



## What can I do to help fight air pollution?

There are many things you can do to help reduce air pollution!

**Drive less.** In California, transportation is the #1 source of air pollution. Combine trips, bike, walk, carpool or use public transit. Make your next car purchase a fuel-efficient hybrid car.

**Don't burn wood.** In many parts of California, woodsmoke is one of the largest sources of particulate pollution during the winter. Change your woodburning fireplace or stove to natural gas or avoid burning wood altogether.

**Gas up your car at night.** Gasoline evaporates when you fill up and these emissions can create ozone. At night, there is not enough sunlight to create ozone.

**Report** smoking cars, idling trucks or other illegal sources of air pollution to your local air quality district.



**Get involved.** Help Breathe California promote the use of clean fuel, toughen air quality standards and reduce existing sources of pollution. Contact your local office by calling 1-877-3-BREATHE.

***There are many things that you can do to help reduce air pollution!***



**1-877-3-BREATHE**  
**[www.breathecalifornia.org](http://www.breathecalifornia.org)**

Breathe California of the Bay Area  
1469 Park Avenue  
San Jose, CA 95126  
(408) 998-5865  
[www.lungsrus.org](http://www.lungsrus.org)

Breathe California Central Coast  
550 Camino El Estero, Suite 100  
Monterey, CA 93940  
(831) 373-7306  
[www.breathecentral.org](http://www.breathecentral.org)

Breathe California  
Golden Gate Public Health Partnership  
2171 Junipero Serra Blvd, Suite 720  
Daly City, CA 94014  
(650) 994-5868  
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Breathe California of Los Angeles County  
5858 Wilshire Blvd, Suite 300  
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[www.breathela.org](http://www.breathela.org)

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# Air Pollution



## What is air pollution?

Air pollution includes a number of harmful substances that can be found in the air. While some types of air pollution come from nature, most are man-made. When air pollution levels rise, it can cause a serious threat to both your health and the environment. The two most common forms of air pollution include:



**OZONE:** Ozone, also known as smog, forms when hydrocarbons and nitrogen oxides react with sunlight. Ozone is not released directly into the air - cars, factories and power plants produce chemicals that can create ozone. Ozone can also form more easily in hot weather. At ground level, ozone can pose a very serious danger to your health.

**PARTICULATE MATTER:** Particulate matter includes tiny, microscopic particles and liquid droplets that are more than 7 times smaller than the width of a single human hair! Particulate matter comes from diesel trucks and cars, construction equipment,

power plants, refineries, factories and woodsmoke. These particles are so small, they can travel deep into your lungs and cause a number of health problems.

Other types of air pollution that are regulated by the government, include: **CARBON MONOXIDE**, a poisonous gas; **NITROGEN OXIDE**, a gas that can create ozone; **SULFUR DIOXIDE**, a gas released from coal-burning plants; and **LEAD**, another deadly pollutant. Like ozone and particulate matter, all of these forms of air pollution can cause health problems.

## Is air pollution still a problem?

Since the federal Clean Air Act was passed in 1970, California's air quality has steadily improved! Over the past 25 years, the state has achieved:

- a 30% decrease in ground level ozone
- 35 times less lead pollution
- 4 times less sulfur dioxide pollution
- 2 times less carbon dioxide pollution

However, we still have a long way to go! Motor vehicles are the main source of ozone, carbon monoxide and nitrogen oxide, and the number of cars and trucks on the road has more than doubled over the past 25 years. Air pollution from industrial factories, power plants and refineries is also still a problem. In addition, as a growing population needs more energy and resources, new sources of air pollution may threaten California.

## What kind of health problems can air pollution cause?

Humans breathe in about 2,000 gallons of air each day so it is no wonder that air pollution can have negative health effects! While they may vary depending on the type of pollution, there are many common, and sometimes deadly, health problems caused by air pollution.

Breathing in polluted air can have immediate effects, including: coughing, wheezing, shortness of breath, and irritation of the eyes, nose and throat. More seriously, spikes in air pollution levels can trigger chest pain, lung infections, asthma attacks, strokes and heart attacks. Being around air pollution for a long time can be even more harmful, raising the risk for many serious diseases, including lung cancer, heart disease and asthma.

### FAST FACT

**More than half of the U.S. population (152 million people) lives in areas with unhealthy levels of air pollution.**

*Source: U.S. Environmental Protection Agency*

Air Quality Index (AQI)	The Levels of Health Concern	Colors
<i>When the AQI is:</i>	<i>Air quality conditions are:</i>	<i>Symbolized by this color:</i>
0 to 50	Good	Green
51 to 100	Moderate	Yellow
101 to 150	Unhealthy for Sensitive Groups	Orange
151 to 200	Unhealthy	Red
201 to 300	Very Unhealthy	Purple
301 to 500	Hazardous	Maroon

## Am I at risk for health problems from air pollution?

While air pollution can hurt all individuals, certain people have a high risk:

- People with lung disease, such as asthma emphysema or Chronic Obstructive Pulmonary Disease (COPD)
- People suffering from heart disease, diabetes or other serious illnesses
- Children and babies
- Seniors
- Those who live or work near high levels of air pollution, including freeways, ports and industry

People with a high risk should check for air pollution and change their daily activities when levels are high. The Air Quality Index (AQI) offers a quick guide to understanding air quality threats (see above), and many newspapers and websites post AQI levels daily. When air quality is poor, high-risk groups should stay indoors.