerosol sprays, and house dust	Eye, nose and throat irritation; increased susceptibility to respiratory infections and bronchitis; lung cancer
Biological Agents (Bacteria, Viruses, Fungi, Animal Dander, Mites)	House dust; pets; bedding; poorly maintained air conditioners, humidifiers and dehumidifiers; wet or moist structures; furnishings	Allergic reactions; asthma; eye, nose, and throat irritation; humidifier fever, influenza, and other infectious diseases
Asbestos	Damaged or deteriorating insulation,	Asbestosis, lung cancer,

	fireproofing, and acoustical materials	mesothelioma, and other cancers
Lead	Sanding or open-flame burning of lead paint; house dust	Nerve and brain damage, particularly in children; anemia; kidney damage; growth retardation
Radon	Soil under buildings, some earth-derived construction materials, and groundwater	Lung cancer

* Depends on factors such as the amount of pollutant inhaled, the duration of exposure and susceptibility of the individual exposed.

How Dirty Is the Air In Your City?

The American Lung Association's 2004 report on air quality used air quality measurements made by state and local agencies and reported to EPA for the years 2000 through 2002 to measure and rank air quality throughout the United States. The rankings were based on daily and year-round particle pollution levels, plus daily ozone levels.

Particle pollution is made up of complex microscopic bits (one-thirtieth the width of a human hair) that cause serious health problems even at relatively low concentrations.

Researchers categorize particles according to size, grouping them as coarse particles and fine particles. Coarse particles fall between 2.5 microns and 10 microns. Fine particles are 2.5 microns in diameter or smaller. Both coarse and fine particles are harmful to your health.

When you inhale these particles, they embed themselves deep in the lungs -- some can pass through the lungs to the blood. Studies link particle pollution to increased risk of asthma attacks, heart attacks, strokes, lung cancer, and tens of thousands of premature deaths in the U.S. every year.

Ozone is generated naturally by short-wave solar ultraviolet radiation and appears in our upper atmosphere (ozonosphere) in the form of a gas. Ozone also may be produced naturally by passing an electrical discharge -- such as lightning -- through oxygen molecules. Lightning is a perfect example of making an abundance of O3 (ozone molecules) to naturally purify the earth's atmosphere.

When ozone comes into contact with pollutants it loses one of its atoms and "oxidizes" the pollutant, thereby destroying it. But, because ozone is an ***oxidizer*** -- always trying to give away its extra atom -- high, sustained levels of ozone in the air near the ground can be harmful to humans, plants and animals.

- Truly Silent Operation; So important when you're trying to rest at night
- Weighs just 3 pounds and is appx 4 inches tall and 11 inches wide with a depth 7 inches,
- Capable of purifying up to 750 square feet space.

While particle pollution is clearly becoming a widespread problem - now affecting a quarter of all Americans - ozone levels continue to endanger nearly half the nation (136 million Americans). Below is a list of cities most affected by the poorest air quality:

- **Northeast** -- New York City, Philadelphia, Harrisburg, Pittsburgh, Washington, DC, Newark, Bridgeport and Baltimore

- **Southeast** -- Atlanta, Birmingham, Knoxville, Louisville, Charleston, Raleigh-Durham and Winston-Salem
- **Midwest** -- Chicago, Cleveland, Cincinnati, Denver, St. Louis and Detroit
- **Southwest**: -- Dallas-Ft. Worth, Houston and Phoenix
- **West** -- Los Angeles, San Diego, San Francisco, Sacramento, Fresno, Eugene, Seattle, Provo and Salt Lake City

If you live in one of the cities mentioned above, you should definitely consider taking extra precautions to avoid dangerous air pollution. While moving to an area with cleaner air may not be a viable option, you can control the amount of pollution you are breathing indoors. With the Way Healthier Home Air Purifier you can rest assured that the indoor air your family breathes is virtually toxin free!

The Pros and Cons of Air Purifying Methods

If you are researching air purifiers, you may wind up a bit confused. Air purifiers come in all shapes and sizes and employ what seems to be straightforward technology on the surface. But simply put, some achieve cleaner air more efficiently than others.

