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 it 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 (PM2.5) 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 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 PM2.5 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 positive associations with cardiovascular diseases and negative associations with cancer and other diseases. But the association with all deaths is null, meaning there are no “premature deaths!” due to PM2.5. Unfortunately, these California-specific analyses are not mentioned in “State of the Air 2012,” as they should have been.

California is a very healthy state that has already reduced air pollution down to safe levels. Based on the most recent (2009) 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 deaths in San Diego County during 2009 were due to asthma.

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