

E-Cigarettes: Unanswered Questions

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SMOKE ANYWHERE

- AIRPLANES
- RESTAURANTS
- NIGHT CLUBS
- BARS
- HOTEL/MOTELS
- EVERYWHERE!



A woman with long dark hair and sunglasses is shown in profile, smoking a cigarette. The background is a blurred indoor setting with other people.

**BEAT THE SMOKING BANS...
EXPERIENCE THE FREEDOM...**

WITH ELITENSMOKE ELECTRONIC CIGARETTES



[Learn More >](#)

Featured Products



YouTube

jenny mccarthy blu



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GUIDE



MORE RESULTS
jenny mccarthy blu



0:41 / 1:01



Who is Selling Them?

- About 200 makers
- Swallowing the independent market
 - Lorillard
 - Altria (Philip Morris)
 - RJ Reynolds
 - British American Tobacco

E-Cigarette Companies

- Using the same political and public relations strategies as cigarette companies
 - Organizing users
- Not likely to allow cannibalization of their cigarette sales

5 Basic Parts to Electronic Nicotine Delivery Systems (ENDS)

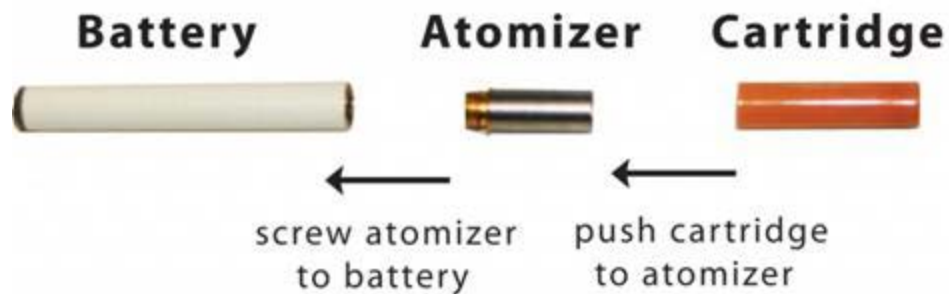
- Housing
- Tip that is sucked on by user
- Battery
- Atomizer that heats the liquid and vaporizes it
- Tank that holds the e-juice and atomizer (called a cartomizer or clearomizer)

The “e-Juice”

- Propylene glycol and/or vegetable glycerine (glycerol)
- Nicotine (0 – 36 mg/ml)
- Flavorings (tobacco, fruit, mint/menthol, etc)
- Additives (trying to mimic “throat grab”)

First Generation (Cigalikes)

- Two types
 - Disposable
 - Rechargeable (pre-filled cartridges)



Second Generation

- Refillable
- More decorative



Third Generation - Mods

- Advanced personal vaporizers
- Control of battery voltage





My Vapor Record (MVR) is a special PC software of eVic. It has professional data statistics function which can record your vapor information more effectively.

Amazing! The design of PC software realizes human-machine interaction through connecting with computer. After your convenient and quick setup, you just only click mouse gently, your vapor record will be displayed on the computer.



Power on/off

Activate battery energy output
Deactivate battery energy output



Battery indicator

Show remaining battery power, it will warn when the battery decreases to 5%.



Variable voltage

Adjust output voltage of the battery



Standby setting

Set standby time of the screen
Set standby time of the system



Puff setting

Show/renew current total puff number
Set reminder puff number.



Show inhaling

Show vaping time on the screen



Date setting

Set time and date of the device manually or update through MVR automatically



Chart Analysis

After connecting with computer, you will have full access to your vapor record



Device parameters

Show resistance of the atomizer, Show output voltage and wattage of the battery



Battery protection

Overheating protection, short circuit protection, low voltage protection, battery inversion protection



Energy saving

Screen of the device will go out when not used
System of the device will fall asleep when not used



PC operation

Through connecting with computer, you can modify information of the device more conveniently

Who Is Vaping?

- Younger
- Higher income
- Better educated
- Both genders
- Dual users
- IS THERE A VAPING SUBCULTURE?

Vaping Subculture

- Believe their addiction can save lives of millions of smokers of “analog” cigarettes
- Disdain cigalikes
- Obsessed with the customizable technology – tricking out vaping pieces with newest upgrades – mods; personal vaporizers
- May spend thousands on hobby in a year for accessories, colors, flavors



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Vapefests

- Highly sponsored multi-day events

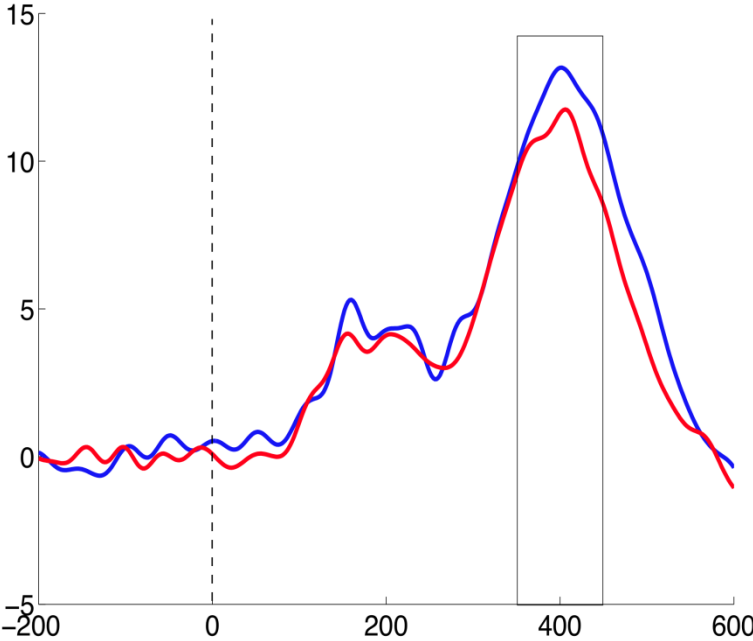


- “No one has ever heard of a nicotine patch club or a nicotine gum club, where people are addicted to these things say “let’s all get together, you know I’m a patch wearer, and you’re a patch wearer, let’s have a club, we’ve got something in common.” Simon Chapman
- Powerful special interest groups, with industry backing

