



Benefits of Whole House UV-C Air Disinfection in HVAC Systems

UV-C destroys virtually all microorganisms, bacteria, mold and viruses in air duct systems

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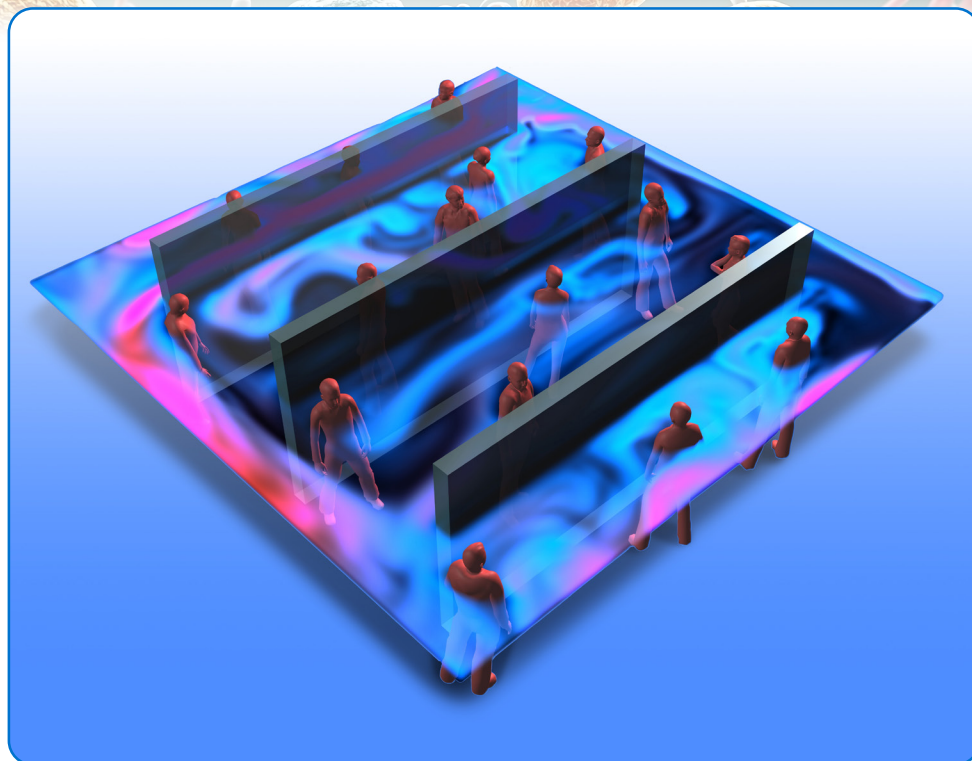
What is Whole House UV-C Air Disinfection?

Microorganisms and Irritants in the Air Contribute to Health Issues, Asthma, and Allergies

The air currents in your home, commercial, or industrial environment carry the oxygen you need to breathe. But you might be surprised to learn that microorganisms such as bacteria, viruses, and mold are stealthily floating around in that air.

These not only cause members of your household to pass airborne illnesses to each other, but can compound allergy and asthma symptoms.

The solution is **WHOLE HOUSE UV-C DISINFECTION.**



Strep, Colds, Flu and Other Viruses Breed Right in Your Ducts

Home or office air ducts are the ideal breeding ground for these harmful microorganisms. The EPA estimates that we spend close to 90% of our time indoors. Therefore, we are at high risk for picking up these germs on a daily basis.

¹<https://www.epa.gov/report-environment/indoor-air-quality>



How Do Viruses, Bacteria, Fungi Spread Through the Air?

All it takes for millions of microbial particles to be released into the air is a simple cough or sneeze. Floating microbes are picked up by air currents and either land on objects in the home or are invisibly transported through the HVAC system's air ducts.

Many fall in the ducts, an environment perfectly suited to bacterial reproduction. While many remain there, others abandon the nest and continue that circuit of "world travel" around your home, spreading to different spaces and potentially infecting unsuspecting family members. HVAC units will also pull in microorganisms and fungi from outside and carry those through the air ducts, expelling them in your home.

How do these contaminants make their way into your body? They are either inhaled as we breathe or internalized by contact with everyday surfaces such as

doorknobs, tables, chairs, and cabinet handles. Touch an infected surface, then innocently touch your mouth or nose. Simple biology does the rest!

The common cold and the flu are the most frequent contaminants spread in the home. According to the CDC, Most adults catch 2-3 colds each year.¹

Both are highly contagious. They are passed from one person

to another via tiny droplets in the infected person's mouth. When an infected person simply breathes or talks, these droplets spew out into the air and find their way into the orifices of uninfected people who are in the vicinity. Laughing, sneezing, and coughing expel even more infected droplets, potentially spreading more germs.



There is even further cause for alarm! The cold and flu are just the tip of the iceberg. Infected people who can spread dozens of other potential germ-carrying airborne microbes, including Pneumonia, Staphylococcus (MRSA), Streptococcus (strep), Coxsackie, Measles, and Tuberculosis (TB).

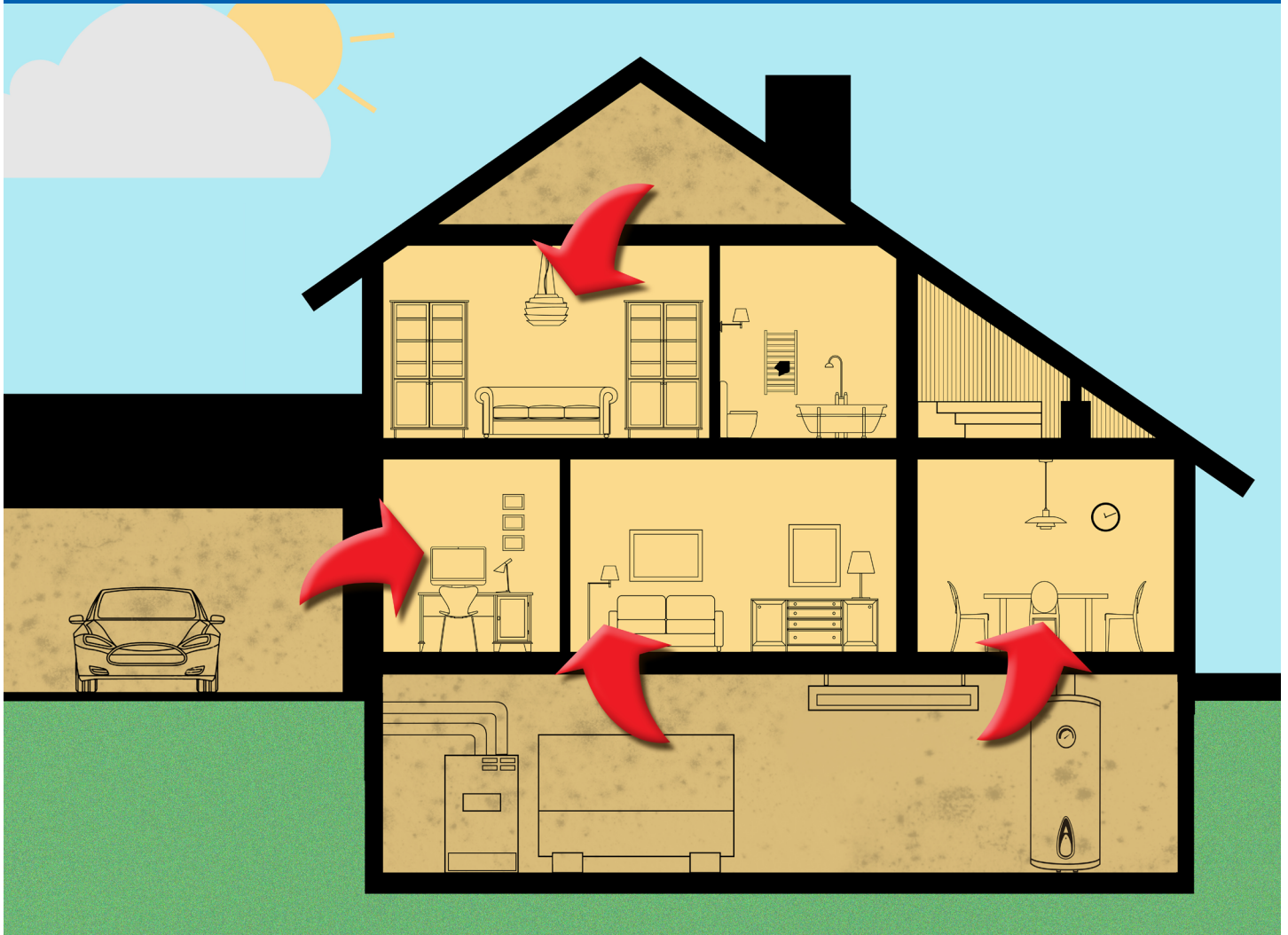
Besides medical illnesses, other factors come into play. Common residential odors, mold, and dust not only create an unhealthy environment in the home, but magnify allergy and asthma-related issues.

Whole House UV-C Air Disinfection, combined with proper air filtration, can lessen odors associated with bacteria and mold.

¹<https://www.cdc.gov/dotw/common-cold/index.html>



UV-C in the home



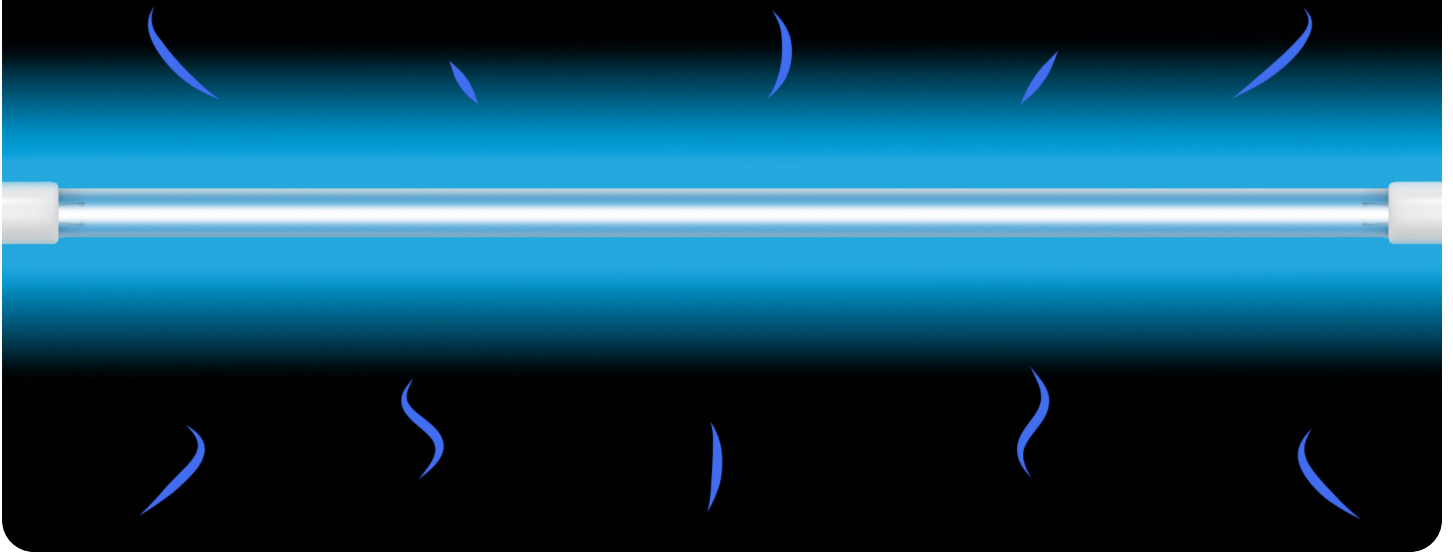
Microscopic organisms develop in garages, basements and attics and infiltrate your home

Treat these targeted areas of your home with UV-C

The environmental conditions found inside your basement, crawlspace, attic, or attached garage face temperature and moisture fluctuations, making them favorable to the rapid development of millions of microscopic organisms. These microorganisms are carried throughout the air from non-living areas into your living spaces. Treating these regions of the home with UV-C is lethal to viruses, bacteria, and mold that repopulate there and spread into your home.

UV-C Whole House Air Disinfection Reduces Airborne Microbes

UV-C AIR DISINFECTION 254 NANOMETERS



~~BACTERIA~~

~~VIRUS~~

~~MOLD~~

Germicidal UV-C is a proven technology and an important weapon in fighting disease transmission. It is not only safe, powerful, and fast but also chemical free and cost effective. Ultraviolet light emitted at 254 nanometers has been found to be an extremely effective means of controlling

airborne pathogens. The resulting rays damage the DNA of harmful microorganisms, destroying their ability to multiply. Unwanted microbes eventually die off, making homes and other facilities safer, healthier, and even more efficient.

