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Going Too Far?
Exploring the Limits of Smoking Regulation

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EXPLORING THE LIMITS OF SMOKING REGULATION

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"Neither are we troubled by the question where to draw the line. That is the question in pretty much everything worth arguing in the law . . . ."[1] -Oliver Wendell Holmes

Justice Oliver Wendell Holmes was never one to agonize over legal line-drawing. For the rest of us, however, the demarcation between necessary regulation and government overreaching can sometimes be difficult to trace. Almost by definition, measures that test the limits of government's role tend to be controversial. Certainly this is true when it comes to the regulation of smoking. Of course, public health law is no stranger to controversy; tobacco control, in particular, is steeped in it. Tobacco control measures that undoubtedly advance the aggregate health of the community often stand in tension with individual claims to liberty, autonomy, and other constitutionally protected interests. Even where legal tensions are absent, and where legislative intervention is solidly supported by medical evidence, measures perceived as "going too far" may hold the potential to trigger public backlash against all regulation. Whether some recent proposals for smoke-free regulation have crossed this line was the subject of a thought-provoking symposium convened by the Tobacco Control Legal Consortium at William Mitchell College of Law on October 23, 2007. The five papers that follow reflect the diversity of opinions exchanged during the course of lively debate and discussion.

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1. Irwin v. Gavit, 268 U.S. 161, 168 (1925).

I. SYMPOSIUM BACKGROUND

Over the last ten years, as medical evidence of the dangers of secondhand smoke has mounted,[2] smoke-free laws have proliferated across the United States and around the world.[3] Today, more than 60% of the U.S. population is protected by laws eliminating smoking in indoor workplaces, including restaurants, and almost 50% of Americans live in communities where even bars are smoke-free.[4] Many Americans are surprised to learn that these laws reflect an accelerating global trend: more than a dozen countries, including France, Ireland, Italy, Norway, Sweden, Thailand, Turkey, the United Kingdom, and Uruguay, have already adopted strong smoke-free laws, as have most Canadian provinces, most Australian states, and cities from Mexico City to Hong Kong.[5]

In the United States and elsewhere, a growing number of jurisdictions are beginning to expand the scope of regulation and to consider enforcing smoke-free policies in areas previously regarded as off-limits: outdoor dining areas of restaurants and bars; public parks, beaches and golf courses; multi-unit residential housing; and motor vehicles.[6] In employment settings, some companies have imposed higher health insurance premiums on

2. The U.S. Environmental Protection Agency, the National Toxicology Program, the International Agency for Research on Cancer, and the U.S. Surgeon General have all designated secondhand smoke as a known human carcinogen, or cancer causing agent. *See, e.g.*, U.S. DEP'T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF INVOLUNTARY EXPOSURE TO TOBACCO SMOKE: A REPORT OF THE SURGEON GENERAL 6, 29–33, 576 (2006), *available at* http://www.surgeon general.gov/library/secondhandsmoke/report/.

3. *See* Americans for Nonsmokers Rights Foundation, Summary of 100% Smokefree State Laws and Population Protected by 100% U.S. Smokefree Laws 1, 1–2 (Apr. 1, 2008), *available at* http://www.no-smoke.org/pdf/SummaryUSPop List.pdf.

4. *Id.* at 1 (stating that 49% of Americans live in communities that prohibit smoking in bars).

5. *See* Campaign for Tobacco Free Kids, Int'l Resource Ctr., *Smoke-Free Laws*, http://tobaccofreecenter.org/smoke_free_laws (last visited Apr. 21, 2008); GlobalSmokefreePartnership, *Smokefree Progress: An Overview of Smokefree Laws Around the World*, http://tobaccofreecenter.org/files/pdfs/SF_world_overview.pdf (last visited Apr. 21, 2008).

6. *See* Americans for Nonsmokers Rights Foundation, Summary of 100% Smokefree Beaches (Apr. 1, 2008), *available at* http://www.no-smoke.org/pdf/ SmokefreeBeaches.pdf; Americans for Nonsmokers Rights Found., Summary of 100% Smokefree Outdoor Dining Areas (Apr. 1, 2008), *available at* http://www.no-smoke.org/pdf/SmokefreeOutdoorDining.pdf; Americans for Nonsmokers Rights Foundation, Summary of 100% Smokefree Parks (Apr. 1, 2008), *available at* http://www.no-smoke.org/pdf/SmokefreeParks.pdf.

employees who smoke, while others have adopted policies prohibiting employees from smoking, even off the job.[7]

Not all members of the public health community have welcomed these new measures as inevitable, necessary, or even appropriate. In fact, many thoughtful and respected tobacco control experts believe that prohibiting cigarette smoking on a public beach or in a private apartment goes too far in regulating the use of a product that is undeniably deadly, but that is nevertheless used by one of every five American adults.[8] In 2007, recognizing that these new initiatives were beginning to spark debate around the world, the Tobacco Control Legal Consortium, headquartered at William Mitchell College of Law, organized a forum for leaders in tobacco control policy to exchange views on this issue in a structured format to identify the key points of consensus and disagreement. The Legal Consortium, a network of legal resource centers supporting tobacco control policy change throughout the United States, was a natural sponsor for such an event. In addition to helping officials throughout the country develop and defend effective public health policies, the Consortium serves as a nationally-recognized think tank, conducting legal and policy research and developing publications on emerging legal issues.

The Legal Consortium's symposium, *"Going Too Far? Exploring the Limits of Smoking Regulation,"* was held at William Mitchell on October 23, 2007. The symposium was timed to coincide with the National Conference on Tobacco or Health, held in Minneapolis, Minnesota, on October 24–26, 2007, which enabled experts from around the country to participate. The interactive symposium was designed to allow attendees to improve their understanding of divergent views about the impact of expansive new smoke-free policies on autonomy, privacy, confidentiality, personal liberty, and public health, and to test their own views against those of respected colleagues. Symposium participants included approximately fifty nationally-recognized experts in tobacco control policy, public

7. *See, e.g.*, Joe Robinson, *Light Up, Lose Your Job*, L.A. TIMES, Feb. 19, 2006, at M3.

8. U.S. DEP'T OF HEALTH & HUMAN SERVS., CTRS. FOR DISEASE CONTROL & PREVENTION, ADULT CIGARETTE SMOKING IN THE UNITED STATES: CURRENT ESTIMATES (Nov. 2007), http://www.cdc.gov/tobacco/data_statistics/factsheets/adult_cig_smoking.htm.

health lawyers, academics, and leading professionals from national public health organizations.

Before the event, the Legal Consortium surveyed invitees, to gauge their preliminary views on the appropriate scope of regulation. Participants were asked whether they "Strongly Agreed," "Agreed," "Disagreed," "Strongly Disagreed," or had "No Opinion" about statements such as the following:

- "Smoking should be banned in all outdoor spaces, including beaches, parks, and personal yards (unless the smoker's yard is separated from other housing by at least 300 feet)."

- "If we want to prohibit smoking in all indoor public areas, workplaces, and multi-unit housing complexes, we actually hurt our cause by passing laws that prohibit smoking in cars and outdoor areas because we look fanatical."

- "Employers should not have the right to prohibit employees from smoking during their personal time, as long as smoking is a legal activity for adults. What's next—allowing employers to make hiring and firing decisions based on people's risky hobbies, like motorcycle riding, or other lifestyle activities?"

While the survey was neither formal nor scientific, the responses were striking. On every question posed, the respondents were almost evenly divided, with about half in agreement with the statement and about half in disagreement. This division reflected not only the controversial nature of the policies being debated, but also the divergence of opinion within the public health community about the risks and benefits the policies represent—a divergence reflected in the articles presented here.

The symposium featured five speakers, all experts in public health law and tobacco control policy. Canadian law professor and policy expert David Sweanor, who has been influential for a quarter of a century in making Canada a world leader in this area of public health, set the stage for debate with thoughtful insights about the way forward after all of the "obvious" steps have been taken. The symposium then featured two moderated point/counterpoint

sessions, with speakers presenting and debating differing views on each topic. Attendees were then invited to explore areas of consensus and debate the potential pitfalls of competing policy options. These spirited exchanges were moderated by Marice Ashe, Director of Public Health Law & Policy with the Public Health Institute in Oakland, California, and Micah Berman, Executive Director of the Tobacco Public Policy Center and visiting Professor at Capital University Law School in Columbus, Ohio.

II. SYMPOSIUM PROCEEDINGS

The symposium proceedings which follow are divided into three parts: a Canadian perspective on the limits of effective regulation as proven interventions are fully implemented and attention shifts toward less "obvious" options, arguably with declining marginal utility; two papers on the pros and cons of smoke-free policies in outdoor venues; and two papers on the pros and cons of smoke-free policies in the workplace.

David Sweanor, adjunct Professor of Law at the University of Ottawa, describes the impressive range of Canadian tobacco control measures enacted with great effort over the last twenty-five years. These include tobacco tax increases, elimination of most forms of tobacco advertising and promotion, graphic health warnings on tobacco product packages, stringent smoke-free laws, and tobacco product testing. As a result of these policies, cigarette smoking in Canada has been greatly reduced. Sweanor points out, however, that despite these hard-won advances, smoking persists as Canada's leading preventable cause of death, and he expresses concern that further regulatory progress may be increasingly constrained by tobacco control advocates who adhere to an "ideological view of appropriate interventions rather than pragmatic public health orientation."

Sweanor's concern about the risk of excessive or unwise regulation is shared by Simon Chapman, a leading figure in tobacco control and Professor of Public Health at the University of Sydney, Australia, who takes up the issue of outdoor smoking policies. While strongly supporting smoke-free policies in indoor venues, Chapman argues that the risk of exposure to toxic particles and gases outdoors is much less than indoors, and that risks are associated with exposure to smoke caused by the incomplete combustion of any biomass (fuel, barbecues, car exhaust, campfires, in addition to tobacco). He contends that smoke-free

policies are becoming detached from evidence of direct harm and that paternalistic zero-tolerance policies may undermine the scientific credibility of the evidence base for tobacco control and alienate important public health allies.

James Repace, a biophysicist, former senior policy analyst and scientist with the U.S. Environmental Protection Agency, and visiting Clinical Professor at Tufts University School of Medicine, disagrees that it is excessive to regulate smoking outdoors. He draws on several studies of the hazards of secondhand smoke exposure in outdoor venues, to argue that banning smoking outside and inside vehicles (especially where children are at risk) or wherever people are congregated, is scientifically justified.

Next, Lewis Maltby, an attorney and President of the National Workrights Institute, addresses the topic of smokefree policies in the workplace. Maltby expresses grave concerns that giving employers the authority to regulate the off-site smoking of their employees jeopardizes individual privacy and autonomy. He points out that smoking is just one of many private activities that affect employees' health and employers' health care costs, and that intrusive zero-tolerance tobacco regulation sets a dangerous precedent in the workplace.

Finally, Micah Berman, Executive Director of the Tobacco Public Policy Center and visiting Professor at Capital University Law School, and Dr. Rob Crane, an Assistant Professor of Medicine at Ohio State University, make the case that current tobacco control efforts are not reducing smoking rates quickly enough to prevent the "continuing public health catastrophe caused by cigarette smoking." They discuss the increased healthcare and productivity costs of smoking employees; legal measures, such as insurance surcharges, that employers can take to regulate smoking; and the overall need for tobacco control advocates to work with business to support private-sector initiatives such as tobacco-free workforce policies.

III. CONCLUSION

The symposium did not reach a breakthrough consensus about the proper limits of smoking controls. Even the most passionate advocacy and discussion could not resolve the disagreements among participants, who continue to debate the wisdom of expansive new regulation. Rather, the exchange served mainly to expose the complexities of the trade-offs involved, leaving

many participants less confident of their own positions than when the day began. Perhaps that is the first step toward an answer. Certainly, given the deadly nature of the products involved, participants ended the day convinced that this is an area where, as Justice Holmes put it, the question of where to draw the line is worth arguing; even if, unlike Justice Holmes, they remained troubled about where to draw it.

A CANADIAN'S PERSPECTIVE: LIMITS OF TOBACCO REGULATION

David Sweanor J.D.[†]

I. INTRODUCTION

Canada is widely seen as an example of what can be accomplished by effective tobacco control efforts.[1] The country's numerous policy precedents have been replicated in many countries and have shaped international efforts on tobacco regulation, such as the World Health Organization's Framework Convention on Tobacco Control.[2] The result of Canada's policy interventions is a decline in cigarette smoking over the past quarter century that few countries have been able to match.[3]

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1. David Sweanor & Ken Kyle, *Legislation and Applied Economics in the Pursuit of Public Health: Canada*, *in* TOBACCO CONTROL POLICY: STRATEGIES, SUCCESSES AND SETBACKS 71 (Joy de Beyer & Linda Waverly Brigden eds., 2003).

2. *See* World Health Org. (WHO), *Framework Convention on Tobacco Control*, *at* http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf (last visited Apr. 8, 2008).

3. *See* Donald W. Gardner & Richard J. Whitney, *Protecting Children from Joe Camel and His Friends: A New First Amendment and Federal Preemption Analysis of Tobacco Billboard Regulation*, 46 EMORY L.J. 479, 523–24 (1997); Jennifer Lesny, *Tobacco Proves Addictive: The European Community's Stalled Proposal to Ban Tobacco Advertising*, 26 VAND. J. TRANSNAT'L L. 149, 165 n.143 (1993); *see also* Health Canada, *The National Strategy: Moving Forward—The 2006 Progress Report on Tobacco Control*, Jan. 15. 2007, http://www.hc-sc.gc.ca/hl-vs/pubs/tobac-tabac/prtc-relct-

The accomplishment is based, in part, on the fact that Canada started with such a horrendous problem. In the early 1980s, when I first started working full time on tobacco control efforts, Canada had one of the most serious smoking problems in the world. Per capita cigarette consumption was among the highest in the world, with over 40% of fifteen to nineteen-year olds reported to be daily smokers.[4] There were no legislated restrictions on tobacco advertising, no legislated package warnings, and negligible protection from environmental tobacco smoke.[5] Cigarette taxes were not only low, but had fallen in real terms for decades.[6] This situation can be attributed in part to the fact that the tobacco manufacturers were powerful and extremely well connected politically.[7] Also, Canada was a large producer of tobacco with a crop size that, on a per capita basis, was considerably larger than that of the United States at the time.[8]

Currently, Canada has tobacco taxes that are not only among the highest in the world,[9] but are also expressly linked to the goal of reducing smoking.[10] Tobacco advertising and promotion are essentially banned,[11] retail displays are disappearing,[12] graphic health warnings cover half the cigarette package,[13] and additional health information is required as package inserts.[14] Federal law mandates extensive constituent testing and requires disclosure of the results to the federal health department.[15] All cigarettes must meet reduced ignition propensity standards.[16] In addition, smoke-free spaces for public (and many private) areas are mandated by law,[17] and there are legislated—and enforced—restrictions regarding where and to whom cigarettes can be sold.[18]

2006/part2_e.html#1b (showing a greater than 60% decline in per capita consumption from the early 1980s to 2005).

4. Sweanor & Kyle, *supra* note 1, at 73 (citing Health Canada, *Canadians Smoking: An Update*, Cat. No. H39-214/1991E (1991)).

5. *Id.*

6. *Id.* at 74.

7. *Id.* at 73.

8. *Id.*

9. *Id.* at 87–90.

10. *Id.*

11. *See* Tobacco Act, R.S.C., ch. 13, pt. IV(22) (1997).

12. *Id.* at pt. IV(29)–(30).

13. *Id.* at pt. III(15)(1); Sweanor & Kyle, *supra* note 1, at 84.

14. Tobacco Act, R.S.C., ch. 13, pt. III(15)(2).

15. *Id.* at pt. I(7).

16. *Id.*

17. *See* Non-Smokers' Health Act, R.S.C., ch. 15, pt.(3) (1985) (stating that

As a direct result of these policy interventions, per capita cigarette consumption in Canada is down by roughly 60% in the past quarter century.[19] Canada entered the 1980s with a reported smoking prevalence of over 40%.[20] By 2006, only 18% of Canadians fifteen years and older reported being smokers and only 14% reported being daily smokers.[21] Perhaps even more impressive, reported daily smoking among fifteen to nineteen-year olds decreased from 42% at the beginning of the 1980s to only 9% in 2006.[22]

In examining the way policy changes have so dramatically reduced cigarette consumption in Canada, there can be a tendency to think that Canada is somehow different from other countries and that tobacco control policies were somehow easier to achieve. But public policy is like a game of football. Political changes do not happen spontaneously any more than a football moves up or down a field on its own. Policy issues, like footballs, move based on the forces brought into play. In Canada, the health side of policy was not actively engaged in the politics of tobacco until the early 1980s.[23] Once health policy became an issue, the country was radically transformed through a long series of campaigns, and virtually everything found on most standard lists of tobacco control strategies has now been implemented.[24]

This raises some interesting questions, not the least of which is why a lawyer who was a key player in so many of these regulatory battles, who built a career around fighting for such measures and convincing others that policy interventions were the most important measures available to counter the health toll of smoking, would now be asked to talk about "the limits to regulation." To be honest to our long term health objectives, however, it is extremely important to critically examine what has been accomplished

nothing in the act requiring smoke-free environments affects any rights to protection from tobacco smoke under any Act of Parliament or provincial legislation).

18. *See, e.g.*, Tobacco Act, R.S.C., ch. 13 (1997) (limiting how, where, and to whom cigarettes may be sold); Smoke-Free Ontario Act, R.S.O., ch. 10 (1994) ("No person shall sell or supply tobacco to a person who is less than 19 years old.").

19. *See* Health Canada, *supra* note 3.

20. *Id.*

21. *Id.*

22. *Id.*

23. *See* Sweanor & Kyle, *supra* note 1, at 74–81.

24. *Id.* at 74–95.

through policy interventions, to be open to the thought that some of our interventions have not achieved all of our goals, and to think about where tobacco control policy needs to head in the future.

II. "CHECKED ALL THE BOXES"

Canadian tobacco control advocates are perhaps in an ideal position to consider the limits of regulation because Canada is one of a growing number of countries that have implemented virtually all of the components of traditional comprehensive strategies to reduce smoking.[25] The country has "checked all the boxes." Despite all of the policy successes and the dramatic reductions in cigarette smoking over the past quarter century, however, there are still over 4.5 million Canadians who smoke,[26] and smoking is still the country's leading cause of preventable death.[27] Further, many policies have reached either a limit on what can be done, or at least a state of greatly diminishing marginal returns.

Tobacco control is not unlike efforts to contain other causes of disease where measures have been used that reduce the severity of a problem but still leave a large number of people who appear unresponsive to standard treatments. The medical profession deals with such issues on an ongoing basis, and the role of skilled physicians is to consider the limits of standard treatments, prevent iatrogenic conditions, and look to new interventions that can lessen the remaining risks. Public policy advocates dealing with tobacco-caused disease should be just as vigilant.

III. OBSTACLES TO TRADITIONAL REGULATION

Simply doing "more of the same" is a seemingly attractive option when actions to date have worked remarkably well. But, as with doctors who might be tempted to treat an antibiotic-resistant disease with more of the same antibiotics—after all, the treatment worked successfully with plenty of other people presenting with similar symptoms—it is important to consider the limits, as well as the successes of our interventions.

25. *Id.*

26. *See* Health Canada, *Canadian Tobacco Use Monitoring Survey*, Dec. 12, 2007, http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/research-recherche/stat/_ctumsesutc_2006/wave-phase-1_summary-sommaire_e.html.

27. Health Canada, *Smoking and Your Body*, Jan. 24, 2008, http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/body-corps/index_e.html.

A. Diminishing Returns

The first broad category of limits to regulation in Canada is the decreasing marginal benefits of simply continuing to apply traditional tobacco control interventions. An example of this can be seen in relation to tax policy. Canada was able to dramatically increase the price of cigarettes, in part because the price had been so low.[28] Tripling real prices has a tremendous dampening effect on consumption,[29] but tripling prices again is nearly impossible. Among other issues facing Canada, there is now a significant contraband market.[30] Although hard to estimate, it appears that cigarettes manufactured on, or shipped through, Indian Reserves could account for as much as 20% of current cigarette consumption in Canada's two most populous provinces.[31] The presence of these alternative, untaxed sources of supply clearly limit the pursuit of policies that are aimed at making tobacco products less available to smokers through further tax increases. At the same time, measures aimed at requiring cigarettes to be made less palatable to smokers or otherwise trying to force smokers to quit via regulation[32] become less viable in the face of this illicit supply. In effect, tobacco control policy aimed at forcing

28. *See* Sweanor & Kyle, *supra* note 1, at 91 (figure showing that the retail price for 200 cigarettes in Canada was less than twenty Canadian dollars into the early 1980s).

29. *See* WORLD HEALTH ORG., WHO REPORT ON THE GLOBAL TOBACCO EPIDEMIC, 2008: THE MPOWER PACKAGE 39 (2008), http://www.who.int/tobacco/mpower/mpower_report_full_2008.pdf [hereinafter WHO REPORT] ("A 70% increase in the price of tobacco could prevent up to a quarter of all smoking-related deaths worldwide.").

30. GFK RESEARCH DYNAMICS, ILLICIT USAGE OF CIGARETTES—NATIONAL STUDY FOR THE C.T.M.C.—CANADIAN TOBACCO MANUFACTURERS COUNCIL 8 (2007) (showing that 22% of purchased cigarettes in 2007 in Canada were contraband, an increase from 16.5% in 2006).

31. In Ontario, 31.6% of cigarettes purchased were contraband. *Id.* at 11. 40.7% of contraband cigarettes were bought on Indian Reserves. *Id.* at 26. As a result, approximately 12.9% of all cigarettes purchased in Ontario were contraband bought on Indian Reserves. In Quebec, 30.5% of purchased cigarettes were contraband. *Id.* at 11. 20.6% of contraband cigarettes came from Indian Reserves. *Id.* at 26. Thus, about 6.3% of all cigarettes purchased in Quebec were contraband bought on Indian Reserves.

32. *See, e.g.*, PHYSICIANS FOR A SMOKE-FREE CANADA, TOBACCO-FREE PHARMACIES (2006), http://www.smoke-free.ca/pdf_1/pharmacy-backgrounder.pdf (advocating banning sales of tobacco in pharmacies).

abstinence is running into some of the same constraints as past and present prohibitionist approaches to alcohol and other drugs.[33]

Further examples of diminishing returns from our policy interventions can be found in the realm of smoke-free policies. Making all workplaces and public areas smoke-free is expected to have a significant impact on both the number of smokers and the amount of cigarettes that are consumed.[34] A tremendous number of smokers are impacted when workplaces and public areas go smoke-free, but once we move into the realm of "tidying up the leftovers"—such as trying to extend smoke-free policies into areas like shared residential buildings—we can expect less overall impact, simply because we are dealing with far smaller numbers of affected people. There are certainly gains that can still be made through the application of more traditional approaches to tobacco control, but such gains pale in comparison to both the accomplishments of the past (the low hanging fruit is gone) and to the magnitude of the projected future health toll from smoking.

B. Self-Imposed Limits

The second broad category of limits on regulation is, paradoxically, effectively self-imposed by the culture of the tobacco control movement. Canada has done much to reduce smoking onset, encourage cessation, and protect non-smokers. Now, the country is running up against the limits of tobacco regulation caused by the attitude of the now-entrenched anti-tobacco community to regulation.[35] Tobacco control advocates have, like other social groups, developed their own paradigms through which they see the world and possibilities for further interventions.[36] As Thomas Kuhn's work demonstrates so well, such paradigms dictate

33. *See generally* CRAIG HERON, BOOZE: A DISTILLED HISTORY 235–66 (2003) (discussing Canada's experience with Prohibition in the 1920s).

34. *See* WHO REPORT, *supra* note 29, at 26 ("Smoke-free laws in workplaces can cut absolute smoking prevalence by 4%. Smoke-free policies in workplaces in several industrialized nations have reduced total tobacco consumption among workers by an average of 29%.").

35. *See, e.g.*, Physicians for a Smoke-Free Canada, About Us, http://www.smoke-free.ca/eng_home/pschome_about.htm (last visited Apr. 12, 2008). The organization has "one goal," which is "the reduction of tobacco-caused illness through reduced smoking and exposure to second-hand smoke." *Id.*

36. *See* THOMAS S. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS 24 (2d ed. 1970) ("[T]he paradigm forces scientists to investigate some part of nature in a detail and depth that would otherwise be unimaginable.").

what is acceptable and can blind people to effective alternative courses of action.[37] The result is that a critical limitation on further regulation is actually self-imposed by the views of tobacco control advocates. This can either cause the pursuit of less effective health interventions or prevent the pursuit of strategies likely to yield greater gains.[38]

Further regulatory progress is, for example, constrained by lobbying for impractical goals based on an ideological view of appropriate interventions rather than a pragmatic public health orientation. A group sharing an ideology often sees such schemes as deeply desirable, but these schemes stymie progress on policy interventions by redirecting energy and resources from practical goals to unattainable, ineffective, or even counter-productive strategies. Examples of this, in the case of Canada, include pursuing the nationalization of the tobacco industry[39] and pursuing restrictions on tobacco use that cannot be justified on the basis of protecting others, such as promoting prohibition of the use of *any* tobacco product *anywhere* on the grounds of hospital campuses.[40]

C. Existing Regulations Seen as an End Instead of a Means

A further limitation on regulatory strategies is that, in some cases, existing regulatory measures, such as blanket advertising bans, graphic package warnings, or industry de-normalization, have come to be seen as an end in themselves rather than as a means of achieving improved public health.[41] As such, efforts to re-think such measures are often rejected out-of-hand by anti-tobacco forces

37. *See id.* at 64 ("In the development of any science, the first received paradigm is usually felt to account quite successfully for most of the observations and experiments easily accessible to that science's practitioners.").

38. *See id.* ("[P]rofessionalization leads, on the one hand, to an immense restriction of the scientist's vision and to a considerable resistance to paradigm change.").

39. *See* CYNTHIA CALLARD ET AL., CURING THE ADDICTION TO PROFITS: A SUPPLY-SIDE APPROACH TO PHASING OUT TOBACCO 14–15 (2005), http://www.policyalternatives.ca/documents/National_Office_Pubs/2005/curing_the_addiction_summary.pdf.

40. Ottawa Hospital instituted a campus-wide smoke-free policy in June 2006. Ottawa Hospital, Designated Smoking Areas, http://www.ottawahospital.on.ca/media/extras/smoke-zones-e.asp (last visited Apr. 12, 2008). However, the hospital changed the policy in November 2007 and now allows smoking in three designated outdoor areas. *Id.* Unintended consequences of the policy included effects on patient and employee safety, as well as on neighboring businesses. *Id.*

41. *See, e.g.*, WHO REPORT, *supra* note 29, at 36–38 (advocating "complete" and "comprehensive marketing bans" on tobacco companies).

as being "a step backwards." Yet, this is inconsistent with the pragmatic approaches and recognition of the differences between means and ends advocated by such social reformers as Saul Alinsky,[42] and it can stymie further progress at attaining health goals. For instance, a regulatory strategy could include advertising less toxic tobacco products to current smokers as an alternative to cigarettes, mandating smoker-friendly package messaging aimed directly at facilitating cessation, or differentiating between the culpability of different tobacco companies as a way of changing the behavior of the tobacco companies that are benefiting most from a status quo centered on cigarettes. In the absence of a willingness to re-examine previously passed regulatory strategies, however, progress in such areas is impossible.

This self-imposed constraint on acceptable action by some of those promoting a tobacco control agenda is perhaps most notable—and most damagingly counter-productive—when one examines the issue of harm reduction for nicotine users. There is no scientific doubt that there is a vast continuum of risk depending upon how someone obtains nicotine.[43] If all smokers obtained their nicotine from medicinal or low-toxicity non-combustion products, the health concerns about the drug would approach those associated with the contemporary use of caffeine.[44] Yet many tobacco control advocates generally dismiss the idea of harm reduction in favor of an abstinence-only (or "quit-or-die") orientation.[45] The result is that these tobacco control advocates

42. *See generally* SAUL ALINSKY, RULES FOR RADICALS (Vintage Books ed. 1989) (1972).

43. *See, e.g.*, Neal Benowitz, *The Safety and Toxicity of Nicotine*; TOBACCO ADVISORY GROUP, ROYAL COLL. OF PHYSICIANS, HARM REDUCTION IN NICOTINE ADDICTION: HELPING PEOPLE WHO CAN'T QUIT 88–103, 119–29 (2007), *available at* http://www.rcplondon.ac.uk/pubs/Listing.aspx (follow "Harm reduction in nicotine addiction" hyperlink) (discussing the variety of sources of nicotine and the use of nicotine replacement therapy); Kenneth E. Warner et al., *The Emerging Market for Long-Tern Nicotine Maintenance*, 278 J. AM. MED. ASS'N 1087 (1997) (discussing alternative nicotine-delivery products and a variety of regulatory approaches).

44. *See* BENNETT ALAN WEINBERG & BONNIE K. BEALER, THE WORLD OF CAFFEINE, 303–15 (2001) (discussing how caffeine does cause physical dependence, and toxicity in high doses, but that caffeine use has been normalized). Although physical dependence results, it has not been classified as a clinical dependence syndrome. *Id.* at 303, 306–08.

45. *See* WHO REPORT, *supra* note 29, at 7 ("We must act now to reverse the global tobacco epidemic and save millions of lives."). The WHO estimates one billion deaths from the "tobacco epidemic" in the twenty-first century "unless urgent action is taken." *Id.* at 6.

often sound more like moralists seeking to save souls rather than health campaigners seeking to save lives.[46] This is consistent with what has been experienced in numerous other public health campaigns throughout history[47] and a critical question for future policy directions is just how quickly tobacco control efforts can evolve to become more pragmatic rather than dogmatic.

Abstinence-only orientation, among other things, has greatly limited the ability to implement product standards that can reduce risks for continuing users of nicotine, thereby fulfilling the "fourth leg of public health interventions."[48] This orientation is also strongly at odds with past successful efforts to regulate goods and services which have been principally based on the recognition of differential risks and the resulting ability of regulation to reduce death, injury, and disease.[49] The failure to accept harm reduction strategies as part of its regulatory armamentarium has also sacrificed the moral high ground on the issue of the human rights of smokers. It has gone so far as to include gross

46. *Id.* "The cure for this devastating epidemic is dependent not on medicines or vaccines, but on the concerted actions of government and civil society." *Id.* at 7.

47. *See, e.g.*, ALLAN M. BRANDT, NO MAGIC BULLET: A SOCIAL HISTORY OF VENEREAL DISEASE IN THE UNITED STATES SINCE 1880 (1st ed. 1985) (discussing efforts to curb venereal diseases in the United States since 1880); ESTHER KAPLAN, WITH GOD ON THEIR SIDE: HOW CHRISTIAN FUNDAMENTALISTS TRAMPLED SCIENCE, POLICY, AND DEMOCRACY IN GEORGE W. BUSH'S WHITE HOUSE 194–218 (2004) (discussing the Bush administration's effort to combat teen pregnancy and STDs through an abstinence-only message); JAMES HARVEY YOUNG, PURE FOOD: SECURING THE FEDERAL FOOD AND DRUGS ACT OF 1906 (1989) (discussing the campaign to pass the Federal Food and Drugs Act of 1906); David Sweanor et al., *Tobacco Harm Reduction: How Rational Public Policy Could Transform a Pandemic*, 18 INT'L J. DRUG POL'Y 70 (2007) (discussing alternative systems of nicotine delivery and a harm-reduction approach, as opposed to an abstinence-only approach).

48. *See* Sweanor et al., *supra* note 47, at 70 (delineating four broad categories of intervention aimed at "reducing the risk of death, injury or disease from any behaviour" as "efforts to prevent the behaviour ever taking place, efforts aimed at ending the behaviour, efforts aimed at preventing the activity from harming third parties, and efforts aimed at reducing the risks of those who engage in the behaviour"); *see also* David Sweanor, *Legal Strategies to Reduce Tobacco-Caused Disease*, 8 RESPIROLOGY 413, 417 (2003) (discussing both legislative and litigation efforts to address tobacco use).

49. *See e.g.*, SANDRA HEMPEL, THE STRANGE CASE OF THE BROAD STREET PUMP: JOHN SNOW AND THE MYSTERY OF CHOLERA (Univ. of Cal. Press 2007) (2006) (discussing John Snow's effort to discover the cause behind an 1854 London cholera epidemic); YOUNG, *supra* note 47 (discussing the pre-cursors to the eventual regulation of food quality).

misrepresentations of relative risk in an apparent effort to adhere to an abstinence-only agenda.[50]

IV. WHICH WAY FORWARD?

Canada stands as a good example of the limits of standard tobacco regulatory measures and, simultaneously, the limits imposed by the tobacco control community itself on what may be seen as acceptable regulatory measures. Seeking a way forward via the next generation of tobacco control is of huge importance if Canada is to successfully reduce the projected toll of a million smoking-caused deaths in the country over the next quarter century.[51] Canada is also at the leading edge of global tobacco control policy.[52] The path Canada takes will be of enormous importance to the rest of the world because it is projected that a billion smoking-caused deaths will occur globally this century.[53]

50. *See, e.g.*, *Can Tobacco Cure Smoking? A Review of Tobacco Harm Reduction: Hearing Before the Subcomm. on Commerce, Trade, and Consumer Protection of the H. Comm. on Energy and Commerce*, 108th Cong. 40 (2003) (statement of Richard Carmona, U.S. Surgeon General) ("Smokeless tobacco is not a safe alternative to cigarettes."); Carl V. Philips et al., *You Might as Well Smoke*, BMC PUB. HEALTH 4, Apr. 5, 2005, http://www.biomedcentral.com/content/pdf/1471-2458-5-31.pdf (identifying 108 websites claiming "risks from [smokeless tobacco] are as bad or worse than those from smoking"). "[U]se of Western smokeless tobacco (ST) is substantially less harmful than smoking cigarettes." *Id.* at 1. *See also* PHYSICIANS FOR A SMOKE-FREE CANADA, REFLECTIONS ON THE 'SWEDISH EXPERIENCE': IS SNUS UP TO SNUFF? (2003), http://www.smoke-free.ca/pdf_1/snus.pdf (discussing health effects of a Swedish smokeless tobacco product).

51. *See* PARVIS GHADIRIAN, SLEEPING WITH A KILLER: THE EFFECTS OF SMOKING ON HUMAN HEALTH 6–7 (2008), *available at* http://www.hc-sc.gc.ca/hl-vs/alt_formats/hecs-sesc/pdf/pubs/tobac-tabac/swk-dat/swk-dat_e.pdf. About one in six smokers are projected to die by the 2020s–2030s, and there were 5.4 million Canadian smokers in 2001. *Id.*

52. *See* Sweanor & Kyle, *supra* note 1, at 71 (stating that the number of Canadian smokers declined from 1965–2001 from 50% of the population to 22%).

53. WHO REPORT, *supra* note 29, at 6.

GOING TOO FAR? EXPLORING THE LIMITS OF SMOKING REGULATIONS

Simon Chapman†

It is customary in my home country of Australia at the opening of conferences to invite representatives of the original Aboriginal landowners to welcome delegates. A common way of doing this is to perform a "smoking ceremony" where eucalyptus leaves are burned.[1] This causes clouds of smoke to billow throughout the auditorium.[2] These ceremonies are also performed outdoors,[3] the site of a new frontier in some nations of efforts to outlaw public smoking.[4]

The smell of burning eucalyptus always transports me to my childhood, growing up in a small country town where I would often sleep around campfires with friends, returning home with my clothes and hair thick with the smell of smoke. I have since learned

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1. *See, e.g.*, Howard Spencer, *Watagan Leaves Used In Bridge Smoking*, BUSH TELEGRAPH MAG., Winter 2007, at 5, *available at* http:www.dpi.nsw.gov/au/about us/news/bush-telegraph-magazine/winter-2007.

2. *Id.*

3. *See id.*

4. Eric Weiner, *The First Nonsmoking Nation: Bhutan Banned Tobacco. Could the Rest of the World Follow?*, SLATE., Jan. 20, 2005, http://www.slate.com/id/2112449.

that these adventures exposed my lungs to large volumes of smoke particles, the great majority of which are indistinguishable to those contained in secondhand cigarette smoke.[5] However, I do not subscribe to a worldview that automatically places risks to health, however small, above every other consideration. Consequently, I do not believe that sitting around campfires, nor lighting them in suitable locations, should be banned as a health hazard.

Many will have visited cosy country restaurants and resorts where open log fires create an ambiance that transports us back to childhood memories of winter comforts and a somehow more authentic world. Well-flued fires send most smoke up the chimney, but as anyone entering a room where a log fire has burned the night before knows, considerable smoke also escapes into the room, impregnating carpets and furniture.[6]

I commence with these images because they provide salutary perspective on the debate about secondhand tobacco smoke (SHS). We focus this symposium on whether policy and advocacy for the regulation of SHS might sometimes go "too far." Many people are comforted by the smell of camp and log fires, even seeking out such exposures. But the same people will sometimes become outraged by the occasional fleeting exposure to tobacco smoke. While nearly identical in terms of their noxious content,[7] both forms of smoke have entirely different *meanings*. If radically different concerns about inhaling essentially the same zoo of noxious particles were all that mattered here, we would have to conclude that many people can be irrational. But outrage about some forms of smoke and open acceptance of other forms is very explicable to sociologists as risk perception.[8] Among the many key

5. Nigel Bruce, Rogelio Perez-Padilla & Rachel Albalak, *Indoor Air Pollution in Developing Countries: A Major Environmental and Public Health Challenge*, 78 BULL. WORLD HEALTH ORG. 1078, 1081–84 (2000), *available at* http://www.who.int/docstore/bulletin/pdf/2000/issue9/bul0711.pdf.

6. *See generally* Ms. Builder, *Make Fireplace Smoke-Free*, DETROIT FREE PRESS, Aug. 26, 2007, at RE4 ("More than half of fireplaces cause some smoky conditions inside homes, and it is difficult to totally rid the room of the smoky odor.").

7. *Compare* Luke P. Naeher et al., *Woodsmoke Health Effects: A Review*, 19 INHALATION TOXICOLOGY 67, 69–73 (2007), *with* J. Fowles & E. Dybing, *Application of Toxicological Risk Assessment Principles to the Chemical Constituents of Cigarette Smoke*, 12 TOBACCO CONTROL 424, 426–28 (2003).

8. *See* Karl Dake & Aaron Wildavsky, *Theories of Risk Perception: Who Fears What and Why?*, *in* RISK 42 (Edward J. Burger, Jr. ed., 1993) (1990) ("The most widely held theory of risk perception we call the knowledge theory: the often implicit notion that people perceive technologies (and other things) to be dangerous because they *know* them to be dangerous.").

determinants of meaning and outrage[9] are whether a noxious agent is seen as voluntary or coerced, natural or artificial, and whether the risk has been amplified by lots of media attention.[10] We do not read much about the dangers of inhaling campfire smoke, smoke from incense, smoke from candles, or smoke from cooking, but we read a lot about the dangers of SHS.[11]

"Going too far" in condemning SHS connotes several undesirable features in policy. It can imply a questionable departure from the evidence base, a loss of proportionality, and the abandonment of important ethical principles in the development of public health policy. A careless attitude to matters of such importance can have repercussions that will be regretted and which do not stand up to close ethical audit.

Prohibitions on personal behaviours, like public smoking, can be justified by two related ethical principles: John Stuart Mill's famous articulation of the right to interfere with the liberty of people to harm others and the commonwealth justification[12] whereby the protection of the welfare rights of a large number of people sometimes requires the abrogation of the liberties of a smaller number of people.[13] An example of this occurs with requirements that non-immunised children stay away from school during infectious disease outbreaks.[14]

Paternalism can be ethically justifiable when enacted in the interests of those incapable by virtue of legal immaturity or mental incapacity to act in their own interests.[15] But "[p]aternalism is most

9. *See generally* Simon Chapman & Sonia Wutzke, *Not in Our Back Yard: Media Coverage of Community Opposition to Mobile Phone Towers—An Application of Sandman's Outrage Model of Risk Perception*, 21 AUSTL. & N.Z. J. PUB. HEALTH 614 (1997).

10. *Id.* at Tables 1 and 2.

11. *See generally* K. Clegg Smith, M. Wakefield & E. Edsall, *The Good News About Smoking: How Do U.S. Newspapers Cover Tobacco Issues?*, 27 J. PUB. HEALTH POL'Y 166 (2006).

12. *See* Lawrence O. Gostin, *Health of the People: The Highest Law?*, 32 J.L. MED. & ETHICS 509, 510 (2004) ("Consequently, people may have to forgo a little bit of self-interest in exchange for the protection and satisfaction gained from sustaining healthier and safer communities.").

13. *See* Philip Cole, *The Moral Bases for Public Health Interventions*, EPIDEMIOLOGY 78, 78–83 (1995) (discussing paternalism and moral justifications enforced by state police power by doing the greatest good for the greatest number of people).

14. *E.g.*, N.H. REV. STAT. ANN. § 141-C:20-c (LexisNexis 2006) (stating that children with a legal exemption from mandatory immunization for diseases shall not attend school threatened with outbreak of such diseases).

15. Cole, *supra* note 13, at 80 ("Paternalism . . . can be moral in dealing with children and with adults who are unable to make an informed judgment.").

odious when used as a justification for limiting the choices that adults make"[16] when they put only themselves at risk. Occasionally, paternalism is justified via the argument that the infringement of liberty involved is very trivial and the gains to health are very great, as is the case with mandatory seat-belt use.[17]

In debates about outdoor smoking bans, paternalistic arguments are often evident, but rarely explicit. Health care facilities which ban smoking outdoors often justify their actions in terms of normative role-modeling.[18] This is ethically unproblematic when it comes to staff members who are contractually obligated to observe their employers' policies. But it represents ethically muddled thinking when it comes to patients and visitors to public hospitals. Public hospitals are not somehow "owned and controlled" by health authorities. If patients and visitors are not harming others by smoking outdoors, they ought not be coerced into signing up to the normative health promotion values of a hospital simply because they require hospital care or are visiting someone who does.

Almost all smokers regret having taken up smoking[19] and many gratefully support paternalistically-motivated policies designed to discourage their smoking.[20] But we do not evaluate the ethics of public health by the willingness of people to give up their autonomy, nor with the efficiency or success of commandments to obey laws or directives.[21] Morality is always inexorably about respect

16. *Id.* at 81.

17. Claire Andre & Manuel Velasquez, *For Your Own Good*, http://www.scu.edu/ethics/publications/iie/v4n2/owngood.html (last visited Mar. 26, 2008).

18. Simon Chapman, *Banning Smoking Outdoors is Seldom Ethically Justifiable*, 9 TOBACCO CONTROL 95, 96 (2000).

19. Geoffrey T. Fong et al., *The Near-Universal Experience of Regret Among Smokers in Four Countries: Findings from the International Tobacco Control Policy Evaluation Survey*, 6 NICOTINE & TOBACCO RES. 341, 341 (Supp. 3 2004).

20. Stacy Carter & Simon Chapman, *Smokers and Non-Smokers Talk About Regulatory Options in Tobacco Control,* TOB. CONTROL, 2006, http://tobacco.health.usyd.edu.au/site/supersite/contact/pdfs/TC2006_Carter.pdf.

21. *See* Chapman, *supra* note 18, at 96 ("Restrictions on smoking certainly do reduce smoking frequency and may also promote cessation. However, while this is an undoubted positive benefit, it cannot be used as a front end justification to restrict smoking. It is a fortunate byproduct of bans introduced because of Millean based concerns about stopping smokers harming others. The decision to bring benefit to oneself is a decision that should be up to the individual, not for others to impose.") (internal citations omitted).

for the autonomy of individuals to act freely, providing their actions do not harm others.[22]

To me, "going too far" in SHS policy means efforts premised on reducing harm to others, which ban smoking in outdoor settings such as ships' decks, parks, golf courses, beaches, outdoor parking lots, hospital gardens, and streets.[23] It is also the introduction of misguided policies allowing employers to refuse to hire smokers, including those who obey proscriptions on smoking indoors while at work.

I emphasise that I am very supportive of the prevention of smoking in crowded, confined outdoor settings such as sports stadia, in most outdoor dining sections of (particularly small) restaurants, and in unblocking the entrances to buildings by having smokers move further away. In outdoor stadia, the concentration of smokers and their sardine-can proximity to others can result in significant prolonged SHS exposure over many hours.[24] Moreover, a great many people find it unpleasant to sit beside a smoker for many hours. As such, I support a ban on smoking in stadia as a way of preventing a public nuisance, even before matters of health risk are considered. I apply the same reasoning to my support of not allowing smokers to colonise the high-demand outdoor sections of restaurants. Policies that meaningfully segregate smokers from others are a reasonable civil society response to the unpleasantness of being enveloped in SHS while eating outdoors.

I. RISKS ARISE FROM CHRONIC EXPOSURE

The evidence used to justify the restriction of smoking in public settings has always rested on a bedrock of studies concerning the relationship of chronic diseases like lung cancer, respiratory, and cardiovascular disease to prolonged and repeated exposures in domestic and indoor occupational settings, generally over many

22. JOHN STUART MILL, ON LIBERTY 147 (Currin Shields ed., 1956) (1859) ("But with regard to the merely contingent or, as it may be called, constructive injury which a person causes to society by conduct which neither violates any specific duty to the public, nor occasions perceptible hurt to any assignable individual except himself, the inconvenience is one which society can afford to bear, for the sake of the greater good of human freedom.").

23. Chapman, *supra* note 18, at 95.

24. *See, e.g.*, James Repace, *Measurements of Outdoor Air Pollution from Secondhand Smoke on the UMBC Campus*, June 1, 2005, *at* http://www.repace.com/pdf/outdoorair.pdf.

years (although much less time with infants).[25] Added to this are studies which show that even brief exposures to SHS can produce measurable changes in coronary flow velocity[26] and distensibility of the aorta,[27] to name just two. However, these studies of acute exposure, most recently reviewed by the United States Surgeon General,[28] typically define "brief" exposure to SHS as lasting between fifteen to thirty minutes[29]—considerably more than the typical encounter with SHS in a park, beach, or street. In addition, all of these studies were conducted in indoor environments designed to replicate typical indoor exposure conditions.[30] These effects are also considered to be partially reversible.[31]

Of course, potentially harmful chronic exposure consists of a multitude of acute exposures.[32] These can range from the sort of

25. *See, e.g.*, DEP'T OF HEALTH & HUMAN SERVS., CHILDREN & SECONDHAND SMOKE EXPOSURE: EXCERPTS FROM THE HEALTH CONSEQUENCES OF INVOLUNTARY EXPOSURE TO TOBACCO SMOKE, A REPORT OF THE SURGEON GENERAL (2007), *available at* http://www.surgeongeneral.gov/library/smokeexposure/report/fullreport.pdf (explaining that exposure to secondhand smoke increases instances of Sudden Infant Death Syndrome (SIDS), lower birth weight, weaker lungs, and increased respiratory infections in infants); DEP'T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF SMOKING: A REPORT OF THE SURGEON GENERAL (2004), *available at* http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_2004/chapters.htm (discussing a multitude of carcinogenic, cardiovascular, respiratory, reproductive, and other effects as a result of smoking).

26. *See generally* David S. Celermajer et al., *Passive Smoking and Impaired Endothelium-Dependent Arterial Dilatation in Healthy Young Adults*, 334 NEW ENG. J. MED. 150 (1996); Ryo Otsuka et al., *Acute Effects of Passive Smoking on the Coronary Circulation in Healthy Young Adults*, 286 J. AM. MED. ASS'N 436 (2001); Hitoshi Sumida et al., *Does Passive Smoking Impair Endothelium-Dependent Coronary Artery Dilation in Women?*, 31 J. AM. C. CARDIOLOGY 811 (1998).

27. *See generally* Christodoulos Stefanadis et al., *Unfavorable Effects of Passive Smoking on Aortic Function in Men*, 128 ANNALS INTERNAL MED. 426 (1998), *available at* http://www.annals.org/cgi/content/full/128/6/426.

28. DEP'T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF INVOLUNTARY EXPOSURE TO TOBACCO SMOKE: A REPORT OF THE SURGEON GENERAL (2006), *available at* http://www.surgeongeneral.gov/library/secondhandsmoke/report/fullreport.pdf.

29. *See, e.g.*, Otsuka, *supra* note 26, at 437 ("[A]ll subjects spent 30 minutes in the smoking room . . . .").

30. *See, e.g.*, *id.*

31. *See* Olli T. Raitakari et al., *Arterial Endothelial Dysfunction Related to Passive Smoking is Potentially Reversible in Healthy Young Adults,* 130 ANNALS INTERNAL MED. 578 (1999), *available at* http://www.annals.org/cgi/reprint/130/7/578.pdf.

32. Acute, or short-lived and intense, exposures to SHS may occur often. WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 23 (3d ed. 1993) (acute is defined as something experienced intensely or powerfully; characterized by sharpness or severity; sudden onset, short course). Chronic exposure is "marked by long duration, by frequent recurrence over a long time and often by slowly

"acute" heavy exposure that a bar worker would get throughout an eight-hour shift all the way through to the fleeting exposure lasting a second or so that one might get when walking past a smoker in a park.[33] In an increasing number of nations, public policy has moved to outlaw all indoor occupational exposures, where the implication is that the exposure is both prolonged and involuntary.[34] The question we face today is whether it is reasonable to outlaw involuntary, fleeting, outdoor exposure.

A recent paper by Neil Klepeis and others providing data on outdoor exposures in places like sidewalk café tables, pub patios, and park benches has caused much excitement among supporters of outdoor smoking bans.[35] The study reported what common sense would predict: that SHS in outdoor settings is rapidly attenuated.[36] However, it also concluded that in situations where there are multiple smokers, "between 8 and 20 cigarettes smoked sequentially could cause an incremental 24-hour particle exposure greater than . . . the 24-[hour] EPA health-based standard for fine particles" for those within half a meter of them.[37]

The authors refer to bar patios and outdoor café tables as where the above situation might happen. But they also state that "sitting next to a smoker on a park bench" might occasion such exposure, despite one paragraph earlier stating that "multiple smokers" are required to get particle exposures to levels that challenge the EPA standard.[38] "Multiple smokers" are rarely seated on park benches next to non-smokers for the time it would take to

progressing seriousness." *Id.* at 402. Thus, recurrent acute exposures can add up to chronic exposure.

33. *See* DEP'T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF INVOLUNTARY EXPOSURE TO TOBACCO SMOKE: SECONDHAND SMOKE: WHAT IT MEANS TO YOU 3 (2006), *available at* http://www.surgeongeneral.gov/library/secondhandsmoke/secondhandsmoke.pdf (noting that "there is no safe amount of secondhand smoke.").

34. *See, e.g.*, *Global Momentum for Smoke-Free Indoor Environments at Tipping Point*, SCIENCE DAILY, Apr. 12, 2007, http://www.sciencedaily.com/releases/2007/04/070411170909.htm (recent article in the *New England Journal of Medicine* "describe[s] the growing momentum for indoor smoking bans in countries across the globe").

35. Neil E. Klepeis et al., *Real-Time Management of Outdoor Tobacco Smoke Particles*, 57 J. AIR & WASTE MGMT. ASS'N 522, 533 (2007) (study results indicate that outdoor tobacco smoke (OTS) presents a possible hazard in situations such as outdoor patios or near smokers outside of a building).

36. *Id.* "Unlike indoor SHS levels, which decay slowly over a period of hours, OTS levels drop abruptly when smoking ends." *Id.*

37. *Id.*

38. *Id.*

smoke eight to twenty cigarettes.[39] The paper says nothing about exposure to people on beaches, golf courses, relaxing on the grass in a park, or smoking in an outdoor car park.[40] I would invite reflection on the number of occasions that anyone in any of these situations is *ever* involuntarily closer than half a meter to a group of smokers consuming eight to twenty cigarettes. Yet we are being asked to embrace policies premised on the idea that smoking in such settings poses a danger to others.

II. IS TOBACCO SMOKE ANY MORE TOXIC THAN SMOKE FROM OTHER SOURCES OF BURNT BIOMASS?

As I stated earlier, while tobacco smoke has its own range of recognisable smells, there are few differences between the physics and chemistry of tobacco smoke and smoke generated by the incomplete combustion of any biomass, whether it be eucalyptus leaves, campfire logs, gasoline, or meat on a barbeque.[41] Secondhand smoke is not so uniquely noxious that it justifies extraordinary controls of such stringency that zero tolerance outdoors is the only acceptable policy.[42]

Many cities around the world ban coal and wood fuel fires and backyard incinerators in urban areas.[43] These are deemed to be so

39. Many of the experiments were measured in ten-minute intervals, approximately the length of time to smoke a cigarette. *See, e.g.*, *id.* at 525 (experiments included burning three to five cigarettes successively for thirty to fifty minutes total).

40. *Id.* (on-site locations visited included "restaurant and pub patios, cafés, airport sidewalks, and a public park").

41. *See generally* Naeher, *supra* note 7, at 67–100 (discussing toxic effects of wood smoke).

42. *See id.* For example, the Clean Air Act monitors, regulates, and seeks to reduce many air pollutants (even hazardous pollutants), but does not speak in terms of elimination, or zero tolerance, of air pollutants. *See* U.S. ENVTL. PROT. AGENCY, THE PLAIN ENGLISH GUIDE TO THE CLEAN AIR ACT 16 (2007), *available at* http://www.epa.gov/air/caa/peg/toxics.html20.

43. *See, e.g.*, ENV'T PROT. AUTH., GOV'T OF S. AUSTL., THE STATE OF OUR ENVIRONMENT: STATE OF THE ENVIRONMENT REPORT FOR SOUTH AUSTRALIA 2003, at 19 (2003), *available at* http://www.environment.sa.gov.au/soe2003/report.html (stating that Adelaide, Australia has banned "burning waste on domestic premises (e.g. in backyard incinerators)"); DEP'T OF ENV'T & CLIMATE CHANGE, NEW S. WALES GOV'T, ENVIRONMENTAL ISSUES: AIR TOXICS: SUMMARY, *available at* http://www.environment.nsw.gov.au/air/dopahhm/summary.htm (last visited Apr. 1, 2008) (outlining government control of dioxins in the air by, among other things, banning backyard burning and through a wood and coal smoke reduction program); Theodore Parker Sr., Curriculum Unit 86.06.04: Where, Oh Where is All the Clean Air?, http://www.yale.edu/ynhti/curriculum/units/1986/6/

anti-social in their contribution to urban air pollution that they are now often totally outlawed.[44] Similarly, restaurants are required to meet expensive standards for the indoor ventilation of smoke caused by cooking.[45] However, outdoor commercial cooking such as beer garden barbeques and fund-raising hot dog and steak sizzles run in shopping centres on Saturday mornings have not attracted any attention so far. Neither have health authorities sought to close park facilities for barbequing. I suspect the very obvious reason for this is the amounts of smoke involved are trivial.

While control of industrial and vehicle carbon emissions have attracted immense regulatory controls, there is universal willingness to trade off continuing emissions from industry and motor vehicles for the sake of the massive utility that both bring to society.[46] The benzene we all breathe from car exhaust is the same as the benzene in SHS.[47] We hear many calls for car exhaust abatement and reduction, but we hear no serious calls for the banning of cars, which continue to contribute tonnes of benzene to the atmosphere each year.[48] So when it comes to outdoor smoking

86.06.04.x.html#top (last visited Apr. 1, 2008) (stating that Los Angeles has banned all backyard incinerators).

44. *See* Gregory J. Hobbs, Jr., *To See the Mountains: Restoring Colorado's Clean and Healthy Air*, 75 U. COLO. L. REV. 433, 444–46 (2004) (noting that Colorado banned "backyard refuse burning" in 1970 to combat severe air pollution in the Denver area, resulting from what one journalist called "'that odious neighborhood nuisance, the backyard incinerator.'").

45. In New York City for example, restaurants must provide adequate ventilation and if the exhaust hood is "not sufficient to remove excess fumes in kitchen," the restaurant can be cited for a violation of the city's health code. THE CITY OF NEW YORK, DEP'T OF HEALTH AND MENTAL HYGIENE, INSPECTION SCORING SYSTEM FOR FOOD SERVICE ESTABLISHMENTS app. 23B, Violation 10D (2005), *available at* http://www.nyc.gov/html/doh/downloads/pdf/inspect/foodservice info.pdf. The city of Minneapolis has similar requirements, mandating that "ventilation hoods or canopies shall be installed over equipment where grease vapors, smoke, steam, odor, and heat are produced in the preparation of food." MINNEAPOLIS, MINN., CODE § 188.440 (Supp. 1999).

46. *Cf.* MAINE DEP'T OF ENVTL. PROT., BEAM BENZENE FACT SHEET, http://maine.gov/dep/air/beam/factsheets/benzene_fs.htm (detailing the adverse health effects of benzene exposure from burning fossil fuels) (last visited Apr. 2, 2008).

47. *Id.* ("[B]enzene comes from auto exhaust, gasoline stations, and industrial sources . . . . Cigarette smoke is a significant source of benzene for those who smoke or are breathing in second hand smoke, particularly in the home.").

48. *See, e.g.*, HEALTH ASSESSMENT SECTION, BUREAU OF ENVTL. HEALTH, OHIO DEP'T OF HEALTH, BENZENE: ANSWERS TO FREQUENTLY ASKED HEALTH QUESTIONS 1 (2003), http://www.odh.ohio.gov/ASSETS/B50DD769DEAF483D84C7A06756121 521/benzen.pdf (stating "[a]uto exhaust and industrial emissions account for

as a public risk to others, a sense of proportionality would seem to have many precedents. Against such considerations, arguments for zero tolerance of *any* tobacco smoke in outdoor public settings require interrogation of the assumptions and values driving such demands. In my experience, these are nakedly paternalistic, with heroic rearguard efforts being made to appropriate science in justification.

III. WHAT PROBLEMS WOULD ARISE FOR PUBLIC HEALTH POLICY IF AN ABSOLUTE ZERO TOLERANCE POLICY WAS ADOPTED FOR SECONDHAND SMOKE?

Outdoor smoking bans imply zero tolerance for exposure to SHS. In 2005, the World Health Organization (WHO) announced it would no longer employ smokers in any capacity (not just in its tobacco control division).[49] Presumably, it would not matter to the WHO if the world's most renowned health workers in, for example, malaria, HIV/AIDS, or the prevention of injury smoked: they would no longer be welcome inside the world's peak health agency. The WHO policy came under heated debate on an international tobacco control listserver, GLOBALink.[50] Several participants—also advocates for outdoor smoking bans—supported the WHO policy.[51] They advanced a bizarre argument relevant to the debate on zero tolerance for SHS exposure.[52]

They argued correctly that smokers, after smoking outdoors, returned indoors and "off-gassed" SHS smoke particles including volatile organics like benzene and styrene in their exhaled breath[53]

about 20% of the total nationwide exposure to benzene. About 50% of the entire nationwide exposure to benzene results from smoking tobacco or exposure to tobacco smoke").

49. World Health Org., WHO Employment, What Are We Looking for?, http://www.who.int/employment/recruitment/en/ (last visited Apr. 12, 2008) ("Smokers and other tobacco users will not be recruited by WHO as and from 1 December 2005. This policy should be seen in the context of the Organization's credibility in promoting the principle of a tobacco-free environment.").

50. *See* GLOBALink, http://www.globalink.org/ (list server is private and can be accessed by members only; membership is free, but prospective members must be tobacco-control advocates) (last visited Apr. 2, 2008).

51. *See id.*

52. *See id.*

53. Lance Wallace et al., *Exposures to Benzene and Other Volatile Compounds from Active and Passive Smoking*, 42 ARCHIVES ENVTL. HEALTH 272, 273 (1987) (reporting

and from their clothing. This, they argued, was a further consideration for why workplaces might justifiably refuse to employ smokers.[54] However in 2007, a group of researchers showed that the mean time it took for a smoker to stop exhaling residual tobacco smoke particles after finishing a cigarette was 58.6 seconds, corresponding to about nine subsequent breathings.[55] The researchers concluded that asking smokers to wait two minutes before returning indoors after smoking would eliminate measurable particle dispersal from their breath.[56] No one has yet bothered to quantify the amount of smoke particle shedding that smokers emit from their hair and clothing but the levels would be almost infinitesimal.

Those who were animated about the need to stop smokers from "polluting" workplaces like this were in effect so intolerant of smokers that they argued if we can smell smoke on their breath or clothes, they should be denied employment in indoor occupations.[57] The *reductio ad absurdum*[58] of such a position would involve truly frightening policy obligations. Additionally, it would follow that we should not allow smokers to attend cinemas or theatres, travel on public transport, stand in queues, attend sporting matches, or perhaps even walk past us in the street because some non-smokers might find the experience of being near them intolerable.

We might also require employees to declare that they will no longer associate with smokers because they might then come to work with trace levels of smoke in their clothing. Perhaps WHO employees should be asked to divorce their smoking spouses, agree to send their smoking children to approved smoking cessation programs, and agree not to associate with smokers because these people might cause their parents to turn up to work at the WHO smelling of smoke.

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that the breath of smokers contained significantly higher concentrations of benzene, styrene, ethyl-benzene, and xylenes).

54. *See* GLOBALink, *supra* note 50.

55. Giovanni Invernizzi et al., *Residual Tobacco Smoke Measurement of its Washout Time in the Lung and of its Contribution to Environmental Tobacco Smoke*, 16 TOBACCO CONTROL 29, 31 (2007)

56. *Id.* at 33.

57. *See* GLOBALink, *supra* note 50.

58. To disprove an argument "by showing it leads to a ridiculous conclusion." BLACK'S LAW DICTIONARY 1302 (8th ed. 2004).

It is instructive to consider another common behaviour that holds implications for the health of others. Many people are allergic to the fine hair continually shed by pets such as dogs and cats. For example, in the United States, 17% of the population is allergic to cats.[59] A European study concluded that people with cat allergies who do not own cats "may be exposed to high levels of cat allergen . . . if they live in communities with high levels of cat ownership."[60]

People with cat allergies quickly learn not to own or pat cats and will often avoid going into the houses of people who own cats because of the profusion of dander in such locations. But given that exposure to cats is higher in communities where cats are prevalent and that clothing and hair are key vehicles for exposing the allergens to those allergic to cats,[61] by the same logic that seeks to protect non-smokers from SHS, why should we also not forbid cat ownership or force cat owners to shower and have a complete change of clothing before entering any public space?

Supporters of the WHO policy also argue correctly that smoke-free workplaces can act as incentives to cessation.[62] This paternalism exhibited by supporters of the WHO policy in wanting to stop smokers from harming themselves is presumably motivated by benevolence: it is for smokers' own good. Therefore, let us assume that such benevolence extends to all avoidable causes of death, not just those caused by smoking (because if this is not the case, the WHO policy advocates would be nothing but single issue moralists who cared about a cancer death from smoking but not a cancer death from, say, sun exposure).

On the basis of this assumption, should we encourage the WHO to refuse to hire tanned Caucasians (for sending the wrong

59. *See* Samuel J. Arbes, Jr. et al., *Prevalences of Positive Skin Test Responses to 10 Common Allergens in the U.S. Population: Results from the Third National Health and Nutrition Examination Survey*, 116 J. ALLERGY CLINICAL IMMUNOLOGY 377, 378 (2005).

60. Joachim Heinrich, et al., *Cat Allergen Level: Its Determinants and Relationship to Specific IgE to Cat Across European Centers*, 118 J. ALLERGY CLINICAL IMMUNOLOGY 674, 674 (2006). Non-cat owners may be exposed to the cat allergen through "passive transport" in areas "where cat ownership is common." *Id.* at 680.

61. Anne-Sophie Karlsson & A. Renstrom, *Human Hair Is a Potential Source of Cat Allergen Contamination of Ambient Air*, 60 ALLERGY 961, 961–64 (2005). "[H]uman hair contains substantial amounts of cat allergen and may be an important source for transfer and deposition of cat allergen in public places, school and even homes." *Id.* at 963.

62. Caroline M. Fichtenberg & Stanton A. Glantz, *Effect of Smoke-Free Workplaces on Smoking Behaviour: Systematic Review*, 325 BRIT. MED. J. 188, 188 (2002).

message about skin cancer risk), people who ride motorcycles (a hugely risky activity as evidenced by insurance premiums), anyone who chooses to participate in extreme sports (for example, mountaineering, lone ocean sailing, or base jumping, where the risks are immense), anyone who is obese, anyone who makes a virtue out of not exercising, and anyone who drinks excessively after hours? The list could go on.

IV. PSYCHOGENIC EXPLANATIONS OF CLAIMED HARMS FROM LOW-LEVEL SHS EXPOSURES

Advocates for smoke-free outdoor areas include those who passionately attest to being severely affected by even the smallest exposure to SHS. A compassionate attitude toward such claims would be to accept them uncritically at face value and not to subject them to any scientific scrutiny. But if public health policy is to be evidence-based, such claims need to be subjected to scientific assessment. Here, such individuals may have much in common with those who suffer from what was formerly known as multiple chemical sensitivity (MCS), now known as Idiopathic Environmental Intolerance (IEI).[63] Systematic review of research into chemical provocation studies conducted with people suffering from MCS concluded that the "mechanism of action is not specific to the chemical itself and might be related to expectations and prior beliefs."[64] Three studies, for example, used olfactory masking agents to conceal stimuli, and none of these found associations between provocations and response.[65]

Two recent reviews examined the evidence for both the toxiogenic hypothesis[66] (that susceptibility or intolerance of low levels of any environmental agent such as SHS explains multi-system symptoms either through toxicodynamic pathways or by sensitising neural pathways) and the psychogenic hypothesis (that IEI is a culturally learned phenomenon characterised by an overvalued idea of toxic harm explained by psychological,

63. Robert Keene McLellan et al., *Multiple Chemical Sensitivities: Idiopathic Environmental Intolerance [Acoem Position Statement],* 41 J. OCCUPATIONAL & ENVTL. MED. 940, 940–42 (1999).

64. Jayati Das-Munshi et al., *Multiple Chemical Sensitivities: A Systematic Review of Provocation Studies*, 118 J. ALLERGY CLINICAL IMMUNOLOGY 1257, 1257 (2006).

65. *Id.*

66. Staudenmayer et al., *Idiopathic Environmental Intolerance: Part 1: A Causation Analysis Applying Bradford Hill's Criteria to the Toxicogenic Theory,* 22 TOXICOLOGICAL REV. 4, 235–46 (2003).

psychosocial, and psychophysiological processes).[67] The reviews concluded that none of the Bradford Hill criteria for causation were satisfied by the toxiogenic theory, but that all of the criteria were met for the psychogenic theory.[68]

There are many dimensions of antipathy to public smoking. Some people are affronted by the mere sight of smoking (although John Stuart Mill was emphatic that "mere offence" did not count as harm).[69] Others have an evangelical mission to use "tough love" to help others reduce and quit.[70] Communities often introduce standards on the conduct of citizens which relate to reducing nuisance and improving amenity, regardless of whether these issues impact health; neighbourhood building (aesthetic) approvals, dress codes, and noise rules are three broad examples.[71] These standards reflect values that differ between communities, but do not seek refuge in claims about health. Public health research is debased when it lends bogus credibility to what are essentially matters of community preference. If local governments wish to stop people from smoking on beaches because of the intractable butt-littering that occurs, they should frame their actions in terms of litter reduction, not public health. If landlords want to prevent smokers from renting apartments because of the likelihood of complaints about smoke drift from other residents, they should be

67. Staudenmayer et al., *Idiopathic Environmental Intolerance: Part 2: A Causation Analysis Applying Bradford Hill's Criteria to the Psychogenic Theory*, 22 TOXICOLOGICAL REV. 4, 247–61 (2003).

68. *Compare* Staudenmayer et al., *supra* note 66, at 244, *with* Staudenmayer et al., *supra* note 67, at 257. In a 1965 article, Bradford Hill detailed nine criteria to determine when the environment causes medical conditions, instead of merely being associated with them. Austin Bradford Hill, *The Environment and Disease: Association or Causation*, 58 PROC. ROYAL SOC'Y MED. 295 (1965). They are: strength of association; consistency of the association; specificity of the association; the temporal relationship of the association; presence of a biological gradient; biological plausibility of the association; coherence of a causation theory; experimental analyses; and analogy to more famous diseases. *Id.* *See also* Staudenmayer et al., *supra* note 66, at 236 (table summary of nine Bradford Hill criteria.).

69. *See* MILL, *supra* note 22, at 135 ("The acts of an individual may be hurtful to others or wanting in due consideration for their welfare, without going to the length of violating any of their constituted rights.").

70. *See, e.g.*, Jeffrey Mapes, *Study Promotes "Tough Love" of Measure 50*, OREGONIAN, Nov. 2, 2007; *see also* Andre Picard, *"Tough Love—Smokers Denied Surgery*, ASH, Mar. 2005, *available at* http://no-smoking.org/march01/03-05-01-3.html.

71. *See generally* John Copeland Nagle, *Moral Nuisances*, 50 EMORY L.J. 265, 276–77 (2001).

at liberty to do so, but need not invoke public health justifications in the process.

My final concern about the current excesses in secondhand smoke policy is that we risk undermining the much needed case for smoke-free indoor policies in most parts of the world where smoking remains a normal, unremarkable, and unregulated activity.[72] Health workers in those nations are today desperate to convince governments of how reasonable it should be to remove involuntary exposure from SHS in occupational and indoor public settings.[73] They marshal evidence about disease caused by long-term exposure and staunchly defend the credibility of that evidence from the predations of the tobacco and hospitality industries[74] which are intent on exposing those risks as trivial.

Opponents of clean indoor air will be able to point to dubious "endgame" advocacy in nations[75] which have successfully introduced indoor smoking bans, and invoke slippery slope precedents that advocates actually want to ban smoking

72. Paula C. Johnson, *Regulation, Remedy, and Exported Tobacco Products: The Need for a Response from the United States Government*, 25 SUFFOLK U. L. REV. 1, 36–37 (1991) (explaining that there are many countries that have not yet enacted any legislation to control smoking and that those countries have no restrictions on advertising or public smoking). *See also* WORLD HEALTH ORG., WHO REPORT ON THE GLOBAL TOBACCO EPIDEMIC, 2008—THE MPOWER PACKAGE (2008), *available at* http://www.who.int/tobacco/mpower/en/index.html. According to the WHO, seventy-four countries still allow smoking in health-care institutions and about the same number allow smoking in schools. *Id.* at 44. For example, China, Japan, and Russia do not ban smoking in health-care facilities, and Japan and Russia do not ban smoking in school. *Id.* at 85, 117, 145.

73. *See, e.g.*, F. Howell, *Editorial, Smoke-Free Bars in Ireland: A Runaway Success*, 14 TOBACCO CONTROL, 73, 73 (2005) (noting that the ban on smoking in Irish bars is popular with the public and that negative economic effects have been minimal); *see also* Charles W. Schmidt, *A Change in the Air: Smoking Bans Gain Momentum Worldwide*, ENVIRONEWS, Aug. 11, 2007, *available at* http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1940108.

74. *See* David Champion & Simon Chapman, *Framing Pub Smoking Bans: An Analysis of Australian Print News Media Coverage March 1996–March 2003*, 59 J. EPIDEMIOLOGY & COMMUNITY HEALTH 8, 679–84 (2005) (discussing tactics of the Australian Hotels Association and tobacco control groups in the fight over legislation to make bars smoke free).

75. *E.g.*, Jordan Raphael, Note, *The Calabasas Smoking Ban: A Local Ordinance Points the Way for the Future of Environmental Tobacco Smoke Regulation*, 80 S. CAL. L. REV. 393, 416 (2007) (discussing the efforts of anti-smoking advocates in the United States to ban smoking in multiunit residences); Lila E. Slovak, *Smoke Screens: Why State Laws Making It a Crime to Smoke in Cars Containing Children Are a Bad Idea*, 41 FAM. L.Q. 601, 602 (2007) (noting that Bangor, Maine has banned smoking in cars with minors under age eighteen and that legislators in fifteen states have introduced similar legislation).

everywhere. This may unfairly brand tobacco control advocates as clandestine extremists with agendas which abandon all proportionality in the formulation of policy. Such views are likely to undermine the credibility of advocacy for evidence-based policies[76] to the great detriment of perhaps hundreds of millions of citizens.

76. *See* Katherine Bryan-Jones & Simon Chapman, *Political Dynamics Promoting the Incremental Regulation of Second Hand Smoke: A Case Study of New South Wales, Australia*, 6 BMC PUB. HEALTH 1, 192 (2006) (discussing how "economic, ideological, and anecdotal arguments" can overpower scientific evidence supporting bans on smoking in bars and clubs).

BENEFITS OF SMOKE-FREE REGULATIONS IN OUTDOOR SETTINGS: BEACHES, GOLF COURSES, PARKS, PATIOS, AND IN MOTOR VEHICLES

James L. Repace†

Some persons feel that although establishing smoke-free buildings is justified, establishing smoke-free areas outdoors is not. This paper discusses the toxicity of tobacco smoke, the factors determining its concentration, and argues that tobacco smoke in places where people live, work, or congregate, whether indoors or outdoors, poses a nuisance to many, and both an acute and chronic health hazard to some. Thus, local governments are justified in establishing smoke-free zones outdoors.

Tobacco smoke contains at least 172 toxic substances, including 3 regulated outdoor air pollutants, 33 hazardous air pollutants, 47 chemicals restricted as hazardous waste, and 67 known human or animal carcinogens.[1] The law of conservation of

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1. JAMES L. REPACE, EXPOSURE ANALYSIS 203 (Wayne R. Ott et al. eds., 2006).

mass dictates that this must be true whether tobacco smoke is inhaled in the act of smoking, or inhaled by nonsmokers out of the air indoors or outdoors, known as secondhand smoke (SHS).

The concentration of tobacco smoke pollution in buildings and in vehicles is proportional to the density of smokers, and inverse to the ventilation rate.[2] Tobacco smoke pollution outdoors (outdoor tobacco smoke—or OTS), is far more complicated, being determined by the density and distribution of smokers, the wind velocity (direction and speed), and the stability of the atmosphere.[3] High SHS concentrations are produced by high smoker density, low wind velocities, and stable atmospheric conditions. SHS concentrations persist for hours after smoking ceases indoors, while OTS concentrations dissipate rapidly after smoking ceases outdoors.[4] However, during smoking, OTS levels outdoors may be as high as SHS indoors, especially in close proximity to smokers.

I. STATE AND LOCAL OUTDOOR SMOKING BAN POLICIES

Several states have taken steps to restrict smoking in outdoor locations and even in automobiles where children are present. As a result of research conducted by the state, culminating in the listing of OTS as a Toxic Air Contaminant, some of the most restrictive ordinances have been passed in California.

The City Council of Calabasas, California, passed an ordinance that took effect January 1, 2007, "prohibit[ing] smoking in all public places, indoor or outdoor, where anyone might be exposed to secondhand smoke."[5] The outdoor ban "includes outdoor cafes, bus stops, soccer fields, condominium pool decks, parks and sidewalks."[6] "Smoking in one's car is allowed, unless the windows

2. James L. Repace, *Fact Sheet: Outdoor Air Pollution from Secondhand Smoke* (2005), *available at* http://www.repace.com/pdf/OTS_FACT_SHEET.pdf.

3. *Id.*

4. Neil E. Klepeis et al., *Real-Time Measurement of Outdoor Tobacco Smoke Particles*, 57 J. AIR & WASTE MGMT. ASS'N 522, 522 (2007); James L. Repace, Address Before the 13th World Conference on Tobacco OR Health: Abstract of Indoor and Outdoor Carcinogen Pollution on a Cruise Ship in the Presence and Absence of Tobacco Smoking (Oct. 17, 2004) (unpublished working paper, on file with author).

5. John M. Broder, *Smoking Ban Takes Effect, Indoors and Out*, N.Y. TIMES, Mar. 19, 2006, at 1; CALABASAS, CAL., MUN. CODE §§ 8.12.030–.040 (2006), *available at* http://www.bpcnet.com/codes/calabasas.

6. Broder, *supra* note 5, at 1.

are open and someone nearby might be affected."[7] Violators face "warnings, fines of up to $500 for repeat offenses, and misdemeanor charges."[8] The ordinance followed a few "weeks after the California Air Resources Board declared secondhand smoke to be a Toxic Air Contaminant that can lead to respiratory infections, asthma, lung cancer, heart disease and death."[9] "Smoking has been prohibited on most Southern California beaches and piers since 2003."[10] Nationwide, in excess of "700 cities . . . have enacted ordinances placing some limits on outdoor smoking, according to the American Nonsmokers' Rights Foundation."[11] California Governor Arnold Schwarzenegger "signed a bill [making] it an infraction to smoke in a vehicle if someone under age 18 is present."[12] Other California smoking prohibitions "include a ban on smoking in enclosed workplaces and within 25 feet of a playground."[13] Legislation banning smoking in cars with young children present was adopted in Arkansas in 2006, and similar smoking bans with children have been introduced in the states of California, Georgia, Michigan, New Jersey, New York, Pennsylvania, and Vermont.[14] Louisiana has limited smoking in cars when children 13 and younger are in the vehicle.[15]

II. STUDIES OF OUTDOOR TOBACCO SMOKE CONCENTRATIONS

A limited number of controlled experiments and field studies of OTS have been conducted in California, Europe, Maryland, and the Carribean. These studies show that OTS levels outdoors are often as high as SHS levels indoors, although there are differences in the persistence of OTS levels once smoking ceases.

7. *Id.*
8. *Id.*
9. *Id.*
10. *Id.* at 2.
11. *Id.*
12. Steve Lawrence, *State Bans Smoking with Kids in Vehicle*, ASSOCIATED PRESS, Oct. 11, 2007.
13. *Id.*
14. Wayne Ott et al., *Air Change Rates of Motor Vehicles and In-Vehicle Pollutant Concentrations from Secondhand Smoke*, 1–14 J. EXPOSURE SCI. & ENVTL. EPIDEMIOLOGY 1, 13 (2007).
15. Vaughn W. Rees & Gregory N. Connelly, *Measuring Air Quality to Protect Children from Secondhand Smoke in Cars*, 31 AM. J. PREVENTIVE MED. 363, 363 (2006).

A. California

The California Air Resources Board (CARB) study measured OTS nicotine concentrations outside an airport, college, government center, office complex, and amusement park.[16] CARB found that at these typical outdoor locations, Californians may be exposed to OTS levels as high as indoor SHS concentrations.[17] CARB found that OTS was strongly affected by the number of smokers, and moderately affected by the size of the smoking area and the measured wind speed.[18] The CARB study concluded that OTS concentrations are detectable and are sometimes comparable to indoor concentrations. The study also demonstrated that the number of cigarettes being smoked (i.e., total source strength), the position of smokers relative to the receptor, and atmospheric conditions can all lead to substantial variation in average exposures.[19] CARB concluded that OTS is a "Toxic Air Contaminant."[20]

A Stanford University study measured OTS respirable particle concentrations in outdoor patios, on airport and city sidewalks, and in parks.[21] It also conducted controlled experiments of SHS indoors and OTS outdoors.[22] It found that mean SHS particle concentrations outdoors can be comparable to SHS indoors.[23] Within about 2 feet of a smoker, OTS was quite high and comparable to SHS concentrations measured indoors.[24] The study found that levels measured in 2 sidewalk cafés were detectable at distances beyond 13 feet.[25] It further found that, in contrast to SHS, OTS does not accumulate and that OTS peaks are more

16. *See* CAL. ENVTL. PROT. AGENCY: AIR RESOURCES BOARD, PROPOSED IDENTIFICATION OF ENVIRONMENTAL TOBACCO SMOKE AS A TOXIC AIR CONTAMINANT (2005), http://repositories.cdlib.org/tc/surveys/CALEPA2005.

17. *Id.* at 5–12.

18. *Id.* at 23.

19. *Id.* at 82–91.

20. *Id.* at 25.

21. Klepeis et al., *supra* note 4, at 525 (study conducted via "15 on-site field visits to 10 public outdoor locations containing smokers").

22. *Id.* at 525–26.

23. *Id.* at 531.

24. *Id.* at 532 ("Generally, average levels within 0.5 m[eters] from a single cigarette source were quite high and comparable to indoor levels . . . .") (0.5 meters equals approximately 1.64 feet).

25. *Id.* ("[D]uring 2 on-site proximity experiments . . . OTS was still detectable . . . at distances of approximately 3–4 m[eters] from a single cigarette on sidewalk patios.") (4 meters equals approximately 13.12 feet).

sensitive to source-receptor proximity and wind velocity.[26] Thus, long-term averages for OTS concentrations are averaged over a large number of transient peaks, which only occur when smokers are active, whereas indoor concentrations remain high long after smoking has ceased. The total dose to a person indoors from each cigarette will be greater than that received from each cigarette smoked outdoors. The study found upwind OTS concentrations very low and downwind OTS much higher.[27]

B. Denmark

Boffi measured OTS respirable particle pollution in a car park (open space), outdoors in front of a conference center with smokers under a roof (18 smokers during a measurement time of 35 minutes), indoors in the nonsmoking conference center, along the motorway to Copenhagen city centre, and inside a Copenhagen restaurant where smoking was allowed.[28] He found that mean values observed with smokers in front of the conference center were significantly higher than the outdoor parking place, indoor conference center, motorway, and Copenhagen outdoor official data.[29]

C. Finland

Repace and Rupprecht measured OTS respirable particle pollution in 5 outdoor cafés and on city streets in downtown Helsinki.[30] They found that air pollution levels during August 2003 in Helsinki outdoor cafés with many smokers were 5 to 20 times higher than on the sidewalks of busy streets polluted by bus, truck, and auto traffic.[31]

26. *Id.* at 530–32.
27. *Id.* at 532.
28. R. Boffi et al., *A Day at the European Respiratory Society Congress: Passive Smoking Influences Both Outdoor and Indoor Air Quality*, 27 EUR. RESPIRATORY J. 862, 862 (2006).
29. *Id.* at 863.
30. James L. Repace & Ario Alberto Rupprecht, Paper Presented at the 13th World Conference on Tobacco OR Health: Outdoor Air Pollution from Secondhand Smoke (July 14, 2006).
31. *Id.*

D. Maryland

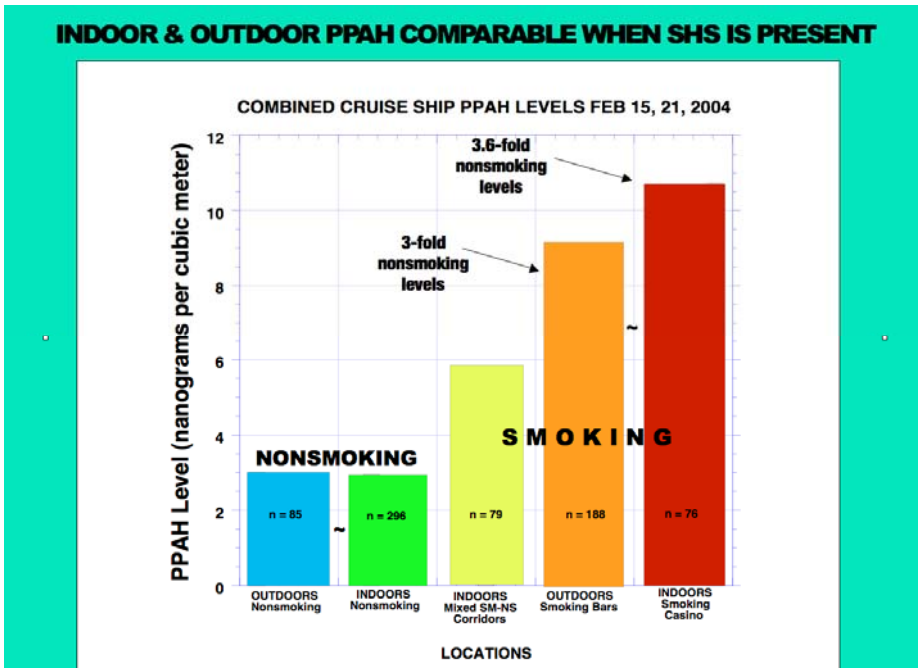
Repace measured outdoor fine particle and carcinogen concentrations from OTS on the campus of the University of Maryland in Baltimore County.[32] Using controlled experiments, Repace found that cigarette smoke respirable particulate (RSP) concentrations decline approximately inversely with distance downwind from the point source, whereas cigarette smoke carcinogen concentrations decline approximately inversely as the square of the distance from source to receptor.[33] The experiments showed that OTS smoke levels did not approach background levels either for fine particles or carcinogens until about 23 feet from the source.[34] Levels of irritation begin as low as 4 micrograms per cubic meter ($\mu g/m^3$) SHS-RSP, and levels of odor detection are as low as 1 $\mu g/m^3$.[35] Thus SHS odor would be detectable in these experiments as far as 7 meters from the source, and levels of irritation would begin at 4 meters from the source.[36]

E. The Caribbean

Experiments conducted on a cruise ship underway at 20 knots at sea in the Caribbean showed that OTS in various smoking-permitted outdoor areas of the ship tripled the level of carcinogens to which nonsmokers were exposed relative to indoor and outdoor areas in which smoking did not occur, despite the strong breezes and unlimited dispersion volume.[37] Moreover, outdoor smoking areas were contaminated with carcinogens to nearly the same extent as a popular casino on board in which smoking was permitted.[38]

32. Repace, *supra* note 2.
33. *Id.* at 9.
34. *Id.* at 10.
35. Martin H. Junker et al., *Acute Sensory Responses of Nonsmokers at Very Low Environmental Tobacco Smoke Concentrations in Controlled Laboratory Settings*, 109 ENVTL. HEALTH PERSP. 1045, 1050–51 (2001).
36. *See id.* at 1049–50.
37. James L. Repace, Address at the 14th Annual Conference of the International Society of Exposure Analysis: Indoor and Outdoor Carcinogen Pollution on a Cruise Ship (Oct. 2004).
38. *Id.*

Figure 1. Indoor and Outdoor Carcinogen Pollution on a Cruise Ship[39]



Outdoor carcinogen levels in the presence of smoking in a ship underway at sea at 20 knots of speed is comparable to indoor levels in the ship's casino, again showing a strong proximity effect despite the open air and strong breezes.[40]

F. Smoking in Cars

Two studies have shown that secondhand smoke in the small volumes of cars leads to very high exposures. Ott, Klepeis, and Switzer measured carbon monoxide (CO) and fine particle ($PM_{2.5}$) from multiple cigarettes smoked inside of 4 motor vehicles under both moving and stationary conditions, and found high particle concentrations inside cars with smokers due to the small volumes of the passenger compartments, and found that the concentrations become extremely high with the low air change rates caused by

39. *Id.*
40. *Id.*

closing windows and air conditioning.[41] They concluded that these extremely high particle concentrations constitute a serious health risk for adults and children who are passengers in a car with a smoker.[42] These findings were echoed by a Harvard School of Public Health report, concluding that SHS in cars can be up to 10 times more of a health risk than SHS in a home.[43] At least 20 states and a number of municipalities have considered limiting smoking in cars where minors are present.[44]

III. DISCUSSION

Individual cigarettes are point sources of air pollution; smokers in groups become an area source of SHS pollution. Outdoor air pollutants from individual point sources are subject to plume rise if the temperature of the smoke plume is hotter than the surrounding air; however if the plume has a small cross-section, as for a cigarette, it will rapidly cool and lose its upward momentum, and then will subside, as the combustion particles and gases are heavier than air.[45] Thus, in the case of no wind, the cigarette plume will rise to a certain height and then descend, and for a group of smokers, for example, sitting in an outdoor café, on a hospital patio, or in stadium seats, their smoke will tend to saturate the local area with SHS.

In the case where there is wind, the amount of thermally-induced plume rise is inversely proportional to the wind velocity—doubling the wind velocity will halve the plume rise.[46] In this case, the cigarette plume will resemble a cone tilted at an angle to the vertical.[47] The width of the cone and its angle with the ground will depend upon the wind velocity: a higher wind will create a more horizontal but wider cone (due to increased turbulence), with uncertain impact on exposure to SHS for downwind nonsmokers.[48] If there are multiple cigarette sources forming an area source of

41. Ott et al., *supra* note 14, at 15.
42. *Id.*
43. Rees & Connelly, *supra* note 15, at 363. The report concludes that levels of RSP measured in private cars were unsafe for children at prolonged rates. *Id.* at 367. *See also* Lawrence, *supra* note 12.
44. Lawrence, *supra* note 12.
45. Repace, *supra* note 2, at 1.
46. *Id. See generally* SAMUEL J. WILLIAMSON, FUNDAMENTALS OF AIR POLLUTION (1973).
47. WILLIAMSON, *supra* note 46; Repace, *supra* note 2, at 1.
48. WILLIAMSON, *supra* note 46; Repace, *supra* note 2, at 1.

SHS, the downwind concentrations will consist of multiple intersecting cones, i.e., overlapping plumes of increased concentration in the volume of overlap, before re-dissipating with increasing distance from the area source.[49] As the wind direction changes, SHS pollution will be spread in various directions, fumigating downwind nonsmokers.

A. Symptomatic Effects

There are a number of studies that show that nonsmokers suffer both illness and irritation from tobacco smoke exposure. SHS contains a large quantity of respirable particles, which can cause breathing difficulty for those with chronic respiratory diseases, or trigger an asthmatic attack in those with disabling asthma.[50] For the remainder of nonsmokers, Junker et al. report eye, nasal, and throat irritation thresholds for 24 healthy young adult females for repeated exposures over the course of 2 hours, corresponding to an SHS-$PM_{2.5}$ concentration of about 4.4 $\mu g/m^3$.[51] As Figure 2 shows, these levels are exceeded even at distances 3 or 4 meters (10 to 13 feet) downwind of a smoker in a sidewalk café, posing an irritation and annoyance problem even for healthy nonsmokers. With larger numbers of smokers, this irritating cloud of pollution would extend to even greater distances. Thus, there is scientific data to support OTS being both a health threat to asthmatic patients and a public nuisance to nonsmokers in general.

49. WILLIAMSON, *supra* note 46.

50. James Repace, Indoor Air Pollution and the Asthma Epidemic 5 (July 1996) (unpublished working paper, on file with author).

51. Junker et al., *supra* note 35, at 1049.

Figure 2. Outdoor Tobacco Smoke (OTS) In a Sidewalk Café and a Backyard Patio[52]

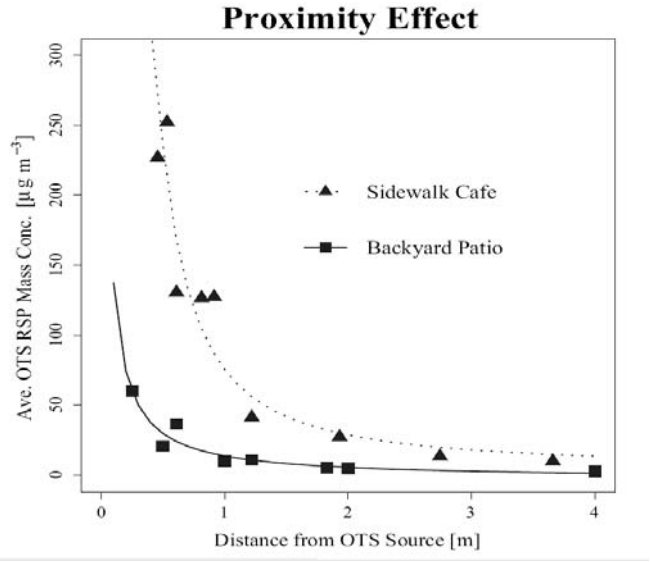


Figure 2. Overall average OTS mass concentrations as a function of proximity to the OTS source measured during experiments on a backyard patio using smoldered cigarettes, and two sidewalk cafés with human-smoked and smoldered cigarettes, for which source proximity was precisely recorded. Background RSP levels were subtracted from all measurements.

Figure 2 illustrates the proximity effect in a sidewalk café: outdoor tobacco smoke was still detectable at distances of approximately 3 to 4 meters from a single cigarette on sidewalk patios. Slightly elevated particle concentrations were detected at a distance of 8 meters from a cluster of burning cigarettes and around the corner of the house during a backyard patio experiment.[53]

Speer investigated subjective reactions of nonsmokers who developed symptoms from passive smoking.[54] Speer divided the nonsmokers into 2 groups: 191 nonsmokers with allergic diseases such as nasal allergy, asthma, and allergic headache, and a control group of 250 non-allergic nonsmokers without such diseases.[55]

52. Klepeis et al., *supra* note 4, at 532, fig. 3.
53. *Id.*
54. *See generally* Frederic Speer, *Tobacco and the Nonsmoker: A Study of Subjective Symptoms*, 16 ARCHIVES ENVTL. HEALTH 443 (1968).
55. *Id.* at 443–44.

Speer concluded that an impressively large number of people complain of symptoms from tobacco smoke, both allergic and non-allergic individuals.[56] The symptoms are summarized in Figure 3 on the following pages.

Figure 3. Known Symptoms of Passive Smoking[57]

Passive Smoking may produce:

- Itching, tearing, burning, reddening, swelling of eyes, blinking—increasing with exposure;
- Sneezing, blocking, running, itching of nose;
- Coughing, wheezing, sore throat—respiratory discomfort might begin within a half hour, persist for 8 to 12 hours;
- Headache, nausea and dizziness;
- Choking sensation;
- Irritation of mucous membranes of nose, throat, lung;
- Respiratory disease exacerbation;
- Respiratory symptoms, depressed pulmonary function.

Passive smoking is the inhalation of secondhand or environmental tobacco smoke (SHS)-polluted air. SHS is the toxic waste of tobacco consumption.

56. *Id.* at 446.

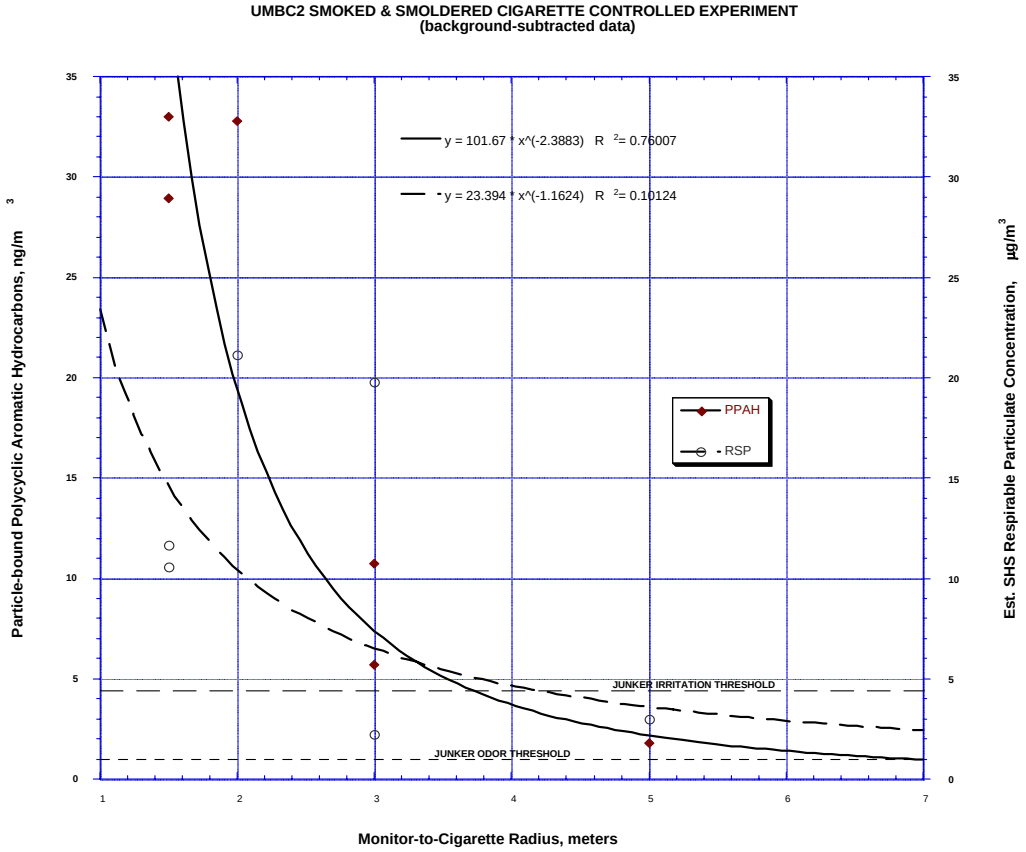
57. *Id.* at 443–46; Herbert Savel, *Clinical Hypersensitivity to Cigarette Smoke*, 21 ARCHIVES ENVTL. HEALTH 146 (1970).

Prevalence of SHS symptoms reported by 10,000 nonsmoking office workers, exposed 8 hours per day[58] • Difficulty working near a smoker (50%) • Forced to move away from desks (36%) • Bothered by SHS (33%) • Eye irritation (48%) • Nasal irritation (35%) • Aggravation of pulmonary disease (25%)	Odor acceptability[59] ~ 1μg/m^3 SHS-RSP; irritation threshold[60]: 4.4 μg/m^3

Savel reported on 8 nonsmokers with clinical hypersensitivity to cigarette smoke; all 8 individuals were allergic nonsmokers, and all developed immediate upper respiratory discomfort after being exposed to cigarette smoke.[61] Savel also reported a number of adverse symptoms, including eye and nose irritation, choking sensation, and both sinus and migraine headaches.[62] Savel concluded that an allergy to cigarette smoke might produce clinically distressing upper respiratory tract symptoms in nonsmokers with allergic backgrounds, exert a depressant effect on the antibacterial defense mechanisms of the lung, exert a toxic effect on lymphocytes, and play a role in the pathogenesis of pulmonary distress.[63]

58. Cary B. Barad, *Smoking on the Job: The Controversy Heats Up*, 48 OCCUPATIONAL HEALTH & SAFETY 21, 21–24 (1979).
59. Junker et al., *supra* note 35, at 1050.
60. *Id.*
61. Savel, *supra* note 57, at 146.
62. *Id.* at 147.
63. *Id.*

Figure 4. Smoked and Smoldered Cigarettes Showing the Cancer-Causing Polycyclic Aromatic Hydrocarbons (PAH) and SHS-RSP Data[64]



The Junker (2001) irritation index shows the median threshold of SHS irritation for healthy nonsmokers.[65] Figure 4 illustrates the proximity effect in an outdoor plaza where students congregated in widely scattered tables on a college campus in Baltimore, Maryland.[66] The proximity effect was studied in a controlled experiment involving 10 college student smokers placed in rings of increasing diameter around 2 air quality monitors so

64. Repace, *supra* note 2.
65. Junker et al., *supra* note 35, at 1045.
66. Repace, *supra* note 2, at 6.

that no matter which way the wind blew, the monitors were always downwind of 1 smoker.[67] Relative to a ring radius of 4 meters (13 feet), where the level is 4 units high, the SHS-RSP exposure concentration at 1.5 meters (5 feet) is 13 units high for particles and 35 units high for PPAH carcinogens, as shown in Figure 4. In this experiment, the proximity effect near a ring-shaped area source increases SHS by a factor of 3 for particles and a factor of nearly 9 for carcinogens.

B. Asthmatic Effects

There is very good evidence that environmental tobacco smoke has direct irritant effects in the case of passive smoking by children under the age of 4; this effect appears to diminish in children aged over 4 years.[68] There is also good evidence that SHS can trigger bronchospasm in some adults with asthma.[69] SHS is associated with wheezing symptoms, medical therapy for wheezing, and wheezing-related emergency department visits by children.[70] A causal association exists between SHS and increased episodes and aggravation of symptoms of children with asthma, affecting 200,000 to 1,000,000 children under the age of 18.[71] More than 14 million Americans reported having asthma in 2000, according to the National Center for Health Statistics.[72] "Asthma is a leading contributor of limited activity and absences from work and school; it also causes 5000 deaths each year in the U.S. The National Heart, Lung, and Blood Institute estimates that the annual direct and indirect costs of asthma were $12.7 billion in 2000."[73] By 2004, 7.1% (20.5 million) of people currently had asthma.[74] Among children under age 18 years, 8.5% (6.2 million) currently had asthma. Among adults 18 years and over, 6.7% (14.4 million) had asthma.[75] According to one report, teenage children exposed to

67. *Id.*
68. Repace, *supra* note 4.
69. *Id.*
70. *Id.*
71. *Id.*
72. Nat'l Heart, Lung, and Blood Inst., Asthma: Frequently Asked Questions, http://www.nhlbi.nih.gov/health/prof/lung/asthma/surveil_faq.htm.
73. Press Release, Nat'l Insts. of Health, NHLBI Funds Centers for Reducing Asthma Disparities (Oct. 30, 2002), *available at* http://www.nhlbi.nih.gov/new/press/02-10-30a.htm.
74. Nat'l Heart, Lung, and Blood Inst., *supra* note 72.
75. *Id.*

tobacco smoke in cars had an even higher risk of persistent wheeze than if they had been exposed at home.[76]

C. Health Risks from Exposure to SHS and OTS

Repeated exposure to a carcinogen, such as air pollution from SHS and OTS, over a lifetime increases the risk of cancer.[77] The U.S. Surgeon General has stated that there is "no risk free exposure to SHS"—chronic risk is proportional to average exposure concentration times duration of exposure times the dose-response relationship.[78] Federal regulatory agencies compute risk over a 70-year standard lifetime (e.g., EPA) or over a working lifetime of 45 years (e.g., OSHA).[79] Typical risks for lung cancer from passive smoking are in the range of 1 to 10 deaths per 1000 persons per lifetime.[80] Typical chronic heart disease risks are 10 times higher.[81] "De minimis" or acceptable risk is typically 1 death per 1,000,000 persons per lifetime.[82] OSHA's "significant risk of material impairment of health" is 1 death or irreversible serious health effect per 1000 workers per 45 year working lifetime.[83] "De manifestis" or obvious risk is 5 deaths or irreversible adverse health effect per 10,000 people at risk.[84] For workers indoors, it would take tornado-like rates of ventilation or air cleaning to reduce risks from chronic workplace exposure to de minimis levels; ergo, there is no risk-free chronic exposure to SHS. This is also likely to be true for waiters in outdoor cafés. Moreover, indoors or outdoors, for persons who have serious asthma, chronic obstructive

76. Peter D. Sly et al., *Exposure to Environmental Tobacco Smoke in Cars Increases the Risk of Persistent Wheeze in Adolescents*, 186 MED. J. AUSTL. 322, 322 (2007).

77. *See* RISK ASSESSMENT FORUM, U.S. ENVTL. PROT. AGENCY, GUIDELINES FOR CARCINOGEN RISK ASSESSMENT 5-1 to -7 (2005) (discussing risk characterization as bringing together hazard, dose-response, and exposure analysis).

78. Americans for Nonsmokers' Rights, *Second Hand Smoke: The Science* 1 (Nov. 2006), *available at* http://www.no-smoke.org/pdf/SHS.pdf.

79. *See* JOHN R. FOWLE III & KERRY L. DEARFIELD, U.S. ENVTL. PROT. AGENCY, RISK CHARACTERIZATION HANDBOOK 154 (2000), *available at* http://www.epa.gov/OSA/spc/pdfs/rchandbk.pdf (EPA); James L. Repace et al., *Air Nicotine and Saliva Cotinine as Indicators of Workplace Passive Smoking Exposure and Risk*, 18 RISK ANALYSIS 71, 78 (1998) (OSHA).

80. *See* James L. Repace et al., *A Quantitative Estimate of Nonsmokers' Lung Cancer Risk from Passive Smoking*, 11 ENV'T INT'L 3, 6–9 (1985).

81. Repace et al., *supra* note 79, at 79.

82. Curtis C. Travis et al., *Cancer Risk Management: A Review of 132 Federal Regulatory Decisions*, 21 ENVTL. SCI. & TECH. 415, 418 (1987).

83. Repace et al., *supra* note 79, at 79.

84. Travis et al., *supra* note 82, at 418.

respiratory disease, or heart disease, even brief exposures to SHS could land them in the emergency room or worse. It is generally these patients who died in the notorious outdoor smog episodes in the Meuse Valley in Belgium in 1930, Donora, Pennsylvania in 1948, and London in 1952, which eventually led to stringent regulation of outdoor air pollution.[85]

Arguments against banning smoking in certain outdoor public venues were advanced by Professor Simon Chapman in his presentation at the Tobacco Control Legal Consortium Symposium on the Limits of Tobacco Control Regulation.

> Our focus in this symposium on whether policy and advocacy for the regulation of SHS might sometimes go "too far." [Where] "going too far" in SHS policy means efforts premised on reducing harm to others, which ban smoking in outdoor settings such as ships' decks, parks, golf courses, beaches, outdoor parking lots, hospital gardens and streets. It is also the introduction of misguided policies allowing employers to refuse to hire smokers, including those who obey proscriptions on smoking indoors while at work. Many people are comforted by the smell of camp and log fires, even seeking out such exposures. But the same people will sometimes become outraged by the occasional, fleeting exposure to tobacco smoke. While nearly identical in terms of their noxious content, both forms of smoke have entirely different *meanings*. If radically different concerns about inhaling essentially the same zoo of noxious particles was all that mattered here, we would have to conclude that many people can be frankly irrational. But outrage about some forms of smoke and open acceptance of others is very explicable to sociologists of risk perception. Among the many key determinants of meaning and outrage are whether a noxious agent is seen as voluntary or coerced; natural or artificial; and whether the risk has been amplified by lots of media attention. We don't read much about the dangers of inhaling campfire smoke, smoke from incense or candles or cooking, but we read a lot about the dangers of secondhand cigarette smoke. I emphasize that I am very supportive of preventing smoking in crowded, confined outdoor

85. WILLIAMSON, *supra* note 46. *See also* STEPHEN T. HOLGATE ET AL., AIR POLLUTION & HEALTH (1999).

> settings such as sports stadia, in most outdoor dining sections of (particularly small) restaurants and in unblocking the entrances to buildings by having smokers move further away.[86]

My response to Professor Chapman's arguments follows: We agree completely on the principle of banning smoking in outdoor cafés and sports stadia. However, I disagree that because campfire smoke and smoke from incense, candles, or cooking have not (yet) received the same level of notoriety that SHS has (largely because they have not been researched until recently), that they do not pose both acute and chronic health hazards resulting from the toxicity of fine particles.[87] In fact, smoke from any source in places where people live, work, or congregate is going to pose a nuisance to many and an acute health hazard to some. Smoke from all of these sources is the product of incomplete combustion and is toxic to humans. As with indoor smoking, if enough persons complain about outdoor smoking, local governments will be moved to protect the public, as they have done for decades with factory smoke and auto exhaust, and are scientifically justified in doing so for OTS on the basis of the exposure analysis discussed herein.

IV. CONCLUSIONS AND POLICY IMPLICATIONS

In 1946, a city ordinance urged by concerned citizens was passed in Pittsburgh, Pennsylvania, despite the absence at that time of any scientific evidence of the health effects of outdoor air pollution levels on the population. Thus, early public air pollution policy was formulated on the basis of intuition. Similarly, a wave of restrictions on outdoor smoking has been passed in several U.S. states, despite the absence of health effects studies on OTS and the paucity of data on OTS concentrations. However, data is accumulating in support of the public's intuitive response to OTS. Recent field studies plus controlled experiments demonstrate that, regardless of which way the wind blows, individuals in an outdoor

86. Simon Chapman, Professor of Public Health at the University of Sydney, Austl., Presentation at the Tobacco Control Legal Consortium Symposium on the Limits of Tobacco Control Regulation at William Mitchell College of Law (Oct. 23, 2007).

87. *See generally* Wayne R. Ott & Hans C. Siegmann, *Using Multiple Continuous Fine Particle Monitors to Characterize Tobacco, Incense, Candle, Cooking, Wood Burning, and Vehicular Sources in Indoor, Outdoor, and In-Transit Settings*, 40 ATMOSPHERIC ENV'T 821 (2006).

café, transiting through a building doorway, on a public street, sidewalk or bus stop, even on the open deck of a cruise ship at sea, or otherwise surrounded by a group of smokers, are always downwind from the source and are thus subject to being enveloped in a cloud of obnoxious, irritating, asthmagenic, carcinogenic, and atherogenic fumes.

These studies also show that under a variety of conditions, levels of OTS can be as high as indoor levels of SHS. Smoking in the small volume of cars leads to much higher levels of tobacco smoke air pollution than in other enclosed environments. Individuals who suffer from asthma, especially children, are at acute risk from OTS. Healthy persons are subject to annoyance and increased risk of developing chronic disease from repeated OTS exposure over a lifetime. This new data confirms public intuition, demonstrating that public demand for smoke-free outdoor spaces is not "going too far," and justifies policies banning smoking in outdoor locations, in vehicles, where people congregate in public, or where workers are placed at risk, such as outdoor cafés.

WHOSE LIFE IS IT ANYWAY? EMPLOYER CONTROL OF OFF-DUTY SMOKING AND INDIVIDUAL AUTONOMY

Lewis Maltby†

"Your right to swing your fist stops at the end of my nose."[1]

Henry Ford had his own private police force.[2] If you worked for Ford Motor Company, its officers could show up at your door at any hour of the day or night and search your entire home.[3] If they found anything Henry Ford disapproved of, you were fired.[4] If you were drinking, you were fired.[5] If there was someone upstairs at night that you were not married to, you were fired.[6] If you were playing cards for money, you were fired.[7] If you had books Ford did not like, you were fired.[8]

Today, we know that this was wrong. The fact that Henry Ford signed people's paychecks did not give him the right to control their private lives.

But we are in danger of slipping back into this kind of world. Many employers are beginning to take control of employees' private lives in the name of reducing health care costs.[9]

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1. Attributed to Justice Oliver Wendell Holmes.

2. *See* HENRY FORD & SAMUEL CROWTHER, MY LIFE AND WORK 128–29 (1922). Ford employed as many as fifty investigators in his "social welfare department" who looked into the private lives of Ford Motor Company employees. *Id.* The Social Department was originally instituted to evaluate each employee's eligibility for a "prosperity-sharing" program. *Id.* at 129.

3. *See* KEITH SWARD, THE LEGEND OF HENRY FORD 59 (1948).

4. *Id.*

5. *Id.*

6. *Id.*

7. *Id.*

8. *Id.*

9. *See generally* Jeremy W. Peters, *Company's Smoking Ban Means Off-Hours, Too*, N.Y. TIMES, Feb. 8, 2005, at C5.

The most common example of this trend involves employers who prohibit employees from smoking in their private lives.[10] The Administrative Management Society has estimated that six percent of all employers in the United States discriminate against off-duty smokers.[11] These employers argue that smokers incur higher medical costs that adversely affect profitability.[12] This is clearly correct. While the magnitude by which smokers' medical costs exceed those of other employees has not been precisely measured, nor the amount of these higher costs that fall on a particular employer, there is no question that smokers cost their employers more money for medical care.[13]

But smoking is not the only behavior that increases medical costs. Alcohol isn't good for you.[14] Neither is junk food, red meat, too much coffee, lack of exercise, or lack of sleep.[15] Many forms of recreation have medical risks, including skiing, scuba diving, and riding motorcycles. Getting to work by bicycle may be good exercise, but it increases the risk of being hurt in a traffic accident. Even your sex life has health care cost implications. People with multiple sexual partners have a greater risk of acquiring STDs than those who are monogamous.[16] If it is acceptable for employers to

10. *See, e.g.*, Peters, *supra* note 9.

11. NAT'L WORKRIGHTS INST., LIFESTYLE DISCRIMINATION: EMPLOYER CONTROL OF LEGAL OFF-DUTY EMPLOYEE ACTIVITIES 2, http://www.workrights.org/issue_lifestyle/ldbrief2.pdf [hereinafter NWI ON LIFESTYLE DISCRIMINATION].

12. In 2002, the Centers for Disease Control and Prevention estimated that, on average, each adult smoker in the United States cost their employer $3391 in additional health care and productivity losses annually. ANNUAL SMOKING-ATTRIBUTABLE MORTALITY, YEARS OF POTENTIAL LIFE LOST, AND ECONOMIC COSTS—UNITED STATES, 1995–1999, Apr. 12, 2002, http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm [hereinafter CDC Report].

13. *See id.* The CDC, along with other individuals and organizations, has estimated the costs of smoking to employers. *Id.* *See also* AM. CANCER SOC'Y, SMOKING IN THE WORKPLACE COSTS YOU MONEY, http://www.cancer.org/downloads/COM/Smoking_in_the_Workplace_Costs_You_Money.pdf. However, all of these estimates have methodological problems that are beyond the scope of this article.

14. A recent study by the National Institute of Health found that how much and how often people consume alcohol independently influences the risk of death from a number of causes. Nat'l Inst. on Alcohol Abuse and Alcoholism, *Quantity and Frequency of Drinking Influence Mortality Risk*, http://www.niaaa.nih.gov/NewsEvents/NewsReleases/mortalityrisk.htm.

15. *See, e.g.*, Rob Stein, *Scientists Finding Out What Losing Sleep Does to a Body*, WASH. POST, Oct. 9, 2005, at A01, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2005/10/08/AR2005100801405.html.

16. The CDC states that "[t]he most reliable way to avoid transmission of STDs is to abstain from sex or to be in a long-term, mutually monogamous

ban off-duty smoking because it increases costs, it is equally acceptable for employers to control all of these other types of behavior. The more we learn about the relationships between behavior and health, the more we realize that everything we do in our private lives affects our health. If employers are permitted to control private behavior when it is related to health, virtually every aspect of our private lives is subject to employer control.

Some people argue this isn't really a slippery slope—employers wouldn't try to control other aspects of people's private lives, only smoking.[17] These people don't understand business. Employers don't ban off-duty smoking because they are anti-smoking; they ban off-duty smoking to increase the bottom line. To an employer, a dollar saved by forcing an employee to give up junk food and lose weight is just as valuable as a dollar saved by forcing an employee to quit smoking. Recent studies from the Centers for Disease Control show that obesity is rapidly overtaking smoking as the leading cause of preventable death in the United States.[18] Cost-conscious employers will soon have more incentive to regulate diet and exercise than smoking.

In fact, some employers have banned other forms of private behavior. Multi-Developers, a real estate development company, prohibits employees from skiing, riding a motorcycle, or engaging in any other risky hobby.[19] The Best Lock Corporation, in Indiana,

relationship with an uninfected partner." Ctrs. for Disease Control & Prevention, *Sexually Transmitted Diseases; Treatment Guidelines: 2006; Clinical Prevention Guidance,* http://www.cdc.gov/std/treatment/2006/clinical.htm#clinical1.

17. *See* Micah Berman & Rob Crane, *Mandating a Tobacco-Free Workforce; A Convergence of Business and Public Health Interests*, 34 WM. MITCHELL L. REV 1653, 1672 (2008) (arguing that tobacco use is distinguishable from other potentially hazardous activities and that "slippery slope concerns are entirely speculative"); Michele L. Tyler, *Blowing Smoke: Do Smokers Have a Right? Limiting the Privacy Rights of Cigarette Smokers*, 86 GEO. L.J. 783, 794–95(1998) (discussing the slippery slope doctrine and concluding that a smoking ban is unlikely to result in further invasions of other privacy rights because of economic factors); Christopher Valleau, *If You're Smoking, You're Fired: How Tobacco Could Be Dangerous To More Than Just Your Health*, 10 DEPAUL J. HEALTH CARE L. 457, 490–92 (2007) (concluding that the slippery slope doctrine fails because smoking is inherently different than other lifestyle behaviors).

18. Ali H. Mokdad et al., *Actual Causes of Death in the United States, 2000*, 291 J. AM. MED. ASS'N 1238–45 (Mar. 10, 2004), *available at* http://www.csdp.org/research/1238.pdf.

19. Zachary Schiller et al., *If You Light Up on Sunday, Don't Come in on Monday*, BUS. WK., Aug. 26, 1991, at 68. Multi-Developers, Inc.'s policy prohibits employees from engaging in "'hazardous activities and pursuits including such things as skydiving, riding motorcycles, piloting private aircraft, mountain climbing, motor

prohibits the consumption of alcohol at any time.[20] Best Lock fired Daniel Winn after eight years of good performance because Mr. Winn went out for a few beers with some friends after work.[21] The city of Athens, Georgia, required all municipal employees to take cholesterol tests—if your cholesterol was too high, you were fired.[22]

Other employers have gone further. Lynne Gobbell lost her job at an Alabama insulation company because she had a "Kerry for President" bumper sticker on her car.[23] Glen Hiller, from West Virginia, was fired because his boss didn't like a question he asked a candidate at a political rally.[24] Laurel Allen, from New York, was fired by Wal-Mart because it disapproved of her boyfriend.[25] Kimberly Turic, from Michigan, was fired for telling her supervisor that she was considering having an abortion.[26]

Virtually all of these terminations were legal. Under American law, an employer has the right to fire an employee at any time, for any reason, unless there is a statute prohibiting a specific reason for termination.[27] A variety of federal and state laws prohibit discrimination based on race, age, gender, religion, disability, and (in some jurisdictions) sexual orientation.[28] However, in other

vehicle racing, etc." *Id.* To the author's knowledge, this is still the policy at Multi-Developers, Inc.

20. Best Lock Corp. v. Review Bd., 572 N.E.2d 520, 521 (Ind. Ct. App. 1991). Best Lock Corporation's tobacco, alcohol, and drug use rule (TAD Rule) states: "The use of tobacco, the use of alcohol as a beverage, or the use of drugs by an employee shall not be condoned. . . . Any employee violating this policy, at work or away from the plant, will be summarily terminated." *Id.*

21. *See id.* (Winn admitted under oath, in a proceeding involving the termination of his brother from Best Lock Corporation, that he had consumed alcohol on several social occasions while employed at Best Lock Corporation).

22. Schiller et al., *supra* note 19. The city of Athens, Georgia, for a short period of time, required job applicants to submit to a cholesterol test. *Id.* Applicants whose cholesterol levels ranked in the top 20% of all applicants were eliminated from consideration for employment. *Id.* Local protests led to elimination of the policy. *Id.*

23. Paola Singer, *Fired Over Kerry Sticker; Her Loss Is Their Gain*, NEWSDAY, Sept. 17, 2004, at A33.

24. Jessica Valdez, *Frederick Company Fires Employee Who Taunted Bush*, WASH. POST, Aug. 22, 2004, at C06.

25. Dottie Enrico, *When Office Romance Collides With the Corporate Culture*, NEWSDAY, Aug. 1, 1993, at 70. Allen was dating a fellow employee while she was still married to her husband, although they were separated. *Id.*

26. *Pregnancy Bias Case Costs a Hotel $89,000*, CHI. TRIB., Mar. 16, 1994, at M3. Turic later won a lawsuit for wrongful termination and was awarded $89,000. *Id.*

27. *See generally* 27 AM. JUR. 2D *Employment Relationship* § 10 (2008).

28. *See, e.g.*, 42 U.S.C. § 2000e-2 (2000) (making it illegal for an employer to discriminate on the basis of race, color, religion, sex, or national origin); MINN.

than a handful of states,[29] there is no law against being fired because your employer disapproves of your private life.

Employment decisions should be based on how well you do your job, not on your private life. Most successful companies operate on this principle. There is no reason all companies shouldn't follow it.

Where does this leave employers who don't want to absorb the additional health care costs created by employee smoking? One option is for employers to require a higher personal contribution to the health care plan for employees who smoke.[30] There is nothing wrong with this in principle. We may all have the right to conduct our private lives as we choose, but we do not have the right to make other people take responsibility for the consequences of our behavior. If people choose to smoke, there is nothing unfair about requiring them to take financial responsibility for the health care costs this behavior creates. Employers could determine the amount by which health care costs of smokers exceed those of non-smokers and require smoking employees to contribute this amount personally.

Employers that choose this policy need to ensure that their surcharge is actuarially correct. While there is no question that smokers have higher health care costs, the actual cost differential is not entirely clear.[31] Moreover, most of the published estimates come from advocates and not from neutral experts.[32] Employers need to check their sources and consult with independent actuaries before determining the amount of the surcharge.

STAT. § 363A.08 subdiv. 2 (Supp. 2007) (listing sexual orientation as a class protected from employment discrimination).

29. New York, Colorado, North Dakota, and Montana offer broad protection of legal off-duty behavior. *See* NWI ON LIFESTYLE DISCRIMINATION, *supra* note 11, at 11–13 (citing 2004 STATE BY STATE GUIDE TO HUMAN RESOURCES LAW (John F. Buckley & Ronald M. Green eds., 2004)).

30. *See* Peters, *supra* note 9 (describing the $50 fee charged by one employer to all smokers to cover increased healthcare costs associated with smoking-related illnesses).

31. *See* CDC Report, *supra* note 12; *see also* KATE FITCH ET AL., AMERICAN LEGACY FOUNDATION, COVERING SMOKING CESSATION AS A HEALTH BENEFIT: A CASE FOR EMPLOYERS 11 (2007), http://www.americanlegacy.org/PDFPublications/Milliman_report_ALF_-_3.15.07.pdf (estimating that employees who suffer strokes or develop coronary artery disease can cost their employers upwards of $65,000 per year in medical expenses).

32. Two of the most active of these advocates are The American Cancer Society, http://www.cancer.org, and The American Legacy Foundation, http://www.americanlegacy.org.

To be completely fair, employers should also analyze the amount of smokers' higher health care charges that the company will pay. For example, one of the largest components of smokers' health care costs is cancer treatment.[33] In many cases, smoking-related cancers occur later in life, after the person has retired, with the majority of that person's medical costs paid by Medicare.[34] Such factors should be included in calculating an employee's surcharge.

Even if actuarially correct, however, there are other concerns about surcharges. To be fair, surcharges should apply to all health-related off-duty behavior. Some non-smokers have higher health risks than some smokers. Someone who eats lunch at McDonald's seven days a week, never exercises, and drinks a six-pack of beer every day probably has greater health risks than a light smoker who does everything else right. Since the justification for the surcharge is the higher cost that the employee's behavior creates, in such cases the non-smoker should pay a higher surcharge. To be fair, a surcharge program needs to contain penalties for poor diet, lack of exercise, risky hobbies, risky sex, and anything else that affects health. This may not be unfair from the standpoint of personal responsibility, but from the perspective of individual autonomy it is "Henry Ford-light."

There are also privacy concerns implicated in such surcharges. For an employer to establish a comprehensive surcharge program, it needs comprehensive knowledge of its employees' private lives. It needs to know how much employees drink, what they eat, what they do in their spare time, and how many sexual partners they have. Do we really want to reveal this information to our employers? Employers' poor historical record of maintaining the privacy of personal information increases the level of concern about surrendering our privacy to this degree.[35]

33. *See* AM. CANCER SOC'Y, CANCER FACTS & FIGURES 2008, at 48–51, http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf.

34. *See* News Release, U.S. Dep't of Health & Human Servs., Medicare Will Help Beneficiaries Quit Smoking: New Proposed Coverage for Counseling as Medicare Shifts Focus to Prevention (Dec. 23, 2004), *available at* http://www.hhs.gov/news/press/2004pres/20041223a.html (stating that "[i]n 1993, smoking cost the Medicare program about $14.2 billion, or approximately 10 percent of Medicare's total budget").

35. *See, e.g.*, RITA TEHAN, CONG. RESEARCH SERV. REPORT FOR CONG., DATA SECURITY BREACHES: CONTEXT AND INCIDENT SUMMARIES tbl. 1 (May 7, 2007), *available at* http://ftp.fas.org/sgp/crs/misc/RL33199.pdf.

Enforcement of surcharge programs also raises privacy issues. Many employees will misrepresent their private behavior in order to avoid penalties. To protect the integrity of the program, employers will need programs to detect such deception. One method is urine testing. Cotinine, the most common metabolite of nicotine, can be detected in smokers' urine, just as THC metabolites are detected in the urine of marijuana users.[36] Before initiating such a program, however, employers need to consider how employees will react. While Americans have generally become accustomed to one-time pre-employment urine tests, random testing of incumbent employees is relatively rare, in part because of employee resistance. Such programs could also run afoul of the Americans with Disabilities Act's prohibition of medical testing that is not job-related.[37]

Another method is to encourage employees who know another employee is secretly smoking off-duty (or secretly riding a motorcycle) to inform management. This approach, however, seems even more likely to cause conflict. What happens to the working relationship between two people when one has turned the other in for smoking or drinking off-duty?

In short, surcharge programs may well create more problems than their cost savings justify.

It might be far more productive for employers to approach employee medical costs from a helpful perspective rather than a punitive one. Very few of us are proud of our bad habits. Surveys repeatedly show that most smokers want to quit.[38] Millions of us make New Year's resolutions to eat less, go to the gym more often, and cut down on our drinking.[39] Employers could do a great deal

36. Found. for Blood Research, