



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30341-3724

**TESTIMONY ON THE SCIENTIFIC EVIDENCE ON TOBACCO RETAIL LICENSURE AND
THE IMPACT OF THE RETAIL POINT OF SALE**

**TIM MCAFEE, MD, MPH
SENIOR MEDICAL OFFICER
OFFICE ON SMOKING AND HEALTH
NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION
U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION**

**OREGON STATE SENATE
SALEM, OREGON
APRIL 8, 2015**

Thank you for the opportunity to submit testimony today about the scientific evidence and public health impact of tobacco retail licensure and the retail point of sale. I am Dr. Tim McAfee, Senior Medical Officer to the Centers for Disease Control and Prevention's (CDC) Office on Smoking and Health. I have over twenty years of tobacco control experience and served as the Director of the office at CDC that leads national comprehensive tobacco control approaches for over four years. Before coming to CDC in 2010, I also served as Chief Medical Officer for Free & Clear (now Alere Health), a Seattle-based company that specializes in telephone- and web-based programs to improve health, which has supplied quitline services to the State of Washington. I also served as Director of Washington State's Group Health Center for Health Promotion from 1997 to 2003 in Seattle, Washington. I also practiced as a family physician for over a decade and am an affiliate faculty member at the University of Washington's School of Public Health. I have served as a principal investigator and scientist on numerous research studies, am an author on over 100 scientific papers, and authored the World Health Organization's quitline manual for low- and middle-income countries. I am drawing upon my decades of experience in evidence-based tobacco prevention and control efforts and my current position at the nation's leading public health agency to inform today's discussion.

For the record, I am submitting expert witness testimony today at the request of Oregon Senator Elizabeth Steiner Hayward to discuss the evidence surrounding the retail environment and tobacco control. Specifically, I will be speaking about tobacco retail licensure and marketing in the retail environment, including price discounts and promotions. Also for the record, this testimony is not for or against any specific legislative proposal.

The Public Health Burden of Tobacco Use

Cigarette smoking and exposure to secondhand smoke are responsible for more than 480,000 deaths each year in this country—or about one in every five deaths—making smoking the single most preventable cause of death and disease in the United States.¹ Since the publication of the first Surgeon General's report on the health effects of smoking in 1964, cigarette smoking has been causally linked to diseases of nearly all organs of the body.¹ And since 1964, more than 20 million premature deaths can be attributed to cigarette smoking.¹

The effects of tobacco use on health are profound. Cigarette smokers cut over 10 years of their life expectancy as a result of smoking, meaning they are likely to die 10 years earlier than if they had not started smoking.² Non-smokers are twice as likely to live to age 80 compared to smokers.² In other words, smoking is not just killing people at the end of their lives, but killing them in middle age. In Oregon an estimated 5,500 adults die from cigarette smoking every year.³ Furthermore, 68,300 Oregon youth that are currently younger than 18 years of age are projected to die early from tobacco use if the status quo remains unchanged.¹

In addition to this enormous health burden, smoking also imposes a major economic burden on society, costing the nation more than \$300 billion each year, including nearly \$170 billion for direct medical care of adults, more than \$156 billion for lost productivity due to premature death, and \$5.6 billion for lost productivity due to secondhand smoke exposure.^{1,4} Specifically, smoking costs Oregon over \$1.5 billion a year in medical costs alone.¹

The Impact of Price on Tobacco Use

We know what works to reduce the burden of tobacco use. The Institute of Medicine, Surgeon General, and World Health Organization all agree that increasing the price of tobacco products is one of the most effective ways to reduce tobacco consumption.^{1,5,6} Raising the price of tobacco products reduces tobacco

consumption and prevents initiation.^{7,8,9} Raising prices also encourages cessation and prevents relapse, leading to improvements in health outcomes.⁷

