# Breathing cleaner air by removing airborne dangers

We like to believe that our homes are the safest place to be, but we are mostly unaware of the **airborne dangers** that can exist in the air we breathe, **airborne dangers** that can be deadly if they are not dealt with. However, with the installation and use of an air purifier, we can breathe easier.

What are some of these airborne dangers that can be found in the air?

There are three main kinds of substances that are found in this breathing space within our home. These are:

- radon
- carbon monoxide
- second-hand cigarette smoke

Save for cigarette smoke, we are unable to smell radon or carbon monoxide and we cannot feel the effects of these substances until it is too late.

#### What is radon and what effect does it have on us?

Radon is a radioactive gas that is produced naturally from the soil by the breakdown of uranium. Because of this natural process, the basements of homes are most likely to have the highest concentration levels of radon. However, radon is capable of penetrating a variety of materials, such as:

- paint
- gypsum board
- mortar
- sheet rock
- insulation
- wood paneling

Essentially, radon is capable of filling an entire house through the floors and walls. Given that radon is the second leading cause of lung cancer in Americans, it is necessary to rid our homes of this **airborne** danger.

#### What is carbon monoxide and what effect does it have on us?

According to Florida's Department of Health, every year <u>more than 500 Americans die from accidental exposure to carbon monoxide</u> and thousands more across the U.S. require emergency medical care for non-fatal carbon monoxide poisoning.

Carbon monoxide is a gas that is produced naturally, but it is capable of being lethal in high levels of concentration. Due to the closed environments of our homes, these high levels are not difficult to achieve. It is primarily produced through the burning of fossil fuels, which are found in:

water heaters

- fireplaces
- furnaces
- gas ranges
- cigarette smoke

Carbon monoxide, when inhaled bonds to the oxygen in our blood, which then affects how much oxygen our organs receive, like the brain. This reduction of oxygen can cause the following symptoms:

- fatigue
- chest pain
- nausea
- vomiting
- headaches
- confusion
- blurred or affected vision
- loss of coordination
- loss of consciousness

If left untreated, carbon monoxide poisoning can even lead to death.

### What is second-hand smoke and what effect does it have on us?

Second-hand cigarette smoke can be inhaled from either or both sources. One such source is the smoke from the end of the cigarette, cigar or lit pipe; the other is the smoke exhaled by the smoker himself. Neither are good for you if inhaled, and can have detrimental effects on one's health. This can include:

- stomach cancer
- brain cancer
- childhood leukemia
- cancers of the throat and voice box
- increased problems with asthma
- heart disease
- problems in pregnant women
- effects on a man's fertility

Even if the smoker has quit, the particles from cigarette smoke can still remain for a number of months, and still affect a person's health.

## Air purifiers can better our health

By removing such **airborne dangers** from the air, we breathe, the use of air purifiers decreases our risk of developing such symptoms, as well as decreasing and/or eliminating the cost of going to the hospital for treatment. Air purifiers are certainly a beneficial to addition to anyone's life.