



STAFF REPORT

Report To: Board of Supervisors **Meeting Date:** February 20, 2020

Staff Contact: Nicki Aaker, naaker@carson.org; Toni Orr, torr@carson.org

Agenda Title: For Discussion Only: Discussion and presentation on the epidemic of vaping and e-cigarette use among young adults, specifically as it relates to Carson City's youth. (Nicki Aaker, naaker@carson.org and Toni Orr, torr@carson.org)

Staff Summary: In 2018, the United States Surgeon General declared a national epidemic of vaping and e-cigarette use among young adults. Toni Orr, Carson City Health and Human Services' Public Health Nurse, gives presentations to Carson High School students during their health classes on the impact of this epidemic on Carson City youth. Her presentation discusses the variety of products used by young adults in our community. She has also conducted presentations for school nurses and health teachers at local conferences.

Agenda Action: Other / Presentation **Time Requested:** 20 minutes

Proposed Motion

N/A

Board's Strategic Goal

Quality of Life

Previous Action

N/A

Background/Issues & Analysis

It is important to teach youth and anyone having influence over youth about the dangers of vaping in order to stop this epidemic. This activity meets an objective of the Funds for Healthy Nevada grant.

Applicable Statute, Code, Policy, Rule or Regulation

N/A

Financial Information

Is there a fiscal impact? No

If yes, account name/number:

Is it currently budgeted? Yes

Explanation of Fiscal Impact:

Alternatives

N/A

Attachments:

[Vaping and Youth PowerPoint.pdf](#)

Board Action Taken:

Motion: _____

1) _____

2) _____

Aye/Nay

(Vote Recorded By)

Vaping and Youth

Tobacco Prevention
Chronic Disease Prevention and Health
Promotion



New Generation of Nicotine Addicts

- Epidemic E-cigarette use among U.S. youth and young adults is now a major public health concern. (Surgeon General, 2018)

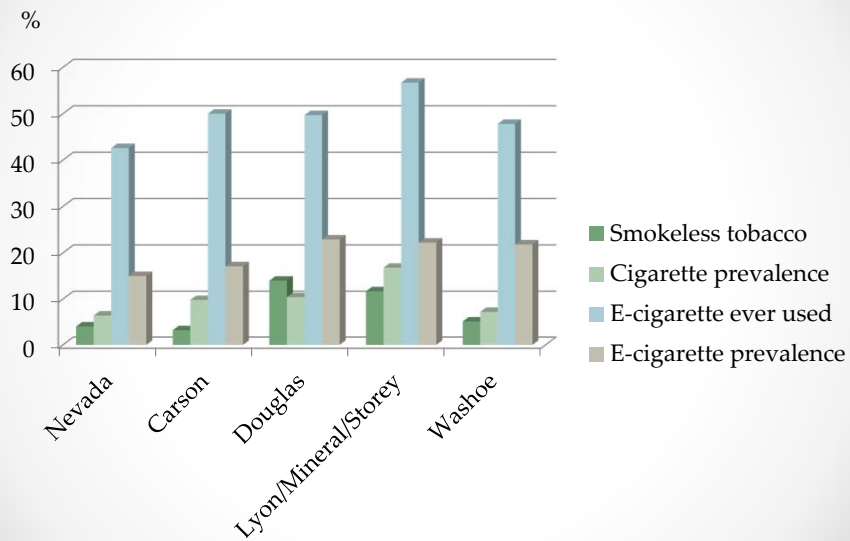


How we get the numbers:

- YRBS?
- What are we looking for?
- When is it done?
- Why do we need it?

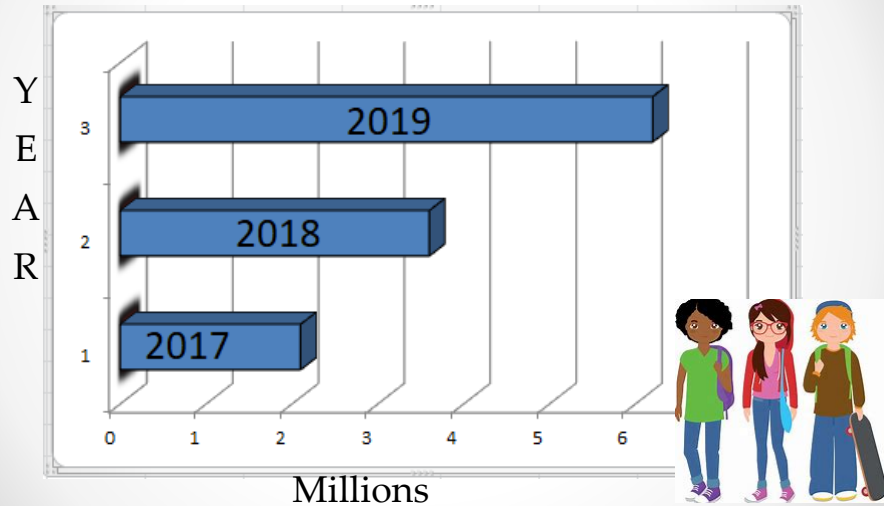


YRBS – 2017



Prevalence of tobacco

Middle school and high school students across the U.S.



Controversy

Save adults or the children???

ban vs. cessation

GRANDMOTHERS AND GRANDFATHERS



Open vs Closed

- Open systems
 - Refillable tank
- Closed system
 - Cartridge



Comparison

Cigarettes	E-cigarettes
<ul style="list-style-type: none">• Package 20 cigarettes/ approximately 10 puffs per cigarette.• Cigarette keeps burning• Pack of cigarettes 8-20 mg	<ul style="list-style-type: none">• One pod 200 puffs. 1.5 - 2 packs of cigarettes• Devices only use product when actually using the device• 59 mg Juul pod/smoke pod 50 mg

“Big Tobacco” and e-cigarettes

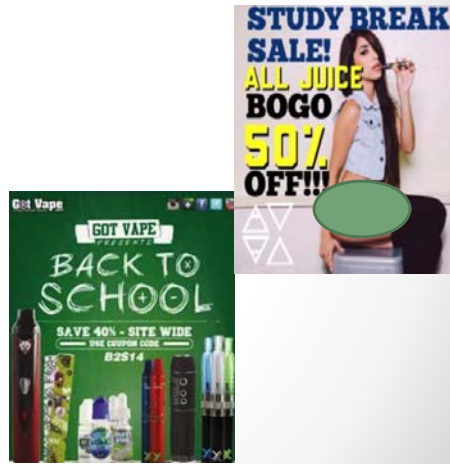
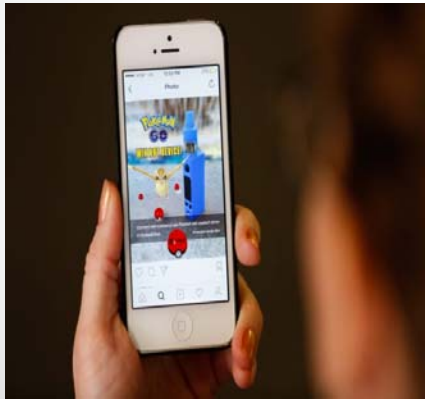
- Juul Labs Inc 16 billion net worth February 2019
- Altria buys 35% of Juul 12.8 billion



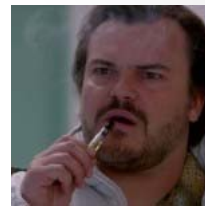
Ads look the same -



Back to School Ads and games



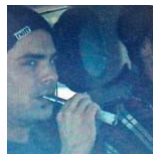
Celebrity influence



'Dora the Explorer' Actress Suspended From High School for Vaping

Vaping Media Team · May 27, 2016

Swiper, No Vaping "Dora" got suspended from school for Vaping in the Bathroom. Fatima Ptacek the teenage actress who is the voice behind "Dora" in the hit...



