

Beware of Ultraviolet Air Purifier that causes Illness

Astounding as it may sound, over 50% of all illnesses are either caused or aggravated by indoor air pollution. Both organic and inorganic contaminants can be held responsible for this. Among the organic contaminants present in air there are bacteria, viruses, fungi, mold, etc. These can cause severe health hazards like asthma, headache, respiratory allergies, sinusitis, fibromyalgia, aspergillosis etc.

Till recently it was believed that HEPA purifiers are good enough to tackle the problem. Any HEPA purifier has the ability to trap contaminants of the size of 0.3 microns and above. Though such filtration takes care of a lot of contaminants, there are still a significant number of contaminants which still need to be dealt with. But they being less than 0.3 microns in size, are not trapped by the HEPA purifier.

The recent innovation has been ultraviolet air purifier. These come either in conjunction with HEPA purifiers or as stand alone machines. The ultraviolet air purifiers work on a totally different concept. Studies have shown that UV rays are effective in dealing with microorganisms of size even less than 0.3 microns in size.

An UV air purifier actually doesn't kill the organism. Instead the rays just alter the DNA and RNA profile of the organisms. This makes them sterile so that they in a way become harmless. With no option of reproducing they can hardly cause any damage. So even if virus and bacteria do enter our respiratory tract they hardly get a chance to grow there.

We cannot definitively say when exactly would you need to change the filter. Much of it depends on what kind of room the air purifier is. If the room has too much traffic and also a lot of activities then the filters would be saturated earlier than normal. The opposite is also true when the filter has it easy in a less frequented room.

However, there have been issues of contention with UV air purifiers too. One allegation is that the UV rays hardly get any time to act on the contaminants. It is documented that ultraviolet is effective on allergens but only under certain conditions. Ultraviolet light can alter the DNA and RNA profiles of the allergens only after they are exposed to the light for a considerable period of time. The dosage or concentration of light on the contaminants is also crucial. Skeptics claim that within an air purifier, the ultraviolet light doesn't get enough time to act. Since a fan is always working the organisms never settle down. With the contaminants unsteady the UV rays cannot work on them.

This may be true, but only partially, as ultraviolet will manage to make some impact on the pollutants. However, there might be those lucky few, who will be able to escape.

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About the Author

Jason Uvios writes about on "Beware of Ultraviolet Air Purifier that causes Illness" to visit :- <http://www.airpurifiersusa.info>, <http://www.air-purifierstoday.info> and <http://www.air-purity-always.info>