

# Newly Emerging Tobacco Products and FDA Center for Tobacco Products:

What You and Your Patients

Need to Know



Ii-Lun Chen, MD Beth Durmowicz, MD

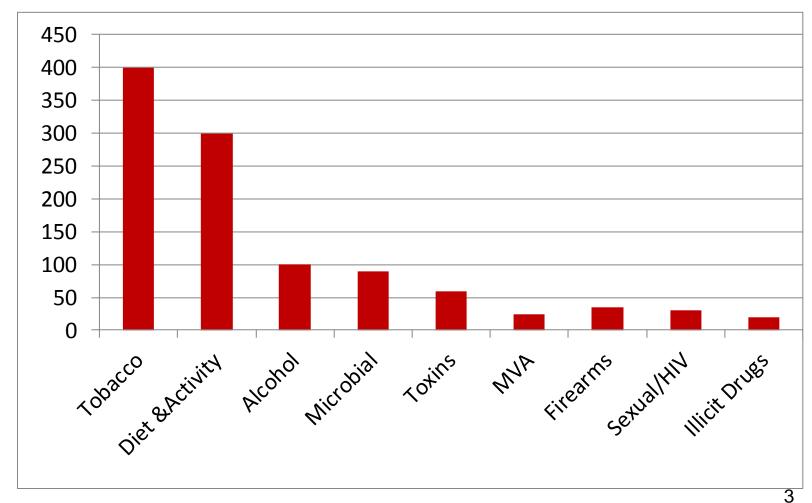
#### Disclosure

- No financial conflicts of interest
- No other conflicts of interest



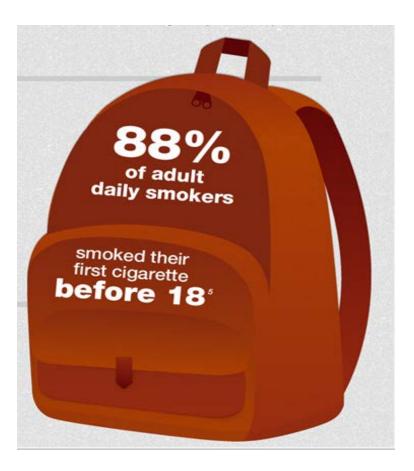
# Thousands of Deaths per Year (2000)

