From:	Tamera Mapes <snowblond@msn.com></snowblond@msn.com>
Sent:	Tuesday, March 22, 2016 10:29 AM
То:	House Health and Social Services
Subject:	Testimony for HB328

Good morning. My name is Tamera Mapes and I reside in Kenai. I am speaking in opposition of HB328and on behalf of the hundreds of adults on the Kenai Peninsula who have made the choice to vape instead of smoke.

An independent research document "Peering through the Mist" by Dr. Burstyn found the TLV's were magnitudes below OSHA limits.

The abstract on page 1 of "Peering through the Mist" states the results and conclusions of Dr. Burstyn's research.

And an independent study, commissioned by Public Health England, found that e-cigarette use is around 95% less harmful to health than smoking and they contain almost none of the chemicals in cigarettes associated with serious diseases like lung cancer and emphysema.

On pages 2 and 3 of the Public Health England study are graphs showing the positive results of e-cig use among adults.

Adults choosing to vape instead of smoke look tounbiased/independent studies like this to help them make informed decisions.

Vaping has saved Alaskans who used to smoke, thousands of dollars and, because they are not painting their lungs with tar and filling their bloodstream with carbon monoxide, has had a tremendous positive impact on their lives.

It seems that this legislation session is about closing down this industry in Alaska or effectively regulating this healthier alternative out of existence. Unless it's about money and not health and well-being of the citizens of Alaska. The only store in Alaska that would comply with this bill in its current form is a tobacco store in the sponsor's district.

There was a time in the not too distant past when people were sure that automobiles were evil and airplanes were foolish... Alaska has the opportunity to show leadership in this new, less harmful way of nicotine delivery..

"You may hear our opposition say otherwise but the truth, as provided by independent studies and real world evidence, is that vaping works..

Thank you for your time and thoughtfulness on this issue.

Sent from my iPhone

March 21, 2016

Representative Paul Seaton State Capitol Room 102 Juneau, AK. 99801

Re: HB 328

Dear Representative Seaton:

I am contacting you regarding my concerns regarding HB 328 as you are Chairman of the Health and Social Services Committee hearing the bill. I am also sending a copy of this letter to the other members of the HSS Committee and the Sponsor and Cosponsors of HB 328 to assure you are all equally informed of my concerns, as follows:

- HB 328 is an over reach of State control that would take away local option for communities throughout the State to deal with this matter, which may or may not affect their individual communities.
- Many other substances such as alcohol and marijuana are local options for communities to set up their own regulations regarding their use. The regulations in Southeast and Southcentral Alaska may be appropriate for the communities in those regions; however may be totally inappropriate and unreasonable for the Interior, North Slope and Bush communities.
- Enforcement of HB 328 would be unmanageable equally across the State as resources are thin and likely to become thinner with the anticipated budget reductions.
- Including e-cigarettes and vaporizers in this bill is counterintuitive to the major goal of the bill to limit and reduce the use of tobacco products.

Vaporizers DO NOT contain any tobacco or produce any combustion by products. The vapor that is exhaled by a vaporizer user is an aerosol, which a study by Drexel University found no apparent concern for bystanders of people using e-cigarettes, even under worst case assumptions about exposure. The study can be reviewed at <u>www.biomedcentral.com</u>. A study of tobacco use among adults in Minnesota found a 10% decrease in use from 2010-2014. Of those who attempted to quit tobacco products in the final 12 months of the study showed over 40% tried vaporizers, which is double the rate for traditional Nicotine Replacement Therapies such as gum and patches; and quadruple the rate for pharmaceutical products such as Chantix. Vaporizers were the number one choice people in Minnesota turned to in their attempt to quit tobacco use, which is now at an all time low among adults.

HB 328 would unfairly and without justification treat vaporizers as tobacco products. If the goal of HB 328 is to limit and reduce the use of tobacco products, leave it at tobacco. Including vaporizers in this bill is like including soda pop in an alcohol bill.

• HB 328 in its current form would force Alaskan small businesses out of business. Virtually every vaporizer business in the State are located in shopping centers with other adjoining businesses. If vaping is not allowed in the stores, customers couldn't sample products and sales would be devastated.

Personally, every member of my family has totally quit using tobacco products for over two years through using vaporizers, like the vast majority of customers who frequent Vape shops. We are all healthier and thankful to be done with tobacco products after trying unsuccessfully for years to quit using traditional gum, patches and pharmaceutical products. Please take e-cigarettes and vaporizers out of HB 328 and support helping Alaskans to quit tobacco use.

Thank you for your thoughtful consideration of these concerns regarding HB 328 and I pray you will support helping Alaskans quitting tobacco use. Please feel free to contact me with any questions you may have.