Specifically, the 2000 report of the U.S. Surgeon General, *Reducing Tobacco Use*, concluded that a 10 percent increase in the price of cigarettes is associated with a 3–5 percent reduction in cigarette consumption—and this reduction can be even greater among youths and other price-sensitive groups, such as low-income populations.^{1,10,11,12}

However, the Surgeon General’s 2014 report, *The Health Consequences of Smoking—50 Years of Progress*, states that tobacco industry has developed “extremely sophisticated” ways to mitigate the effects of price increases to tobacco products, including Web-based, mail-order, brand repositioning, and store-based discounting timed to scheduled price increases.^{1,13} After the 1998 Master Settlement Agreement, tobacco manufacturers shifted their marketing approach from traditional media advertising to price-related promotions.^{7,14,15,16,17} These pricing promotions currently include incentive payments for tobacco retailers and wholesalers to reduce the price of cigarettes to customers (known as buy-downs or off-invoice discounts), coupons, and retail value-added promotions (e.g., buy one, get one free offers).¹ In 2012, the most recent year for which data are available from the Federal Trade Commission, the tobacco industry spent \$7.8 billion out of a \$9.17 billion marketing budget, or 85.1 percent of their marketing budget, on price discounts for cigarettes.¹⁸

Tobacco Retailers in the United States

There are approximately 375,000 tobacco retailers in the United States—or, for every one McDonald’s in the United States, there are 27 tobacco retailers.¹⁹ Given that an estimated one in four adults currently uses tobacco products, this number is excessive relative to consumer demand.^{19,20} In the contiguous United States, there are 15 tobacco retailers for every 10,000 residents, and 69 tobacco retailers for every 10,000 school-aged youth (between age 5 and 17).¹⁹ In contrast, there are only 24 physicians for every 10,000 Americans.²¹

To compare these numbers with other types of retailers, in California, for instance, for every 10,000 consumers, there are approximately 4 gas stations, 14 off-premise liquor stores, and 96 tobacco retailers.¹⁹

Tobacco retailers are also heavily concentrated in high-population areas.¹⁹ Approximately 70 percent of tobacco retailers are located within 1,000 feet of one another, or less than 2 blocks apart.¹⁹

Why the Retail Environment Matters

The location and density of tobacco retailers affects social norms, signaling that tobacco use is more prevalent and socially acceptable than it really is—especially among youth.⁷ In 2012, the Surgeon General found that, “neighborhoods that are more densely populated with stores selling tobacco may promote adolescent smoking not only by increasing access but also by increasing environmental cues to smoke.”⁷ Studies have found that the density of tobacco outlets in high school neighborhoods is related to experimental smoking, and that youth living in areas with the highest density of retail tobacco outlets were more likely to have smoked cigarettes in the past month than those in areas of the lowest density of outlets.⁷

Tobacco retailer locations also tend to be concentrated in certain areas, especially areas with high population density.¹⁹ Inequities in tobacco retailer concentration in certain communities are believed to contribute to the racial and socioeconomic disparities in tobacco use.^{19,22,23} For instance, research demonstrates that tobacco retailer density is strongly associated with the percent of households in a community that receive public assistance, as well as counties with a higher proportion of African-

American residents, a higher proportion of residents living in a rural area, and a lower proportion of youth under age 18.¹⁹ This has a direct impact on our children and their future health; in Chicago, youth in areas with the highest density of retail tobacco outlets were 13 percent more likely to have smoked cigarettes in the past month than those living in areas with the lowest density of outlets—and therefore more likely to become regular smokers.²⁴

Furthermore, proximity to tobacco retail outlets and higher retail density is associated with increased tobacco consumption and decreased quit attempts for cigarette smokers who want to quit.^{19,23,25}

The Role of Licensing Tobacco Retailers

Requiring a license for tobacco retailers ensures that states and localities know who is selling tobacco products in their jurisdiction, thus allowing states and localities to enact and enforce policies.⁵

