Bad science, accountability and courage – speech by AG Tom Miller

written by Clive Bates | 6 December 2016



Tom Miller: "public policy through facts and science rather than ideology"

On 17 November 2016, the Iowa Attorney General, Tom Miller, gave a speech at the E-cigarette Summit 2016 (with biography) on e-cigarettes examining the claims of anti-vaping activists, and their scientific, ethical and legal basis. The full text of the speech is here: America Needs England (PDF). I reported an earlier speech here.

The speech should be widely read, especially in the United States. To facilitate an informed reading, I have reproduced the speech here, with some thematic subheadings, source links and illustrations [these are my additions].

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America Needs England By Tom Miller

The E-Cigarette Summit London, England November 17, 2016

Introduction

In America, consumer protection laws are very important in protecting American consumers from fraud. A major role is played by the State attorney generals. Consumer protection is one of my highest priorities. It is one of the main ways our office serves ordinary people. Consumer protection laws are strong because the basic principles of the law are able to reach many types of fraud, even the most complex and intricate. I believe it is instructive to apply these principles to some of the arguments against e-cigarettes.

But before I do, let me give you some background about the law and me. The consumer protection laws apply to consumer transactions and the companies and individuals who are involved in them. These laws do not apply to scientists, academics, and advocacy groups who are not selling products. The laws would apply to the e-cigarette companies. Let me also tell you something about me.

When I was in college I had a choice between majors. The choice was an unusual choice – it was between a math major and a political science major. I think I chose correctly on political science, but I continue to be a numbers person. Numbers have always been something important to me, and I use them. I am, also, a great believer in facts and science over ideology. For me, we get to where we should be in terms of public policy through facts and science rather than ideology. And finally, I'm a great proponent of intellectual honesty and

detest intellectual dishonesty.

On legal accountability and the limits of impunity for misleading consumers

One important concept of consumer protection law is the prohibition against the omission of a material fact [Iowa law]. This seeks to make deceptive telling the literal truth, but leaving out something important—and thereby creating a totally false impression. Sometimes e-cigarette critics warn that e- cigarettes produce up to 15 times more cancer causing formaldehyde than combustibles [Jensen et al 2015]. What they omit to say is that to produce this, the e-cigarette machine has to be turned up to a level that it is impossible for a human to use , and that at the level e-cigarettes are used by people there is no formaldehyde danger [Bates & Farsalinos, Research letter on e-cigarette cancer risk was so misleading it should be retracted].

Another important consumer protection law principle is that you cannot create a communication whose net effect impression is false. A good example of this is the CDC ad with the person sick, disabled and dying of cancer. The ad suggests that e-cigarettes cause or contribute to this great harm [Review (video)]. The net effect is false or deceptive because the e-cigarette is not a substantial cause of the disease and in any case this is not a common occurrence.

Finally, under American consumer protection law you can't imply something that is false. In America, kid use of e-cigarettes is high—16%–but overwhelmingly experimental. Sixteen percent of kids used e-cigs at least once in the last 30 days but only 1% are daily users. The original announcement is 16% once in the last 30 days. But then people say that kid use is 16%. People then tend to assume that 16% is regular use. Where people cross the consumer protection line is when they make alarmist statements using the 16%. At that point there is an implied claim that the 16% use is something other than overwhelming experimental use. [CDC paper on Frequency of tobacco use, 2015].

On misleading health claims

Let me give you another take on my perspective on the health claims against e-cigarettes. I'm a person that tries always to keep an open mind in my public career. In my public career, there have been some occasions where I have kept an open mind and, during the course of the issue ongoing, I've changed my mind. And frankly, those are some of the proudest moments of my career. So I tried to do that on e-cigarettes and I would hear reports about enormous potential harm and danger created by cigarettes. And I would go to people, scientists and people that I knew and trusted, and ask about them. And the claims wouldn't be true, they wouldn't work, they just didn't pan out. One example, that got a fair amount of life, was that e-cigarettes had formaldehyde that would cause cancer which I discussed earlier. Popcorn lung probably is in the same category [Mike Siegel – New Study Finds that Average Diacetyl Exposure from Vaping is 750 Times Lower than from Smoking].

So my thinking was reinforced as I looked at these various claims of harm. And frankly, I think those allegations of harm are so weak because they're trying to prove something that isn't true, that e- cigarettes have enormous harm, much like cigarettes. When they try to prove something that isn't true, well, if you look at it very carefully, they do fail.