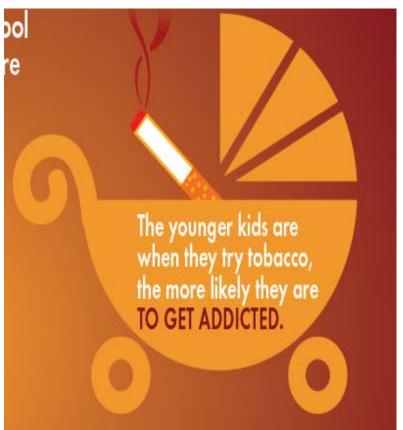
#### Tobacco is Deadly





#### Tobacco Use Begins In Youth

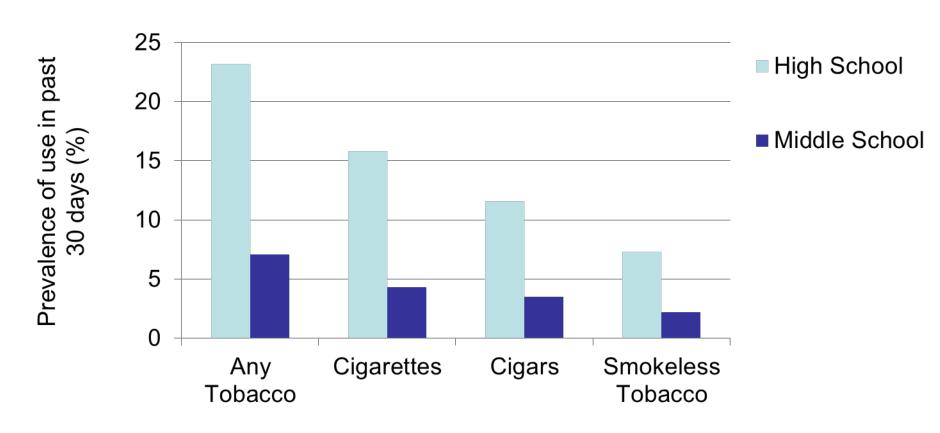




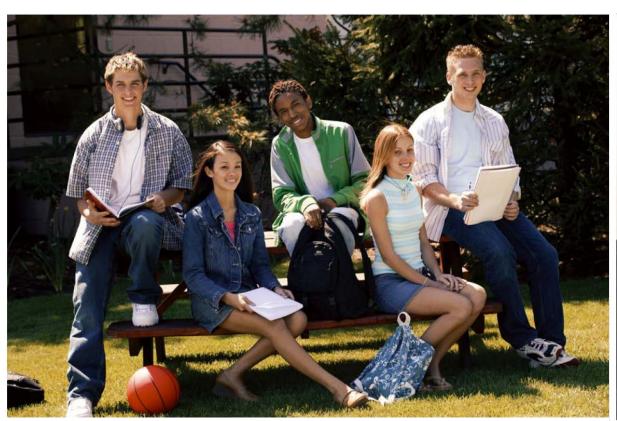
(From Highlights from the 2012 Surgeon General's Report<sup>14</sup>)



#### Tobacco Use in Past 30 Days



#### Factors in Youth Tobacco Use





(Youth Risk Behavior Surveillance-United States, 2011<sup>7</sup>)



#### **Tobacco Marketing**

PM USA Research Center - Young Smokers Prevalence, Trends, Implications and Related Demographic Trends - March 31, 1981 by Myron R. Johnston

Related Demographic Trends - March 31, 1981 by Myron E. Johnston

1. For over fifteen years certain demographic and social trends have been moving in directions favorable to industry growth. Now, one by one, these powerful social and demographic factors are turning against us, and by 1985 all will be operating against us.

The trends are:

- 1. After increasing for over a decade, the prevalence of teenage smoking is now declining sharply.
- 2. After increasing for over a decade, the average daily consumption of teenage

It is important to know as much as possible about teenage smoking patterns and attitudes. Today s teenage is tomorrow s potential regular customer, and the overwhelming majority of smokers first begin to smoke while still in their teens. In addition the ten years following the teenage years is the period during which average daily consumption per smoker increases to the average adult level. The smoking patterns of teenagers are particularly important to Philip Morris:

> This report deals with only one of these trends -- teenage smoking and attitudes toward smoking, together with related demographics. Subsequent reports will cover the social, economic and psychographic characteristics of teenage smokers and the demographics of other significant age groups.

> Because the major data sources have just become available, and because of the importance of these data to the company, I have elected to report the data in a series of memoranda rather than wait and issue all of the material at once.

2. See Entire Summary, pp 1-2. It is important to know as much as possible about teenage smoking patterns and attitudes. Today s teenage is tomorrow s potential regular customer, and the overwhelming majority of smokers first begin to smoke while still in their teens. In addition the ten years following the teenage years is the period during which average daily consumption per smoker increases to the average adult level. The smoking patterns of teenagers are particularly important to Philip Morris: Of the eleven packings of which the median age of smokers is under age 30, seven are Philip Morris packings, and the share index is http://legacy.library.ucsf.edu/tid/fts84a002@highest in the youngest age group for all Marlboro and Virginia Slims packings and for Ban Lighte and Martbol

Philip Morris (1981)

(Photo Courtesy of Suzanne Tanski)

#### Influences on Tobacco Use





(From Tobacco Free Kids Web site<sup>32</sup>)



(**P**rom Metrolic Web site<sup>24</sup>)



#### What Can Pediatricians Do?







#### Don't Just Ask About Cigarettes...





#### Ask About ALL Forms of Tobacco Use



























# Non Traditional and Newly Emerging Products

- Cigars/Little Cigars
- Hookah
- Smokeless Tobacco Products
  - Dissolvable Tobacco Products
- Electronic Cigarettes





## Cigars

- Cured tobacco wrapped in substance with tobacco
- Variety of sizes
- Taxed differently than cigarettes
- Not currently FDA regulated



#### "Not Your Grandfather's Cigar"

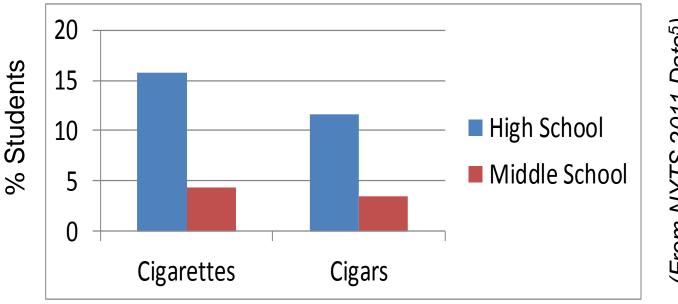


From Campaign for Tobacco Free Kids 2013<sup>4</sup>)



#### Cigar Use and Effects

- Cigar sales more than doubled in 10 years
- Use



From NYTS 2011 Data<sup>5</sup>)

Health effects



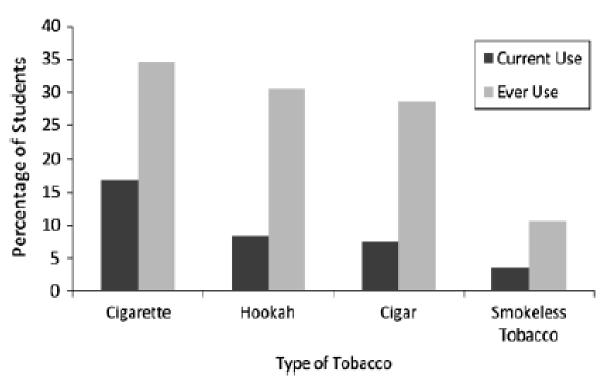
#### Hookah

- Flavored Tobacco
- Social Context
- Greater Exposures
  - 40-45 X tar
  - 6.5-10 X CO
  - 30 X PAHs\*
  - 1.7-2 X nicotine





## Hookah in College Students



(From Primack et al, 2012<sup>29</sup>)

#### **Smokeless Tobacco Products**



Snuff



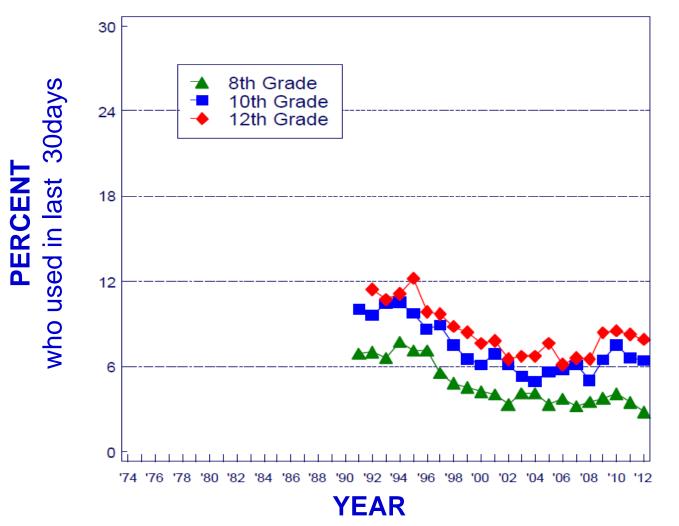
Chewing tobacco



18



#### Smokeless Tobacco Use Trends



(From Monitoring the Future 2012 Data<sup>18</sup>)

#### Dissolvable Tobacco Products





#### Electronic Nicotine Delivery



(From Johnson Creek Web site<sup>17</sup>)



(From Androgeek Web site<sup>2</sup>)



(From EPUFFER Web site<sup>12</sup>)



(From The Electronic Cigarette Shop Web site<sup>31</sup>)





(From Blu Web site<sup>3)</sup>



E-Cigarettes



## Who is "vaping"?



(From The Huffington Post 5/8/12<sup>15</sup>)

#### What do we know about e-cigs?





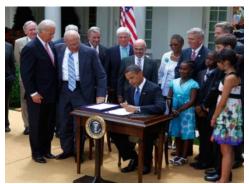


Vari-Volt-Vaping at it's finest!

