## **Global Warming**

## Dale Easley's blog 21 May 2014

I had planned today to be in North Carolina for my mother's cancer surgery, but the surgeon decided instead on ordering more tests. This may be her fourth incidence of cancer despite coming from a family where members regularly live into their 90s. One major difference: My mom smoked Marlboros for 50 years. But how does this relate to global warming?

The earliest data on the harm of smoking was a statistical correlation between smoking and certain types of cancers. However, we know that just because two things are correlated doesn't mean one causes the other. I even teach that in my statistics course. And I also teach that statistics doesn't prove anything. It only shows that something is highly unlikely to be purely random. In the case of smoking, tobacco companies used these two facts to fight for years against regulations, despite the accumulation of evidence that not twice as many people got lung cancer, not three times as many, but 11 times as many smokers got lung cancer as non-smokers. No proof there, but really, what do the odds have to be in order to act? In the meantime, thousands of people died years sooner than they would have if we had regulated smoking sooner. The profits of the tobacco companies mattered more than people's lives.

With respect to global warming, profits from oil and coal companies are being used to fund organizations, such as the Heartland Institute, to fight a political battle. They fight to maintain their short-term profits. However, for society as a whole, long-run prevention is much cheaper than remediation. For example, my mom's surgeries have cost far more than the profits a tobacco company made off her purchases. And do the years lost from her life not also have value?

Unfortunately, such short-sighted values are too common. I have shown my students a map from 1981 indicating a 4% chance in any given year of a great hurricane hitting the coast at New Orleans, a city where I lived for 15 years. The statistics weren't proof that a hurricane would hit. Lotteries and places like Las Vegas depend on you ignoring the odds. But by ignoring the odds, more than a thousand people died in New Orleans and billions of dollars were lost. Science gave us its best prediction, but we chose to value other things more.

In the past, there have been some successes in using statistics to save lives. The year after we started requiring car seats for children, car fatailities for kids aged 2-6 declined 27%. Weren't those kids lives worth more than the \$80 or so it cost for a car seat? Nowadays, you'd have a Congressional fight about a \$80 tax on new parents.

So which of these historical decisions do we wish to be our model with respect to glabal warming? I come down on the side of car seats, on the side of prevention even if it costs more upfront.