On fundamentals: no combustion

They fail in part because of what I call the fundamentals. Combustibles, made up of nicotine and combustion, are different from e-cigarettes, made up of nicotine, aerosol and flavors. Without the combustion, there is no way that e-cigarettes are going to be any way near as harmful. So based on the deceptive claims made against e-cigarettes, the inability of their science to hold up, and the fundamental nature of the two products, I come to the following conclusion: To deny that e-cigarettes are dramatically less harmful in the tobacco context is really quite equivalent to denying climate change in the environmental context.

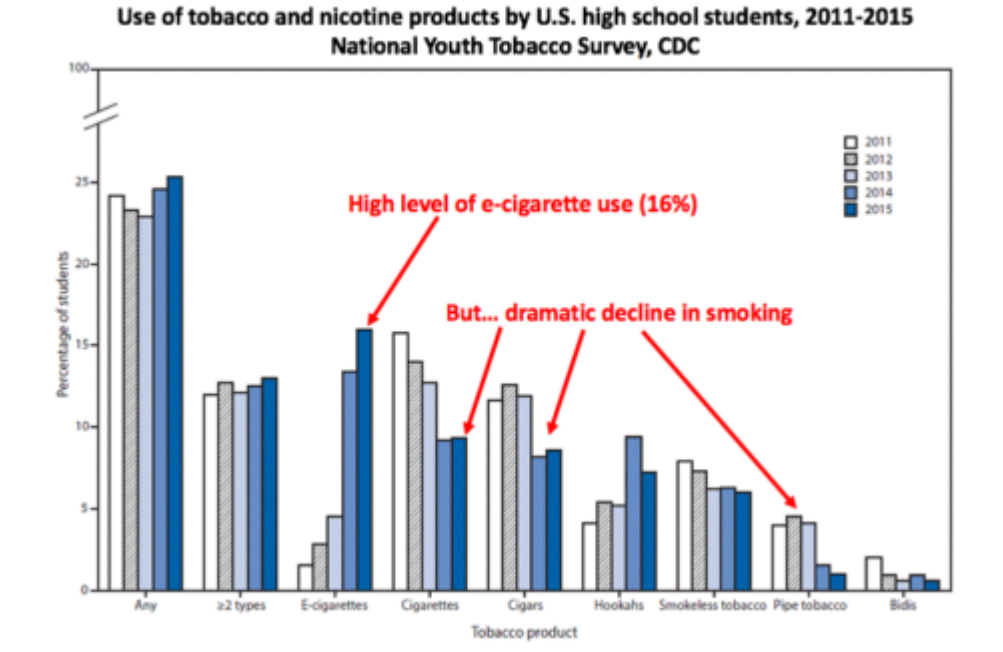
On youth vaping and smoking

Now there is a very legitimate concern about e-cigarettes, and that's kids –

particularly e- cigarettes being a gateway to the combustibles that will kill in a way that we've all seen and been very concerned about. Let's look at all the facts and numbers. Again, for better or for worse, I am a numbers person. There's enormously large and troubling experimental use of e-cigarettes by kids. Overall, once in the last 30-day use, has been in a range of 13 to 16 percent for a couple of years. A significant number. But, it's overwhelmingly experimental. And, the reason I say that is that the kid-use of e-cigarettes on a daily basis is 1 percent. The kid-use of e-cigarettes on a 20-to-29 day basis out of 30 is 1 percent. So, for regular use or semi-regular use you have 2 percent, for experimental use you have 14 percent. So that's the first thing to really recognize. And you really shouldn't talk about one figure without talking about the other, because to say that there are 16 percent of kids who use e-cigarettes really is misleading because so much of that is experimental. And to say that only 2 percent use it regularly or semi-regularly without recognizing the experimental use is deceptive as well.