Trends with young adults



hot boxing goals:



From #1 girls of vaping video



Products are available in Sweet flavors



Other Tobacco Products (OTP's)/Emerging Tobacco Products



Other Tobacco Products, also known as OTPs, commonly refer to any tobacco product that is not a cigarette



17

E-hookah, E-cigarettes, E Mods



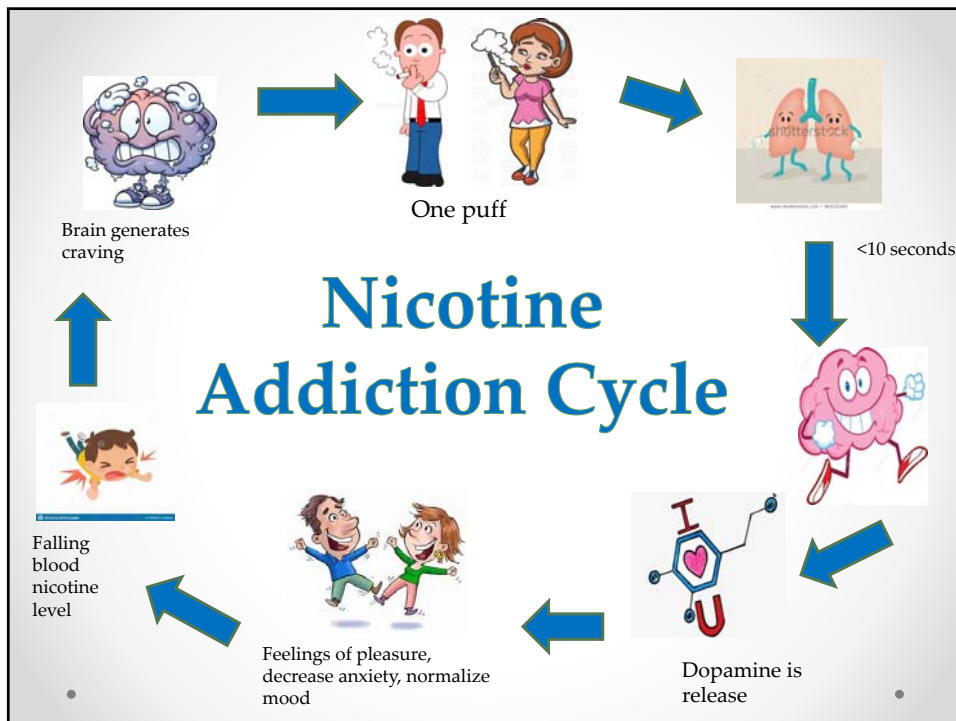
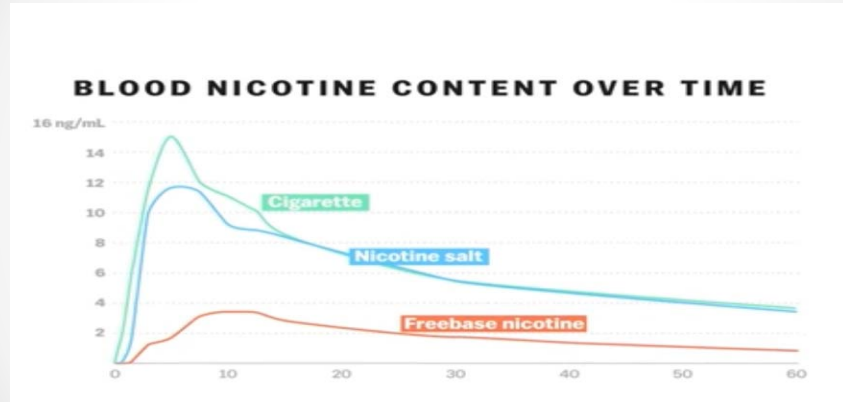
Vaping devices



