

Jonathan E. Fielding, M.D., M.P.H., Chair
Distinguished Professor
Department of Health Policy and Management,
Fielding School of Public Health
Department of Pediatrics, Geffen School of Medicine,
University of California, Los Angeles
Los Angeles, CA

Leticia Van de Putte, Vice-Chair
Texas State Senator
San Antonio, TX

Tom Miller, Treasurer
Attorney General of Iowa
Des Moines, IA

Lawrence G. Wasden
Immediate Past Chair
Attorney General of Idaho
Boise, ID

Donald K. Boswell
President and CEO
Western New York Public Broadcasting Association
Buffalo, NY

Nancy Brown
Chief Executive Officer, American Heart Association
Dallas, TX

Gary R. Herbert
Governor
State of Utah
Salt Lake City, UT

Mike Moore
Principal, Mike Moore Law Firm, LLC
Flowood, MS

Jeremiah W. (Jay) Nixon
Governor
State of Missouri
Jefferson City, MO

Charles K. Scott
Wyoming State Senator
Casper, WY

Cass Wheeler
Chief Executive Officer Emeritus
American Heart Association
Dallas, TX

Greg Zoeller
Attorney General of Indiana
Indianapolis, IN

Mauro Medrano, Youth Board Liaison
Dodge City High School Alumnus
Dodge City, KS

Robin Koval, Ex-Officio
CEO and President
Legacy

October 14, 2014

Edith Ramirez, Chairwoman
Federal Trade Commission
Office of the Secretary
600 Pennsylvania Ave NW
Suite CC-5610 (Annex J)
Washington, DC 20580

RE: Tobacco Reports: Paperwork Comment FTC File NO. P054507

Dear Chairwoman Ramirez:

Legacy welcomes the opportunity to comment on the Federal Trade Commission's (FTC) request for comment on the Tobacco Reports which contain valuable information regarding sales and marketing expenditures for Cigarettes and Smokeless tobacco products. We believe these reports serve an important purpose. At the same time, with regard to the specific question on whether FTC should require submission of tar, nicotine, and carbon monoxide yields for all cigarettes sold by the companies, we encourage FTC to discontinue requiring this information. We recommend this for several reasons outlined below. Finally, we encourage FTC to expand the products for which it collects the sales and marketing expenditure data to include cigars and e-cigarettes.

Legacy envisions an America where tobacco is a thing of the past and where all youth and young adults reject tobacco use. Legacy's proven-effective and nationally recognized public education programs include **truth**[®], the national youth smoking prevention campaign that has been cited as contributing to significant declines in youth smoking; **EX**[®], an innovative public health program designed to speak to smokers in their own language and change the way they approach quitting; and research initiatives exploring the causes, consequences and approaches to reducing tobacco use. Legacy also develops programs to address the health effects of tobacco use – with a focus on priority populations disproportionately affected by the toll of tobacco – through alliances, youth activism, train and technical assistance. Located in Washington, D.C., the foundation was created as a result of the November 1998 Master Settlement Agreement (MSA) between attorneys general from 46 states, five U.S. territories and the tobacco industry.

Background and utility of the data



Since 1967 and the passage of the Federal Cigarette Labeling and Advertising Act, the FTC collected information on the sales and marketing expenditures and reported that information to Congress. Similarly, in 1987, the Comprehensive Smokeless Tobacco Health Education Act required similar reports on smokeless tobacco products. When those provisions expired, FTC continued to collect the data under the authority of Section 6(b) of the FTC Act, 15 U.S.C. § 46(b).¹ In 1999, FTC published similar data on cigar products.²

In general, the sales and marketing expenditure data in these Tobacco Reports creates the basis for life-saving public policies with regard to tobacco use and marketing. Other sources do not provide this high-utility data, and therefore these reports deliver a critical tool for protecting public health from the ravages of tobacco-related disease, which kills 480,000 people annually and costs nearly \$300 billion a year in medical costs and lost productivity.³ We also know that the advertising and marketing of these products contributes significantly to youth initiation of these products.⁴ In addition, as the industry increasingly focuses their marketing and advertising budget on price discounting, FTC's Cigarette and Smokeless Tobacco Reports provide vital information in this regard, particularly for youth, a price-sensitive population.⁴ Without the data FTC gathers for these reports, researchers and public health advocates alike would have a much less complete picture of the industry's tactics to lure new users and keep current users of their deadly products.

