



Connecticut Department of Public Health

**Testimony Presented Before the House
Appropriations Subcommittee on Labor,
Health and Human Services, Education and
Related Agencies**

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The Connecticut Department of Public Health's Recommendations Regarding Vaping

Good morning. My name is Renée Coleman-Mitchell, I am the Commissioner for the Connecticut Department of Public Health (DPH). I come before you today with great concern for all the victims who have been misled and misinformed about the human health risk of vaping. There have been 26 confirmed deaths across our country and I know you join me in expressing our heartfelt sympathy to their families in this time sorrow. In Connecticut so far (My state) we have had (1) death, but one death is too much.

I want to extend thanks to Representative Rosa DeLauro of the 3rd Congressional District of the Great State of Connecticut for reaching out to me to share our experience as a state with this outbreak of vaping-related lung disease. Representative DeLauro is always boots on the ground to serve and implement action for all our constituents. Thank you Rosa!

As the state public health official to address this panel on this very serious national public health challenge, I feel a great responsibility to share our perspective from the state level. I also want you to know that our sister state agencies have been collaborating on what should be best practices to stop this odorless seemingly not intrusive killer (E-Cigarette Vaping)

The mission of the Connecticut Department of Public Health is to protect and improve the health and safety of the people of Connecticut by making all possible efforts to provide resources, education and communication to mitigate risk to protect against harm, disease and death.

I am here to convey to you the magnitude and gravity of this vaping-related lung disease epidemic. I am grateful for the opportunity to testify and I thank you for listening.

In the 50 years since the first Surgeon General's report was released on the health hazards of what we now refer to as combustible cigarettes, we were able to substantially reduce cigarette smoking in America. Those efforts on behalf of all Americans starting with the surgeon general's office and saved millions of lives. We developed true understanding nationwide of the harm associated with smoking. Unfortunately, that progress is under attack as new products are introduced.

These products have taken over to the extent where, in December of 2018, U.S. Surgeon General Jerome Adams had to issue an advisory that declared e-cigarette use among youth an epidemic. To make matters worse, by late summer we began to receive reports of a rise in vaping-related lung injuries and deaths.

BACKGROUND:

E-cigarettes, vape pens, e-pipes and other vaping products are battery-powered devices that people can use to inhale aerosolized liquids. The vapor is derived from liquid cartridges that may contain marijuana, nicotine, which is very addictive and harmful to adolescent brains, and flavoring enhancers, which have been associated with severe and fatal lung disease. The combination of the chemicals in the e-cigarette combine with human physiology has proven fatal.

The inhaled aerosols from vaping products also contain ultrafine particles, oils, volatile organic compounds, heavy metals like nickel, tin and lead, and possible cancer-causing chemicals. These are combustible materials when released into the lungs appear to create a chain reaction that maybe burning the lung which may also lead to irreversible lung Disease. The most recent, fourth-generation vaping devices release much greater amounts of aerosol, leading to higher levels of these toxic

chemicals reaching the lungs and a greater risk of lung damage.

Vaping of nicotine and marijuana related products has continued to rise in our state and nationally – especially among young people.

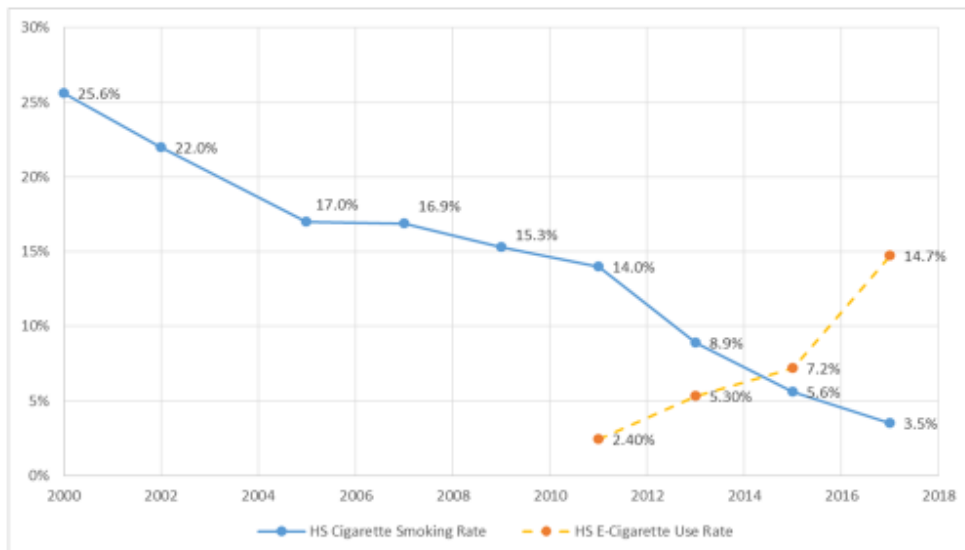
According to the Centers for Disease Control and Prevention (CDC), since 2014 e-cigarettes have been the most commonly used tobacco product among both middle and high school students, and more than half of Connecticut high school students who reported ever using e-cigarettes had used the devices at least once to vape substances other than nicotine, including Tetra/hydro/canna/binol (THC) oil and wax. This is the Psycho-active ingredient of marijuana.