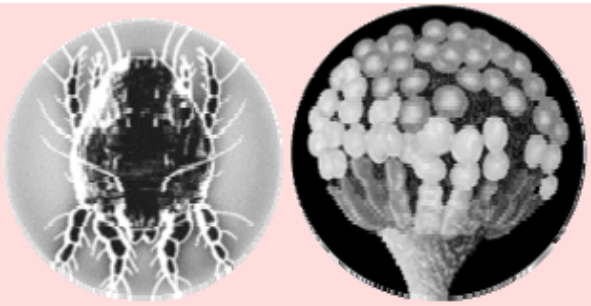
Below is a listing of the basic home air purifiers on the market today and a description of how they work, plus the pros and the cons of each.

Buyer Beware: Here Are Two Air Purifiers You Want To Avoid!

NEVER use Ozone Generators that use ozone as their primary source of purification!!!

Ozone is an unstable oxygen molecule (O_3) that oxidizes anything it bumps into. So if it "bumps" into iron, it makes iron oxide, or rust. Ozone air purifiers work by propelling the ozone by a fan, whatever the ozone bumps into it oxidizes. This is great for removing odors, killing mold and mildew -- and even killing small animals with enough exposure!

If a home is flooded or has a sewage backup, professionals will use this technology to help clean up the mess. Since people and pets are removed while the ozone is applied and are only brought back after the ozone is removed, this is an appropriate use of the technology.



- Protect your family from dangerous mold, fungi and other bacteria with the best Home Air Purifier

Still, there are several firms that sell ozone air purifiers for home use. This can be dangerous because overexposure to ozone can bring on asthma symptoms, and a high enough level of ozone can actually scar your lungs! Beware of the following misleading sales pitches often used by retailers trying to sell ozone purifiers for residential use:

- *"You need to turn up the ozone air purifier until you smell a fresh laundry scent."*

  Since your olfactory system becomes accustomed to smells over time, this means that your purifier has to continually be set to deliver higher concentrations of ozone, often leading to serious health consequences!

- *"Ozone purifiers are approved by the federal government for use in occupied spaces."*

NO agency of the federal government has ever approved these devices for such use!!! In fact, several federal government agencies have worked in consultation with the EPA to produce a review that clearly documents that ozone is not appropriate for use in residential or home air purifiers.

Note: The U.S. Environmental Protection Agency (EPA) has established 80 ppb (parts per billion) of ozone exposure over eight hours as the National Ambient Air Quality Standard. The Underwriters Laboratories (the trusted source across the globe for product compliance) standard for emitting ozone is 50 ppb. Currently, air purifiers are not legally obligated to comply with this standard, but it is a very strong recommendation. When tested, the ARANIZER Home Air Purifier produced a maximum of 10 ppb - a very safe and effective level of ozone far below the UL standard of 50 ppb!

The Sharper Image Ionic Breeze Air Purifier is showing up in lots of places these days, but DO NOT BE FOOLED by their ads and popularity – this is a system you DO NOT want to use in your home.

Ionic Breeze ads run on scores of channels, versions are sold in countless publications, and the products are sold in lots of stores, so it must be good right? Wrong!!! The relentless intensity of advertising behind Ionic Breeze purifiers just gives the product the appearance of popularity.

Ionic Breeze Air Purifiers "work" by using a charged plate electrostatic system, but with no fan. It relies solely on the electrostatic plates to move the air though the air purifier. To some extent it does move air as you can see with the wiggling ribbons on TV.

What the makers of Ionic Breeze fail to mention is that it moves very little air. The typical air purifier moves 200 to 400 cubic feet of air a minute. If you tape the little ribbons from the ionic breeze air purifier commercial on the typical purifier -- they would be blown off. To put this in perspective, 400 cubic feet is contained in a room with 8-foot ceilings that is about 9' by 6'. The "real" air purifiers move all of this air in ONE minute. Here are some points to remember about the Ionic Breeze:

- One independent product testing publication reported that the Ionic air purifiers removed very little dust in a test lasting over 100 minutes. Generally, it didn't come close to the performance of other air purifiers tested.
- Ionic Breeze purifiers are found to only absorb about 30% of the particles in the air.
- The air purifier that used ionic breeze technology was also found to have left about 5% of the contaminated air in the room to circulate without ever being absorbed by the purifier.
- Consumer Reports gave ionic breeze purifiers a "poor" rating.