The 2007 Institute of Medicine report, *Ending the Tobacco Problem*, recommends requiring state licensing of all retail outlets that sell tobacco products.⁵ The Institute of Medicine found that licensure enhances enforcement of key tobacco control policies, such as verifying the age of purchasers, banning the use of self-services displays and vending machines (where appropriate), and selling products only in a face-to-face exchange.⁵

Furthermore, in 2012, the Surgeon General found that “research supports the policy option of regulatory control over the retail tobacco environment. Studies show that tobacco use is associated with both exposure to retail advertising, and relatively easy access to tobacco products.”⁷ Such controls could include restricting the number and location of tobacco retail outlets (through licensing, for example) and nontransferable retail licenses that could be revoked for noncompliance with laws (for instance, illegal sales to minors).⁷

The 2014 Surgeon General’s report reiterated these findings, noting that some states have improved enforcement of sales to minors’ restrictions, including revoking store licenses for retailers that violate laws and sell to minors.¹ The Surgeon General also noted that state experience with improving tobacco licensure management can enhance revenue collection from tobacco taxes, as well as minimize tax avoidance and evasion.¹ Maintaining high prices of tobacco products is a key way to reduce initiation and encourage quitting, especially among price-sensitive populations such as youth.¹

What States and Communities Have Done to License Tobacco Product Retailers

As of February 2015, 36 states require retailers that sell tobacco products, both over-the-counter and through tobacco vending machines, to have a license.²⁶ One state (Idaho) requires a license for over-the-counter tobacco retailers only, and 5 states (Illinois, Kentucky, Michigan, North Carolina, and South Carolina) require a license for vending machine retailers only.²⁶ Nine states, including Oregon, do not require tobacco retailers to be licensed to sell tobacco products.²⁶⁶

This count of states with licensing laws does not, however, account for nuances between state licensing provisions, including enforcement provisions. These nuances can be important indicators of the effectiveness of licensing policies for youth tobacco prevention. For example, policies that allow for more frequent renewals enable states and localities to obtain important information on tobacco retailers and to make changes to licensure structure if required.

States and localities have also implemented policies that tie tobacco retail licenses to policy enforcement.¹⁹ For instance, the U.S. Food and Drug Administration limits the sale of certain tobacco products as part of the Family Smoking Prevention and Tobacco Control Act, such as single cigarettes or

cigarettes through self-service displays. Tying a license to the enforcement of these and other state and local tobacco control provisions can help enhance retailer compliance and prevent violations of the law.¹⁹

States have also implemented laws that suspend or revoke tobacco retailer licenses for violations of certain laws, including illegal sales to minors.¹⁹ Currently, 27 states have laws that require either license revocation or suspension if a retailer violates the law.²⁶ Six states have laws that revoke tobacco retailer licenses for violations, and 2 states have laws that suspend tobacco retailer licenses for violations only.²⁶

Appropriate licensing fees that adequately reflect the administration, implementation, and enforcement of the retailer license are another potential approach.¹⁹ All but 4 states that require retailer licenses require a license fee.²⁶ Currently, there is also a wide range in licensing fees across states that do require tobacco retail licensure.²⁶ Maximum license fees range from \$5 in Delaware and Montana to \$230 in Maryland.²⁶⁶

These strengthened licensure provisions for tobacco retailers are also akin to how many states regulate the sale of other products, such as alcohol and, in some states, marijuana.²⁷ Despite the fact that tobacco use remains the leading cause of preventable death and disease in this country, enhanced tobacco licensure is often underutilized in comparison to the regulation of other substances. As an example, in Oregon, while tobacco retailers are not currently required to have a license to sell tobacco products, an off-premises sales license to sell malt beverages, wine, and hard cider at retail is currently \$100, renewed annually.^{28,29} Furthermore, although Oregon's licensure for recreational marijuana retail sales is still in development, annual license fees are preliminarily set at \$1,000.³⁰

