

Electronic smoking devices

Alcohol & Drug Advisory Board



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HHSa-PHS-Maternal, Child, & Family Health Services
Chronic Disease Unit – Tobacco Control Resource Program
November 20, 2013

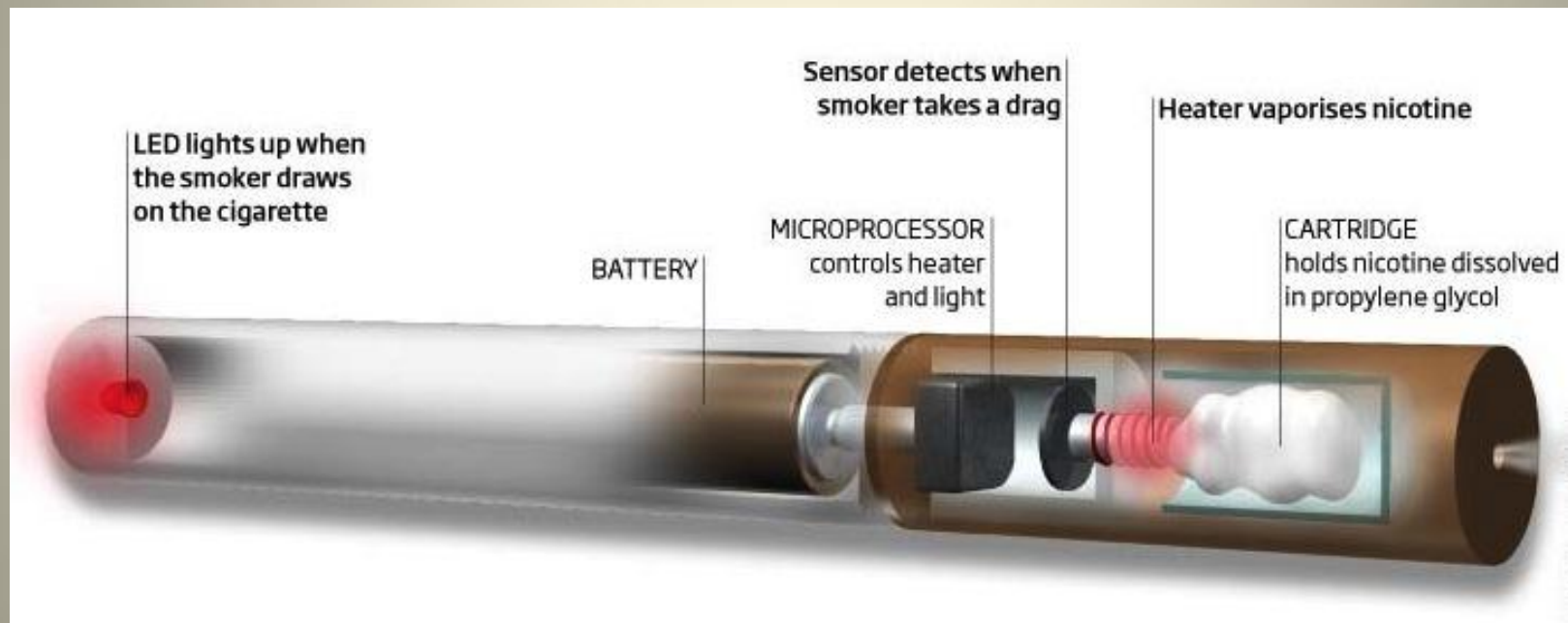
Agenda

- Acknowledge CA Youth Advocacy Network (CDPH statewide contractor)
- Overview of e-cigarettes
- Use of e-cigarettes
- Summary of science on e-cigarettes
- Discussion on the use of e-cigarettes for cessation
- Recommendations for inclusion of e-products in tobacco-free policies

What Are E-Cigarettes?

- Electronic Nicotine Delivery Systems (ENDS)
- ENDS, including electronic cigarettes (e-cigarettes) are novel tobacco-free nicotine delivery devices.
- They do not contain tobacco, however the nicotine may be derived from tobacco.
- Solution contains 3 main ingredients:
 - Propylene Glycol or Vegetable Glycerin (Humectant)
 - Nicotine
 - Flavor (fruit, candy, tobacco, coffee, bacon, mix and match)
- Variations on this theme (e-cigars, hookahs, cigarillos, pens, M-zigs. etc)/ no nicotine

How Do E-Cigarettes Work?