Sincerely,

Greg McDonald 1408 P Street Anchorage, AK 99501 907-632-4224 Gmcdonald@eklutninc.com

From: Sent:	Greg McDonald <gmcdonald@eklutnainc.com> Monday, March 21, 2016 11:57 PM</gmcdonald@eklutnainc.com>
То:	Rep. Paul Seaton
Cc:	Rep. Liz Vazquez; Rep. Neal Foster; Rep. Louise Stutes; Rep. David Talerico; Rep. Adam Wool; Rep. Chris Tuck; Rep. Charisse Millett; Rep. Bryce Edgmon; Rep. Bob Herron; Rep. Lynn Gattis; Rep. Cathy Munoz; Rep. Geran Tarr; Rep. Bob Lynn
Subject:	HB 328
Attachments:	SB 1 Letter.pdf; ATT00001.txt
Categories:	Taneeka

Representative Seaton -

Please find attached a letter regarding my concerns with HB 328. It is my understanding that this bill is being heard by the HSS Committee on 3/22/16 and I'm copying the Members of the Committee and the Sponsor and Cosponsors of the bill so you are all equally informed of my concerns.

Please remove e-cigarettes and vaporizers from this bill. Vaping does not contain any tobacco products or combustion by products; and has been shown to be the most effective way to reduce tobacco consumption.

Your consideration in this matter will save lives by supporting tobacco users to quit using tobacco products. Including vaping in this bill will not only take away an effective alternative to tobacco products, but it will also force Alaskan small businesses in the vaping industry out of business.

Please feel free to contact me should you have any questions. Thank you.

Best regards,

Greg McDonald 907-632-4224 Gmcdonald@eklutnainc.com

From:	LIO Mat-Su
Sent:	Tuesday, March 22, 2016 8:32 AM
То:	House Health and Social Services
Subject:	FW: Testimony from American Vaping Association for Mat-Su Leg Public Hearing
	3-19-16
Attachments:	AVA-Mat-Su 3-19-16.pdf

From: tomandersonalaska@gmail.com [mailto:tomandersonalaska@gmail.com] On Behalf Of Thomas Anderson Sent: Saturday, March 19, 2016 9:55 AM

To: Sen. Bill Stoltze <Sen.Bill.Stoltze@akleg.gov>; Rep. Shelley Hughes <Rep.Shelley.Hughes@akleg.gov>; Rep. Cathy Tilton <Rep.Cathy.Tilton@akleg.gov>; Sen. Charlie Huggins <Sen.Charlie.Huggins@akleg.gov>; Rep. Jim Colver <Rep.Jim.Colver@akleg.gov>; Rep. Wes Keller <Rep.Wes.Keller@akleg.gov>; Rep. Lynn Gattis <Rep.Lynn.Gattis@akleg.gov>; Rep. Mark Neuman <Rep.Mark.Neuman@akleg.gov>; Sen. Mike Dunleavy <Sen.Mike.Dunleavy@akleg.gov>

Cc: LIO Mat-Su <LIO.Mat-Su@akleg.gov>

Subject: Testimony from American Vaping Association for Mat-Su Leg Public Hearing 3-19-16

Greetings from the Mat-Su.

Optima oversees public/media relations for Clear the Air Alaska (CTAA), a trade association representing the vaping and electronic cigarette industry in our state. CTAA works with the American Vaping Association (AVA) at the national level to educate policymakers.

Attached is a comprehensive letter, dated today, from AVA's president Gregory Conley. The information conveyed particularly addresses pending legislation (SB 1 / HB 304 / SB 133), all of which adversely affect the vaping industry, and by extension, public health.

Thank you for holding this community hearing and allowing testimony to be submitted.

Respectfully,

OptimaPublicRelations

Tom Anderson, Managing Partner Cell: 907-440-9661 Email: <u>Tom@OptimaPublicRelations.com</u> OptimaPublicRelations.com

From:	Chuck Butler <hawkingrage@gmail.com></hawkingrage@gmail.com>
Sent:	Tuesday, March 22, 2016 9:55 AM
То:	House Health and Social Services
Subject:	Hb 328 opposition

Good Afternoon Representatives My name is Charles Butler I reside in Anchorage AK.

I urge you to pull this bill. Smoking and Vaping are two entirely different things and are defined as such in other states for example Nevada passed its own vaping bill SB225, and New York People VS Thomas where a judge stated that vaping is not smoking. This bill is a violation of the states residents, and is discriminating against adults who chose to smoke, and is now classifying individuals such as myself that chose to use a safer alternative known as vaping as smokers. I quit smoking tobacco products six years ago thanks to vaping. I once again urge you to pull this bill as it violates my rights and those of every Alaskan

Definitions taken from SB 225 Nevada

"Vapor product":

(a) Means any noncombustible product containing nicotine that employs a heating element, power source, electronic circuit or other electronic, chemical or mechanical means, regardless of the shape or size thereof, that can be used to produce vapor from nicotine in a solution or other form.