Since the passage of the Family Smoking Prevention and Tobacco Control Act (Tobacco Control Act), Legacy is pleased that the Food and Drug Administration (FDA) and FTC work together to continue to gather this information. However, we do have some concerns about the continued collection of data on tar and nicotine by the FTC. We outline those concerns below.

FTC Should NOT require or report tar levels of cigarettes because of the potential to mislead consumers

Our concern about FTC's publication of this data stems from the tobacco industry's long history of deceiving consumers about the harms of their products. Previously, FTC reported the nicotine and tar levels found in cigarettes through the Cigarette Reports. The tobacco industry used those results in their advertising and marketing to make claims of reduced risk, when in fact, there was no evidence of reduced risk. The industry's marketing of the so-called "light" and "low tar" cigarettes wreaked havoc on public health – the effects of which are still felt today – as demonstrated in great detail in Judge Kessler's findings in the racketeering case against the tobacco industry, *United States v. Philip Morris*.⁵

Further, scientific studies have shown that availability and marketing of so-called "light" and "low tar" cigarettes reduced smokers' perceptions of health risk⁶⁻⁸ and reduced readiness to quit.^{9,10} Such misperceptions of risk impact tobacco use, as they have been shown to reduce the likelihood of quitting among smokers.¹¹

We encourage FTC to discontinue publishing the nicotine and tar yields. The experience described above illustrates just why: many people believe that there are meaningful differences in levels of risk across products with different levels of tar, nicotine and carbon monoxide, when in most cases, there are none. The publication of tar and nicotine yields and their subsequent use in tobacco advertising has also led to reduced readiness to quit.

Legacy is also concerned that continuing to publish this data could have unintended consequences. For example, a recent review highlights extensive evidence showing that the presentation of quantitative

information on tobacco constituents on cigarette labels and packaging is misleading.¹² While studies have shown that consumers believe that display of numerical information is helpful,¹³ many are either unable to accurately recall this information¹⁴⁻¹⁶ or use the information to draw false conclusions, specifically interpreting lower numbers with a reduction in risk and using this information to guide their choice of brands.^{15,17-22} This is not limited to the uneducated; even smokers in some of the most affluent countries struggle with interpretation of these numbers.²³⁻²⁵ Additionally, there are proven limitations of existing emission testing methods, which have been shown to produce numbers divergent from those actually generated when humans smoke²⁶⁻²⁸ and are considered an unreliable indicator of exposure and risk.^{29,30} Given these limitations, the potential costs of presenting quantitative information on tobacco constituents are high and likely to outweigh any possible benefits from display of such information.

We are particularly concerned about potential unintended consequences among people of low literacy and low numeracy. Studies on consumer understanding of numeric presentation of data show that individuals who have a high level of understanding of numbers are more likely to pay attention to numbers associated with risk, better comprehend them, translate them into meaningful information and ultimately use them in making decisions.^{31,32} Less numerate individuals are more likely to rely on emotions, mood, or trust or distrust of information source. Given that the FTC is seen as a trustworthy source of information, presentation of tar and nicotine levels by FTC may inadvertently serve to reinforce perceptions of reduced risk or increased safety of certain products. Since low numerate individuals are also likely to be disadvantaged by poverty, lack of education, or linguistic barriers,³³ the potential exists for presentation of information on levels of tar, nicotine and carbon monoxide to lead to disparities in understanding in the same groups in which we see tobacco-related health disparities: those of low socioeconomic status and racial/ethnic minorities.