(From Volcano Web site<sup>34</sup>)

#### Tobacco Control Act (2009)

- Authorizes FDA to regulate "tobacco products"
- Defines Tobacco Product
  - any product made or derived from tobacco (not "drug", "device" or combination)
- CTP currently has jurisdiction over all cigarettes, cigarette tobacco, roll-your-own tobacco, and smokeless tobacco





#### FDA Center for Tobacco Products

#### Vision:

 To make tobacco-related death and disease part of America's past, not America's future and, by doing so, ensure a healthier life for every family

#### Mission:

To protect Americans from tobacco-related death and disease by regulating the manufacture, distribution, and marketing of tobacco products and by educating the public, especially young people, about tobacco products and the dangers their use poses to themselves and others

#### **Tobacco Control Act - Limitations**

In general, CTP's regulatory authorities do not extend to:

- Ban certain specified classes of tobacco products
- Require the reduction of nicotine levels to zero

FDA is generally not involved with:

- Setting tax rates for tobacco products
- Regulating the farming of tobacco leaf
- Setting smoke free policies



# Public / Population Health Regulatory Standard in CTP



Tobacco products cannot be regulated using FDA's traditional "safe and effective" standard

The Tobacco Control Act mandates the use of a population health standard taking into account both users and non-users of tobacco products



#### FDA and Youth

#### FDA Tobacco Product Regulation

September 2009



Banned flavored cigarettes making them less appealing to kids

March 2010



Restricted youth access to tobacco products

June 2010



Banned misleading advertising to avoid misperception that products are safer

June 2010



Established new smokeless tobacco warnings to communicate health risks

March 2012



Established list of harmful and potentially harmful constituents

March 2012



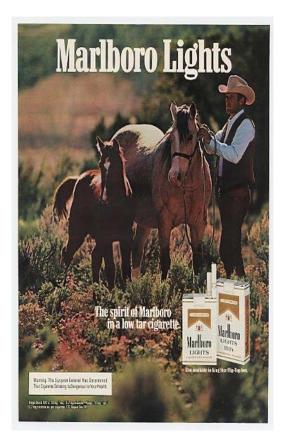
Issued draft guidance on submitting a Modified Risk Tobacco Product Application



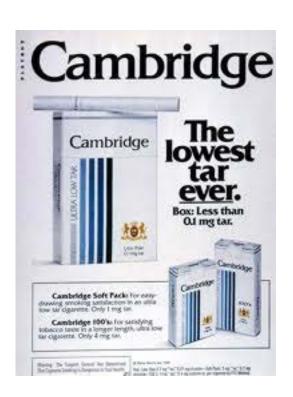
## Restrict Marketing and Distribution

- To reduce youth initiation FDA restricts access and marketing of regulated products. Since June 2010, FDA prohibits:
  - Sales to people younger than 18
  - Sales of cigarette packs with fewer than 20 cigarettes
  - Distribution of free samples of cigarettes and restricts distribution of free samples of smokeless tobacco products
  - Tobacco brand name sponsorship of athletic, musical, or other social events and of teams
  - Hats and tee shirts, etc., with brand names or logos
  - Sales in vending machines or self-service displays except in adult-only facilities

# Prevent False & Misleading Claims that State or Imply Reduced Risk









## What is FDA Doing Now Specific to Youth?

- Education
  - for youth and young adults to prevent initiation and encourage cessation
- Research
  - to inform regulation









## **Education Campaigns**

## At-risk youth ages 12-15 in the following audience segments:

- African American
- Hispanic
- Asian/Pacific Islander
- American Indian/Alaskan Native
- Youth who identify as LGBT
- Youth who reside in rural communities

#### Youth ages 12-17 who:

- Have not tried FDA-regulated tobacco products
- Are intermittent users of FDA-regulated tobacco products





# The Population Assessment of Tobacco and Health Study

- The PATH Study is a large, national, representative longitudinal cohort study of tobacco use and health in the United States which will measure tobacco use behaviors and related health effects
- Baseline data collection, N ~ 60,000, is scheduled for the Fall of 2013 with a cohort of never, current, and former users of tobacco products in the U.S. ages 12 and over
  - The cohort will then be followed annually for at least two additional data collection waves.

Population Assessment of Tobacco and Health

## Ensure Industry Compliance – Retailers

#### Undercover Buy Inspections

 Minor attempts to purchase regulated tobacco product (cigarettes, smokeless tobacco, or cigarette tobacco)

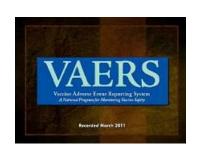
#### Inspectors also check that retailers:

- Sell regulated tobacco products in a direct, face-to-face exchange (i.e., no more vending machine sales) unless in a qualified adultonly facility
- Do not sell cigarette packages containing fewer than 20 cigarettes
- Do not sell single cigarettes "loosies"
- Do not sell cigarettes or cigarette tobacco with characterizing flavors (other than menthol).