It is important to note that the tobacco product landscape is continuously changing. For instance, the use of electronic nicotine delivery systems, including e-cigarettes, e-hookahs, hookah pens, vape pens, and e-cigars, has grown substantially in recent years.¹ This includes the over 250,000 youth that had never smoked a conventional cigarette, but reported using e-cigarettes as of 2013.³¹

Electronic nicotine delivery systems (ENDS) are currently not regulated by the U.S. Food and Drug Administration (FDA) under the Family Smoking Prevention and Tobacco Control Act, although FDA issued a proposed rule in April 2014 to regulate them under its tobacco product authorities.³² FDA's current authority, however, does not extend to certain key policy interventions, such as retailer licensure.³³

Addressing Tobacco Retailer Density

As noted above, high tobacco retailer density is a public health concern, as it is associated with higher youth initiation of tobacco use, increased tobacco consumption, and lower likelihood of successful quitting.^{7,25} Therefore, the Surgeon General found in 2012 that, "the number and location of stores that sell cigarettes must be considered."⁷ The Institute of Medicine noted that "retailer density can be controlled directly by the licensing body either by limiting the total number of licenses distributed or by limiting the density of licenses within geographic areas."⁵ The Institute of Medicine also made the recommendation that "state governments should develop and, if feasible, implement and evaluate legal mechanisms for restructuring retail tobacco environments and restricting the number of tobacco outlets."⁵

Reducing tobacco retailer density may also help reduce the alarming health disparities in tobacco use and tobacco-related diseases.¹⁹ A number of communities in California have taken this approach, by limiting the number of tobacco retailer licenses issued annually or not renewing a certain number of retailer licenses.¹⁹ Santa Clara, California has also implemented a minimum distance requirement between tobacco retail outlets.¹⁹ These communities are presently evaluating the impact of these policy approaches to reduce tobacco retailer density.

Addressing Tobacco Retailer Locations

Some states and localities have limited the number of tobacco retail outlets, especially in proximity to places where youth frequent, such as schools, parks, libraries, and playgrounds.¹⁹ Communities have also used zoning regulations to prevent the sale of tobacco products in certain areas, such as residential areas.¹⁹ Examples of these communities include Santa Clara, Santa Barbara, and Baldwin Park, California, and New Orleans, Louisiana.¹⁹

Addressing the Redemption of Tobacco Product Discounts and Promotions

The 2012 U.S. Surgeon General's report found that in recent years, the pricing of tobacco products has become a key marketing strategy for the tobacco industry.⁷ "Price-reducing promotions have been the primary means of price competition among manufacturers, and there is evidence that these promotions have been targeted to specific brands or venues that are more important to young people."⁷ Discounts such as direct mail coupons, point-of-sale coupons, and "buy some, get some" offers are particularly appealing to young people.³⁴ One study found that 35 percent of cigarette smokers ages 18 to 24 reported that they "always" take advantage of discount and multi-pack coupons when purchasing cigarettes.³⁴ Adult heavy smokers who smoke 15 cigarettes or more a day are also much more likely to use price-minimization strategies, including discounts, rather than quitting.¹³

These promotions undermine the effectiveness of a powerful policy lever to stop youth and young adults from starting or continuing to use tobacco. Researchers estimate that if price promotions, such as discounts and couponing, were eliminated throughout the United States, the number of current, established smokers would decrease by over 13 percent.³⁵ As a result, the U.S. Surgeon General concluded that "the industry's extensive use of price-reducing promotions has led to higher rates of tobacco use among young people than would have occurred in the absence of these promotions".⁷

Some communities have implemented policies that prohibit the redemption of tobacco product discounts and coupons at retailers in their jurisdiction—specifically, New York, New York and Providence, Rhode Island. Courts have found that this authority is explicitly reserved to states and communities in the Family Prevention and Tobacco Control Act.^{36,37} Evaluations of the impact of these policies on health outcomes are ongoing.