What Do E-Cigarettes Look Like?

- Variety in appearance
- Customizable
- Homemade “mods” with bigger batteries produce more vapor
- Some e-cigarettes are disposable, others are rechargeable/refillable



Sometimes Conventional

May look like regular cigarettes, might come in a “pack” that serves as a storage box and battery charger.



Sometimes Decorative

May come in many different designs. Modern, sleek, clean, fun, personalized.

Current trend: devices look more like electronics than cigarettes.



Sometimes Glamorous

Some are decorative, feminine, and unique.



Sometimes Modern

E-cigarettes often do not look like cigarettes.



Sometimes "Stealth"

E-cigarettes have been fashioned to look like other products such as asthma inhalers, beverage containers, and other common products.



Drip Tips

Hollow tube which attaches to e-cigarette and acts as a mouthpiece.

E-liquid is dripped through tube on to atomizer.

E-LIQUID

GREAT TASTE, WITHOUT THE FANCY NAMES.



E-Liquids/ E-Solids

Refill cartridges or drop fluid into drip tips.



Vapure U.S.A Inc. eLiquid

All flavors come in 0mg, 11mg or 24mg.

Tobaccos

- Sweet & Mild
- Blackberry Dry Blend
- Clove
- Country
- Dry Blend
- Fine Cigar
- Fire Cured
- Full Flavor
- Golden Blend
- Havana
- Island
- RY80
- vY4
- Warm Leaf

Menthols

- Black Ice
- Blackberry Dry Blend
- Can't Ice This
- Candy Cane
- Cool Ice*
- Dry Blend Menthol
- Fire & Ice*
- Full Flavor Menthol
- Kiwi Menthol
- Peach Ice
- Pinealoupe Ice
- Pure Menthol
- Strawberry Mango Freeze
- Tropical Ice
- Watermelon Ice
- White Tic Tac

Drinks

- Cappuccino
- Cherry Cola*
- Coffee
- Cola*
- Fruit Punch
- Funky Monkey
- German Chocolate
- Coffee
- Horchata
- Irish Cream
- Lemonade on a Stick
- Merlot
- Mocha Mint Coffee
- Mt. Dewy
- Pina Colada
- Red Energy
- Root Beer
- Root Beer Float
- Strawberry Champagne
- Vanilla Cola*

Sweets

- Apple Pie*
- Atomic Cinnamon*
- Banana Cream Pie*
- Berry Parfait
- Blueberry Pancakes
- Boston Cream Pie
- Bubble Gum
- Candy Chocolate Mint
- Caramel
- Caramel Apple Pop
- Caramel Candy
- Caramel Kettle Corn
- Cherry Cordial *
- Cherry Vanilla*
- Chocolate Banana
- Chocolate Cake
- Chocolate Strawberry
- Cinnamon Roll
- Cotton Candy
- Double Chocolate
- English Toffee
- Fruit Gum
- Gummy Bears
- Honey
- Marshmallow
- Orange Dream
- Peanut Butter Cup
- Pumpkin Pie
- Raspberry Cheesecake
- Snickerdoodle
- Snicks
- Strawberries & Cream
- Sweet Cinnamon*
- Sweet Tarts
- Vanilla
- Vanilla Cupcake
- Vanilla Sunrise
- Waffle

Fruits

- Acai Berry
- Banana*
- Black Cherry*
- Blackberry
- Blueberry
- Blueberry Acai
- Blueberry Pomegranate
- Cherry*
- CTONA Watermelon
- Dragon Fruit
- Grape
- Green Apple*
- Juicy Peach
- Kiwi Banana
- Kiwi Strawberry
- Mango
- Manic Melon
- Peach
- Pinealoupe
- Pineapple
- Pomegranate
- Prickly Pear
- Raspberry
- Razzapple
- Star Fruit
- Strawberry
- Strawberry Banana
- Strawberry Mango
- Watermelon

VAPURE
Smoking Redefined

ALEXANDRA IMBUZAN
Director of Sales

Refilling an E-Cigarette



Hookah Pen



- Also called a “Shisha Stick” or “Shisha Vape”
- E-Cigarette made with hookah flavor

Big 3 Tobacco Companies now in E-Cigarette Business

In 2013:

- **Altria** developed and began selling MarkTen (limited market)
- **British American Tobacco** developed and began selling Vype
- **Imperial Tobacco** acquired Dragonite International