If you have allergy, asthma problems, or other respiratory problems, it is obvious that you are better off going with a more substantially performing air purification system.

Air Purifiers That Work – But Then Cannot Finish the Job

High Efficiency Particulate Air filter, or HEPA, technology is one of the most popular technologies used in air purifier. An air purifier that is equipped with a HEPA filter is able to absorb 99.7% of all particles that are 0.03 microns and larger in size. Most harmful particles found in the air are measured to be about 0.03 microns or larger. To qualify as a "true" HEPA, the filter must allow no more than 3 particles out of 10,000 to penetrate the filtration media.

As good as that sounds pure HEPA air purifiers do not remove odors, chemicals or gasses. Since these are molecular level substances, the 0.3 micron holes are large compared to the gas molecules. Because air must pass through the filter, it can be difficult to clean a very large room with a HEPA filter.

Mother Nature uses UV light rays of the sun and ozone that is produced by thunderstorms to perform natural air purification.

To understand how the HEPA works, imagine a filter that only allows very tiny particles to pass through. If you placed a single sheet of this HEPA paper in front of a fan, very little air would be able to pass because of the small size of the holes. In addition, air purifiers made like this would need to have the filter changed often because the holes would plug rapidly.

To get adequate airflow and filter life, you would have to fold the paper back and forth so that it can present a very large surface area to the airflow. This is how "real" HEPA filters are made -- with as much as 40 square feet of the filter material folded into the HEPA section.

A HEPA air purifier is simply a fan that forces airflow though a filter. The more times the airflow goes though the filter, the cleaner the room. So, if you put the product at one end of a long narrow room, how often is the air from the other end going to get though the HEPA filter? Not often. If you need to purify air in a large space, the HEPA is probably not your best choice.

Electronic air purifiers use an electronic charge to attract particles to collection plates and eliminate them from the air. Proven to be 95% efficient, electronic purifiers can absorb most particles from the air. Similar to magnets, they use static electricity to charge particles in the air. The static that is developed by the machine is used to attach a charge to all particles in the air that is taken in by the air purifier.

When the particles possess a charge, this charge is attracted to the opposite type of charge. This opposite charge is placed onto collection plates or other types of medium inside the air purifier. This medium attracts the charged particles and they stick to the charged medium instead of staying in the air. There are two types of electronic air purifiers:

1. The one-stage system in an electronic air purifier charges the particles and sticks them to the collection plates. There is only one step that the air goes through of filtering once it enters the air purifier.
2. In the two-stage system, however, the air enters the air purifier and the particles in the air are charged using high-voltage wires. The charged particles are then pulled into metal plates that are charged oppositely. Both types of electronic air purifiers are just as effective at removing particles from the air.

Here's why electronic air purifiers are more efficient than other types:

- When particles are charged as opposed to just being absorbed, they stick easier to the medium.
- More particles are removed and there is a better chance of them being absorbed by the filter when they possess the charge given by an electronic air purifier.
- Both types of electronic air-purifying systems require very low maintenance.

- There are no filters to change and the air purifiers tend to stay relatively clean.
- If build-up develops, the collection plates can be wiped down with a damp cloth. All of the build up will be removed by a simple wipe and the collection plates will be good as new and perfectly charged.
- If the collection plates are kept clean and free from particle build up, they will remain efficient and effective in cleaning the air.

Electronic purifiers cover smaller areas such as bedrooms and small living quarters. The usage of electronic purifiers is very limited as an increased airflow reduces the unit's effectiveness in removing air borne particles. Electronic units are acceptable in removing dust and pet dander, but not recommended for removal of chemicals, smoke, molds and certain smaller pollen particles.

Negative Ion purifiers re-create the same process nature uses to keep the air fresh and clean.