FTC and FDA should work together to develop a means to disseminate this information that protects public health

Section 904(a)(3) of the Tobacco Control Act requires FDA to collect data on harmful or potentially harmful constituents (HPHCs) and report that data to the public that is understandable and not misleading. In March of 2012, FDA established a list of 93 constituents including carbon monoxide and nicotine. Further, Section 206 of the Tobacco Control Act gives FDA the authority to require nicotine and tar yields on labels and advertising. Under that section, FDA has the authority to establish via regulation, the methodology for determining those yields. The Act goes on to say that a Memorandum of Understanding between FDA and FTC will resolve any differences in the reporting and methodologies established by those regulations. FDA has not yet acted on those regulations, and we encourage FTC to work with FDA to determine the best methodology and best way to disseminate such information to the public. Given the history of the misuse of the data provided in the Cigarette Report, and the potential for serious harm to public health, Legacy believes FTC and FDA should collaborate to gather and disseminate that information in a way that protects public health.

FTC should compile sales and marketing reports on cigar products and e-cigarette products

CIGARS

In 1998, FTC required the five largest cigar companies in the United States to report their sales and marketing data for the years 1996 and 1997,³⁴ as well as information on the characteristics of each variety of cigar marketed within each brand, including:

- Product size
- Product style
- Weight of the individual cigars
- Types of tobacco used
- Tobacco curing method
- Flavorings
- Total units sold for each cigar variety
- Total dollar sales for each cigar variety

That is the one and only time that FTC has required such reporting from cigar companies. Legacy believes that more information on cigar sales and marketing is needed to better understand how industry markets this product. This is particularly important now, as cigars are unregulated by FDA, a condition that remains in place until finalization of the deeming regulation.

Data shows that consumption of cigars is rising, and prevalence has remained flat, particularly among youth and young adults, even while cigarette consumption and prevalence have decreased. Overall consumption of cigars has risen from 2000-2011 while cigarette consumption declined in the same time.^{35,36} In particular, large cigar consumption increased every year from 2000 to 2011, with large jumps in 2009 after the tax increase on all tobacco products, and especially on little cigars, went into effect. After that, cigar companies increased the weight of their little cigar products in order to be taxed as large cigars.^{35,37} Further, numerous national surveys have shown no decline in cigar use prevalence, even while cigarette smoking prevalence has decreased. The 2012 National Survey on Drug Use and Health (NSDUH), showed that rates of current cigar use among 12-17 year-olds have remained similar from 2002-2012, while current cigarette use rates declined in those same years.³⁸ Moreover, a recent national survey showed that current cigar smoking among youth was higher than youth cigarette smoking in eight states and cigar use rates were similar to that of cigarette use rates in an additional two states.³⁹

While some data does exist on the marketing of cigars, much more information is needed. For example, research by Legacy highlights the targeted marketing of little cigars/cigarillos, using both price and promotion at the point-of-sale, to vulnerable populations including young adults and African Americans in Washington, DC.⁴⁰ Of the 80% of Washington, DC stores that sold little cigars and cigarillos in September 2011 to March 2012, 95% sold these products in flavors, such as fruit, candy, and wine, and 13% sold menthol little cigars and cigarillos. Nearly 60% of these stores sold single little cigars and cigarillos, 74% sold little cigar and cigarillo packs, and 70% offered Black & Mild packs. Block groups in the higher quartiles for proportion of African American residents were significantly more likely to have little cigars and cigarillos available than were block groups in the lowest quartile. The average price per cigarillo for the lowest priced Black & Mild pack was \$0.91. Price per cigarillo in areas in the third quartile for proportion of young adults was significantly lower by \$0.09 than was the first quartile. Price per cigarillo for cigarillos sold in 2-packs

was significantly lower than were those sold in 5-packs; advertised prices were significantly lower than were non-advertised prices.⁴⁰

While this is important work, the data that FTC would provide through regular reports similar to that produced in 1999, would enhance such research and provide a considerable treasure trove of information on these products that continue to be used by youth and young adults. For that reason, Legacy strongly encourages FTC to use its reporting powers under Section 6(b) of the FTC Act, 15 U.S.C. § 46(b), to begin collection and dissemination of this data as soon as possible, and continue to provide such reports on a regular basis.