Aerosol of e-cigarettes

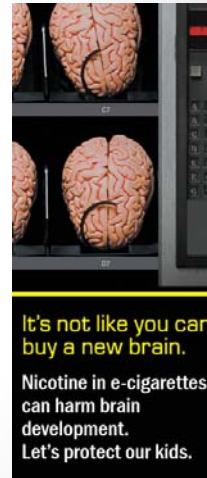


Nicotine



Health and Harm

- Fine and ultra fine particles
- Nicotine is a poisonous substance
- Nicotine
 - Even in small amounts
 - Primes the brain



Health and Harm

- Drinking nicotine in E-juice is harmful and possibly fatal for babies and toddlers.
- The process of heating the nicotine and flavors
 - Hydres...which are known carcinogens
 - Custom mixing – other drugs, antifreeze, essential oils

Side effects of nicotine

The most common side effects of nicotine are featured in this graphic:

Side effects of nicotine

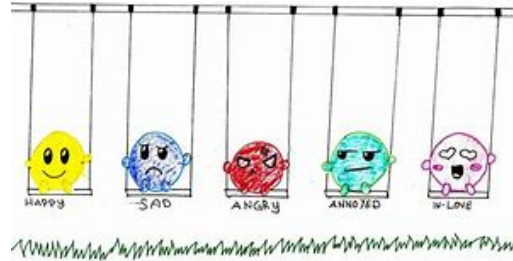
- Circulation**
 - Increased clotting tendency
 - Atherosclerosis
 - Enlargement of the aorta
- Lungs**
 - Bronchospasm
- Muscular**
 - Tremor
 - Pain
- Hormonal**
 - High insulin
 - Insulin resistance
- Joint pain**
- Gastro-intestinal**
 - Nausea
 - Dry mouth
 - Dyspepsia
 - Diarrhea
 - Heartburn
 - Peptic ulcer
 - Cancer
- Central**
 - Lightheadedness
 - Headache
 - Sleep disturbances
 - Abnormal dreams
 - Irritability
 - Dizziness
 - Risk of blood restriction
- Heart**
 - Increased or decreased heart rate
 - Increased blood pressure
 - Tachycardia
 - More (or less) arrhythmias
 - Coronary artery constriction
 - Coronary artery disease
- During pregnancy, risks to child later in life**
 - Type 2 diabetes
 - Obesity
 - Hypertension
 - Neurobehavioral defects
 - Respiratory dysfunction
 - Infertility

Signs and symptoms

The collage includes the following illustrations:

- A green face with a pained expression, representing nausea or discomfort.
- A person vomiting into a toilet, representing gastrointestinal distress.
- A red heart with a pulse line and a blood pressure gauge, representing cardiovascular symptoms.
- A blue elephant with stars around its head, representing dizziness or lightheadedness.
- A lit bomb, representing increased clotting tendency or risk of blood restriction.
- A person with a red heart on their chest and a distressed expression, representing heart-related symptoms like tachycardia or chest pain.
- A man with a shocked expression and wide eyes, representing irritability or dizziness.

Vs. withdrawal symptoms



Not just tobacco products

Synthetic/spice



Marijuana



Young e-cigarette users are 3.5x more likely to use marijuana.

3.5x



That's going to leave a mark! -Public Health concerns



E-cigarette Public Health Concerns

Dan Walker, 20



"I could have lost my private parts or even worse"

Nevada Quitline

- Texting, phone, online
- Fast confidential
- Just for teens
- Nevada residents 11 and older
- Fast and confidential
- One on one coaching
- Free to Nevada residents 13 and older



Policy and this program

- T 21
- Clean indoor air act
- Minimum distance
- Multiunit housing
- Smoke free workplaces
- Smoke free events
- SB263-tax/no vaping where smoking is prohibited

Thank You!



Questions



Gethealthycarsoncity.org

Acknowledgments and Resources

Many of the slides in this presentation were developed from content contained in fact sheets, websites, and other materials developed by the American Legacy Foundation, American Academy of Pediatrics, Campaign for Tobacco Free Kids, Americans for Non Smoker's Rights, Centers for Disease Control and Prevention and Public Health Law Policy Center.