In 2012:

- **Lorillard** bought Blu
- **RJ Reynolds** created Vuse (limited market)
- **Swisher Sweets** developed e-cigarillos (e-swisher)



USE: Adult Use Estimates

- 2012 National estimates of ENDS:
 - Ever-use prevalence of 11.4% for smokers
 - 2% for former smokers
 - 0.8% for never smokers
- Suggest that in absolute numbers
 - Roughly 5 million smokers and more than 1 million former and never smokers have ever used ENDS

“E-cigarette use is growing rapidly. There is still a lot we don’t know about these products, including whether they will decrease or increase use of traditional cigarettes.”

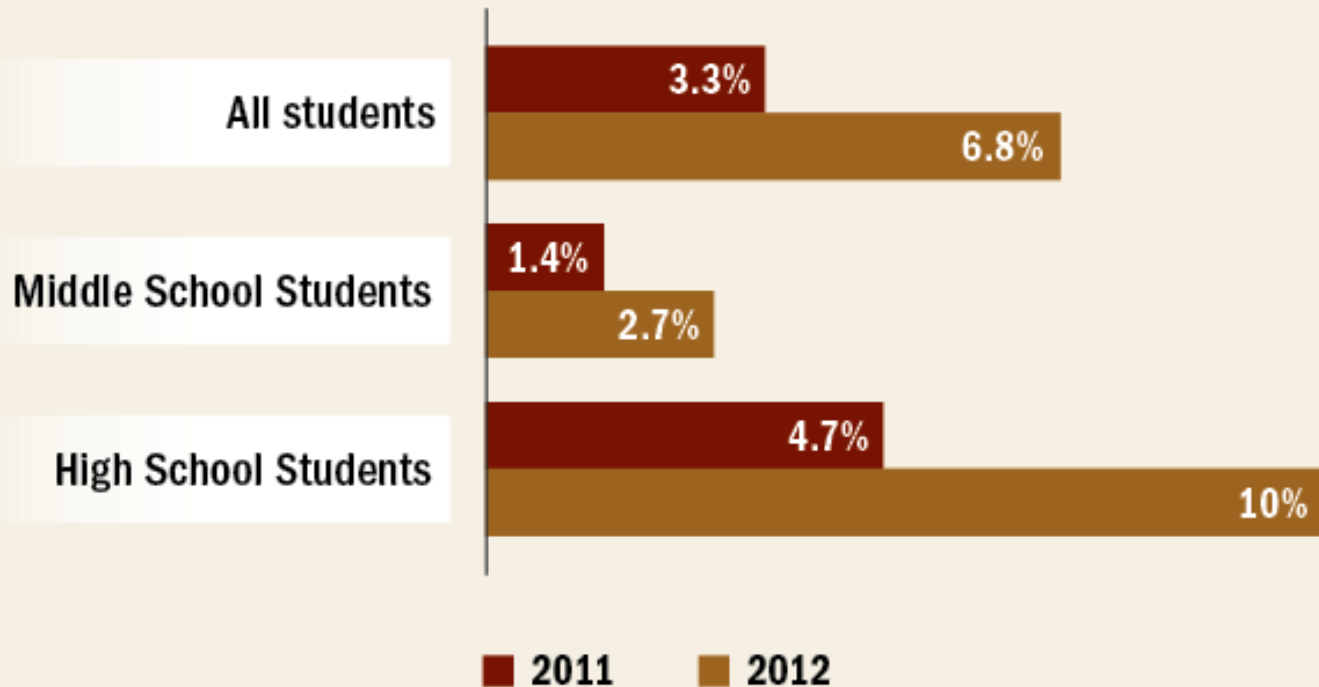
– CDC Director Tom Frieden, MD, MPH

Youth E-Cigarette Use Doubled

- During 2011-2012, among US students in grade 6-12
 - **Ever e-cigarette use** increased from 3.3% to 6.8% (estimated 1.78 million students)
 - **Current e-cigarette use** increased from 1.1% to 2.1%
 - **Dual use** of e-cigarettes and conventional cigarettes increased from 0.3% to 0.7%
 - More than 1.78 million middle and high school students reported trying e-cigarettes in 2012.

