

From *Statistics Unbound*

Statistics

What are “statistics”? Basically, they are statistics bent to a particular strategic and ideological purpose by researchers or advocates seeking to advance a belief or to secure future grant funding. They are what advocates of an idea develop and use when the simple facts and numbers in a situation prove to be less supportive than desired.

The best examples of statistics and their use in today’s world come, not surprisingly, from the antismoking movement, and often involve the basic foundational pillar that has driven smoking bans since Godber’s 1975 World Conference on Smoking and Health. The overall guideline from the panels and speakers at that conference was one advising Antismokers that to successfully eliminate smoking, it would first be essential to foster a perception that would “emphasize that active cigarette smokers injure those around them, including their families and, especially, any infants that might be exposed involuntarily to ETS.”ⁱ

ETS, environmental tobacco smoke, is the combination of the smoke coming from the end of the burning cigarette and that exhaled by the smoker. The claim that exposure to ETS is deadly was to become one of the antismoking movement’s most powerful weapons, but at the time it was first seriously proposed as a major tool at Godber’s conference, the claim had very little real scientific support.

<snip>

The “Commander Almost Zero Fallacy”

The best example of this statistical weapon can be seen when the presence of an expected element in a smoking environment (such as “smoke” or “nicotine”) is compared to the presence of that element in a

nonsmoking environment. It is then “revealed” that the smoking environment has five times, or ten times, or even 53 times the amount of that element as the nonsmoking one.

If a smoker’s home contains 53 times as much of a deadly toxin as a nonsmoker’s home it seems like a good reason not to bring your precious young one into such an environment. But once you realize that the amount in the nonsmoking environment is, quite literally, almost zero, then you might also realize that 53 times almost zero is still going to be ... almost zero. It’s like trying to frighten people into never taking showers by telling them that homes with shower-takers have 53 times as much deadly chlorine gas in them (evaporating from healthily chlorinated, bacteria-free tap water) as homes where nobody but a bunch of grubby, long haired, non-showering hippies live.¹

We saw this trick used in 2009 when the Smoke-Free Campus movement was being generously funded by such folks as the NicoGummyPatchyPushers at the Robert Wood Johnson Foundation (RWJF),ⁱⁱ as well as being supported by programs and organizations like TFU, TTAC, CTPR, BACCHUSⁱⁱⁱ, GAMMA^{2iv} and other alphabet soup groups, shells, and fronts springing from such mega-sources as the Master Settlement Agreement’s “invisible tax”³ on smokers. These groups were pushing colleges around the country to follow up on classroom and dormitory smoking bans with bans covering the entirety of their outdoor campuses – even to the far corners of parking lots enshrouded in clouds of engine exhaust! The background, usually unstated, justification for such pressure was that the bans would “foster campus and community environments that promote healthy lifestyles...”^v or “The hope is that

¹ I’ve been called a grubby longhaired hippie at times in my life, but I *do* take occasional showers – whether I need them or not.

² Alphasoups Translated: Tobacco Free Universities, Tobacco Technical Assistance Consortium, Center for Tobacco Policy Research, Boosting Alcohol Consciousness Concerning the Health of University Students, and Greeks Advocating the Mature Management of Alcohol. {The Endnote nicely documents BACCHUS as a creature of the CDC’s Office on Smoking and Health co-funded by state MSA tobacco control monies -- despite its name only mentioning alcohol. GAMMA meanwhile specifically notes it “is not against underage drinking!”}

³ The MSA is often called an invisible tax because, although it’s money collected to be given directly to the government, it was never passed as a legally legislated tax.

those who desire to quit smoking or desire to quit chewing tobacco will take the opportunity to do that.”^{vi}

As part of that effort, the University of Georgia produced a study supposedly showing that simply being around smokers would boost your blood nicotine (actually cotinine, the nicotine metabolite found in blood) level to over 150% higher than the levels of those who avoided such exposure. It isn't until you read the study itself that you'd find out that it compared a group of test subjects who sat around outside in a location nowhere near any smokers to a group that sat right in the middle of crowds of smokers in smoke pits outside of smoke-banned bars for six hours straight on busy Friday nights.