(b) Includes, without limitation:

(1) An electronic cigarette, cigar, cigarillo or pipe or a

similar product or device; and

(2) A vapor cartridge or other container of nicotine in a

solution or other form that is intended to be used with or in an

electronic cigarette, cigar, cigarillo or pipe or a similar product or device.

(c) Does not include any product regulated by the United States Food and Drug Administration pursuant to Subchapter V of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 351 et seq.

New York People VS Thomas

New York state law defines smoking as," ... the burning of a lighted cigar, cigarette, pipe or any other matter or substance which contains tobacco."

In accordance with the state's definition of smoking, the court ruled that, "An electronic cigarette neither burns nor contains tobacco. Instead, the use of such a device, which is commonly referred to as "vaping," involves "the inhalation of vaporized e-cigarette liquid consisting of water, nicotine, a base of propylene glycol or vegetable glycerin and occasionally, flavoring."

Thank you

Charles Butler

From The Desk Of Larry J. "Hack" Hackenmiller 518 Farmers Loop Road Fairbanks, Alaska 99712 Phone: 907-457-1327 Fax: 907-457-1328 Cell: 907-388-4677

Public Testimony SB1 Senate Finance Committee March 14, 2016

The implied intent of this bill is to protect "Alaskan employees" from hazardous workplace conditions by eliminating secondhand smoke in buildings where they work. The supporters of this bill repeatedly state that the intent is not to remove the right of the smoker but simply to have smokers "take it outside".

The Alaska Occupational Safety and Health division, AKOSH, states that there are no occupational safety and health regulations that directly address secondhand smoke in the workplace. That there are 4,700+ chemical compounds in tobacco smoke, not over 7,000 chemicals as implied in written testimony on this bill, and many of the chemicals found in secondhand smoke have been listed in the federal OSHA Air Contaminant Standard (29 CFR 1910.1000) for Permissible Exposure Limits, PELs, on indoor air quality.

PELs are what makes the exposure to hazardous toxins acceptable without any science backed evidence to the contrary where the public health is concerned. Inhaling toxins below the PEL established by the EPA does not constitute a hazard or life threatening condition. A good example of this would be the PEL for driving a fuel driven vehicle. Without PEL's we would all be walking to work. The point here is that we have developed real science standards for exposure to hazardous toxins which are in practice today.

AKOSH states that levels of the contaminants in air resulting from secondhand smoke inside a building are **unlikely to reach levels that approach or exceed OSHA/AKONS PELs.** I will interpret this to mean that secondhand smoke in the workplace does not constitute, imply or substantiate a hazardous working condition.

My statement of facts above is not politically correct. It is based on a document I received from AKOSH when I ask them what the standards were for secondhand smoke in the workplace. Don't take my word for it. Ask them. Health groups did but don't like to talk about it.

So SB1 intends to protect Alaskan employees from a hazardous workplace condition that does not exist. SB1 intends to take away local options by organized municipalities to decide on their own the merits concerning an implied public health issue. SB1 intends to take away the right of businesses who serve the public and presently practice their rights to allow or restrict secondhand smoke exposure in their business without government red tape or penalties.

And the part about smokers taking it outside. There is no hazardous public health issue involved with smoking tobacco in an outdoor baseball stadium yet SB1 declares such. REALLY???

Ever wonder what the outcome would be if some poor smuck who got a \$100 ticket for smoking outside within 20 feet of a building entrance took the state to court to make them prove that dose of secondhand smoke in the open air was a public health hazard?

Attachment 1

Senate Finance Committee Testimony SB1

Email from Dave Guinn, Health Consultant with Alaska Occupational, Safety & Health Official response to a the question "What are the OSHA standards for secondhand smoke in the workplace."

OSHA Request 39519602: Environmental Tobacco Smoke

From: Guinn, Dave (DOL) (dave.guinn@alaska.gov)

Sent: Fri 3/20/15 11:41 AM

To: icharrfbks@hotmail.com (icharrfbks@hotmail.com)

Cc: Markiewicz, Krystyna A (DOL) (krystyna.markiewicz@alaska.gov)

Hello Mr. Hackenmiller,

My name is Dave Guinn, I'm a Health Consultant with Alaska Occupational Safety and Health, Consultation and Training, and I've been asked to respond to your question: "What are the OSHA standards for environmental tobacco smoke, ETS, or commonly referred to as secondhand smoke, in a workplace?"

The short answer to your question is: OSHA and AKOSH (Alaska Occupational Safety and Health) currently have no occupational safety and health regulations that directly address environmental tobacco smoke (ETS) in the workplace. (See Attachment 1 below for OSHA's position on ETS in the workplace).