Youth E-Cigarette Use

E-CIGARETTE USE AMONG STUDENTS 2011-2012



Source: CDC, National Youth Tobacco Survey

Use of E-Cigarettes

- E-cigarettes are used predominantly by
 - Smokers
 - Smokers considering cessation
 - Former smokers
 - Young Adults
- It is suggested that use is popular among those with a college degree.
- 44% of smokers who used an e-cigarette were Millennials (born between 1977 – 1994 per study).
- Of smokers who use e-cigarettes, 56% are male and 44% are female.
- Even though few never-smokers use e-cigarettes, the products may bring them closer to smoking conventional cigarettes.

Growth of E-Cigarettes

- Revenue expected to double this year to over \$1 billion and up to \$1.7 billion
 - 2% share of the tobacco market in the U.S.
- Web Searches conducted between 2008-2010 in Australia, Canada, US, UK
 - Compared ENDS searches with Snus, NRT, Chantix, Champix
 - Searches were several hundred-fold greater for ENDS than other products
 - Areas with stronger tobacco laws yielded more ENDS searches
 - 50-75% of searches were for shopping, not information seeking

A summary of the science on e-cigarettes

RESEARCH

Lack of Standardization

- Consumers do not have reliable information on product quality
 - Poor Quality Control (no manufacturing standards)
 - Technical Flaws (leaking cartridges)
 - Variable Nicotine Delivery (inconsistent dose)
- Also:
 - Unsubstantiated health claims
 - Erroneous nicotine content labeling

May Contain Toxic Contaminants in Fluid and/or Vapor

- Formaldehyde
- Diethylene Glycol
- Nickel
- Chromium
- Cadmium
- Lead
- Fine and Ultrafine Particles
- TSNA's
- VOCs
- Heavy Metals
- Silicate Particles
- Acetaldehyde
- Acrolein
- Benzene
- Isoprene
- Nicotine
- Toulene

* Items in RED: On CA prop 65 list of carcinogens and reproductive toxins

Toxicity

- E-cigarette refill fluids vary greatly in toxicity.
- Researchers found that toxicity in e-cigarettes may be due to the chemicals used to flavor the products.



Commonly Reported Health Effects

- Throat Irritation/ Sore Throat
- Mouth Irritation/ Dry Mouth/ Mouth Ulcers
- Dry Cough
- Dizziness
- Headache
- Nausea
- Allergic Reactions

- Long term health effects are unknown

Health Effects – Secondhand Vaping

“Overall, the e-cigarette is a new source of VOCs and ultrafine/fine particles in the indoor environment. Therefore, the question of “passive vaping” can be answered in the affirmative. However, with regard to a health-related evaluation of e-cigarette consumption, the impact of vapor inhalation into the human lung should be of primary concern”

(Schripp, et al., 2012).

Explosions

Exploding e-cigarette could have killed my dogs and cats, terrified Atlanta woman says



Dylan Stableford, Yahoo! News September 4, 2013 12:19 PM
The Sideshow



LATEST NEWS

Man Loses Teeth and Part of Tongue in Electric Cigarette Explosion

MELISSA NELSON, Associated Press

February 15, 2012 4:07 PM

3-Year-Old Boy Catches Fire When Mom's E-Cigarette Explodes

Sep 24, 2013 | By Ruth Manuel-Logan

Share 150 Recommend 59 Tweet 44 Email Share 75



Poisonings

Liquid nicotine can poison kids

8:46 AM, Nov 12, 2012 |  29 comments

Electronic Cigarette Kills Toddler in Israel

Posted on May 29, 2013 by Karin Kloosterman in Cities with 24 Comments

"If you look at the container that the liquid is for the electronic cigarettes, it's in a small, almost looks like an eyedropper container or even some of those candies, have you seen, that you drip into your mouth," said Julie Weber, the Missouri Poison Center Director. "And just 1 milliliter is enough to cause a problem in a young child."

FDA MedWatch

- Report adverse effects of e-cigarette use
 - 1-800-FDA-1088
 - Or online at:
www.accessdata.fda.gov/scripts/medwatch/



U.S. Food and Drug Administration
Protecting and Promoting *Your Health*



***The FDA Safety Information and
Adverse Event Reporting Program***

Butane Hash Oil

Wax and Hash oils are often smoked using **Vape - Pens or E cigarette type devices**



- The process for making Hash oil involves using Butane gas to extract higher levels of THC. **Butane gas is colorless odorless and highly flammable.**
- Butane is used as a solvent for hash oil extraction because it separates herbal oils from mostly useless marijuana plant/bud matter. This type of filtered oil is sometimes nicknamed "Hash or Honey Oil" because the results are similar in color and consistency to amber honey.
- In September 2013, two men in Pacific Beach were burned attempting to make Butane Hash Oil (BHO).