To understand how these purifiers work, you need to first understand the role negative ions play in nature.

An ion is any atom that has a positive or a negative charge. A positively charged ion will seek a negatively charged one to unite with and then turn into something totally new and available. In nature, ions are generated in abundance wherever energy is transferred into the air such as ultra-violet light from the sun, or by lightning and thunderstorms.

Negative Ions remove airborne contaminates from the air you breathe, and have a rejuvenating effect when interacting with our body – especially your respiratory system.

Places we find energizing, such as in the mountains, near waterfalls and the beach have optimal concentrations of negative ions of at least 2,000 per cubic centimeter.

On the other hand, there are only a couple hundred negative ions per cubic cm. in the typical indoor environment. Scientific studies about negative ions have also shown that some people become moody, tired, depressed, or experience difficulty concentrating when negative ion counts are low, or when positive ion counts are high (such as in front of a computer monitor).

Negative Ion purifiers generate the negative ions that nature uses to significantly reduce the amount of dust and other particles in the air.

Most floating contaminates and allergens are positively charged. In environments where high densities of negative ions exist, they are able to reverse the charge of floating contaminates to a negative charge.

This results in a magnetic attraction among the floating pollutants in the air, causing them clump together. As a result, they become too heavy to remain floating and fall to the ground -- out of the air you breathe (shown pictured right).

However, these particles fall out of the air and are then stuck to the wall or items in the room that the air purifier is cleaning. The particles that the negative ion attract and charge are not cleanly taken out of the air or absorbed into the air purifier. Instead, they have simply been moved to the walls and surrounding solid items in the room. These particles could easily become loose and circulate the air again.

Although negative ion technology may seem to be cutting edge and may seem effective since it is used in a few different industries, this type of air purifier is still not proven as effective as HEPA technology or electronic technology when it comes to eliminating and catching more particles in the air.

Nature's Own Methods Purify Indoor Air

Similar to Negative Ion purifiers, Air Purification units also produce negative ions to reduce particles in the air. However, that is where the similarities end. The Air Purification units we recommend utilize exclusive technology you will not find in any other air purification system.

Photocatalysis is a process that oxidizes organic odors, germs, and fungi in a room or office -- exactly the same way this occurs in nature. The UV light rays of the sun and ozone that is produced by thunderstorms perform natural air purification. This is why air smells so fresh after a thunderstorm. Ion generation occurs in nature from lightning and ultraviolet radiation.

The other part of the process is a catalyst made from Ti02 (titanium dioxide) and other proprietary metals, that when activated, generates hydroxyl radicals and super oxide ions. This system is not an air filter, but an air purifier duplicating Nature's own methods of air cleaning and revitalization.

This process creates hydroxyl radicals (OH), which are more effective and safe as an oxidant than ozone and chlorine. Despite being so small that 10 billion billions would fit in a raindrop, OH is probably the single most important cleansing agent in the earth's atmosphere.

Trillions of these molecules continually purge the atmosphere of a wide variety of pollutants, including carbon monoxide, methane and nitrogen oxide. OH radicals last only about one second before reacting with some other chemicals species. This highly reactive nature is what makes OH such an important cleansing agent that it:

- Effectively destroys fungi such as mold, mildew, viruses and bacteria
- Neutralizes toxic chemical fumes and vapors -- like formaldehyde.

According to a recent Mayo Clinic Study, nearly all chronic sinus infections (afflicting 37 million Americans) are a result of molds. Molds (sometimes referred to as black molds, even though mold can come in a variety of colors) can cause a wide array of adverse responses in humans depending on the type and quantity that is present.

How Much Ozone is Safe?

At safe levels, ozone is harmless, and it can also be beneficial. When we breathe air unpolluted by human activities, we usually take in about 10 to 15 parts of ozone per billion parts of air (10-15 ppb). However, pollution from human activities has greatly elevated levels of the ozone we breathe. Since the Industrial Revolution, surface ozone measurements have increased in some places as much as 100-200 percent - with spring and summer ozone concentrations reaching above 125 ppb during episodes of excessive heat.