Studies show a clear correlation of reduced microorganisms after UV-C treatment. An extensive Canadian study cited in the respected medical journal *The Lancet*¹ found a reduction of 99% of microbial and endotoxin concentrations in an office ventilation system following proper use of an installed air duct UV-C apparatus. As a result, those participating in the study showed a significant reduction in symptoms such as headaches, coughs, congestion, and respiratory issues.

¹[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(03\)14897-0/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(03)14897-0/fulltext)



UV-C Air Treatment Systems

The solution to a healthy home or work environment.

Atlantic Ultraviolet Corporation® engineers designed the **AeroLogic® UV Air Duct Disinfection Systems** for use in just about any occupied setting. All AeroLogic® models provide economical, safe, and continuous disinfection. It's a win-win when microbes and irritants are rendered unable to reproduce. Health improves, asthma and allergy discomfort can decrease, and heating systems become more efficient. UV-C air treatment can also reduce and eliminate odors. It increases overall sanitization in the home as the air is treated before it lands on surfaces or is inhaled. In short, UV-C Air Duct Disinfection maximizes health, wellness, and comfort.

The **AeroLogic®** can be easily installed inside HVAC systems by a professional or homeowner. Watch the step-by-step installation video on our YouTube channel entitled "[AeroLogic Air Duct Disinfection Systems - Model AD36-1 Installation Video.](#)"



While the AeroLogic® can be installed anywhere within the HVAC system, we recommend it be mounted perpendicular to airflow and directed at the condenser coil for best results. That is where mold and fungus tend to grow and thrive.

Since the powerful ultraviolet lamps are housed within the air duct, they are completely safe to use. You won't be exposed to their rays while they are busy at work.

- Units may be mounted into new or existing duct systems
- Constructed of corrosion-resistant stainless steel
- Reduces and/or eliminates the growth of bacteria and mold
- Controls the spread of airborne viruses and diseases
- Continuous disinfection without special attention
- Numerous models available for homes or facilities of any size

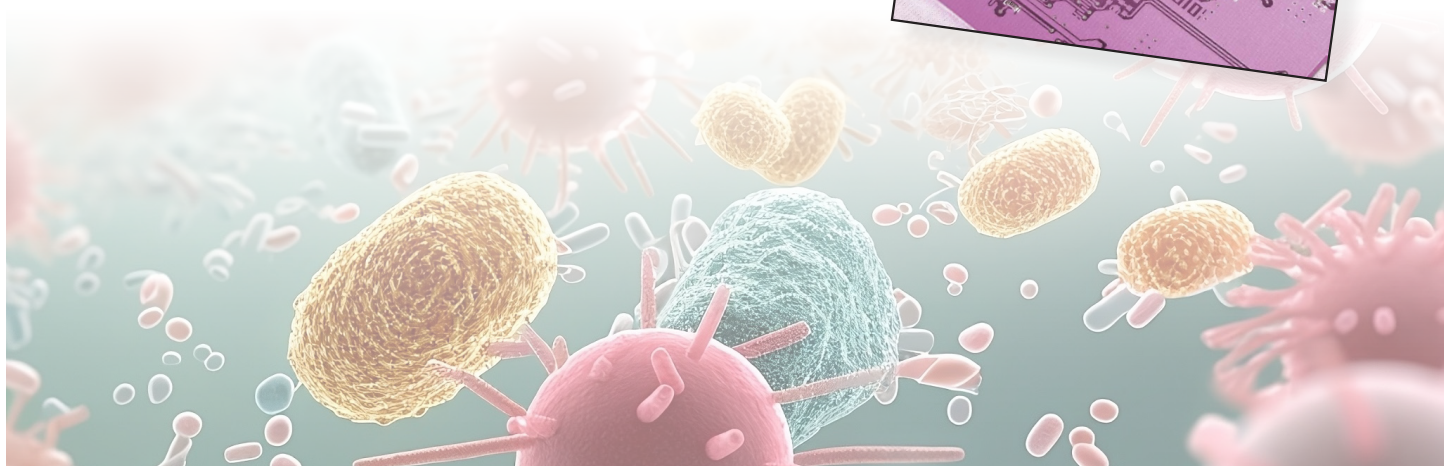
UV-C Air Treatment Systems

UV-C Effectiveness Further Documented

Ultraviolet technology is a great solution for achieving air quality goals. Following extensive controlled environment testing, published articles by the [US Environmental Protection Agency](#) and [Rensselaer Polytechnic Institute](#) document the efficiency and safety of the AeroLogic® Air Duct Disinfection System in reducing the presence of microorganisms within air-duct systems.

