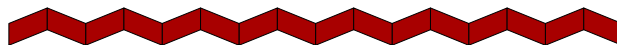




# AIR CLEANING DEVICES



## Safety & Security Fact Sheet

### ✓ **WHAT ARE ROOM AIR CLEANING DEVICES?**

These are devices that use mechanical filtration, ion generation, electrostatic precipitation, or combinations of two or more techniques to remove particles (dust) from the air. In addition to removing particles, some air cleaners may remove gaseous pollutants; this is possible only if the air cleaner contains special material, such as activated charcoal. *No government agency has taken a position either for or against the use of these devices.*

### ✓ **AREN'T AIR CLEANING DEVICES EFFECTIVE IN CONTROLLING INDOOR AIR POLLUTANTS OR REDUCING ALLERGIC REACTIONS?**

Air cleaning alone cannot adequately remove all pollutants typically found in indoor air. Some controversy exists about whether air cleaners can reduce the allergic reactions produced by larger particles such as pollen, dust mite and cockroach allergens, some molds, and animal dander. Because of their size, these particles fall quickly and collect on surfaces, rather than remaining dispersed in the air. They cannot be removed by an air cleaner unless disturbed and resuspended in the air by occupant activity. **Good housekeeping and ventilation are considered the primary means to control or minimize indoor air pollutants.**

### ✓ **EVEN SO, WON'T AN AIR CLEANING DEVICE IMPROVE THE AIR QUALITY IN A CLASSROOM?**

Probably not significantly. Most portable air cleaners are manufactured for residential use, in bedroom-sized rooms, and are not designed for classrooms with 20 to 30 active people. Also, most classrooms are mechanically ventilated at an air exchange rate that greatly exceeds the filtering capacity of most residential air cleaners.

### ✓ **WHAT IS AN ION GENERATOR?**

Ion generators act by charging the particles in a room so that they are attracted to walls, floors, tabletops, draperies, occupants, etc. However, brushing against these coated surfaces can result in these particles being resuspended in the air. While ion generators may remove small particles from the indoor air, they do not remove gases or odors, and they may be relatively ineffective in removing large particles such as pollen and house dust allergens.

### ✓ **WHAT ABOUT THE HEALTH CLAIMS MADE BY MANUFACTURERS OF OZONE GENERATORS?**

Consumer Reports, the National Institute of Occupational Safety and Health (NIOSH), and the U.S. Environmental Protection Agency have concluded that ozone generators are not effective in improving indoor air quality. Studies have found that while some indoor air pollutant concentrations decline in the presence of ozone, other pollutants increase. In fact, upon reaction with ozone, some previously undetected, toxic chemicals emerge in indoor air, including formaldehyde. Besides, ozone is a potent irritant that can bring about diminished lung function, cough, inflammation associated with biochemical changes, and increased responsiveness to allergens. The intentional addition of ozone to indoor air is contrary to the recommendation of every reputable public health organization or regulatory agency.

### ✓ **ARE AIR CLEANERS ALLOWED TO BE INSTALLED IN FCPS FACILITIES?**

There is no policy that specifically prohibits the installation of air cleaning devices in FCPS facilities, but, because they are considered to be ineffective in the high occupancy setting of a classroom, their installation is discouraged. However, as a result of the potential health hazards associated with ozone, the installation of any device that intentionally emits ozone is unacceptable.

### ✓ **WILL FCPS PROVIDE AN AIR CLEANING DEVICE?**

No. FCPS is committed instead to providing a sanitary, adequately ventilated learning environment. Indoor environmental pollutants will be minimized or eliminated at their source through good housekeeping or through improvements in ventilation.

### ✓ **WHAT IF SOMEONE INSISTS ON PROVIDING HIS OR HER OWN AIR CLEANING DEVICE?**

The device must be Underwriters Laboratory approved, certified by the American Home Appliance Manufacturers, properly installed so as not to present an obstacle, and maintained in accordance with the manufacturer's recommendations. Maintenance and filter replacement or replacement of other expendable components will remain the responsibility of the owner.