Tobacco Marketing in the Retail Environment

In addition to tobacco retailer density and location, as well as price promotions and discounts, marketing in the retail environment, or at the "point of sale," is also of public health concern. The 2012 Surgeon General's report found that tobacco marketing at the point of sale is associated with youth tobacco use, and retail marketing is an important channel for tobacco companies with very few restrictions, making consumers—including children—unavoidably exposed to pro-smoking messages when they shop or pass by stores.⁷ In 2012, the most recent year for which data are available from the Federal Trade Commission, the tobacco industry spent \$26 million a day on marketing and promotion of cigarettes and smokeless tobacco, and 85% of those marketing and promotion dollars were spent at the point of sale.^{38,39}

Furthermore, the Surgeon General found that, "because tobacco companies use powerful financial incentives to influence the retail environment, voluntary strategies may prove ineffective in reducing youth and young adult exposure to retail tobacco marketing."⁷

There are a number of examples that illustrate the relationship between retail marketing and youth tobacco initiation and use. For instance, cigarettes are sold in convenience stores more than any other types of stores, and about 70 percent of adolescents shop in convenience stores at least weekly.⁷

Convenience stores also have more tobacco advertising and promotions than any other type of store, which increases the likelihood of exposing children and youth to pro-tobacco messages while they are shopping, which can affect initiation rates among those exposed, particularly if the stores are near schools.⁷

A growing body of evidence has also found relationships between exposure of youth to tobacco marketing in stores and experimentation with smoking.⁷ Frequent exposure to retail marketing has been associated with a significant increase in the odds of ever smoking.⁷ A 2010 longitudinal study of adolescents aged 11 to 14 years found that the odds of initiating smoking more than doubled for adolescents reporting that they visited the types of stores that contain the most cigarette advertising (convenience stores, liquor stores, small grocery stores) two or more times a week.⁷ This was the first longitudinal study to document that exposure to cigarette advertising is a risk factor for initiation of smoking.⁷

A systematic review of studies on the impact of tobacco promotion at the point-of-sale also found a consistent association between exposure to point-of-sale tobacco promotions and initiation of smoking or susceptibility to that behavior.⁷

Given this scientific justification, some states and localities have implemented policies that aim to reduce the influence of retail marketing, especially among youth.¹⁹ For instance, St. Paul, Minnesota adopted a content-neutral advertising ordinance to regulate the amount of window space that can be covered by signs at local businesses.¹⁹ This new requirement promoted safety by ensuring the clerk and interior of the store are visible from the outside, enhanced neighborhood beauty by reducing cluttered storefronts, and reduced the amount of tobacco product advertising in communities.¹⁹ New York state also conducted an education campaign to increase public awareness about the quantity and impact of tobacco marketing on youth tobacco use rates, highlighting that “kids who see tobacco marketing are more likely to smoke.”¹⁹

Again, with tobacco retail marketing, it is important to consider parallel approaches to marketing in alcohol and marijuana. For instance, Oregon’s Measure 91, which addresses the sale of recreational marijuana, gives the Oregon Liquor Control Commission the authority to, “regulate and prohibit any advertising by manufacturers, processors, wholesalers or retailers of marijuana items by the medium of newspapers, letters, billboards, radio or otherwise.”⁴⁰

Conclusion

The retail environment is a critical component in efforts to reduce the death and disease caused by tobacco use. There are hundreds of thousands of tobacco retailers in this country, and their proliferation make it harder for tobacco users to quit.¹⁹ They also make it more likely that children will start to smoke.⁷ Research supports licensing tobacco retailers and limiting retailer density and proximity to youth-oriented places. Research also supports states and communities taking steps to reduce the amount of tobacco marketing at the point-of-sale, including reducing price promotions and discount redemption.

¹ 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: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Printed with corrections, January 2014.

² Clarke R, Emberson J, Fletcher A, Breeze E, Marmot M, Shipley MJ. Life expectancy in relation to cardiovascular risk factors: 38 year follow-up of 19,000 men in the Whitehall study. *BMJ* 2009;339:b3513.