The Department has worked jointly with CDC to implement evidence-based programming that follows their Best Practices for Comprehensive Tobacco Control programs, and we appreciate CDC's guidance in developing these programs.

Connecticut managed to reduce the high school youth combustible cigarette use rate to less than 4% by 2017 by implementing such best practices, which included enacting a Clean Indoor Air Law, levying a high excise tax rate and providing youth education on smoking. However, the increase in vaping has overtaken that trend.

The Connecticut Youth Tobacco Survey shows that our overall rate of e-cigarette use among all high school students was 14.7% in 2017; for high school seniors the rate is 24.4%, nearly one in four.

OVERALL CT YOUTH CIGARETTE VS. E-CIGARETTE USE



Data from the CT School Health Survey-Youth Tobacco Component 2000-2017

This is one of the most frustrating facts when it comes to vaping: after decades of work, we really had substantially decreased youth tobacco use. We were really headed in the right direction.

But with aggressive marketing campaigns touting interesting flavors and pitching e-cigarettes as safe alternatives to smoking, youth nicotine use is once again on the rise. It is important to pause and clarify a common understanding about E-Cigarettes. The original E-Cigarette was introduced to us as having a very low dose of nicotine similar to some nicotine patches and to some it helped break the habit. However, as we know the E-cigarettes being sold today contains substances that are laced with many more carcinogens

Vaping is now super easy and convenient, and doesn't smell like cigarettes. This means it's really easy to hide it from parents. And now, vaping is endangering the lives of our citizens.

VAPING-RELATED LUNG INJURY IN CT:

To date, we have seen 31 reports of vaping-related lung disease severe enough in Connecticut where people have been hospitalized. Two weeks ago, we had the duty to report our first fatality of someone who had suffered vaping related lung injury. All patients have a reported history of e-cigarette product use, or vaping – both nicotine and cannabis products – and no consistent evidence of an infectious cause has been discovered. We therefore suspect the cause is a chemical exposure. Many of the patients have reported purchasing cannabis vaping cartridges off the street or from friends. So the Black Market for these vaping products appears to be a significant factor.

Patients presented with respiratory symptoms including cough, shortness of breath, and fatigue. Other symptoms included nausea, diarrhea, vomiting, and chest pain and weight loss. Symptoms worsened over a period of days sometimes weeks before patients sought medical attention. Most patients were admitted to the hospital. Many

patients have required treatment in the Intensive Care Unit.

Actions taken by DPH

Our Department has been using different approaches to combat this increased incidence of lung injury related to vaping. State statute allows me as Commissioner to identify and have certain diseases reported for study, as such I have added vaping-related lung disease to the list of reportable diseases.

On September 27, 2019 I formally amended DPH's "List of Reportable Diseases, Emergency Illnesses and Health Conditions" to include mandatory reporting by health care providers and facilities of all incidents of "unexplained vaping-related lung injuries".

This information is important for describing the magnitude and geographic distribution of injuries and guiding prevention and control measures.

For my state, Connecticut, and as a nation we must look not only at immediate short term action plans, but we must look at long term planning to eradicate the disease of addiction.

As simple as it seems the one most effective tool is education and training. We need to invest in ongoing education about addiction from first grade to graduation. We need to educate in detailed the difference disease state and all risk. We should not sugar coat the issues. Parents are to be educated to communicate with their children in an age appropriate manner. As we have seen throughout history lack of knowledge is deadly.

Fifty years ago there were ads with those posing as physicians in white coats telling the country that smoking was okay. Some of the misleading information is what we are now witnessing with poor health outcomes and billions of dollars in Health Care costs.

To better understand the severity of this issue, the Department has been participating in an

investigation of the disease in collaboration with CDC and the U.S. Food and Drug Administration so informed efforts may be undertaken to address vaping related lung disease

A formal process has been established for investigating cases. Healthcare providers contact DPH when they recognize that a patient in their care has vaping-related lung injury.

Our epidemiologists then collect data from the healthcare provider about the patient; including demographic information, and information about the patient's illness and the types of vaping products they used.

These data are collected so that the epidemiologists can assess whether the patient meets the CDC criteria for definite or probable vaping-related lung injury.

The state has consulted with our federal partners about how to classify vaping-related lung injury cases.

We have facilitated collection of clinical specimens from patients with vaping-related lung injury for submission to CDC for additional analysis by CDC pathologists to better characterize the nature of the lung injury. We have also facilitated collection of vaping products from patients, and submission of those products for testing.

The Connecticut Department of Public Health voluntarily reports information on probable and confirmed cases to CDC through an online reporting system. CDC, in turn, publishes weekly updates on the national investigation on their website; including numbers and characteristics of cases as well as in the Morbidity and Mortality Weekly Report (MMWR). CDC also provides updates on the investigation to all states involved through weekly conference calls.

I implore you to increase investment in surveillance and data collection pertaining to vaping-related lung injuries, as well as tobacco best practices as developed by the Centers for Disease Control and Prevention.

CHALLENGE FOR CDC:

Initially, we all were challenged with how to manage these and how to mitigate risk.

Do we look at these vaping-related cases as related injuries? Do we look at this as an outbreak – as we would an infectious disease? Or a food-borne illness?

One thing that is true of all outbreak investigations is that it is impossible to tell how long they will go on or where they will go.

At Connecticut DPH, we are using all available resources to help investigate this outbreak.

We are using personnel from our infectious disease section, from our tobacco prevention section, from our injury section, we are using our toxicologists, and our state lab.

We are taking these critical resources away from other crucial areas of our mission to deal with this ongoing outbreak.

These resources are being used for three things: investigation of cases in Connecticut, the completion of case reports, and for the transmission of this data to the CDC.

Like any outbreak investigation, sometimes over the course of the investigation you find out you need more resources.

What is happening for the Connecticut Department of Health as we respond to this vaping epidemic is being repeated all over the country in state public health departments.

And we face a very critical question: Is this outbreak contained? Or will it be with us for the foreseeable future?

The greatest danger we face is that these vaping-related lung illnesses are not only outbreak, but may in fact become endemic or even a chronic disease.

If this is true – what additional resources will we need to commit to sustain our response?

As more states legalize recreational marijuana, we face a certain market forces reality.

As long as there is a Black Market for vaping products that adds THC from marijuana to the liquid mixture and is cheaper than anything you can find in a legal marijuana dispensary, then we are very likely going to see ongoing cases of vaping-related lung disease.

But the more cases we see nationwide – it begs the question: Should we make this condition a nationally notifiable disease?

So in sum, I support legislation to commit resources to the CDC to invest in better data collection and streamlined management of the response to this national vaping epidemic.

YOUTH CESSATION CHALLENGE:

We must also not give up on fighting for our youth to live smoke-free, nicotine-free lives.

Remember that every dollar spent on tobacco use cessation saves millions in healthcare costs.

For Connecticut, even with a 'low' adult cigarette smoking rate that is less than 13%, the health care costs directly caused by smoking are \$2.03 billion each year.

We have been fighting this war against a tobacco industry that has misled the public into believing that vape products are safe.

In addition, kids who never would have tried cigarettes have been lured by appealing advertisements into trying vaping products.

With high levels of nicotine disguised by kid-friendly flavors, many quickly become addicted to these products and now need effective help to quit.

We must tailor our tobacco use cessation efforts to build programs that work better for youth.

Although we operate the statewide tobacco use cessation telephone Quit line, this is not the most effective treatment for young tobacco users, even with a specialized youth program.

There is a need for additional research and adoption of evidence-based cessation programming for this younger generation – including social media.

We must learn from our mistakes and take a lesson from the tobacco industry. We should use our resources to combat these addictive diseases just as hard as they fight to advertise. The tobacco industry spends millions on advertising to get our children addicted to their products. We as a nation should also put in just as much and more to protect the future of our children. Saving our children is an investment in our future.

We should communicate with our children from grade (1) one all thru college with age appropriate information to empower them to live healthy, happy productive lives. Addiction is threatening the future of our youth.

Root cause analysis is the key. We will implement many plans to react to this issue but we must also focus on a long range plans and at the core is education and communication. Remembering that knowledge is power.

CONCLUSION:

I encourage committee members to consider funding for our coordinated federal-state response to the national epidemic of vaping-related lung injury.

By recognizing the structure of the evidence-based Best Practices for Comprehensive Tobacco Control Programs and funding at the recommended levels, we can improve the health of all of our residents and

reduce the morbidity and mortality associated with tobacco use.

Providing states with the necessary resources for a structure to help us cope with both our lung injury reporting and our youth epidemic is key. We cannot afford to wait another 50 years to combat the vaping epidemic, we need to take action now.

Thank you for the opportunity to speak with you today. I am available to answer any questions.