## Tobacco Product Adverse Event & Product Problem Reporting









# Why Track & Evaluate Adverse Events & Product Problems?

 To assess trends and signals indicating the need for regulatory action to protect public health





# Adverse Event (AE) Definitions FD&C Act

- AE = any adverse health-related event associated with the use of a product
- **SAE** = Serious AE is an AE that results in death, a life-threatening experience, inpatient hospitalization, persistent or significant disability or incapacity, congenital anomaly / birth defect or requires a medical or surgical intervention
- Expected vs. <u>Unexpected</u>; Frequency;
   Attribution



### Product Problems also of Interest

- Contamination
- Malfunction or defective component
- User errors
- Package breaches
- Labeling concerns
- Product mix-ups
- Poor quality
- Suspected counterfeit product

# Current Voluntary Reporting Mechanisms

- MedWatch (Clinicians & Consumers)
  - Voluntary reporting of AEs, Product problems & product use errors
  - Form 3500 paper or online via <u>https://www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm</u>

#### CTP

– AskCTP@fda.hhs.gov or 1-877-CTP-1373

# CTPs Tobacco Adverse Event Reporting System (TAERS)

- Report unexpected adverse health effects associated with the use of tobacco products
- Report tobacco product, packaging and labeling problems



#### Safety Reporting Portal

ABOUT THE PORTAL

SAFETY REPORT DIRECTORY

Or

FAQS RELATED LINKS

Account

Benefits

Save a d

Faster da

entry

Easier fo

View sub

#### ety Reporting Portal

Reporting Portal (SRP) streamlines the process of reporting product s to the Food & Drug Administration (FDA) and the National Health (NIH).

our role, (manufacturer, health care professional, researcher, public I, or concerned citizen), when you submit a safety report through

ou make a vital contribution to the safety of America's food supply, nd other products that touch us all.

#### **Begin Reporting Here**

1. Login

EMAIL

PASSWORD

Remember me

Forgot your password?

2. Report As Guest

Not ready to create an account but would like to submit a report?

You can do that here.

> Report as Guest Create A

Log In

Reports You Can Submit Through this Portal

- FDA safety issues involving:
  - Human or animal reportable foods
  - Animal drugs Pet foods

NIH safety issues involving:

- · NIH gene-transfer research
  - For other issues, find out where to submit your report.

#### Should Submit a Safety Report?

tions and people in certain professional roles, such as the following, may ed by law to submit safety reports under some circumstances.

d Manufacturers, Processors, Packers, and Holders earchers g Manufacturers

ncluding concerned citizens, health professionals, and public ficials, may voluntarily submit reports if they encounter

sues with a product and/or unanticipated harmful



# How can you help CTP?

- Submit comments on draft guidances or special topics to the FDA docket:
  - Find guidance documents at <a href="http://www.fda.gov/TobaccoProducts/GuidanceComplianceR">http://www.fda.gov/TobaccoProducts/GuidanceComplianceR</a> egulatoryInformation/ucm281147.htm
  - Provide comments via
    - www.regulations.gov
    - http://www.fda.gov/RegulatoryInformation/Dockets/FR/ucm290
       145.htm
- Submit tobacco product adverse event reports
- Educate patients to submit tobacco product adverse events
- Report potential tobacco product violations

#### What have we learned?

- Tobacco use starts in youth and young adults
- Healthcare providers
  - should inquire about all forms of tobacco use
  - are a critical resource to patients and to CTP/FDA in decreasing the morbidity and mortality due to tobacco use



#### FDA Resources

- Potential Tobacco Product Violations Form: <a href="http://www.fda.gov/TobaccoProducts/Protecting">http://www.fda.gov/TobaccoProducts/Protecting</a>
   <a href="http://www.fda.gov/TobaccoProducts/Protecting">KidsfromTobacco/ucm330160.htm</a>
- Web Site: www.fda.gov/tobacco
  - Find more information
  - Order materials
  - Sign up for email subscriptions, like "This Week in CTP"
  - Join us on Twitter



### Other Resources

- 1-800-QUIT NOW (784-8669)
- Be Tobacco Free Web Site: <a href="http://betobaccofree.hhs.gov/index.html">http://betobaccofree.hhs.gov/index.html</a>
- CDC Web Site: <a href="http://www.cdc.gov/tobacco/index.htm">http://www.cdc.gov/tobacco/index.htm</a>
- NIH Web Site: <a href="http://teen.smokefree.gov/Default.aspx">http://teen.smokefree.gov/Default.aspx</a>