E-CIGARETTES

E-cigarettes – or electronic nicotine delivery systems – are a relatively new product that has been ruled a tobacco product, but is currently unregulated by the FDA. Yet, in this completely unregulated environment, e-cigarettes have exploded onto the market. They come in a vast array of flavors, with inconsistent delivery of nicotine, and very little known about what other ingredients are in the products. While these products started independently of the cigarette manufacturers, the big tobacco companies have become major players in this new market. Moreover, reminiscent of the tactics used by the tobacco industry, the products themselves continue to change and evolve,⁴¹ unfettered by any regulations, making it difficult to know what exactly is in these products and how they impact public health.⁴²⁻⁴⁶

Some financial analysts estimate that U.S. sales of e-cigarettes are estimated to surpass \$10 billion by 2017.⁴⁷ This is reflected by national surveys showing increases in ever use of e-cigarettes. In just one year (2011 to 2012), ever e-cigarette use in youth and young adults (18-34) doubled - from 3.3% to 6.8%⁴⁸ and from 5.0% to 10.3%,⁴⁹ respectively. In adults overall, ever e-cigarette use nearly doubled, from 3.3% in 2010 to 6.2% in 2011.⁵⁰ Current e-cigarette use has also increased. From 2011-2012 among youth in grades 6-12, current e-cigarette use increased from 1.1% to 2.1%.⁴⁸ In adults, current e-cigarette use has increased from 1.2% in 2010⁵¹ to 1.9% in 2012.⁵² Existing national studies demonstrate rapid increases in ever use and current use of e-cigarettes in the U.S. They do not, however, demonstrate an age gradient in e-cigarette use and at present, data suggests that youth, young adults, and adults, overall, have a similarly low prevalence of current e-cigarette use at about 2%,^{48,52} with young adults more likely to report e-cigarette trial compared to older adults.⁵³

Current law restricts youth marketing of cigarettes and smokeless.^{54,55} Though, as FTC's Cigarette and Smokeless Reports show, there are many other ways the industry reaches its audience. Our research as well as others points out that e-cigarette companies are spending heavily on marketing and much of it is targeted to youth.

Recently, Legacy undertook two studies examining youth marketing of e-cigarettes and published a report entitled "Vaporized: E-cigarettes, advertising and youth," available for download on our website (http://legacyforhealth.org/content/download/4542/63436/version/1/file/LEG-Vaporized-E-cig_Report-May2014.pdf).⁵⁶ The first study surveyed youth and young adults using an online panel to measure their use and awareness of e-cigarettes and e-cigarette advertising. The second study analyzed media expenditure data to estimate whether e-cigarette advertising is reaching young people. Results of the first study indicated that awareness of e-cigarettes among young people in this study was nearly ubiquitous, ranging from 89% for 13-17 year olds to 94% for young adults aged 18-21. For current or ever traditional cigarette



smokers, awareness was even higher at over 95% among both youth and young adults. Similar levels of awareness held across racial and ethnic groups. Most respondents indicated they saw e-cigarette ads in the retail setting (convenience stores, supermarkets or gas stations) and our recent work highlights the penetrance of e-cigarette advertising in the point-of-sale environment.⁵⁷ There was also high awareness of television advertising of e-cigarettes, with 45% of 13-17 year olds reporting they saw TV ads always, most or some of the time. Additionally 43% of 13-17 year olds responded that they saw e-cigarette ads always, most or some of the time when they were online. The numbers were even higher for young adults.

The second study examined advertising expenditures and estimated audience exposure data for the 24 most popular brands of e-cigarettes from June to November of 2013 estimated by MediaCom, who obtained the data from paid subscriptions to proprietary data. This study highlights not only how much the e-cigarette industry may be spending on advertising overall, but also how much specific brands spent, on which channels they advertised, and who saw their ads. Overall, in that 6-month period, e-cigarette advertisers spent \$39 million. Magazine advertising received the largest amount of money from that – 58%. National television advertising came in second at 19%. In that June to November 2013 timeframe, the three biggest-spending brand names were blu, NJOY and FIN – accounting for 86% of the overall spending. By far, blu spent the most at \$22 million, with NJOY and FIN brands spending \$5.6 million and \$4.9 million respectively. VUSE, which was available only in Denver, CO as a test product during this time frame, spent \$1.4 million. It is important to note that

These findings highlight the potential of e-cigarette companies to drive the messages people see about these products and the rapidity with which youth and young adult exposure to these messages will occur if unrestricted. However, there were some limitations to the study, as outlined in the report. FTC's collection of sales and marketing data could minimize those limitations, and provide additional information with regard to the e-cigarette industry's tactics to attract users of its product – particularly those that are aimed at youth. For all these reasons, we strongly encourage FTC to begin collection and dissemination of sales and marketing data for e-cigarettes as soon as possible and continue to provide them on a regular basis.

