

Secondhand Smoke  
Testimony by Edmund Contoski  
at Meeker County Public Hearing

I've never been a smoker, never owned a bar or restaurant or worked in one, never owned stock in a tobacco company or received any money for one. I'm a retired environmental consultant. I was director of planning for an internationally renowned environmental consulting company doing business in more than 40 countries.

Your draft ordinance gives the impression of overwhelming evidence that secondhand smoke (environmental tobacco smoke—ETS) is dangerous. But the independent health research firm of Littlewood and Fennell surveyed all available studies and reported to the National Toxicology Program's Board of Scientific Counselors on Carcinogens that the overwhelming majority (over 75 percent) of these studies showed no association between ETS and lung cancer and the remainder showed very weak associations and substantial problems with unacceptable methodology, misrepresentation of risk, and other problems. Please note that this is a survey of research studies—not a public opinion survey such as you were shown earlier by proponents of the ban. Scientific truth is not determined by public opinion polls but by scientific facts.

Your draft ordinance also cites various government agencies as determining danger. It leaves out agencies with the opposite conclusion: for example, the U.S. Dept. of Transportation, the U.S. Dept. of Energy, and the U.S. Public Health Service, and the Congressional Research Service. The Dept. of Transportation got involved because of laws prohibiting smoking in airplanes. It found that a flight attendant would have to be on duty in the cabin of an airplane for 30 hours per week for 32 years to get the equivalent of smoking one cigarette.

And the Dept. of Energy studied 2<sup>nd</sup> hand smoke by attaching monitoring devices to waiters in bars and restaurants in seventeen cities. This is significant because it measured the actual amount of smoke right there at the employee instead of somewhere else in the room or calculating an average exposure. The result was no danger.

And I see the Occupational Safety and Health Administration (OSHA) on your list. I don't know what that's about because at the time of EPA's decision on secondhand smoke, OSHA had 14 studies on smoking in the workplace, and 13 of them showed no danger. It tells you a lot about EPA's dishonesty that it based its opinion here on one study and omitted the other 13. But other researchers later discovered a statistical error in that one study, and the necessary correction left that study with ZERO danger, too. So 14 of 14 OSHA studies showed no danger from ETS in workplaces. And OSHA in 2001 declined to regulate smoke in bars and restaurants because it found no health danger. Therefore, your ordinance does not state OSHA's position accurately or fairly.

Time prevents me from saying more about these other studies, so I move directly to EPA. EPA has claimed that ETS is a carcinogen that causes 3,000 deaths annually due to lung cancer. But, at the request of Congress, the Congressional Research Service examined

the EPA report and—looking at the same data—concluded: “It is possible that very few or even no deaths can be attributed to ETS.” Elsewhere, it also noted that people exposed to pack-a-day secondhand smoke for 40 years had “little or no risk of developing lung cancer,” much less dying from it.

Internal documents show EPA’s own employees warned its findings were exaggerated and its conclusions unjustified. And EPA’s Science Advisory Board warned the agency was on shaky scientific ground here, but EPA overruled them. And a dozen EPA employees wrote a letter to the Washington Times “risking our careers rather than choosing to remain silent” about “egregious misconduct” at EPA. EPA was found guilty of violating 6 federal statutes for employee harassment and intimidation against whistleblowers. The U.S. House of Representatives launched a Congressional investigation, which concluded that EPA “deliberately abused and manipulated the scientific data in order to reach a predetermined, politically motivated result... EPA was able to reach that conclusion [3,000 lung cancer deaths] only by ignoring or discounting major studies and by deviating from generally accepted scientific standards.” The House of Representatives’ report goes on to state that in the case of ETS there appears to have been “a conscious misuse of science and the scientific process to achieve a political agenda that could not otherwise be justified.” That’s what you have right here in Meeker county if you approve a smoking ban on the basis of this kind of phony, fraudulent information cited right in your ordinance. Evidently some of your doctors and other speakers here earlier have been taken in by this phony information, because they have cited that same fraudulent figure of 3,000 deaths.

And the scientific corruption of EPA has spread to other government agencies. The Surgeon General’s reports, NIOSH and other government agencies still use that fraudulent figure of 3,000 deaths, just as your ordinance does, and have even adopted the degraded statistical standards and corrupt practices that EPA used to produce it.

Epidemiologists have developed a scale for quantifying risk. It is risk ratio, also known as relative risk. Dr. Marcia Angell, editor of the New England Journal of Medicine, one of the world’s foremost medical journals, says, “As a rule of thumb, we are looking for a relative risk of 3 or more.” Dr. Robt. Temple of the FDA says, “My basic rule is if the relative risk isn’t at least 3 or 4, forget it”. And EPA declined to regulate high-voltage power lines because it said the risk ratios seldom exceeded 3.0. Yet EPA came up with a relative risk of 1.19 for ETS and claims that this is dangerous. Is that being honest? It would appear that the range of 3.0 to 4.0 is very weak and is an *indication* of possible danger.