I took the figures from the Georgia study and computed what the level of exposure would actually be if a waiter worked every Friday night on the crowded smoking patio of a college bar where indoor smoking had been banned. It turns out that the waiter would have to work in such conditions for about a hundred years to get the equivalent exposure of smoking a single pack of cigarettes.^{vii}

Levels of exposure that were a bit more normal on a campus, say, walking through clumps of smokers at doorways or maybe sitting on a bench several times a week while a couple of smokers smoked on a bench nearby, would be far lower. A hapless student might have to wander around such a “smoke-filled” campus for almost a thousand times as long – a hundred thousand years of Friday nights – to enjoy the equivalent of smoking a single pack of cigarettes or a couple of marijuana joints.⁴

Now if the above concern about momentary passage by smokers near a doorway seems a bit far-fetched to you, you're clearly not a card-carrying Antismoker. In early 2011, a sadly brainwashed student wrote an article in support of a campus-wide smoking ban and expressed concern that “toxic chemicals from cigarette smoke leave harmful residue” on

⁴ I've always thought it rather funny that while Smoke Free Campuses so stridently pushes their full campus smoking bans they never seem to consider the students who smoke marijuana rather than tobacco. After all, if a college can expect to successfully halt tobacco smoking then it would seem that they should also have full legal responsibility for any pot smoking that they allow to occur under their watch.

campus benches that might poison nonsmokers unwise enough to sit there later.^{viii}

Later in this book (*Slab IV*) I will examine the theoretical danger posed to an infant who obsessively licks “thirdhand smoke” off ten square feet of smokers’ flooring every day of the week. I show how it would take literally trillions of years to absorb the amount of “poison” touted as a deadly threat by Antismokers. On an outdoor campus, assuming the typical college bench surface is roughly ten square feet with a smoke deposition rate (in an outdoor environment with normal breezes etc.) of roughly 1/1,000th of that which settles on an inside floor, a student would have to extend their educational opportunities for roughly 3,000,000,000,000,000 (3 quadrillion) years while licking an entire bench nice and clean every single day before dying. As in the case of the arsenic-eating baby mentioned earlier, they’d have to refrain from “going potty” all that time. If they delayed their doctoral thesis until the end, they’d most certainly win the Commander Almost Zero Prize for a thesis more full of a certain aromatic substance than any produced in all of previous academic history.

A final and very simple example of a mismatched comparison is found in the common statement seen on the Internet and heard at legislative hearings that “Breathing secondhand smoke is more deadly than smoking.” Sometimes the claim is even explained “scientifically” by pointing out that the filter protects the smoker. Obviously it’s a silly statement, or researchers would have concluded decades ago that smoking protected people from lung cancer in smoky environments rather than caused it – as their own cigarette puffs filtered out the deadly secondhand smoke in the air surrounding them. But how did the comparison come about?

The answer lies in the fact that the true scientific statement would be along the lines of “Smoke taken directly from the burning ember at the end of a cigarette contains more X (where X is just about any substance that exists in smoke) than the smoke that has been filtered through the length of the body of the cigarette and inhaled by the smoker.” The trick that provides for the misunderstanding is that nonsmokers do not suck

on the lit ends of cigarettes and inhale lungfuls of that concentrated smoke. The average concentration of smoke that the nonsmoker inhales in most reasonably ventilated situations today has been diluted by a factor of at least a thousand times. A very simple distinction, but one that has been completely lost in the constant retelling as reality has morphed into a statistic.

ⁱ Huber GL, *et al.* "Passive Smoking: How Great A Hazard?" *Consumers Research*, Volume 74, Number 7, July 1991, p. 10.

ⁱⁱ <http://www.higheredcenter.org/files/product/community-colleges.txt>.

ⁱⁱⁱ <http://www.tobaccofreeu.org/policy/documents/DiamondAwardBooklet.pdf>.

^{iv} Wellness Resource Center. "About Gamma," <http://wellness.missouri.edu/gamma.html>.

^v <http://www.higheredcenter.org/files/product/community-colleges.txt>.

^{vi} "Arizona State University planning campus-wide smoking ban," *Eloy Enterprise*, October 11, 2012. http://www.trivalleycentral.com/elyo_enterprise/education/arizona-state-university-planning-campus-wide-smoking-ban/article_21857904-1330-11e2-93ea-0019bb2963f4.html.

^{vii} Hall JC, *et al.* "Assessment of exposure to secondhand smoke at outdoor bars and family restaurants in Athens, Georgia, using salivary cotinine," *Journal of Occupational and Environmental Hygiene*, November 2009, Volume 6, Issue 11, pp. 698-704. dx.doi.org/10.1080/15459620903249893.

^{viii} Gao R. "Smoke-Free Campus Must Become Reality," *DailyTrojan.com*, April 10, 2011. <http://dailytrojan.com/2011/04/10/smoke-free-campus-must-become-reality/>.