Conclusion

The FTC Cigarette and Smokeless reports provide great utility in that they shed significant light on the tactics the industry employs to sell its deadly products. We do have concerns with FTC continuing to require and publish data on tar, nicotine and carbon monoxide yields without significant coordination with FDA to ensure that the information is not misunderstood or misleading. Finally we strongly urge FTC to regularly collect and report sales and marketing data on cigars and e-cigarettes – particularly as these products are currently unregulated by FDA. However, we would strongly encourage FDA and FTC to coordinate and produce similar reports once FDA does have authority over these products.

Sincerely,

M. David Dobbins
Chief Operating Officer

1. Federal Trade Commission. Supporting Statement: FTC Cigarette and Smokeless Tobacco Data Collection. Washington, DC.2011.
2. Federal Trade Commission. Cigars Should Have Health Warnings; FTC Says. 1999; <http://www.ftc.gov/news-events/press-releases/1999/07/cigars-should-have-health-warnings-ftc-says> Accessed October 9, 2014.
3. U.S. Department of Health and Human Services. *The health consequences of smoking - 50 years of progress: a report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014 2014.
4. U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2012 2012.
5. U.S. v. Philip Morris USA Inc., et al. 566 F.3d 1095. 1124. In: D.C. Cir. *cd*, ed. 130 S. Ct. 3501 (2010)2009.
6. Biener L, Bogen K, Connolly G. Impact of corrective health information on consumers' perceptions of "reduced exposure" tobacco products. *Tobacco control*. Oct 2007;16(5):306-311.
7. Shiffman S, Pillitteri JL, Burton SL, Rohay JM, Gitchell JG. Smokers' beliefs about "Light" and "Ultra Light" cigarettes. *Tobacco control*. 2001;10 Suppl 1:i17-23.
8. Cummings KM, Hyland A, Bansal MA, Giovino GA. What do Marlboro Lights smokers know about low-tar cigarettes? *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco*. Dec 2004;6 Suppl 3:S323-332.
9. Shiffman S, Pillitteri JL, Burton SL, Di Marino ME. Smoker and ex-smoker reactions to cigarettes claiming reduced risk. *Tobacco control*. Mar 2004;13(1):78-84.
10. Kozlowski LT, Goldberg ME, Yost BA, White EL, Sweeney CT, Pillitteri JL. Smokers' misperceptions of light and ultra-light cigarettes may keep them smoking. *American journal of preventive medicine*. Jul 1998;15(1):9-16.
11. Pederson LL, Nelson DE. Literature review and summary of perceptions, attitudes, beliefs, and marketing of potentially reduced exposure products: communication implications. *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco*. May 2007;9(5):525-534.
12. Hammond D. Tobacco packaging and labeling policies under the U.S. Tobacco Control Act: research needs and priorities. *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco*. January 2012;14(1):62-74.
13. Gallopel-Morvan K, Moodie C, Hammond D, Eker F, Beguinot E, Martinet Y. Consumer understanding of cigarette emission labelling. *European journal of public health*. June 2011;21(3):373-375.
14. O'Connor RJ, Kozlowski LT, Borland R, Hammond D, McNeill A. Relationship between constituent labelling and reporting of tar yields among smokers in four countries. *Journal of public health*. Dec 2006;28(4):324-329.
15. Cohen JB. Smokers' knowledge and understanding of advertised tar numbers: health policy implications. *American journal of public health*. Jan 1996;86(1):18-24.
16. Chapman S, Wilson D, Wakefield M. Smokers' understandings of cigarette yield labels. *The Medical journal of Australia*. Oct 20 1986;145(8):376-379.
17. Hammond D, White CM. Improper disclosure: tobacco packaging and emission labelling regulations. *Public Health*. July 2012;126(7):613-619.
18. Brown A, McNeill A, Mons U, Guignard R. Do smokers in Europe think all cigarettes are equally harmful? *European journal of public health*. February 2012;22 Suppl 1:35-40.
19. Pollay RW, T D. Marketing cigarettes with low machine measured yields. *Smoking and Tobacco Control Monograph 13: Risks associated with smoking cigarettes with low machine-measured yields of tar and nicotine*. Bethesda, MD: U.S. Department of Health and Human Services, Public Health Services, National Institutes of Health; National Cancer Institute;; 2001:199-233.
20. Gori GB. Consumer perception of cigarette yields: is the message relevant? *Regul Toxicol Pharmacol*. August 1990;12(1):64-68.
21. Devlin E, Eadie D, K A. Low tar product category. 2003.
<http://www.tobaccopapers.com/casestudies/index.htm#lowtarproduct>.
22. Environics Research Group. Toxics information on cigarette packaging: Results of a survey of smokers. 2003.
<http://www.tobaccolabels.ca/constitu/canada>.

23. O'Connor RJ, Kozlowski LT, Borland R, Hammond D, McNeill A. Relationship between constituent labelling and reporting of tar yields among smokers in four countries. *Journal of public health*. December 2006;28(4):324-329.
24. Bansal-Travers M, Hammond D, Smith P, Cummings KM. The impact of cigarette pack design, descriptors, and warning labels on risk perception in the U.S. *American journal of preventive medicine*. Jun 2011;40(6):674-682.
25. Hammond D, Parkinson C. The impact of cigarette package design on perceptions of risk. *Journal of public health*. Sep 2009;31(3):345-353.
26. Hammond D. Tobacco industry research on smoking and cigarette toxicity. *Lancet*. Jul 22 2006;368(9532):286.
27. Marian C, O'Connor RJ, Djordjevic MV, Rees VW, Hatsukami DK, Shields PG. Reconciling human smoking behavior and machine smoking patterns: implications for understanding smoking behavior and the impact on laboratory studies. *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*. Dec 2009;18(12):3305-3320.
28. US Department of Health and Human Services. *Risks associated with smoking cigarettes with low machine measured yields of tar and nicotine*. Bethesda, MD: US Department of Health and Human Services, Public Health Services, National Institutes of Health; National Cancer Institute;2001.
29. World Health Organization. Elaboration of guidelines for implementation of Article 11 of the Convention. 2008. http://apps.who.int/gb/fctc/PDF/cop3/FCTC_COP3_7-en.pdf.
30. McNeill A, Joossens L, M J. *Review of the implementation of the Tobacco Product Regulation Directive 2001/37/EC*. Commissioned by ASH London;March 2004.
31. Peters E. Numeracy and the perception and communication of risk. *Ann N Y Acad Sci*. April 2008;1128:1-7.
32. Peters E, Västfjäll D, Slovic P, Mertz CK, Mazzocco K, Dickert S. Numeracy and decision making. *Psychol Sci*. May 2006;17(5):407-413.
33. Reyna VF, Nelson WL, Han PK, Dieckmann NF. How numeracy influences risk comprehension and medical decision making. *Psychol Bull*. November 2009;135(6):943-973.
34. Federal Trade Commission. FTC Requires Cigar Companies to Supply Data on Cigar Sales and Advertising Expenditures. 1998; <http://www.ftc.gov/news-events/press-releases/1998/02/ftc-requires-cigar-companies-supply-data-cigar-sales-and>. Accessed 10/10/2014.
35. Nonnemaker J, Rostron B, Hall P, MacMonegle A, Apelberg B. Mortality and Economic Costs From Regular Cigar Use in the United States, 2010. *American journal of public health*. Jul 17 2014:e1-e6.
36. Corey CG, King BA, Coleman BN, et al. Little Filtered Cigar, Cigarillo, and Premium Cigar Smoking Among Adults - United States, 2012-2013. *MMWR. Morbidity and mortality weekly report*. Aug 1 2014;63(30):650-654.
37. Centers for Disease Control and Prevention. Consumption of cigarettes and combustible tobacco--United States, 2000-2011. *MMWR. Morbidity and mortality weekly report*. Aug 3 2012;61(30):565-569.
38. Substance Abuse and Mental Health Services Administration. *Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-46, HHS Publication No. (SMA) 13-4795. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2013.
39. Kann L, Kinchen S, Shanklin SL, et al. Youth risk behavior surveillance - United States, 2013. *Morbidity and mortality weekly report. Surveillance summaries (Washington, D.C. : 2002)*. Jun 13 2014;63 Suppl 4:1-168.
40. Cantrell J, Kreslake JM, Ganz O, et al. Marketing little cigars and cigarillos: advertising, price, and associations with neighborhood demographics. *American journal of public health*. Oct 2013;103(10):1902-1909.
41. Bonvin B, Peitsch M, de Wilde F. Reduced-Risk Products. Paper presented at: Philip Morris International Investor Day 20142014; Lausanne, Switzerland.
42. Williams M, Talbot P. Variability among electronic cigarettes in the pressure drop, airflow rate, and aerosol production. *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco*. Dec 2011;13(12):1276-1283.
43. Foulds J, Veldheer S, Berg A. Electronic cigarettes (e-cigs): views of aficionados and clinical/public health perspectives. *International journal of clinical practice*. Oct 2011;65(10):1037-1042.
44. Dawkins L, Turner J, Roberts A, Soar K. 'Vaping' profiles and preferences: an online survey of electronic cigarette users. *Addiction (Abingdon, England)*. Jun 2013;108(6):1115-1125.

45. Cobb NK, Byron MJ, Abrams DB, Shields PG. Novel nicotine delivery systems and public health: the rise of the "e-cigarette". *American journal of public health*. Dec 2010;100(12):2340-2342.
46. Trtchounian A, Talbot P. Electronic nicotine delivery systems: is there a need for regulation? *Tobacco control*. Jan 2011;20(1):47-52.
47. Herzog B, Gerberi J. *Equity Research: E-Cigs Revolutionizing the Tobacco Industry*. Wells Fargo Securities, LLC Equity Research Department;2013.
48. Centers for Disease Control and Prevention. Notes from the field: electronic cigarette use among middle and high school students - United States, 2011-2012. *MMWR. Morbidity and mortality weekly report*. Sep 6 2013;62(35):729-730.
49. Richardson A, Williams V, Rath J, Villanti AC, Vallone D. The Next Generation of Users: Prevalence and Longitudinal Patterns of Tobacco Use Among US Young Adults. *American journal of public health*. Aug 2014;104(8):1429-1436.
50. King BA, Alam S, Promoff G, Arrazola R, Dube SR. Awareness and ever-use of electronic cigarettes among u.s. Adults, 2010-2011. *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco*. Sep 2013;15(9):1623-1627.
51. Regan AK, Promoff G, Dube SR, Arrazola R. Electronic nicotine delivery systems: adult use and awareness of the 'e-cigarette' in the USA. *Tobacco control*. Jan 2013;22(1):19-23.
52. Agaku IT, King BA, Husten CG, et al. Tobacco Product Use Among Adults—United States, 2012–2013. *MMWR. Morbidity and mortality weekly report*. 2014;63(25):542-547.
53. 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*. Sep 2012;102(9):1758-1766.
54. Family Smoking Prevention and Tobacco Control Act. *Public Law No: 111-31*. Vol HR 12562009.
55. National Association of Attorneys General. Master Settlement Agreement. 1998;
<http://publichealthlawcenter.org/sites/default/files/resources/master-settlement-agreement.pdf>.
56. American Legacy Foundation. Vaporized: E-cigarettes, advertising and youth. 2014;
http://legacyforhealth.org/content/download/4542/63436/version/1/file/LEG-Vaporized-E-cig_Report-May2014.pdf. Accessed May 14, 2014.
57. Ganz O, Cantrell J, Moon-Howard J, Aidala A, Kirchner TR, Vallone D. Electronic cigarette advertising at the point-of-sale: a gap in tobacco control research. *Tobacco control*. Mar 11 2014.