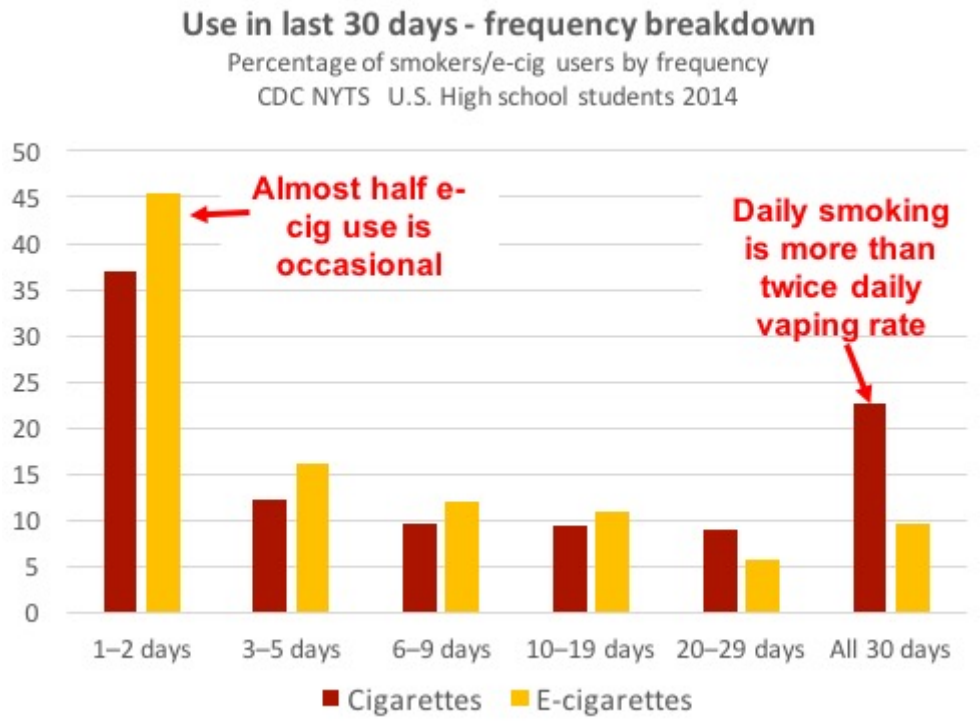
[A pause to illustrate this point with Counterfactual annotated graphics]

Quoting a high rate of teenage e-cigarette use in isolation…

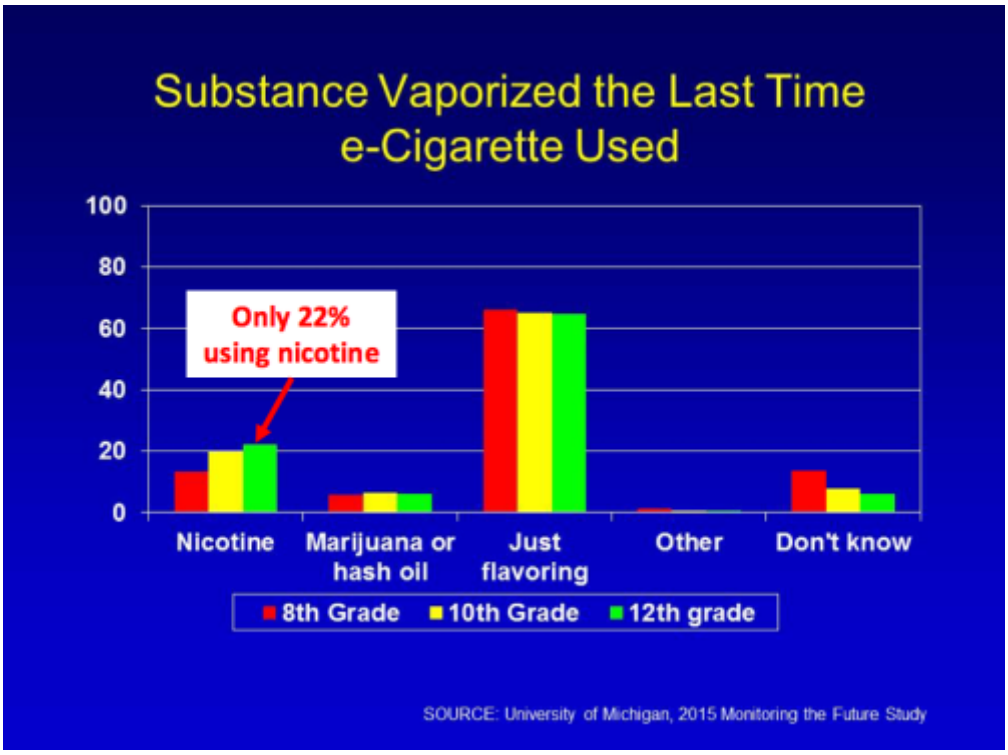


…does not convey beneficial reductions in smoking, and…

…may conceal that much e-cigarette use is occasional or experimental…



...and that most of the use does not involve nicotine



[AG Miller's speech resumes here...]

On e-cigarette gateways

The Truth Initiative in one of its surveys found out that of kids that use e-

cigarettes, more than half of them don't buy e-cigarettes. They only use them when they're shared by their friends. There have been some surveys and some information that first I didn't really believe much of it but I now think it should be explored, that is the percentage of kids that use e-cigarettes without nicotine. We need to find out more about that. On the plus side of e-cigarettes and kids, there's at least one survey – and we need to get more information on this, also – which says that 1 percent of kids are using e-cigarettes to get off combustibles. That's pretty amazing in the context of 3.3 percent of kids are daily users of combustibles and you have 1 percent trying to get off them by using e-cigarettes. [Teens give many positive reasons for using e-cigarettes: JAMA / table]

And finally, Ken Warner did a recent study [link] using the Monitoring the Future data and came up with what I think is very informative on the whole gateway issue and that is that for kids that haven't tried or used combustibles, the possibility of that group of kids to get to a daily or semi-daily user of e-cigarettes – not combustibles but e-cigarettes – the chance is one in 140 kids.