-
- ³ Centers for Disease Control and Prevention. *Best Practices for Comprehensive Tobacco Control—2014*. Atlanta, GA: Centers for Disease Control and Prevention, 2014.
- ⁴ Xu X, Bishop EE, Kennedy SM, Simpson SA, Pechacek TF. Annual healthcare spending attributable to cigarette smoking: an update. *American Journal of Preventive Medicine* 2014; pii:S0749–3797(14)00616-3.
- ⁵ Institute of Medicine. *Ending the Tobacco Problem: A Blueprint for the Nation*. Washington, DC: The National Academies Press, 2007.
- ⁶ World Health Organization. *WHO Report on the Global Tobacco Epidemic, 2008—The MPOWER package*. Geneva, Switzerland: World Health Organization, 2008.
- ⁷ U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012.
- ⁸ Chaloupka FJ, Straif K, Leon ME. Effectiveness of tax and price policies in tobacco control. *Tobacco Control* 2011;20(3):235–8.
- ⁹ International Agency for Research on Cancer. *Effectiveness of Tax and Price Policies for Tobacco Control*. IARC Handbooks of Cancer Prevention, Volume 14. 2011.
- ¹⁰ U.S. Department of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.
- ¹¹ U.S. Task Force on Community Preventive Services. *Reducing Tobacco Use and Secondhand Smoke Exposure: Interventions to Increase the Unit Price for Tobacco Products*. Atlanta, GA: Task Force on Community Preventive Services, 2012.
- ¹² Chaloupka FJ. Macro-social influences: the effects of prices and tobacco control policies on the demand for tobacco products. *Nicotine and Tobacco Research* 1999;1(Suppl 1):S105–9.
- ¹³ Xu X, Pesko MF, Tynan MA, Gerzoff RB, Malarcher AM, Pechacek TF. Cigarette price-minimization strategies by U.S. smokers. *American Journal of Preventive Medicine* 2013;44(5):472–6.
- ¹⁴ Chaloupka FJ. Why is tobacco price manipulation a problem? In *Tobacco Retail Price Manipulation Policy Strategy Summit Proceedings* 3, 5 (May 29–30, 2008), available at: <http://www.cdph.ca.gov/programs/tobacco/documents/ctcpricestrategysummit2009.pdf>. Accessed December 16, 2014.
- ¹⁵ Loomis BR, Farrelly MC, Mann NH. The association of retail promotions for cigarettes with the Master Settlement Agreement, tobacco control programmes and cigarette excise taxes. *Tobacco Control* 2006, 15(6):458–463.
- ¹⁶ Ruel E, Mani N, Sandoval A, Terry-McElrath YM, Slater SJ, Tworek C, Chaloupka FJ. After the Master Settlement Agreement: trends in the American tobacco retail environment from 1999 to 2002. *Health Promotions Practice* 2004;5(3):99S–110S.
- ¹⁷ Wakefield MA, Terry-McElrath YM, Chaloupka FJ, Barker DC, Slater SJ, Clark PI, Giovino GA. Tobacco industry marketing at point of purchase after the 1998 MSA billboard advertising ban. *American Journal of Public Health* 2002, 92(6):937–940.
- ¹⁸ Federal Trade Commission. *Federal Trade Commission Cigarette Report for 2012* (2015), available at: <https://www.ftc.gov/reports/federal-trade-commission-cigarette-report-2012>. Accessed April 3, 2015.
- ¹⁹ Center for Public Health Systems Science. *Point-of-Sale Report to the Nation: The Tobacco Retail and Policy Landscape*. St. Louis, MO: Center for Public Health Systems Science at the Brown School at Washington University in St. Louis and the National Cancer Institute, State and Community Tobacco Control Research Initiative, 2014.
- ²⁰ Agaku IT, King BA, Husten CG, Bunnell R, Ambrose BK, Hu SS, Holder-Hayes E, Day HR. Tobacco product use among adults—United States, 2012–2013. *Morbidity and Mortality Weekly Report* 2014;63(25):542–7.
- ²¹ Kaiser Family Foundation. Physicians (per 10,000 population). Available at: <http://kff.org/global-indicator/physicians/> (accessed February 24, 2015).
- ²² Loomis BR, Kim AE, Goetz JL, Juster HR. Density of tobacco retailers and its association with sociodemographic characteristics of communities across New York. *Public Health* 2013;127(4):333–8.
- ²³ Henriksen L, Feighery EC, Schleicher NC, Cowling DW, Kline RS, Fortmann SP. Is adolescent smoking related to the density and proximity of tobacco outlets and retail advertising near schools? *Preventive Medicine* 2008;47(2):210–4.