Highly potent forms of marijuana such as Wax and Honey Oil or Hash Oil are made using this process. **THC levels can vary from 60% to 90% using this extraction method.**



MPI
Marijuana
Prevention
Initiative
San Diego County

The Epidemic in San Diego

3

BEHAVIORS

**TOBACCO USE
POOR DIET
NO EXERCISE**

FOUR

DISEASES

**HEART DISEASE
TYPE 2 DIABETES
LUNG DISEASE
CANCER**

50

PERCENT

**PERCENT
OF
DEATHS**

The Spectrum of PREVENTION (Prevention Institute)

Influencing Policy and Legislation

Changing organizational practices

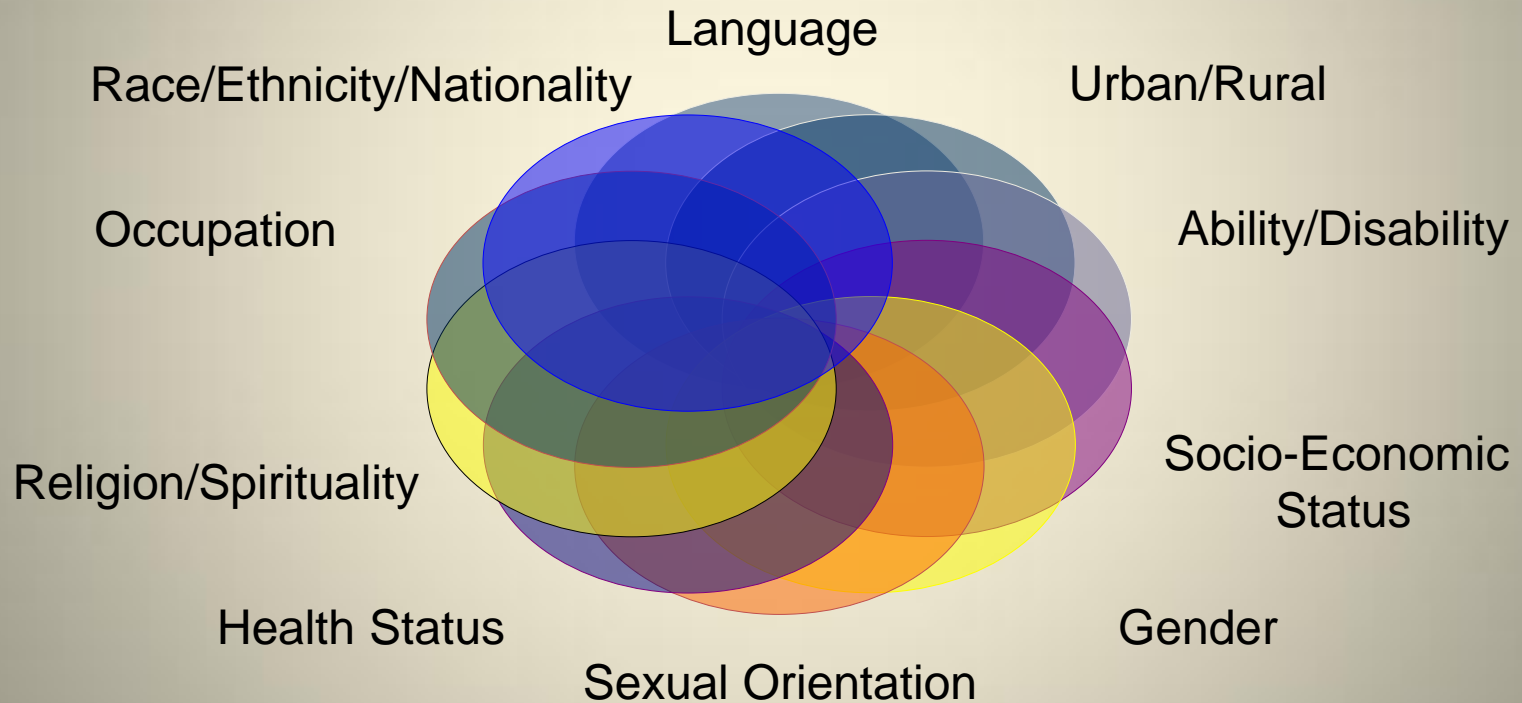
Fostering coalitions and networks

Educating Providers

Promoting Community Education

Strengthening individual knowledge and skills

POLICY works!