However, Alaska Statute AS 18.35.300, Places Where smoking Is Regulated, prohibits smoking in "a place of employment in which the owner, manager, proprietor, or other person who has control of the premises posts a sign stating that smoking is prohibited by law." The text of the Alaska statute addressing smoking can be found at:

http://www.legis.state.ak.us/basis/folioproxy.asp?url=http://wwwjnu01.legis.state.ak.us/cgi-

<u>bin/folioisa.dll/stattx12/query=*/doc/%7bt8695%7d</u>. The state agency with jurisdiction for enforcing this statute is the Alaska Department of Environmental Conservation (ADEC). In addition to state regulations, the following communities have smoke-free workplace laws:

Anchorage

Bethel

<u>Haines</u>

Juneau

<u>Klawock</u>

Nome

<u>Palmer</u>

Outlook.com Print Message

<u>Petersburg</u>

<u>Skagway</u>

<u>Unalaska</u>

<u>Valdez</u>

Reference: http://dec.alaska.gov/eh/fss/Smoking Home.html

Tobacco smoke contains many (4,700+) chemical compounds, and some of these are addressed in the OSHA Air Contaminant Standard (29 CFR 1910.1000). Examples of these and their federal and Alaska-specific occupational permissible exposure limits can be found in the table below. For additional information on the hazards of the chemicals listed below, you can use the NIOSH Pocket Guide to Chemical Hazards, which can be found at this link: <u>http://www.cdc.gov/niosh/npg/</u>. While ETS is unlikely to produce hazardous chemicals in concentrations high enough to violate enforceable occupational exposure standards, they remain hazardous, and tobacco smoke in combination with exposure to other hazardous substances (e.g. crystalline silica, asbestos, radon gas) increases the health hazards synergistically.

In summary:

There are no OSHA or AKOSH occupational safety and health standards that directly address ETS:

While not regulated specifically, ETS contains hazardous chemicals that may be individually regulated by OSHA and AKOSH standards;

AKOSH PELs may be lower (more protective) than federal OSHA PELs;

While present, levels of these contaminants in air resulting from ETS are unlikely to reach levels that approach or exceed OSHA/AKOSH PELs;

Alaska statutes address smoking in public places, and smoking is prohibited in places of employment that management has designated as non-smoking;

Some Alaska municipalities have smoke-free workplace laws.

Contaminant	Federal PEL 1, 2, 3	Alaska PEL _{1, 2, 3, 6}
Carbon Monoxide (CO)	50 ppm	35 ppm
Nicotine	0.5 mg/m ³	0.5 mg/m ³
Benzene	1 ppm or 10 ppm $_5$	1 ppm or 10 ppm $_5$

Formaldehyde 4	0.75 ppm	0.75 ppm
Methanol (wood alcohol)	200 ppm	200 ppm
Ammonia	50 ppm	35 ppm

Notes:

PEL = Permissible Exposure Limit

PPM = Parts per million (Used for contaminants in the gas phase)

Mg/m³ = milligrams per cubic meter (Used for contaminants in the solid (particulate) phase.)

See 29 CFR 1910.1048

Benzene is covered by a specific standard (29 CFR 1910.1028), which lists a PEL of 1 ppm as an 8-hour time-weighted average. 29 CFR 1910.1028(a)(2) lists exclusions, for which the 10 ppm PEL applies.

Alaska PELs are found in Alaska Administrative Code, 8 AAC 61.1100, Table Z-1-A. Link: <u>http://www.legis.state.ak.us/aacpdf/ak861100.pdf</u>

This table includes only 8-hour time-weighted averages; there may be additional exposure limits such as ceilings and shortterm exposure limits (STELS), as well as action levels (e.g. 0.5 ppm for benzene), which trigger other requirements for employers. As with other occupational exposure limits, these are unlikely to be triggered by ETS exposure.

If you have any additional questions, please feel free to contact AKOSH at 907-269-4940, or you can contact me directly at 907-269-4949. Thank you for your interest in occupational safety and health.

ATTACHMENT 1: OSHA Policy on Indoor Air Quality: Office Temperature/Humidity and Environmental Tobacco Smoke

February 24, 2003

MEMORANDUM FOR:	REGIONAL ADMINISTRATORS STATE PLAN DESIGNEES
THROUGH:	R. DAVIS LAYNE DEPUTY ASSISTANT SECRETARY
FROM:	RICHARD E. FAIRFAX, DIRECTOR DIRECTORATE OF ENFORCEMENT PROGRAMS

https://blu185.mail.live.com/ol/mail.mvc/PrintMessages?mkt=en-us

SUBJECT:

OSHA Policy on Indoor Air Quality: Office Temperature/Humidity and Environmental Tobacco Smoke

On December 17, 2001 OSHA withdrew its Indoor Air Quality (IAQ) proposal and terminated the rulemaking proceeding (66 FR 64946). However, the Agency still receives public inquiries about IAQ, primarily office temperature/humidity and smoking in the workplace. For that reason, we have summarized the Agency's position and guidance on these topics. We are including language in the form of letters you can utilize when responding to complainants on these topics.

Office Temperature/Humidity

As a general rule, office temperature and humidity are matters of human comfort. OSHA has no regulations specifically addressing temperature and humidity in an office setting. However, <u>Section III, Chapter 2, Subsection V of the OSHA</u> <u>Technical Manual</u>, "*Recommendations for the Employer*," provides engineering and administrative guidance to prevent or alleviate indoor air quality problems. Air treatment is defined under the engineering recommendations as, "the removal of air contaminants and/or the control of room temperature and humidity." OSHA recommends temperature control in the range of 68-76° F and humidity control in the range of 20%-60%.

As a second source of guidance, American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 55, *Thermal Environmental Conditions for Human Occupancy*, addresses "thermal comfort" in an office environment, which means that an employee wearing a normal amount of clothing feels neither too cold nor too warm. This standard discusses thermal comfort within the context of air temperature, humidity, and air movement and provides recommended ranges for temperature and humidity that are intended to satisfy the majority of building occupants. These ranges vary for cold and hot weather. ASHRAE addresses ventilation and the removal of air contaminants in a separate standard, ASHRAE Standard 62, *Ventilation for Acceptable Indoor Air Quality*.

As you know, hazards for which OSHA does not have a specific standard are governed by Section 5(a)(1) of the Occupational Safety and Health Act (the Act; General Duty Clause) which requires that employers provide employment and a place of employment that are free from recognized hazards that are causing or are likely to cause death or serious physical harm. Citations for violations of the General Duty Clause are issued when the four components of this provision are present, and when no specific OSHA standard has been promulgated to address the recognized hazard. These four components are: 1) the employer failed to keep his/her workplace free of a "hazard"; 2) the hazard was "recognized" either by the cited employer individually or by the employer's industry generally; 3) the recognized hazard was causing or was likely to cause death or serious physical harm; and 4) there was a feasible means available that would eliminate or materially reduce the hazard.

Office temperature and humidity conditions are generally a matter of human comfort rather than hazards that could cause death or serious physical harm. OSHA cannot cite the General Duty Clause for personal discomfort.

Environmental Tobacco Smoke (ETS)

Because the organic material in tobacco doesn't burn completely, cigarette smoke contains more than 4,700 chemical compounds. Although OSHA has no regulation that addresses tobacco smoke as a whole, <u>29 CFR 1910.1000</u> *Air contaminants*, limits employee exposure to several of the main chemical components found in tobacco smoke. In normal situations, exposures would not exceed these permissible exposure limits (PELs), and, as a matter of prosecutorial discretion, OSHA will not apply the General Duty Clause to ETS.

For further information to offer to employers/employees as guidance, you may wish to review a document published by the U.S. Environmental Protection Agency (EPA) about the health effects from environmental tobacco smoke, *A Fact Sheet: Respiratory Health Effects of Passive Smoking*. Additional information on indoor air quality in general can be found on the

Indoor Air Quality Technical Links page on the OSHA website.

We hope you find this information helpful. If you have any questions, please feel free to contact the Office of Health Enforcement at (202) 693-2190

End of Attachment 1

Dave Guinn

Industrial Hygienist

Alaska OSH Consultation & Training Program

Department of Labor and Workforce Development

Phone: 907-269-4949

FAX: 907-269-4950

http://labor.alaska.gov/lss/oshhome.htm

I work for the Alaska Department of Labor and Workforce Development, Labor Standards and Safety Division and was recently assigned your request. I must preface this response by stating that I am not an attorney; and I cannot provide legal advice. I can provide you with the current clarification of the Occupational Safety and Health Regulations that are applicable in Alaska based upon the facts provided. All requests must be in the form of letter, fax, or electronic transmission to ensure accuracy, and will be retained for future reference. Statements and conclusions expressed herein may change depending upon the inclusion or exclusion of additional facts or background information. Due to periodic changes in OSHA Standards and their interpretations, it is important for you to review them regularly.



TESTIMONY OF GREGORY CONLEY

MARCH 19, 2016

Re: SB 1 & HB 304 / SB 133 -- Vapor Products and Electronic Cigarettes

Members of the Mat-Su Valley delegation:

Thank you for the opportunity to testify on the important topic of vapor products, which are commonly referred to as electronic cigarettes or e-cigarettes. Our organization has great concerns about SB 1, which would prohibit the use of smoke-free vapor products in indoor places of employment, as well as Gov. Walker's proposed budget, which would subject vapor products to an exorbitant tax of 100% of wholesale.

Vapor products are not tobacco products and should not be treated as such. Vapor products are *anti-tobacco technology* products, as they are tobacco-free, smoke-free, often nicotine-free, and are increasing being recognized as a smart way to get smokers to transition away from smoking combustible cigarettes. A recent study undertaken by Public Health England estimated that vapor products are about 95% less hazardous than smoking and pose no material risk to bystanders. This review was endorsed by a dozen of the largest public health groups in the UK, including Cancer Research UK, the Royal College of Physicians, and Action on Smoking & Health (the largest anti-smoking organization in the UK).