At Atlantic Ultraviolet Corporation, our application specialists will help you size the UV-C air duct system which best suits your needs.

Contact them today!



About Atlantic Ultraviolet Corporation®

At Atlantic Ultraviolet Corporation®, we've spent 60 years engineering and manufacturing germicidal ultraviolet equipment to prevent disease caused by contaminants in water, in air, and on surfaces. Our **STER-L-RAY®** UV-C lamps make this disinfection possible, producing ultraviolet wavelengths that are lethal to bacteria, viruses, and other harmful microorganisms.

Our engineering department brings each concept to a finished model, implementing stringent quality control procedures. Our manufacturing department uses stainless steel and the highest quality materials to ensure the safety of personnel and room occupants.

Our UV-C Specialists possess a vast knowledge of ultraviolet technology to provide homeowners, businesses, industries, and institutions with effective and cost-conscious solutions. Contact us Mon–Fri, 7am–6pm EST to learn how ultraviolet disinfection can benefit your application.

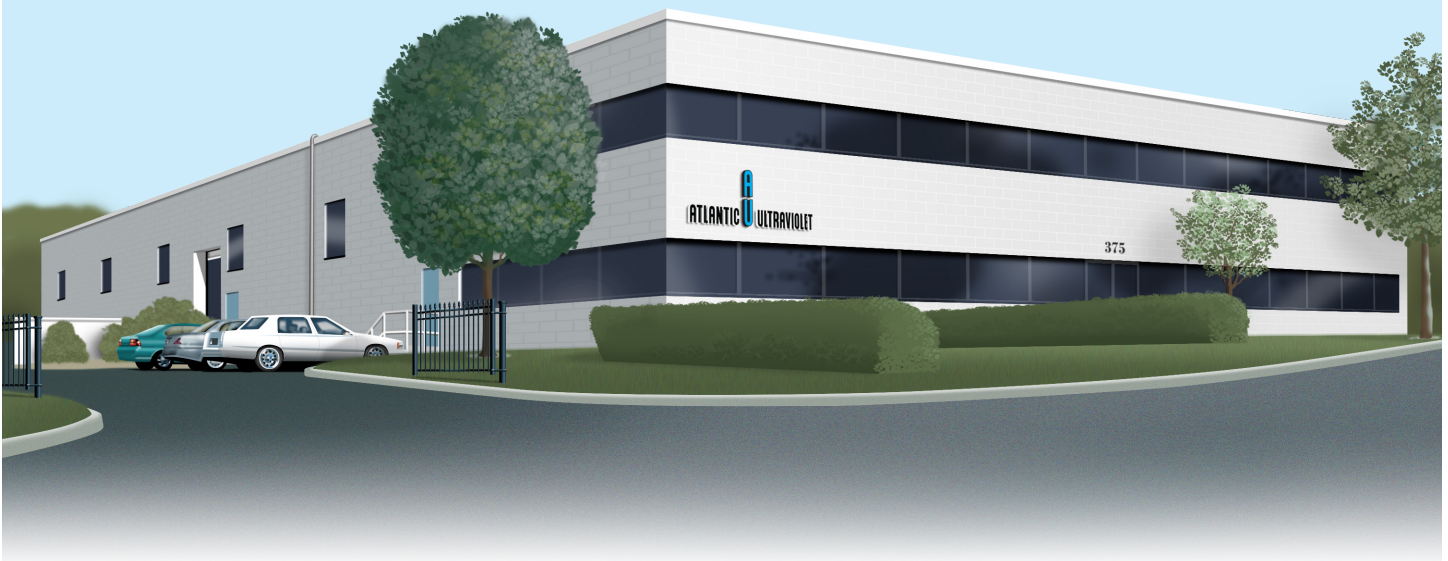
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