A Moving Target:

Tobacco prevalence DOWN, cigarillo smoking is UP

Little Cigars



Board of Supervisors (BOS)

- Board Letter
 - Approval to receive Prop 99 funds since June 1984
 - Authorization to conduct objectives in Comprehensive Work Plan
- Health Services Advisory Board
 - Recommended for approval Jan 2012: BOS Policy A-99 (including electronic cigarettes and smoke-free County facilities)
 - HHSA Policy B-1 (smoke-free entry way 50 ft.)

Electronic cigarettes are in BOS Policy A-99

“It is the policy of the Board of Supervisors to:

- Item 1) Support and strengthen County Tobacco Regulatory Ordinances as an ideal vehicle for promotion and operation of tobacco use (including cigarettes, cigars, pipes, snuff, chewing tobacco, electronic cigarettes [*vapor devices*], or other tobacco products) prevention, cessation, and enforcement programs.
- Item 10) Authorize the Agency Director to carry out any additional activities necessary to reduce the impact of tobacco use in San Diego County, including but not limited to:
 - countering pro-tobacco [*Limit tobacco promoting*] influences
 - reducing youth access to tobacco products
 - reducing exposure to second-hand smoke
 - promote cessation services and 100% tobacco-free environments on County properties



Public Health Position:

National Association of City and County Health Officials - NACCHO

- Use broadly-defined **language to include** e-cigarettes in new smoke-free legislation for indoor and outdoor environments
- Make clear that e-cigarettes are **covered by existing smoke-free laws** through clarifying opinion or regulation/rule (n.b.: opening up or amending the definitions of “smoke” and “smoking” to incl e-cigs and e-cig vapor may jeopardize existing laws)
- **Oppose** legislation at the local or state level that **exempts** e-cigarettes from current smoking ban policies and regulations
- **Require tobacco retailer licenses** to sell e-cigs, or add an additional fee for existing tobacco retailers to sell e-cigarettes
- Establish an ordinance **limiting the number of retailers** or locations where e-cigarettes can be sold
- **Ban** sales of e-cigarette **components that may appeal to minors**, such as flavored cartridges
- Work with businesses and public locations, such as malls, to voluntarily **prohibit e-cigarette sales on premises**

Public Health Position:

National Association of Local Boards of Health - NALBOH

- **Use broadly-defined language** to include e-cigarettes in smoke-free legislation for indoor and outdoor venues
- **Amend existing definitions** of “smoke” or “smoking” to include e-cigarettes and e-cigarette vapor
- **Oppose legislation that exempts** e-cigarettes from the smoking policy/regulation
- Ban the sale of e-cigarette components that may **appeal to minors** (e.g., flavored cartridges)
- Require tobacco **retailer licenses** to sell e-cigarettes
- Establish proper **enforcement** procedures for e-cigarette policies and regulations
- Prohibit e-cigarette manufacturers and retailers from stating unsubstantiated marketing claims about the safety and benefits of the product₄

Public Health Position:

Tobacco Education and Research Oversight Committee- TEROC

TEROC is a legislatively mandated oversight committee (California Health and Safety Code Sections 104365-104370) that monitors the use of Proposition (Prop) 99 tobacco tax revenues for tobacco control, prevention education and tobacco-related research in CA. TEROC advises the CDPH, the UC, and the CDE with respect to: policy development, tobacco control and prevention integration, evaluation of tobacco education programs (funded by Prop 99), and is responsible for the development of a master plan for the future implementation of tobacco control.

