

OPINION

AIR POLLUTION HEALTH RISKS NOT AS BAD AS CLAIMED

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Contrary to what some may think, AB 32, the "Global Warming Solutions Act of 2006," has nothing to do with air pollution as it has been classically defined. AB 32 is the California Legislature's attempt to deal with the worldwide problem of global warming by using regulations and market mechanisms ("cap-and-trade") to reduce greenhouse gas emissions in California to 1990 levels by 2020.

A recent U-T San Diego commentary, "Clean air and AB 32 help to keep us healthy," presents a highly inaccurate view of air pollution health effects in San Diego County and California. In particular, the author, Mike Welch, M.D., incorrectly claims that "AB 32 is an essential part of cleaning up California's air, and is critical to protecting public health from air pollutants that make people sick and shorten lives."

Greenhouse gases, primarily CO₂, have only recently been considered by some to be a form of air pollution. However, CO₂ certainly does not have the public health risks of classical air

pollutants. Indeed, a normal level of CO₂ in the lungs and arterial blood (about 40 mm Hg or about 5 percent of total air at sea level) is imperative for human health.

Because of the adverse economic impact of new greenhouse gas regulations, Proposition 23, a voter initiative to suspend AB 32 until the California economy recovers, was placed on the November 2010 ballot. Proposition 23 was defeated in large part because advocacy organizations like the American Lung Association misrepresented it as an effort to suspend air pollution regulations in California. The official ballot arguments signed by the ALA contained inflammatory and false statements like "Prop. 23 is a DIRTY ENERGY PROPOSITION that MEANS MORE AIR POLLUTION and INCREASED HEALTH RISKS - Vote NO."

The ALA has also misrepresented air pollution health effects in California in its report, "State of the Air 2012." San Diego County is listed as one of the most polluted counties in America based on its measured levels of ozone and fine particulate matter (PM_{2.5}) relative

to the National Ambient Air Quality Standards (NAAQS). The NAAQS were set by the U.S. Environmental Protection Agency (EPA) years ago based on the EPA assessment of the national health effects associated with these pollutants. However, there is now overwhelming evidence that the health effects of these pollutants in California are minimal and that the NAAQS are

found that criteria pollutants (PM_{2.5}, PM₁₀, ozone, NO₂ and sulfate) were not related to total mortality during 1982-2000.

These findings have been independently assessed by several qualified scientists and are summarized in a 2011 "Dust and Death" commentary by statistician Matt Briggs, Ph.D. There is some confusion regarding these findings because PM_{2.5} shows

mortality statistics from the CDC WONDER database, San Diego County had an age-adjusted total death rate that was 15 percent below the U.S. death rate. This death rate was lower than the death rate in every state except Hawaii. In addition, San Diego County had an asthma death rate that was 30 percent below the U.S. asthma death rate. Indeed, only 22 of the 19,177

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not applicable to California and San Diego County. Since 2000, 10 separate analyses of five major cohorts of Californians have shown that there is NO relationship between PM_{2.5} and total mortality (also known as "premature deaths") in California. One of these analyses was led by UC Berkeley Professor Michael Jerrett and was based on about 75,000 California adults in the American Cancer Society Cancer Prevention Study cohort. The results of this 2011 analysis

deaths in San Diego County during 2009 were due to asthma.

While Dr. Welch's efforts to help children with asthma are highly laudable, they do not justify the misstatements he has made regarding AB 32 and air pollution health effects in California and San Diego County.

Enstrom, Ph.D., M.P.H., has been conducting epidemiologic research at the UCLA School of Public Health since 1973. He is an expert in the health effects of air pollution in California.

California is a very healthy state that has already reduced air pollution down to safe levels. Based on the most recent (2009)