My conclusion, based on what we reasonably know today, is that for kids, e-cigarettes are a gateway to nowhere. This is extremely important in balancing health risks and benefits of e-cigarettes. [for me see Counterfactual post: How not to be duped by gateway effect claims]

On e-cigarette marketing to kids

Another concern about e-cigarettes and kids is whether the e-cigarette companies are marketing to kids. The tobacco companies in the past have done a shameful job of marketing to kids. What are e-cigarette companies doing here? We have done some work on the question of e-cigarettes marketing and kids. The starting point is in the cigarette world, a rather modest amount is being spent on marketing generally and it is dropping–$33 million in 2015 compared to $120 million in 2014.

Second, we had some work done on whether e-cigarettes were marketing to kids on the internet or social media. Their conclusion was that there was no evidence that e-cigarette companies were targeting kids, but they found that e-cigarette distributors were targeting kids. These two rather basic facts led me

to conclude that e-cigarette companies are certainly not targeting kids the way the tobacco companies did in the past.

On false perceptions of relative risk and the responsibility of public health bodies to put this right

What troubles me a lot is that the American public does not realize that e-cigarettes are dramatically less harmful. The misconceptions are amazing and extremely troublesome. If you give Americans five choices: e-cigarettes are a lot less harmful, little less harmful, same, little more harmful, a lot more harmful, only 15 to 20 percent of Americans get it right– that it's a lot less harmful. [NCI HINTS 2015 data – note, it is even worse than AG Miller says – and Reuters survey, 2016]. And it's roughly the same among adults and among kids. There is, however, some data that show the kids are starting to get it right more often than adults.

We have the situation where millions of lives could be saved but smokers don't know that e- cigarettes are significantly, dramatically less harmful. What do we do about that in America? The best thing to start with would be for us to be like England, where not only public health, English Public Health, but also ASH, the tobacco control community, and the physicians, the Royal College of Physicians have all, in a united way, taken the position that e-cigarettes are dramatically less harmful [UK public health consensus,statement 2016]. They say at least 95 percent less harmful. And adult smokers that cannot quit, or are unwilling to quit, should switch to e-cigarettes. We need that in America. We need the federal government to take that position, we need the tobacco control community to take that position, and we need physicians to take that position.

One of the things I'm working on is to develop a way to calculate the number of lives that we are losing in America because we haven't taken the position that England has taken, either on a monthly or weekly basis. That could motivate us more. And also frankly, so there is some accountability. I don't know whether we can develop that count but we are trying to do it. Any help you can give would to welcome.

On what America can draw from England

> *America needs England! England gave the great warnings about cigarettes in the sixties, two years before we did with Surgeon General Luther Terry's report. You now have taken the position that, since e-cigarettes are at least 95% less harmful than combustibles [PHE 2015][RCP 2016], adults who are unable or unwilling to quit should switch to e-cigarettes. You need to help us get there.*
>
> *You need to come to America and share your knowledge and experience with e-cigarettes.*
>
> *Some of you already have—Deborah Arnott and John Britton came to a Truth Initiative Conference. You need to give us your very best information and numbers on the benefits of your position. Give us your updates immediately. Give us your numbers, experience and reasoning and help us save lives in America like you are doing here.*

On the importance of top academics speaking out

> *In closing, I want to thank you for what you have done and are doing on e-cigarettes as a harm reduction tool. You have taken a position that, since e-cigarettes are at least 95% less harmful than combustibles, adult smokers unable or unwilling to quit should switch to e-cigarettes—that could, according to Professor Dan Wikler of Harvard, save worldwide hundreds of millions of lives. Incidentally, Professor Wikler is the great visionary on this issue. He sets his position forth in a great lecture in Stockholm. It took great courage to be the first to do what you did worldwide. I thank you for that courage. It also takes great persistence. You have shown that and need to continue to show it. From my perspective, you are heroes. Thanks again for what you have done.*

A postscript: hard lessons for public health

I thought AG Miller's themes were particularly important for those ethically bankrupt activist academics who contrived to inspire one of the worst newspaper articles ever written on the subject of e-cigarettes this weekend: E-cigs: The

incendiary truth… Just 10 puffs increases your risk of heart disease and they may even make smokers LESS likely to quit.

Virtually everything said in this article is incorrect, true but misleading or a blatant non-sequitur. I suggest they read AG Miller's speech and think seriously about what they are doing. What possible effect could this have on smokers?



Nice work public health academics