



## Air Purifier Buying Guide Quick Reference Handout

Air purifiers can help you breathe cleaner, fresher air in the home, and even eliminate or reduce odours, too.

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### What are air purifiers?

Air purifiers are small appliances that can be floor-standing or desktop size with filters inside that help remove pollutants from the air. This includes everything from bacteria and viruses to dust mites, mold, odours, and chemicals from household products. While ideal for those with allergies or asthma, any individual or family can enjoy the benefits of an air purifier.

### How do air purifiers work?

They use filters and a fan to trap pollutants, then recirculate cleaner air in the home.

### The main types of air purifiers

Air purifiers use four main types of filters and/or purification technologies.

**HEPA (High-Efficiency Particulate Air)** – These have pleated mechanical material and are the most effective type, able to capture ultra-fine particles that are as small as 0.3 microns in size. This can include dust, pollen, viruses, and smoke.

**Activated carbon filters** – Pieces of carbon are constructed and treated to be porous so they can absorb allergens: organic compounds in the air react to the activated carbon. They are ideal for trapping odours, chemicals, and gases, and often used alongside HEPA filters.

**UV-C light** – These use short-wave ultraviolet light to kill germs, viruses, and bacteria, with a UV lamp that disinfects the air through a process called germicidal irradiation. They are most often used alongside a HEPA and/or activated carbon filter.

**Ionic** – Usually smaller, they emit negative ions into the air to attract positive charged airborne particles but are known to produce trace amounts of ozone that can irritate the lungs.

### What are the benefits of an air purifier?

There are many benefits of an air purifier related to the cleaner air it provides.

**Breathe cleaner air overall** – Most obvious is that you can breathe cleaner, fresher air that's free of pollutants, bacteria, viruses, mold, dust mites, pollen, and smoke.

**Helpful for those with allergies, asthma** - If you suffer from allergies or asthma, even a small amount of dust, mold, pollen, and even pet dander can trigger symptoms. An air purifier can help by reducing these.

**Helps reduce odours** – From pungent cooking smells to cleaning chemicals and paint during home renovations, air purifiers help get rid of or at least reduce these smells.

**Helps improve sleep** – Not only can removing things like dust particles or pollen from an open



window help you sleep better, some people find the sound of an air purifier soothing.

**Reduces the transmission of airborne diseases** - Diseases and viruses for everything from the common cold to the flu can travel through the air, and having an air purifier in the home can help reduce the transmission.

**Contributes to healthier lungs** - The American Lung Association notes outright that “clean air is essential for healthy lungs,” and an air purifier helps you get that inside your home.

### **What size air purifier should you get?**

Air purifiers are floor-standing, either wide and low or slim and tall. There are also tabletop-sized models. Choose based on the size of the room. Small for a room up to 400 square feet, medium for 400-600 square feet, and large for 600+ square feet. Look at the recommended room size on the label but also account for things like high ceilings.

### **What is a CADR number?**

Clean Air Delivery Rate (CADR), developed by the Association of Home Appliance Manufacturers (AHAM), shows how much air particulate a purifier can clean in cubic feet per minute. The higher the number, the better.

### **What to look for in an air purifier**

**Size** – Make sure it will fit nicely in not only the room but the specific place you want to put it. It’s a good idea to measure first, especially in smaller homes and apartments.

**Air quality reporting and sensors** - Sensors provide real-time details about the air quality in the room, while some smart models report this in an app as well.

**Speed settings** – Some let you adjust the speed and level of purifying, and premium models can sense how much purification is needed and adjust speed settings automatically.

**Noise level** – Look for one that runs quietly at both the lowest speed setting as well as the highest, especially if it will be running in a bedroom at night.

**Timer functions** – These will automatically turn the machine off and on at desired times so you don’t waste energy or have it running all day while you aren’t home.

**Smart features** – Some can connect to Wi-Fi and/or Bluetooth and be controlled remotely from a smartphone app or even by voice using a smart assistant. The app will also provide details about the real-time air quality, filter replacement, and more.

**Secondary features** – You can find models that do double duty, working as hot and/or cold fans and/or humidifiers as well.

### **How to maintain an air purifier**

You will need to clean the filter periodically and replace HEPA filters, usually once a year or every few years, depending on how often you use it and how much purification is needed. UV-C air purifiers, meanwhile, will require bulb replacement, usually every year or so as well.