- ***The Tobacco Education and Research Oversight Committee (TEROC) opposes the use of e-cigarettes in all areas where other tobacco products are banned.***

Joint Position:

American Heart Association, American Cancer Society, American Lung Association

- Our organizations support including e-cigarettes in all new smokefree laws. While much more research must be done regarding the potential health consequences caused by the vapor of e-cigarettes to non-users, we recognize that the usage of e-cigarettes further complicates efforts by business owners and officials to enforce smokefree laws. We do not recommend opening up or amending existing state or local comprehensive smokefree laws to specifically add e-cigarettes, which could jeopardize the entire law. Instead, a clarifying opinion or regulation/rule making clear e-cigarettes are covered by the state law would be preferable.
- Our organizations do not oppose including e-cigarettes (and refills) in existing state or local youth access laws limiting the sale of tobacco products to under-age youth. This is best done by refining the definition of tobacco products to include e-cigarettes (e.g., products “made or derived from tobacco”), NOT by establishing a separate classification for e-cigarettes, which has the potential to undermine existing tobacco control laws and policies.
- Our organizations would support taxing e-cigarettes at a rate equivalent with traditional cigarettes.
- The FDA has not approved e-cigarettes as an effective method to help smokers quit. The U.S. Public Health Service has found that the seven therapies approved by the U.S. Food and Drug Administration in combination with individual or group cessation counseling is the most effective way to help smokers quit. Until and unless the FDA approves a specific e-cigarette for use as a tobacco cessation aid, our organizations do not support any direct or implied claims to that effect.

Other Jurisdictions:

- **City of Vista:** Amended the definition of smoking in the Vista Municipal Code to include electronic cigarettes and similar smoking devices. This amendment only affects areas where the city currently regulates smoking.

48 CA cities and counties

require a retailer to obtain a license to sell e-cigarettes through special language in the definition of tobacco product in their local tobacco retailer licensing ordinance.

Any product or formulation of matter containing biologically active amounts of nicotine that is manufactured, sold, offered for sale, or otherwise distributed with the expectation that the product or matter will be introduced into the human body, but does not include any cessation product specifically approved by the United States Food and Drug Administration for use in treating nicotine or tobacco dependence.

Watsonville (March 2013)
 Dublin (Nov 2012)
 Lynwood (Oct 2012)
 Parlier (Apr 2012)
 Oxnard (Jan 2012)
 El Monte (Nov 2011)
 Huntington Park (Nov 2011)
 Malibu (Nov 2011)
 Hawaiian Gardens (Jul 2011)
 Santa Cruz (Apr 2011)
 Eastvale (Oct2010)
 Palmdale (Jan 2010)
 Menifee (Dec 2009)
 Grass Valley (Nov2009)

Montebello (Sep 2009)
 Firebaugh (Aug 2009)
 Culver City (Jul 2009)
 Calabasas (Jun 2009)
 Richmond (Jun 2009)
 Albany (Feb 2009)
 South Pasadena (Feb 2009)
Solana Beach (Jul 2009)
 Baldwin Park (Oct 2008)
 Perris (Aug 2008)
 Gardena (Jul 2008)
 Wildomar (Jul 2008)
 Delano (Jun 2008)
 Oakland (Apr 2008)

Hemet (Mar 2008) Pacifica
 (Feb2008)
 Nevada City (Nov 2007)
San Diego (Nov 2007)
 Inglewood (Oct 2007)
 Glendale (Sep 2007)
 Moreno Valley (Sep 2007)
 Davis (Aug 2007)
 Desert Hot Springs (Aug 2007)
 Lake Elsinore (Aug 2007)
 Santa Ana (Oct 2006)
 Concord (Sep 2006)
 Banning (Aug 2006)
 Maywood (Aug 2006)

Lancaster (Jun 2006)
 San Jacinto (Jun 2006)
 Hollister (May 2006)
 Murrieta (May 2006)
 Riverside (May 2006)
 Norco (Mar 2006)
 Corona (Oct 2005)
 Arroyo Grande (Feb 2005)
El Cajon (June 2004)
 Coachella (Jul 2007)
 Compton (Jul 2007)
 Lomita (May 2007)
 Wasco (Mar 2007)
 Burbank (Feb 2007)
 California City (Feb 2007)

Other Jurisdictions:

Sweetwater Union High School District

Largest secondary school district in CA, serving over 42,000 high school-aged students and over 32,000 adult learners. The district includes 14 high, and 11 middle schools.

Analysis: The policy has been updated to prohibit nicotine delivery devices and other vapor emitting electronic devices, such as electronic hookah, with or without nicotine content, that mimic the use of tobacco products. Current data indicates that e-cigarettes cannot be rated as safe and contain ingredients that can be harmful and can also cause adverse health effects to third parties exposed to the ultra-fine liquid particles that can be inhaled.

Public Venues:

UCSF: Smoking Policy

I. Purpose

The University of California, San Francisco (UCSF) has adopted a smoke-free campus policy in order to minimize health risk, improve the quality of air, and enhance the environment in all facilities.