-
- ²⁴ Novak SP, Reardon SF, Raudenbush JW, Buka SL. Retail tobacco outlet density and youth cigarette smoking: a propensity-modeling approach. *American Journal of Public Health* 2006;96(4):670–6.
- ²⁵ Chuang YC, Cubbin C, Ahn D, Winkleby MA. Effects of neighborhood socioeconomic status and convenience store concentration on individual level smoking. *Journal of Epidemiology and Community Health* 2005;59(7):568–73.
- ²⁶ Centers for Disease Control and Prevention. State Tobacco Activities Tracking and Evaluation System. Available from: <http://apps.nccd.cdc.gov/statesystem/Default/Default.aspx>. Accessed December 17, 2014.
- ²⁷ Guide to Community Preventive Services. The effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol-related harms. *American Journal of Preventive Medicine* 2009;37(6):556–9.
- ²⁸ Or. Rev. Stat. § 471.186 (2013).
- ²⁹ Oregon Liquor Control Commission. [Off-Premises Sales License](#). Accessed February 10, 2015.
- ³⁰ Oregon Measure 91, § 28 (2014)
- ³¹ Bunnell RE, Agaku IT, Arrazola R, Apelberg BJ, Caraballo RS, Corey CG, Coleman B, Dube SR, King BA. Intentions to smoke cigarettes among never-smoking U.S. middle and high school electronic cigarette users, National Youth Tobacco Survey, 2011–2013. *Nicotine and Tobacco Research* 2014; doi: 10.1093/ntr/ntu166.
- ³² Food and Drug Administration (2014). “Deeming Tobacco Products To Be Subject to the Federal Food, Drug, and Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act; Regulations on the Sale and Distribution of Tobacco Products and Required Warning Statements for Tobacco Products; Proposed Rule.” 79 Federal Register 80 (25 April 2014), pp. 23142–23207.
- ³³ Pub. L. 111–31 (2009).
- ³⁴ White VM, White MM, Freeman K, Gilpin EA, Pierce JP. Cigarette promotional offers: who takes advantage? *American Journal of Preventative Medicine* 2006;30(3):225–231.
- ³⁵ Slater SJ, Chaloupka FJ, Wakefield M, Johnston LD, O’Malley PM. The impact of retail cigarette marketing practices on youth smoking uptake. *Archives of Pediatric and Adolescent Medicine* 2007;161(5):440–445.
- ³⁶ *National Association of Tobacco Outlets, Inc. v. City of New York*, 1:14-cv-00577 (2014)
- ³⁷ *National Association of Tobacco Outlets, Inc. v. City of Providence*, 731 F.3d 71 (1st Cir. 2013)
- ³⁸ Federal Trade Commission. *Federal Trade Commission Cigarette Report for 2012* (2015), available at: <https://www.ftc.gov/reports/federal-trade-commission-cigarette-report-2012>. Accessed April 3, 2015.
- ³⁹ Federal Trade Commission. *Federal Trade Commission Smokeless Tobacco Report for 2012* (2015), available at: <https://www.ftc.gov/reports/federal-trade-commission-smokeless-tobacco-report-2012>. Accessed April 3, 2015.
- ⁴⁰ Oregon Measure 91, § 7 (2014)