When ratios get down in the area of 2.0, risks are comparable to drinking pasteurized milk and the municipal water supplies that millions of people in Minnesota drink every day. Both the National Cancer Institute and the World Health Organization have clearly stated that risk ratios below 2 are not to be relied upon. And the report to the Board of Scientific Counselors on Carcinogens stated that risk ratios below 2 are “dancing on the pinhead of statistical insignificance”, and claiming they are meaningful “is a waste of time and resources.” Yet EPA—and the proponents of smoking bans—are telling the

world that ETS, with a risk ratio of 1.19, is terribly dangerous and causing lung cancer deaths. If you believe that, I know a bridge in Brooklyn that you might like to buy.

Although the 1.19 risk ratio—meaning a risk of nineteen percent—is not statistically significant, EPA had to violate several scientific standards to arrive at even that number. I'd love to tell you about those fraudulent shenanigans, but there isn't time. So I'll simply say that since EPA came up with that number, five similar studies—done by outsiders—have come up with an average risk ratio of 1.01, a difference 18% less. You can appreciate that this is essentially zero risk because a risk ratio of 1.0 means no effect.

Now, all the other health risks cited in your ordinance (ischemic heart disease, low birth weight babies, sudden infant death syndrome, middle ear infections) refer to studies that virtually all have risk ratios below 2—usually far below. Most of the remaining few are barely over 2.0 and far below the 3.0 to 4.0 recognized by the New England Journal of Medicine, the FDA, and others as being the bare minimum for concern. And deaths attributed to these adverse health conditions are derived from their risk ratios. If the risk ratios aren't meaningful, calculations of the numbers of deaths are meaningless. It's just like when the EPA came up with its figure of 3,000 deaths annually from lung cancer instead of “very few or even no deaths.”

What I've said about risk ratios tells you all you need to know in order to know that the projected deaths from ETS in your ordinance are bogus. But there are two other reasons they're bogus. First, a risk ratio tells you that there is a **statistical association** between a risk factor and a disease—and that's all it tells you. It does **NOT** tell you there is a cause and effect relationship. The higher the risk ratio, the more **likely** it is that there is a causal relationship, but further research is needed to establish that. Suppose a study shows a statistical association between lung cancer and people being lefthanded—which could happen. Does that mean being lefthanded causes lung cancer? Of course not. We would be jumping to conclusion if we said that. But that is exactly what people are doing regarding low birth weight babies, ear infections, etc. They have jumped to the conclusion that statistical associations—and very weak ones (even statistically insignificant ones) at that—are proof of cause and effect. That is irresponsible. But it is effective in scaring the public who has no understanding of how meaningless these numbers are, and it provides cover for the activists who want to ban ETS.

Second, these estimates of deaths attributed to ETS are based on the assumptions that there is no safe level for ETS and that deaths are directly proportional to ETS exposure. It's like saying that if 100 men die from a fall of 100 feet, then ten in 100 must die from a fall of 10 feet, and 1 in 100 must die from a fall of one foot. Of course, probably nobody's going to die for a fall of one foot. But then they go even further and calculate how many will die from a fall of one inch. Or fractions of an inch. And since nobody is likely to die in that sample of 100 people, they enlarge the sample; they use a million people, or ten million, or 100 million, or the entire population of the United States and come up with deaths in the thousands.

They claim there's no safe level for secondhand smoke, that there's no threshold below which it isn't dangerous—and this is absolute nonsense! This no threshold theory has never been shown to be true for ANY chemical, even chemicals far more dangerous than ETS.

At least ten elements (including oxygen and iron) are carcinogens at high doses but are essential to human life in small doses. This contradicts the no-threshold principle. Some carcinogens, such as Selenium and Vitamin A, are proven **anti**-carcinogens at low doses. Again, this disproves the no-threshold theory.

And the scientific literature demolishes the no-threshold theory. I will cite the title of just one treatise, (you can find complete references for some others in one of my books) but I cite just one here because the title says it all: "*Environmental Carcinogenesis – The Threshold Principle: A Law of Nature*," by Claus and Bolander. **The threshold principle IS a law of nature.** And the authors state that the contrary belief ignores "all the fundamental principles of cell biology." But activists assume this law of nature does not exist, and they offer not one particle of evidence why it doesn't exist or why it doesn't apply to ETS. Nor do they explain why they are entitled to ignore "all the fundamental principles of cell biology." They simply state their unsubstantiated claim counter to science and expect everyone to bow down to the special wisdom they possess that requires no proof or evidence and to accommodate them by passing smoking bans.

