

Erie County Public Hearing
Electronic Cigarettes
Draft remarks from Dr. Hyland

Good afternoon. I am Dr. Andrew Hyland, Chair of the Department of Health Behavior at Roswell Park Cancer Institute. I direct our tobacco research and services programs. We have done a lot of work looking at what happens when jurisdictions implement clean indoor air policies – in fact, I was right here in this room back in the 1990s at the first public hearing on Erie County’s Clean Air Act. We’ve also done a lot of work recently on e-cigarettes and I want to thank you for the opportunity to share our perspective on this issue. As our time is short, I will be brief.

Let me state up front that my position on e-cigarettes in general is that there is reason to be hopeful but also reason to be concerned about their potential to improve public health. We and others are doing research to understand under what conditions e-cigarettes can benefit public health. When Erie County banned cigarette smoking in restaurants back in the 90s, it helped lead the state and the country in a wave of activity that has provided clean air to workers and patrons alike. Now, when we walk into a business or a restaurant, we have difficulty imagining what it was like when smoking was allowed.

Times change, as do tobacco products. Electronic cigarettes didn’t exist when Erie County adopted the clean indoor air act and people and groups I’ve spoken with are looking for guidance on whether that policy applies to them or not...that’s why we are all here today.

As of October 2014, more than 200 municipalities, including Chicago, Los Angeles and New York, along with 3 states (New Jersey, North Dakota, and Utah) have decided electronic cigarettes should be included in Clean Indoor Air Regulations. Locally, (January 2012) Cattaraugus County also approved a county-wide law prohibiting the use of e-cigarettes in indoor public places.

The science base surrounding risks associated with e-cigarettes and what’s in e-cigarette emissions is quickly evolving and it’s a moving target because this class of products is evolving. Based on my review of the latest science this is what I come to the following 4 conclusions:

1. E-cigarettes may be safer for those cigarette smokers who switch completely to e-cigarettes, but e-cigarette and e-cigarette emissions are not 100% safe.
2. Focusing on e-cigarette emissions, some emissions include harmful chemicals including formaldehyde and carbonyl compounds.
3. Levels of these harmful compounds increases with increasing voltage of e-cigarette devices, and newer e-cigarette technology offers higher voltage options.
4. And emissions levels also appear to vary by manufacturer, brand and type of electronic nicotine delivery system used, which is not surprising given there are no regulatory standards over the manufacturing process.

The spirit of the Erie County Clean Indoor Air law is to provide workers with clean air to breathe and while these products may hold promise for cigarette smokers who switch to e-cigarettes completely, their emissions are not harmless.

Let me also briefly touch on a couple of additional issues that are often raised in these debates.

Some argue that not allowing vaping in indoor public places makes it hard for people using these products to quit smoking cigarettes. I'm all for quitting cigarette smoking...I run the New York State Smokers Quitline and help about 100,000 people each year to quit smoking. This bill is about providing clean air and supports quit smoking efforts. Imagine you are a cigarette smoker who is 3 days into quitting tobacco and you walk into a restaurant and people at the table next to you are vaping, which will queue triggers to smoke. I am not aware of any credible scientific evidence that supports using e-cigarettes in indoor public places that promote quitting cigarettes.

Some may argue that not allowing vaping in bars and restaurants will be bad for the hospitality business. This was a legitimate concern 20 years ago but the evidence showed that the hospitality business followed previous trends and was not adversely impacted. Cigarette use at that time was 10-fold what e-cigarette use is now and the social norms are completely different. It is hard to imagine adding e-cigarettes to the list of tobacco products not permissible in indoor public places causing economic hardship to the retail businesses that sell these products. Furthermore, the bill has an exemption for certified ecigarette businesses, which recognizes the need for vape shop owners to allow product sampling in their establishments.

Some may also argue that even if there are toxic chemicals present in the vapor that the levels are so low they don't pose a risk. For example, a 2013 non-peer reviewed technical report concludes that ecigarette emissions are so low they "pose no apparent concern' to bystanders. The funder was The Consumer Advocates for Smoke-free Alternatives Association Research Fund This Association is an advocacy group to "raise awareness and protect the right to access reduced harm alternatives" with up to one third membership of electronic cigarette retailers. There are a number of concerns with this report including: 1) reliance on older data that does not include more recent data, some of which I presented earlier, refuting the conclusions; 2) reliance on comparing ecigarette emissions to occupational standards, which are designed to limit harm in healthy workers and does not factor in vulnerable populations and different patterns of exposure between occupational and more general exposures for which even NIOSH scientists conclude such comparisons are not appropriate; and 3) the dose-response curve of exposure to harm may not be linear. We know that for heart disease the risk rises quickly with relatively small doses of exposure to fine particles, which are found in ecigarette vapor, and then levels off. Other peer-reviewed studies do show levels of some toxins in ecigarette vapor and which refute the conclusion in this report that emissions pose no apparent concern.

Lastly, some may try to deflect attention on the issue at hand and ask why burning candles are allowed in restaurants, for example. There are policies that address air quality in restaurants. The Health Department has regulations for cooking exhaust for restaurants for example. With regard to candles, I've looked into the literature on this area and it suggests that emissions are highly variable based on the candle wax, wick, room size, and ventilation rates and some studies have found under some conditions that there are detectable levels of various compounds including particulate matter or some organic compounds; however other studies show these levels are generally low compared to other sources of the compounds in the environment. These mixed data should not distract from the issue today, which is whether e-cigarettes should be included in the Erie County Clean Air Act.

In conclusion, e-cigarette vapor is not harmless and it falls within the intent of the Erie County Clean Air Act to not permit the use of e-cigarettes in indoor places where cigarettes are not permitted.