Resources:

- American Cancer Society, Prevention and Early Detection. "Guide to Quitting Smoking," Revised May 2009.
- Americans for Nonsmokers' Rights, Electronic (e-) Cigarettes and Secondhand Aerosol, 2014.
- American Legacy Foundation. "Tobacco Fact Sheet: Electronic Cigarettes," Revised June 2013.
- American Society for Heating, Refrigeration, and Air Conditioning Engineering (ASHRAE Journal), June 2014
- Campaign for Tobacco Free Kids. "FDA and the States Must Regulate E-Cigarettes to Protect Public Health: Our Policy Regarding E-Cigarettes," July 2013.
- Campaign for Tobacco Free Kids. "New Study Finds Dramatic Rise in Youth Exposure to E-cigarette Ads on TV," June 2, 2014.
- Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report. "Electronic Cigarette Use Among Middle and High School Students — United States, 2011–2012," Volume 62, Number 35, September 6, 2013.
- Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report. "Notes from the Field. Calls to Poison Centers for Exposures to Electronic Cigarettes — United States, September 2010–February 2014", Volume 63, Number 13, April 4, 2014.
- Consumer Reports, "E-cigarettes: Still many questions," March 2014
- Senator Richard J. Durbin (D-IL), Rep. Henry Waxman, Senators Rockefeller IV, Blumenthal, Markey, Brown, Reed, Boxer, Merkley, and Rep. Pallane Jr. (Report written by staff), "Gateway to Addiction- A Survey of Popular Electronic Cigarette Manufacturers and Targeted Marketing to Youth", April 14, 2014
- London, William M. (2000, July 1) How addictive is cigarette smoking?
- Public Health Law and Policy, Technical Assistance Legal Center. "Electronic Cigarettes: How They Are- and Could Be- Regulated," July 2011.
- Youth Risk Behavior Survey 2015

<http://no-smoke.org/pdf/e-cigarette-secondhand-aerosol.pdf>

http://health.nv.gov/PDFs/Tobacco/TobaccoBurdenDocument_FINAL.pdf

http://www.tobaccofreekids.org/facts_issues/hell_us/newada

<http://www.legacyforhealth.org/content/download/82/6926/file/LEG-FactSheet-eCigarettes-IJUNE2013.pdf>

http://www.cdc.gov/tobacco/data_statistics/fact_sheets/

http://www.nytimes.com/2014/07/24/business/selling-a-poison-by-the-barrel-liquid-nicotine-for-e-cigarettes.html?partner=rss&emc=rss&mid=tw-nytimes&_r=1

www.aap.org/richmondcenter

<http://teen.smokefree.gov/yourHealthEffects.aspx>

https://en.wikipedia.org/wiki/Medical_gallery_of_Mikael_H%C3%A4ggstr%C3%B6m_2014

<http://ohio.gov/pr/images/feeding-cycle.pdf>

E-cigarette References as of 12/18/19

- American Cancer Society, Prevention and Early Detection. "Guide to Quitting Smoking," Revised May 2009
- Americans for Nonsmokers' Rights, Electronic (e-) Cigarettes and Secondhand Aerosol, 2014.
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- Consumer Reports, "E-cigarettes: Still many questions," March 2014
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- Grana, R., N. Benowitz, and S. Glantz, Background Paper on E-cigarettes. Center for Tobacco Control Research and Education, University of California, San Francisco and WHO Collaborating Center on Tobacco Control, 2013.
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- Sussan TE, Gajghate S, Thimmulappa RK, Ma J, Kim J-H, et al. (2015) Exposure to Electronic Cigarettes Impairs Pulmonary Anti-Bacterial and Anti-Viral Defenses in a Mouse Model. PLoS ONE 10(2): e0116861. doi:10.1371/journal.pone.0116861
- London, William M. (2000, July 1) How addictive is cigarette smoking?
- Public Health Law and Policy, Technical Assistance Legal Center. "Electronic Cigarettes: How They Are- and Could Be- Regulated," July 2011.
- Surgeon Generals Report on E-Cigarettes, 2016