II. Definitions

Campus is defined to include University-owned or leased property, buildings, space, and University-owned passenger vehicles and moving equipment, including light and heavy trucks, cargo and passenger vans, buses, and any other mobile equipment with an enclosed or enclosable driver/passenger compartment.

Smoking tobacco products means inhaling, exhaling, burning or carrying any lighted or heated cigar, pipe or cigarette (traditional or e-cigarette).

III. Policy

To provide a smoke-free environment for its faculty, staff, students, patients, and visitors, UCSF shall be a smoke-free campus. Smoking is prohibited on University-owned or leased property, and in buildings, vehicles and moving equipment. This policy applies to all members of the campus community (including faculty, staff, students, patients, and visitors) at all UCSF sites.

Additionally, tobacco products may not be sold in any UCSF facility.

Other Jurisdictions:

Contra Costa County

PROPOSED AMENDMENT TO THE COUNTY'S SECONDHAND SMOKE AND TOBACCO PRODUCTS

ORDINANCE (Chapter 445 of the County Code). Staff was directed to work with County Counsel to draft an amendment to the County's current ordinance to address these issues. On November 5, 2012, the Family and Human Services Committee reviewed and approved the attached ordinance amendment to prohibit the use of e-cigarettes in areas where smoking is prohibited and to require a tobacco retailer license for retailers selling e-cigarettes.

The ordinance (Attachment II) prohibits the use of electronic cigarettes at all places where smoking is prohibited and requires a tobacco retailer's license for the sale of electronic cigarettes. The ordinance accomplishes this by amending the definitions of "smoking" (subsection (i) of the section 445-2.006) and "tobacco product" (subsection (k) of the section 445-2.006) and by adding a new definition of "smoke" (subsection (h) of the section 445-2.006). The ordinance excludes any product specifically approved by the United States Food and Drug Administration for use in treating nicotine dependence or tobacco dependence from the definition of "tobacco product".

Public Venues:

Petco Park

SMOKING POLICY

- *Petco Park is a smoke-free facility. Guests who wish to utilize standard **or electronic smoking** devices at a Petco Park event are required to utilize the designated locations outside the ballpark. Guests wishing to exit the ballpark and return to the same event must receive a re-entry stamp from gate personnel.*
- Other **ballparks** that directly addresses electronic cigarettes in their rules include: Safeco, Kauffman, The Great American, and Chase.

Public Venues:

SDSU: Smoking Policy

1.0 Smoking shall be prohibited by San Diego State University as follows:

2.0 The distribution of free samples of tobacco products is prohibited. No tobacco-related advertising or sponsorship shall be permitted on SDSU property, at college-sponsored events or in publications produced by the college, with the exception of advertising in a newspaper or magazine that is not produced by SDSU and which is lawfully sold, bought or distributed on campus property. For the purposes of this policy, "tobacco-related" applies to the use of a tobacco brand or corporate name, trademark, logo, symbol or motto, selling message, recognizable pattern of colors or any other indicia of product identification identical to or similar to, or identifiable with, those used for any brand of tobacco products or company which manufactures tobacco products.

10.0 Smoking is defined as inhaling, exhaling, burning, or carrying a lighted or vapor-producing tobacco product. Tobacco is defined as all tobacco-derived or containing products, including, but not limited to, cigarettes (clove, bidis, kreteks), electronic cigarettes, cigars and cigarillos, hookah smoked products, and oral tobacco (spit and spitless, smokeless, chew, snuff).

Public Venues:

UCSD: Smoking Policy

Smoke & Tobacco - Free Policy

Effective Date: September 1, 2013

In January, 2012 citing healthcare and environmental considerations, UC President Yudof asked that each UC Chancellor implement a smoke-free policy on his/her campus by January 2014. The president set out the key elements expected to be present in any such campus policy to maintain a smoke-free environment: that smoking, the use of smokeless tobacco products, and the use of unregulated nicotine products (e.g., “e-cigarettes”) be strictly prohibited in indoor and outdoor spaces, including parking lots, private residential space, and the Medical Center campuses; that the policy apply to all UC facilities, whether owned or leased; and that the sale or advertising of tobacco products be prohibited in University Owned or occupied buildings.

Separation of smokers and non-smokers in the same air space doesn't work!



Thank you.
Questions, comments?