# Acknowledgements

- David Ashley, PhD
- Cathy Backinger, PhD, MPH
- Corinne Husten, MD, MPH
- Lucinda Miner, PhD
- Susan Rudy, MSN, CRNP
- Lester Jao Lacorte, MD, PhD

## Thank You



### References

- American Academy of Pediatrics, Committee on Environmental Health, Committee on Substance Abuse, Committee on Adolescence, and Committee on Native American Child Health. Tobacco Use: A Pediatric Disease. *Pediatrics*.2009;124(5): 1474-1487.
- 2. Androgeek Web site. <a href="http://androgeek.com/green-smoke-e-hooka/">http://androgeek.com/green-smoke-e-hooka/</a>. Accessed 4/22/2013.
- 3. Blu Web site. <a href="http://www.blucigs.com/">http://www.blucigs.com/</a>. Accessed 4/22/2013.
- Campaign for Tobacco-Free Kids. Not Your Grandfather's Cigar A New Generation of Cheap & Sweet Cigars Threatens a New Generation of Kids March 13, 2013.
  - http://www.tobaccofreekids.org/what\_we\_do/industry\_watch/cigar\_report/.
- Centers for Disease Control and Prevention. Current Tobacco Use Among Middle and High School Students-United States, 2011. MMWR. 2012; 61(31):581-585.
- 6. Centers for Disease Control and Prevention. Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses United States, 2000-2004. *MMWR*. 2008; 57(45):1226-28.

- 7. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance-United States, 2011. *MMWR*. 2012; 61(4).
- Centers for Disease Control and Prevention Web site. Smoking and Tobacco Use. Youth and Tobacco Use. <a href="http://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/youth\_data/tobacco\_use/index.htm">http://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/youth\_data/tobacco\_use/index.htm</a>. Accessed 4/17/2013.
- 9. Chen IL. FDA Summary of Adverse Events on Electronic Cigarettes. *Nicotine and Tobacco Research*. 2013;15(2):615-6.
- 10. Cobb CO, Sahmarani K, Eissenberg T, Shihadeh A. Acute toxicant exposure and cardiac autonomic dysfunction from smoking a single narghile waterpipe with tobacco and with a "healthy" tobacco-free alternative. *Toxicology Letters*. 2012;215:70–75.
- 11. Dube SR, Arrazola RA, Lee J, Engstrom M, Malarcher A. Pro-Tobacco Influences and Susceptibility to Smoking Cigarettes Among Middle and High School Students-United States, 2011. *J Adolesc Health*. 2013;52:S45-51.
- 12. EPUFFER Web site. <a href="http://www.epuffer.com/eshop/electronic-cigar.html">http://www.epuffer.com/eshop/electronic-cigar.html</a>. Accessed 4/22/2013.

- 13. Food & Drug Administration Web site:
  <a href="http://www.fda.gov/TobaccoProducts/ProtectingKidsfromTobacco/ucm3078">http://www.fda.gov/TobaccoProducts/ProtectingKidsfromTobacco/ucm3078</a>
  07.htm. Accessed 4/17/2013.
- 14. Highlights from the 2012 Surgeon General's Report, Preventing Tobacco Use Among Youth and Young Adults. <a href="http://www.flickr.com/photos/hhsgov/8288549745/">http://www.flickr.com/photos/hhsgov/8288549745/</a>. Accessed 4/20/2013.
- 15. Huffington Post Web site.

  <a href="http://www.huffingtonpost.com/2012/05/08/celebrities-smoking-electronic-cigarettes-photos\_n\_1500814.html">http://www.huffingtonpost.com/2012/05/08/celebrities-smoking-electronic-cigarettes-photos\_n\_1500814.html</a>. Accessed 4/22/2013.
- 16. Independent Web site: <a href="http://www.independent.co.uk/life-style/health-and-families/features/why-i-gave-up-smoking-2235120.html">http://www.independent.co.uk/life-style/health-and-families/features/why-i-gave-up-smoking-2235120.html</a> . Accessed 5/7/2013.
- 17. Johnson Creek Web site <a href="http://www.johnsoncreeksmokejuice.com/">http://www.johnsoncreeksmokejuice.com/</a>. Accessed 4/23/2013.
- 18. Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. 2013.