As explained below, the AVA urges you to reject the proposed vapor product usage ban, as well as the tax proposal.

Nonetheless, if it not possible to remove vapor products from the smoking / vaping ban, it is imperative that the Legislature take a more reasonable approach by: (1) Exempting all vape stores from the law, regardless of whether they share a wall with another business; (2) Allowing usage in places of employment where minors are not permitted; and (3) Allowing usage in workplaces not open to the general public.

I. Appropriate Exemptions Should Be Made, Including For Vape Shops

Regulation of e-cigarette use is not an all or nothing prospect. If the Legislature is insistent on taking action against vapor products, it should not attempt to fit a round peg in a square hole by simply redefining "smoking" to include the use of smoke-free devices. In light of the fact that the science on e-cigarettes shows no threat to bystanders (see Section II), the Committee should consider making appropriate exemptions that recognize the inherent differences between vapor and smoke.

A. Vape Shops Sell Technology Products – Usage in Stores is Essential For a Number of Reasons

Over the past four years, e-cigarette specialty stores – also known as "vape shops" – have played a vital role in helping transition smokers to far less hazardous alternatives. However, unlike cigarettes, there is a learning curve involved in understanding how vapor products work. First-time customers need to be shown how to use products. Customers of all sorts need help troubleshooting.

Multiple major cities and one state have considered whether to allow or disallow vaping in vape shops. Most have sided firmly with the former. For example:

- Chicago bans "smoking" in any retail tobacco store that shares a common wall with any other home or business. In a city like Chicago where businesses tend to be clustered together, this acts as a de facto ban on the opening of stores where "smoking" is permitted. However, because e-cigarette vapor is not noxious, does not travel through walls, and does not leave behind a lingering odor, when the Chicago City Committee amended their smoking ban to include e-cigarettes, *an exemption was added allowing vaping in any vape store regardless of shared wall space.* Chicago is a city that is incredibly hostile to vaping and yet they decided that it made no sense to apply the rules equally.
- New York City law on "smoking" is even stricter. With the exception of some cigar bars
 that were grandfathered into their anti-smoking bill in 2003, "smoking" is banned in all
 retail tobacco stores in New York City. Nonetheless, when NYC proposed banning ecigarette usage last year, an exemption for all current and future vape shops was
 included and received *no opposition* from the members of the Committee or members of
 groups like the American Lung Association and Campaign for Tobacco Free Kids.
- Other major cities make similar exemptions, including Philadelphia, Los Angeles, and Baltimore.
- Utah and Delaware ban "smoking" in retail tobacco stores, but both carved out exemptions for vape shops in its e-cigarette usage ban law.

B. Baltimore's Recent Usage Ban Provides a More Reasonable Model

At the end of 2014, the Baltimore City Council passed usage restriction on vapor products that does not permit their use in most public places. However, e-cigarette usage will be permitted in bars and restaurants so long as the establishment posts signs indicating that usage is permitted. This sort of flexibility will allow bars and restaurants the opportunity to, for example,

only permit vaping during certain hours of the day, or only for special events. This is a reasonable approach, especially in the context of places where children are not known to or permitted to congregate, like bars.

The Committee should resist calls to treat cigarettes and e-cigarettes identically. Doing so is not only not supported by science, but it sends the dangerous and incorrect message to smokers that e-cigarette use is just as hazardous as smoking.

II. Science on E-Cigarette Vapor Demonstrates No Risk to Bystanders

As the Committee is aware, research in this field is contentious, but that is true in many other areas that the Committee is forced to consider each year. A thoughtful examination of claims made by opponents reveals flawed and often twisted science. Below, claims with regard to four chemical classes are analyzed.

A. Chemicals in E-Cigarette Vapor are at Trace Levels – Potential of Any Significant Adverse Effects are Minimal

A favorite tactic of e-cigarette detractors is to make reference to chemicals that have been detected in e-cigarette liquid or vapor. Critically, they fail to note the actual levels of these chemicals found. In doing so, they ignore a central tenet of toxicology – the dose makes the poison. It's not just a presence of a chemical that matter, it is the amount that is present.

To our knowledge, the Department of Health has neglected to cite one of the most important studies to ever look at the chemicals that e-cigarette users and bystanders are exposed. Last year, the medical journal BMC Public Health published a study by Drexel University Professor and toxicologist Dr. Igor Burstyn entitled "Peering Through the Mist."¹ Dr. Burstyn utilized over 9,000 observations of electronic cigarette liquids and vapor in order to assess possible threats to the direct user and bystanders. Dr. Burstyn concluded that the levels of chemicals in e-cigarette vapor are so low so as to pose no apparent risk to bystanders.

i. Metals

Opponents often note that e-cigarette vapor contains various metals, implying that e-cigarette vapor is a source of inhaled toxic metals. Without proper context, presentation of this information is misleading. Dr. Michael Siegel, a long-time anti-tobacco researcher who testified against cigarette companies in lawsuits that cost them billions, has noted that the levels of metals delivered to vapor product users (bystanders are exposed to much less) are far lower than the daily exposures permitted by the authoritative United States Pharmacopeial Convention for inhalable medications.²

¹ Burstyn, I. "Peering through the mist: systematic review of what the chemistry of contaminants in electronic cigarettes tells us about health risks." *BMC Public Health Journal*, January 2014.

