

ADVANCED ALLERGY & ASTHMA SPECIALISTS

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THE Asthma EPIDEMIC

If it seems everyone is coughing and wheezing these days; because Asthma continues to be a growing problem. Though the disease was mostly unheard of in 1900, it now affects over 15 million Americans a year and annually kills 180,000 people around the world. In the U.S., the asthma rate has increased 42 percent in the past decade alone. What is causing this spike? Most problems in medicine are a result of many factors and Asthma is no exception. As we have damaged the air quality, the ozone layer, forests, vegetation and oceans, we have increased the irritants and toxins in our environment which damage the delicate lining of our airways.

Chlorofluorocarbons (CFCs) used as the gas for spray cans, have destroyed the natural ozone layer which protects us from the sun's radiation (imagine a clear cap surrounding the planet approximately 20 kilometers above the earth's surface.) In 2010, new legislation mandated most countries change to a new spray gas, which does not damage the ozone. 97% of the world's nations have complied.

CFCs have created "holes" in the ozone layer allowing higher levels of radiation to enter the earth's atmosphere. Carbon gases produced by cars, mining, manufacturing, burning, and many other ways, are "cooked" by this increase in radiation and become yet more toxic to our airways. A 2002 study by researchers at the University of California at San Francisco and the Natural Resources Defense Council (NRDC) demonstrated that diesel particles are able to alter human immune systems in ways that actually cause new asthma cases to develop.

In addition, as the radiation remains trapped below the ozone layer (imagine steam in a pressure cooker) our earth's surface temperature has risen. In Alaska, the local government is moving Inuit towns away from the shore as the permafrost many feet under the snow is warming, melting and falling into the sea. Imagine watching your whole neighborhood fall right into the ocean!

Were this all not enough, acid rain forms when rain travels through polluted air and picks up chemicals as it falls to our earth's surface and oceans. This not only causes all sorts of havoc to living creatures and humans, but many of these toxins return to the air we breathe as this acidic water evaporates.

More troubling evidence from a major study in Occupational and Environmental Medicine which evaluated more than 650,000 children throughout Western Europe, demonstrated that those exposed to higher levels of indoor humidity — which increases along with outdoor temperatures — are more likely to develop Asthma. A 10% humidity increase evoked a 3% increase in Asthma rates.

Paul Epstein MD, Co-director of Harvard Medical School's Center for Health and the Global Environment explored how pollen levels are affected by the higher carbon dioxide along with higher temperatures. When ragweed was exposed to the higher CO2 levels, like those we expect in the next 30-50 years, pollen production increased 60 percent. Epstein believes that other high-pollen weeds will likely respond in similar ways. Furthermore, warmer temperatures will cause increasingly earlier springs — which means prolonged allergy seasons along with higher pollen counts — a perfect recipe for an ever-worsening epidemic.

Hereditary Allergies are no longer the #1 cause of airway inflammation...the air we breathe is simply no longer "user-friendly," thus we are witnessing an epidemic of Chronic Respiratory Inflammatory Disease.....better known as Asthma, Rhinitis, Sinusitis and Emphysema (aka COPD or Bronchitis.)