

Chemical Allergies and Air Purifiers

We live in a chemical-filled world. Most chemicals with which we come in contact are not part of the 'natural' world and thus are considered 'foreign' to our bodies. Thus, many people suffer from something called Multiple Chemical Sensitivity or MCS.

What Exactly Is Chemical Sensitivity?

Increasingly our society is based on chemistry. After World War II petrochemicals were developed and used in a variety of consumer goods. Plastics are the most ubiquitous of petrochemical products. In addition, petrochemicals began to appear in almost every household product including cleaning products, pesticides, detergents and perfumes/scents. Synthetic fabrics, carpeting and building materials were made with petrochemicals as well. These items tend to give off toxic fumes, especially when new. These vapors contain formaldehyde and other volatile organic compounds (VOCs) that are dangerous for humans to ingest or inhale in any quantity. Exposure to too many of these chemicals or too much of a VOC can leave a person with many side effects including:

- Headaches
- Sore throat
- Problems with respiration
- Digestive disorders
- Nerve disorders
- Allergies
- Cancer

People with chemical sensitivities are often told that it's all in their heads. Although no professional medical institution or organization has officially recognized multiple chemical sensitivity (MCS) as a true illness, millions of people cannot be wrong.

How Can I Protect Myself Against Chemical Sensitivity?



It is not known if there is a cure or a sure-fire preventative measure to keep one away from chemical sensitivities. Our world is so inundated with chemicals that it would take

a great deal of effort to live outside of that realm. However, there are some measures one can follow to stay away from toxic chemicals as much as possible. These include utilizing hypoallergenic cosmetics and personal products; use bedding made without bleaches, dyes, detergents, latex, or other chemicals (this may be VERY hard to find); make sure your cleaning products and detergents do not have harmful chemicals; use water that does not contain chlorine or fluorine; wear a face mask, especially around new carpeting or remodeled areas; and finally, use a HEPA air filter that also has adsorbent materials such as activated carbon.

Why Should I Purchase a Particular Type of Air Purifier? What Type Is Most Effective for VOCs?

Because most chemicals are in vapor or gas form, a HEPA filter without any other material will not do any good. HEPA filters are not rated for gases and VOCs. However, HEPA filters *are* rated for ridding the environment of particulate matter down to the sub-micron level. The best HEPA filters can filter particles down to about 0.3 microns. Some vapors and gases have particulate matter as part of their composition, so it is a good idea to have a HEPA filter as a portion of the proper air filter used.

The best type of filtration for VOCs and other gases is a unit containing many pounds of activated carbon. Activated carbon is an adsorbent material and consists of small carbon pellets that have been treated with oxygen so that they are extremely porous. The added pores from the oxygen treatment create a much larger surface area for which to adsorb dangerous chemicals. The more activated carbon contained in the filter, the better the filter and the longer it will capture dangerous chemicals in the environment.

Tailor made for sufferers of Multiple Chemical Sensitivity (MCS), the Airgle MultiGas (AG950) air purifier packs in 15 pounds of premium activated carbon and a medical-grade cHEPA filter with an efficiency of over 99.991%.

MCS sufferers should definitely not purchase an ionic or an ozone air purifier. These types of air purifiers are controversial and are known to have adverse effects on lung function when ozone levels are too high. In any case an MCS-safe air purifier should not have any