² Siegel, M. "Metals in Electronic Cigarette Vapor are Below USP Standards for Metals in Inhalation Medications," Rest of the Story – Tobacco Analysis and Commentary, April 2013. http://tobaccoanalysis.blogspot.com/2013/04/metals-in-electronic-cigarette-vapor.html

Dr. Siegel compared the levels of metals expected to be inhaled by the average e-cigarette user vs. the average user of the FDA-approved Nicorette nicotine inhaler and found that the levels were nearly identical. For some metals, electronic cigarette vapor contained LESS metals than the Nicorette inhaler. But again, these trace levels are allowed in medications, and metals in neither e-cigarette vapor nor the mist released by a nicotine inhaler represent a threat to the user or bystander.

There is no evidence that e-cigarettes are a source of any appreciable level of harmful chemicals. In a study funded in part by the National Institutes of Health, 12 different e-cigarette products were tested vs. a traditional combustible cigarette vs. the FDA-approved Nicorette inhaler. That study reported the levels of toxicants and chemicals identified as causing harm in cigarette smoke were present at trace amounts 9-450x less than in cigarette smoke.³ Even more importantly, the researchers noted that the levels were similar to those that are released by the Nicorette inhaler.

ii. Volatile Organic Compounds

As with metals, activists opposed to e-cigarette use often state that volatile organic compounds (VOCs) have been found in e-cigarette vapor. In a study published in the Journal of Indoor Air, German investigators at the Fraunhofer Wilhelm-Klauditz-Institute's Department of Material Analysis and Indoor Chemistry detected virtually no quantifiable levels of 20 VOCS found in cigarette smoke.⁴

Of the six chemicals detected (see below), five were at levels less than 1% the permissible exposure limits (PELs) set by the Occupational Safety and Health Administration. The sixth chemical, formaldehyde, was present at 2.4% of the PEL. However, the researchers noted because formaldehyde was detected at similar levels before the e-cigarette was used, the presence of formaldehyde "might be caused by the person in the chamber itself, because people are known to exhale formaldehyde in low amounts."

³ Goniewicz, M., et. al. "Levels of selected carcinogens and toxicants in vapour from electronic cigarettes," Tobacco Control, March 2013. http://tobaccocontrol.bmj.com/content/early/2013/03/05/tobaccocontrol-2012-050859.abstract

⁴ Schripp T., et. al. "Does e-cigarette consumption cause passive vaping?" Indoor Air 23: 25–31, 2013. http://www.ncbi.nlm.nih.gov/pubmed/22672560

VOC	E-cigarette Vapor	Cigarette Smoke
Propylene glycol	*	112
1-hydroxy-2-propanone	*	62
2,3-butanedione	*	21
2,5-dimethylfuran	*	5
2-butanone	2	19
2-furaldehyde	*	21
2-methylfurane	*	19
3-ethenyl-pyridine	*	24
Acetic acid	13	68
Acetone	20	64
Benzene	*	22
soprene	*	135
imonene	*	21
M,p-xylene	*	18
Phenol	*	15
Pyrrole	*	61
oluene	*	44
Formaldehyde	12	86
Acetaldehyde	2	119
Propanal	*	12

Concentrations (ug/m3) of VOCs in Vapor From Three E-cigarettes (Average) and Smoke

*Unquantifiable/same as empty chamber

iii. **Polycylic Acromatic Hydrocarbons (PAHs)**

A flawed study in 2013 asserted that levels of polycylic acromatic hydrocarbons (PAHs) were raised by 20% after non e-cigarette users were exposed to e-cigarette vapor for a significant period of time. This study has been soundly criticized for its methodological flaws. As explained by Dr. Konstantinos Farsalinos and Dr. Riccardo Polosa - the most published researchers on this topic throughout the world -- in a review of e-cigarette science overlooked by Committee staff:

[A] major methodological problem of this study is that control environmental measurements were performed on a separate day and not on the same day of EC use. This is a major limitation, because the levels of environmental PAHs have significant diurnal and day-to-day variations [Ravindra et al. 2008]; therefore, it is highly likely that the differences in levels of PAHs (which are

mainly products of combustion and are not expected to be emitted from EC use) represented changes due to environmental conditions and not due to EC use. Bertholon and colleagues [Bertholon et al. 2013] examined the EC aerosol exhaled from a user, in comparison with exhaled smoke from a smoker. The authors found that particle size diameters were 0.29–0.033µm. They observed that the half life of EC aerosol was 11 seconds compared with 20 minutes for cigarette smoke, indicating that risk of passive vaping exposure is significantly lower compared with passive smoking.⁵

iv. Particulate Matter

With regard to particulate matter, e-cigarette opponents have misinterpreted the science. It is inherently misleading to refer to the aerosol droplets created by e-cigarettes as "particulates," as doing so leads the reader to believe that liquid droplets are particles that lead to the same health concerns when inhaled as solid particles (i.e., smoke of any kind). As explained by Dr. Carl Phillips, a longtime researcher on tobacco harm reduction, in criticizing what he called "fatal flaws" in a paper cited by Committee staff (Schober, et. al, 2014).

