

# The YOU Docs: Time to get particular about particle pollution

By Michael Roizen, M.D., and Mehmet Oz, M.D. *Pioneer Press* August 7, 2009

The dirtiest air in America isn't the smoggy haze blanketing Los Angeles. In a new report from the American Lung Association, the City of Angels was edged out by Bakersfield, Calif., and Pittsburgh for that dubious distinction. Don't live there? The doesn't mean your air is A+ pure, because the scary fact is the worst air of all might be in your own home, car or back yard.

The culprit you need to watch out for is particle pollution. Major sources include smokestack emissions, vehicle exhaust and coal-fired power plants, but smoking, household appliances, woodstoves, even candles and incense can spew them, too. These particles don't sound dangerous until you know that ultrafine ones (2 to 10 micron) — some so small 50,000 could fit on the period at the end of this sentence — can lodge in your lungs and even sneak into your bloodstream. There, they can trigger asthma attacks, worsen or even cause serious respiratory diseases (including chronic obstructive pulmonary disease) and can increase your risk of heart attack, stroke and early death.

They cause generalized inflammation in your body once they get into your lungs. True, the air throughout the U.S. is cleaner than it was 10 years ago, but six in 10 Americans still live in places where outdoor particle pollution ("particulate" matter in scientist-speak) reaches unhealthy levels, and at least 30 percent of Canadians live where particulate levels are too high.

What we do in our homes and cars can make things far worse — or far better. Avoiding particulates could save your lungs, your health and your life. In California alone, particulates still kill an estimated 18,000 people a year; that's one reason environmental health advocates consider particulates one of the most widespread and dangerous air-quality issues in America.

Particulates are bad news for everybody. Here's how to keep these sneaky particles under control: Have a Plan B for dirty-air days. Sunny, hot summer days can create the perfect conditions for ground-level ozone — a lung-damaging compound that forms when various air pollutants react in the presence of sunlight. Ozone and particulates are often high on the same days, and together, they can be even more damaging to your respiratory system than either one alone.

Pay attention to the day-to-day air quality where you live; [airnow.gov](http://airnow.gov) has a minute-to-minute report by ZIP code. When the air is unhealthy, children and people with respiratory diseases should limit time outside; when it's extremely unhealthy, even adults without health problems should do that, too.

Live in a bad-air town? Create a safe haven. If you have respiratory or cardiovascular problems, such as diagnosed heart disease — or simply like the idea of breathing cleaner air when the outdoor stuff's dirty (we do!) — consider installing a HEPA air filter or an air conditioner that contains one in at least one room. This won't eliminate all pollutants and particulates, but it can help.

Walk, run and bike away from busy roadways. Exercise makes you breathe faster and deeper, drawing more air (and more particulates) deep into your lungs. Instead of dodging traffic, choose less-traveled (but still safe) places for outdoor workouts.

Stop being the No. 1 air polluter in your home. Most of us spend 90 percent of our time indoors. Cigarette smoke is the single largest source of particulates in homes, so don't let people smoke in your home and encourage them to quit.

Keep furnaces in good repair, and be sure vents to heaters, clothes dryers and ranges are clean and working properly. Turn on the exhaust fan while cooking, since frying and sauteing fling particulates into the air.

Think twice about lighting incense and candles, which also may produce particulates when burned.

Leave your chariot at home. Despite vents, filters and air conditioners, the air inside cars was two to 10 times dirtier than the air outside in one study conducted on the freeways of Los Angeles. If you can't walk (somewhere that's not near the highway), at least don't tailgate. Half the pollutants inside a car come from the vehicle directly ahead of you.

Be part of the solution. Reducing your personal "emissions footprint" is just the first step. Another way to make a difference is to urge people in government agencies to set tougher pollution standards. That's what has worked in the past 10 years. One easy way to keep progress alive: Send a message through the American Lung Association's campaign for cleaner air at [lungaction.org/campaign/](http://lungaction.org/campaign/) SOTA2009.

**The YOU Docs — Mike Roizen and Mehmet Oz — are authors of "YOU: Being Beautiful — The Owner's Manual to Inner and Outer Beauty." To submit questions and find ways to grow younger and healthier, go to [RealAge.com](http://RealAge.com), the docs' online home.**