The U.S. Environmental Protection Agency (EPA) has established 80 ppb of ozone exposure over eight hours as the National Ambient Air Quality Standard. The Underwriters Laboratories (the trusted source across the globe for product compliance) standard for emitting ozone is 50 ppb. Currently, air purifiers are not legally obligated to comply with this standard, but it is a very strong recommendation.

A very safe and effective level of ozone far below the UL standard of 50 ppb! It's important to note that ozone concentration diminishes rapidly as you get further away (even a short distance of just a foot or two can make a significant difference). While ozone is very powerful, it has a very short life cycle. When faced with odors, bacteria or viruses the extra atom of oxygen in ozone destroys the airborne pollutants completely by oxidation. In so doing, that extra atom of oxygen is destroyed and there is nothing left...no odor...no bacteria...no extra atom, only oxygen. Low level ozone does not last long. It simply does its job and disappears.

The health risks associated with mold exposure include, but are not limited to: allergic reactions, irritation associated with volatile organic compounds (VOCs), invasive disease, and mycotoxicosis. Infants, young children, the immune-compromised, and the elderly are at an increased risk of experiencing adverse health effects related to mold exposure. Also, because most allergens, such as pollen, dust, dust mites, pet dander, and smoke, are particulates, Our Air Purification units are especially effective at relieving allergy symptoms

sooner, while remaining equally effective against mold, bacteria, cooking and pet odors, as well as other normal household odors.

Ionizing Air Purifiers are better than air filters at minimizing the airborne particulate, which allows mold spores to disperse to other areas of your home since they can remove smaller particles from the air, and do not rely on particulate passing through them in order to remove them from the air.

Formaldehyde (also called Quaternion) is a cheap preservative found in virtually everything from rugs and new clothes to soap and even baby shampoo! If you find it listed on labels around your home, your house is filled with these carcinogenic vapors. The ARANIZER eliminates this harmful chemical.

ARANIZER's exclusive ARAN technology generates superior purification to generate negative ions much faster, which means there are more negative ions in the air to attach to the positively charged particulates in the air.

The ARANIZER system contains a sensor that monitors the balance in the electrical charge of the area being treated. When the treated area becomes balanced (the number of negative and positive ions are equal), the sensor automatically deactivates active ionization until more negative ions are needed. This prevents dust, smoke, and other particulate from adhering to (and discoloring) walls and other surface areas.

The ARANIZER system consists simply of a base unit. The coverage area is sufficient for most large rooms up to 750 square feet. There are no moving parts or filters to clean, and the system is as quiet as a light bulb!

The ARANIZER Air Purifier produces fresh clean air throughout your home or office uniformly, by addressing the pollutant source - without the use of fans, filter, or plates. Unlike most air purifiers, the ARANIZER Air Purifier doesn't wait for pollutants to contact a filter or plate. Instead, the ARANIZER unit uses the most sophisticated air-purifying technology that migrates through a large area and neutralizes organic odors, microbes, and molds at their source.

Unlike most air filters, you won't find a fan in your ARANIZER Home Air Purifier. The challenge with most air filters or purifiers is that air must be drawn to the unit, either through natural airflow, or through the use of a fan. This method results in uneven treatment and can leave pockets of polluted air. For maximum effect, the ARANIZER Home Air Purifier is intended for around-the-clock use and can effectively clean a large room of up to 750 square feet!

Even worse is the noise the fans make. Most fans you find on air purifier units are so noisy that they can actually substitute for a white noise filter and can serve to mask noise. While this is an obvious benefit if you are trying to fall asleep, the noise they make can really be distracting and irritating during the day. Because Way Healthier Air Purifiers do not use fans -- they make NO noise. Plus the fans are subject to failure, and require higher levels of electricity.

And you'll love how Aranizer's unique design accents any décor. Only 4 inches tall and 11 inches wide with a depth 7.5 inches, this lightweight air purifier weighs just 3 pounds and can be set up horizontally or vertically to fit just about anywhere.

. . . for Pricing and to place an Order for any of the Aranizer products.