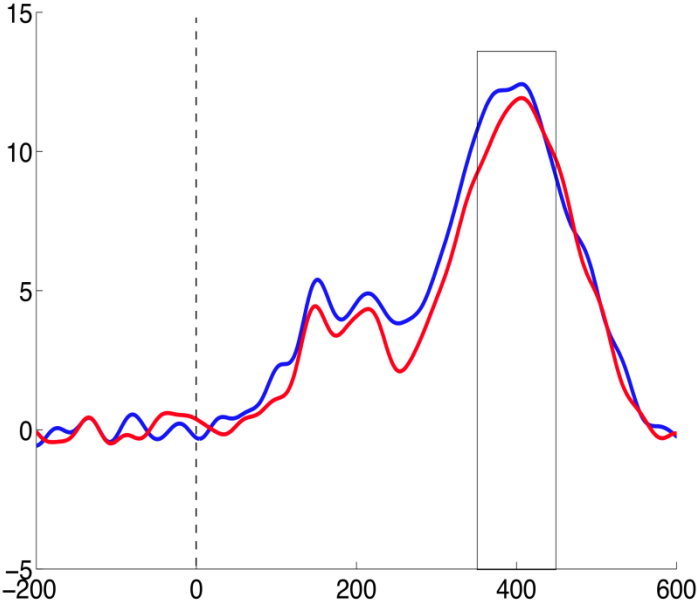
Are They Effective...

- For nicotine delivery?
- For craving/withdrawal?
- For smoking cessation?

P3 Component of Cortical ERP



Own Brand Cigarette

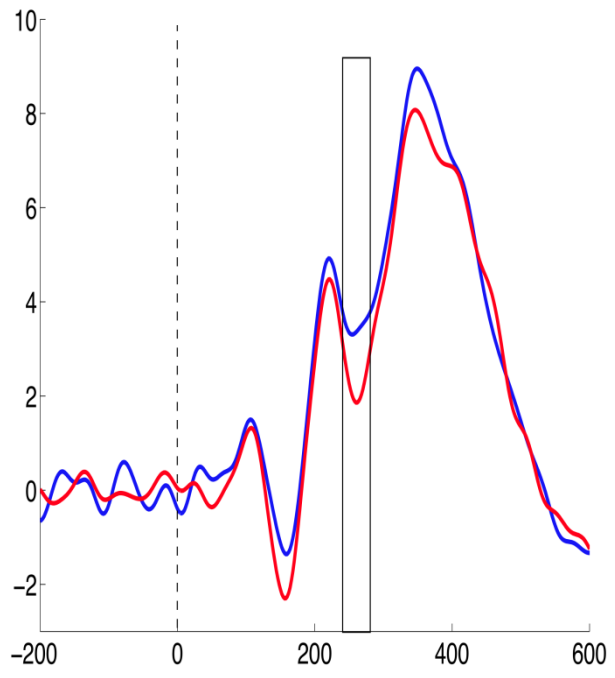


ENDS with Nicotine

N2 Component of Cortical ERP



Own Brand Cigarette



ENDS with nicotine

Blood Nicotine Levels

- Eissenberg (2010)
 - Compared ENDS to tobacco smoking
 - Only tobacco smoking raised blood nicotine levels
- Bullen (2010)
 - ENDS reached maximum blood level of 1.2 ng/ml in 20 minutes

Problems with Studies

- Naïve users – must learn how to maximize nicotine delivery
- First generation devices may be ineffective
- Vansickel and Eissenberg (2013)
 - Experienced users using their own devices
 - Effective nicotine delivery with 2nd generation devices
- Dawkins and Corcoran (2013)
 - Effective nicotine delivery with 1st generation device in regular users

What about Smoking Cessation?

- Moderately effective at alleviating tobacco craving
- RCTs suggest cessation rates comparable to NRT
- RCTs were done using cigalike ENDS

What May Be the Adverse Effect of FDA Regulation of ENDS?

- Would require an IND application if testing for efficacy for cessation
- May pretty much guarantee no independent RCTs for cessation

So What is the Controversy About?

Expanding the Definition of Harm

- Re-normalizing smoking
 - Marketing back on television using same imagery as old time cigarette ads
 - Similar placement in convenience stores as we once saw for cigarettes (e.g., near candy)
- The problem of use by youth
 - Rapidly adopting
 - Dual use common
 - Youth who use are heavier smokers
 - Temporal relationship between use of ENDS & tobacco cigarettes is not known

The Controversy

- May be another tool for quitting among some cigarette smokers, but...
- May be associated with lower odds of quitting (bridge product to maintain nicotine levels in venues where smoking not permitted)
- Disease risk likely to be only modestly affected in dual users
- Passive exposure results in cotinine levels similar to those of passive smokers

We Just Don't Have the Answers