You've all received copies of the table showing the carcinogens in ETS, their threshold limits, and the number of cigarettes that would have to be smoked in a sealed, unventilated room to reach those limits. Below those limits, those carcinogens are harmless. These limits are established by the American Conference of Government Industrial Hygienists. If there are no thresholds, no safe doses for these chemicals, why are all these government scientists calculating these thresholds? And they aren't the only ones. OSHA has its scientists who also calculate threshold limits below which these chemicals are considered safe. And there are scientists in other organizations doing the same thing. And what about the scientific journals that publish these thresholds? All the editors and scientists associated with these professional journals, the scientists at OSHA who calculate thresholds and the government industrial hygienists who calculate thresholds, are all these scientists wrong and the smoking-ban activists right?—that there are no thresholds and any dose is dangerous? And what about the former president of the American Association for Cancer Research, who stated, "Chemical carcinogenesis is a strongly dose-dependent phenomenon"? Are we to believe that the activists who claim the exact opposite—that any dose is dangerous—know more about the subject than the doctor elected president of the American Association for Cancer Research?

The activists attempt to scare people by saying there are 50 carcinogens in ETS; the American Lung Association says 69. But a cup of coffee contains 100 carcinogens.

We live in a world of carcinogens. They are everywhere. They are in the food we eat, the air we breathe, the water we drink, the soil we walk on. They are produced by plants, animals, fungi, viruses, bacteria and our own bodies. Human blood contains many

carcinogens; if it were an industrial product, it would be classed as toxic substance. Our saliva contains nitrates, which are carcinogens. All human sex hormones are carcinogens.

Sucrose, the common sugar from sugar cane and sugar beets, is a carcinogen. Fructose, found in all fruits, is a carcinogen. Orange, lemon, lime, and grapefruit oils are carcinogens or carcinogen promoters. Corn oil, cottonseed oil and sunflower oil are carcinogens. Raisins and walnuts contain malonaldehyde, which is a carcinogen. Salt is a carcinogen. Black pepper, cinnamon, ginger and nutmeg contain saffrole, which is a carcinogen. All fruits and vegetables and animal feed contain terpenes, which are carcinogens. The French-based International Agency for Research on Cancer reports that “virtually every food stuff or food product is potentially susceptible to contamination by [carcinogenic] aflatoxin...Samples of nearly every dietary staple have been found to contain [it].” These staples include coconuts, sunflower seeds, hazelnuts, Brazil nuts, walnuts, pecans, corn, wheat, oats, barley, rye, sorghum, rice, black pepper, cocoa, wine, peas, and sweet potatoes.

Raw beef, pork, turkey and chicken contain carcinogens, and cooking makes things worse. Broiling, roasting, baking, braising, boiling, frying and smoking foods produce a variety of carcinogens. Mother’s milk contains lactose. Lactose is a carcinogen.

Why aren’t we all dead already from all these carcinogens? Because small amounts are not dangerous; they all have thresholds below which they are harmless. The same is true of the carcinogens in ETS. In fact, most of them are found not just in tobacco smoke but everywhere throughout our environment, and we’re exposed to them all the time. I can’t go through the whole list, but let’s take benzo(a)pyrene because that’s been talked about a lot. This dangerous carcinogen is found in sizable quantities in lettuce, cabbage, leeks, tea, and spinach. And you get 2,500 nanograms of it every time you grill a steak. But to reach the threshold for this carcinogen with secondhand smoke, 222,000 cigarettes would have to be smoked simultaneously in a sealed, unventilated room 20 by 22 feet.

Not only are small amounts of carcinogens not dangerous, there is considerable evidence that they are beneficial in providing a protective effect against lung cancer and other diseases. This should not be as surprising as it may at first seem. After all, this is the basis of vaccines. What do you think you’re getting when you get a flu shot? When you get a flu shot or any other vaccine, you’re getting a small amount of a weakened form of a disease-bearing virus or bacteria. This stimulates your body’s immune system to provide resistance to larger dangers of this type in the future. And it’s well known that alcohol can increase the risk for heart disease, stroke and various other diseases, but that small amounts of alcohol—1 or 2 drinks a day—actually reduce the likelihood of these diseases. And we all know that sunlight can cause cancer, but modest amounts of sunlight actually protect you against cancer. So there is nothing new in the idea that small amounts of a toxin or carcinogen are beneficial.

You have a table showing studies with risk ratios below 1.0, which means a protective effect from ETS. EPA refused to consider these studies because it refused to consider any evidence that ETS is not a carcinogen.

And the other proponents of smoking bans are the same way, and that includes that propaganda machine known as the Star Tribune. They refuse to consider evidence that clashes with their political agenda. They put ideology ahead of facts. This is even true of the American Cancer Society, which campaigns against secondhand smoke even though it has sponsored at least three studies all of which fail to show any danger according to the standards of its own director of analytic epidemiology, Dr. Eugenia Calle.

Finally, your ordinance references the work of James Repace. I suggest you read the devastating analysis of his work in the Littlewood and Fennell report, which found his claims “totally unsubstantiated” and “a perversion of sound science” that is both scientifically and morally reprehensible. I think you would not want your integrity to be judged by mention of this dishonest work in your ordinance.