  Monitoring the Future national results on drug use: 2012 Overview, Key
  Findings on Adolescent Drug Use. Ann Arbor: Institute for Social Research,52
  The University of Michigan.

- 19. King BA, Alam S, Promoff MA, Arrazola R, Dube SR. Awareness and Ever Use of Electronic Cigarettes Among U.S. Adults, 2010–2011. *Nicotine and Tobacco Research*.2013. [epub ahead of print] doi:10.1093/ntr/ntt013
- 20. Legacy Tobacco Documents Library. <a href="http://legacy.library.ucsf.edu">http://legacy.library.ucsf.edu</a>. Accessed 4/16/2013.
- 21. Lipkus IM, Eissenberg T, Schwartz-Bloom RD, Prokhorov AV, Levy J. Affecting Perceptions of Harm and Addiction among College Waterpipe Tobacco Smokers. *Nicotine & Tobacco Research*. 2011;13(7): 599–610.
- 22. Maziak W. The waterpipe: time for action. *Addiction*. 2008;103:1763–1767.
- 23. McGinnis JM, Foege WH. Actual Causes of Death in the United States. *JAMA*. 1993;270(18):2207-12.
- 24. Metrolic Web site. <a href="http://www.metrolic.com/smoking-in-movies-to-be-rated-r-119925/">http://www.metrolic.com/smoking-in-movies-to-be-rated-r-119925/</a>. Accessed 5/7/2013.
- 25. Miner L, Richter P, Chen I. FDA's new role in tobacco control: Guidance on helping kids to say no. Contemporary Pediatrics.2011. <a href="http://contemporarypediatrics.modernmedicine.com/contemporary-pediatrics/news/modernmedicine/modern-medicine-feature-articles/fdas-pediatrics/news/modernmedicine/modern-medicine-feature-articles/fdas-pediatrics/news/modernmedicine/modern-medicine-feature-articles/fdas-pediatrics/news/modernmedicine/modern-medicine-feature-articles/fdas-pediatrics/news/modernmedicine/modern-medicine-feature-articles/fdas-pediatrics/news/modernmedicine/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/fdas-pediatrics/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/news/modern-medicine-feature-articles/ne

new-role-tobacco-c?id=&pageID=1&sk=&date. Accessed 4/17/2013.

- 26. O'Connor RJ. Non-cigarette tobacco products: what have we learnt and where are we headed? *Tobacco Control*. 2012;21:181-190.
- 27. Pearson JL, Richardson A, Niaura RS, Vallone DM, Abrams DB. E-Cigarette Awareness, Use and Harm Perceptions in US Adults. *American Journal of Public Health*. 2012;102(9):1758–1766.
- 28. Polosa et al. Effect of an electronic nicotine delivery device (e-Cigarette) on smoking reduction and cessation: a prospective 6-month pilot study. *BMC Public Health*. 2011 11:786.
- 29. Primack BA, Shensa A, Kim KH, Carroll MV, Hoban MT, Victor Leino E, et al. Waterpipe Smoking Among U.S. University Students. *Nicotine* & *Tobacco Research*. 2013;15(1): 29-35.
- 30. Sutfin EL, McCoy TP, Reboussin BA, Wagoner KG, Spangler J, Wolfson M. Prevalence and correlates of waterpipe tobacco smoking by college students in North Carolina. *Drug and Alcohol Dependence*. 2011; 115:131–136.

- 31. The Electronic Cigarette Shop Web site . <a href="http://theelectroniccigaretteshop.uk.com/products-page/page/3/Hookah">http://theelectroniccigaretteshop.uk.com/products-page/page/3/Hookah</a>. Accessed 4/22/2013.
- 32. Tobacco Free Kids Web site: <a href="http://www.tobaccofreekids.org/ad\_gallery">http://www.tobaccofreekids.org/ad\_gallery</a>. Accessed May 7, 2013.
- 33. U.S. Department of Health and Human Services. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General, 2012. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office of Smoking and Health, 2012. <a href="http://www.cdc.gov/tobacco/data\_statistics/sgr/2012/">http://www.cdc.gov/tobacco/data\_statistics/sgr/2012/</a>. Accessed 5/8/2013.
- 34. Volcano Web site. <a href="http://www.volcanoecigs.com/">http://www.volcanoecigs.com/</a>. Accessed 4/23/2013.