While droplets are particulates in the broadest sense of the term, in the context of environmental pollution that term generally refers to fine solid particles that can lodge in or be absorbed through the lungs intact. A liquid, of course, just dilutes into the bloodstream or other bodily liquids, regardless of particle size and deposition location. Thus, the extensive discussion of particulate size, let alone the explicit claims about health implications, is highly misleading. Indeed, the results they found are not all that different from the "particulate" exposure when someone takes a cold shower in terms of both "particle" size and concentrations, which illustrates the need to characterize the tiny bits of matter that disperse light, not merely determine that they exist.

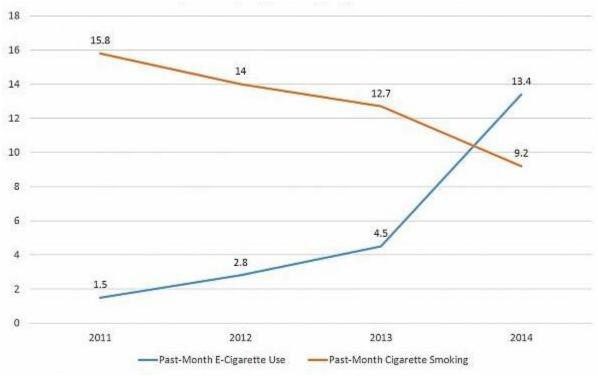
The device the authors used to detect "particles" does not distinguish between droplets and solid particles; to assess any health-relevant particles the authors should have used gravimetric techniques that determine the mass of solid particles emitted into the air. As such, the authors' work suffers from inadequate testing of their major conclusion and confirmation bias: they assumed health-relevant particles would be present in the aerosol, performed a test that was incapable of ruling that out, and then interpreted their results as confirmation.⁶

⁵ Farsalinos, K., et. al. "Safety evaluation and risk assessment of electronic cigarettes as tobacco cigarette substitutes: a systematic review." Ther. Adv. Drug. Saf; 5(2): 67-68. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4110871/?report=classic

⁶ Phillips, C. "Letter re fatal flaws in Schober et al. paper on environmental vapor." Anti-THR Lies. January 2014. <u>http://antithrlies.com/2014/01/29/letter-re-fatal-flaws-in-schober-et-al-paper-on-environmental-vapor/</u>

III. E-Cigarette Experimentation by Youth is Occurring as Youth Smoking Hits Record Lows in the United States

For for over five years, e-cigarette opponents have contended that the availability of e-cigarettes would lead to increased teen smoking. During that time period, despite increased e-cigarette experimentation by teens, youth smoking has reached historic lows.



Increased e-cigarette experimentation has occurred simultaneously with a sharp decline in teen smoking

IV. Conclusion

The science does not support restricting the use of vapor products where smoking is banned. Therefore, private business owners should retain the ability to allow or disallow e-cigarette usage. However, if the Legislature is to enact a usage ban, it should take efforts to draw distinctions between "smoking" and "vaping" by making common sense exemptions for bars, private workplaces, and most critically, vape shops.

Taxation of vapor products will harm public health. Studies consistently show that vapor products are effective at helping smokers quit and are leading to declines in smoking among youth and adults. Vapor products are readily available on the Internet. No new taxes on these products are justified. Indeed, taxation on these products could harm Alaska's fiscal health in the long run due to the societal and budget costs imposed on the State by combustible cigarettes.

In making your decisions, please consider the following:

"Health professionals should embrace this potential by encouraging smokers, particularly those disinclined to use licensed nicotine replacement therapies, to try them, and, when possible, to do so in conjunction with existing NHS smoking cessation and harm reduction support. E-cigarettes will save lives, and we should support their use."

- Royal College of Physicians editorial by Dr IIze Bogdanovica, Professor Linda Bauld and Professor John Britton from the UK Centre for Tobacco and Alcohol Studies⁷

Thank you for your consideration.

Sincerely,

Gregory Conley

Gregory Conley, J.D., M.B.A. President – American Vaping Association

⁷ Bogdanovica, et. al. "What you need to know about e-cigarettes." Royal College of Physicians. March 2014. https://www.rcplondon.ac.uk/commentary/what-you-need-know-about-electronic-cigarettes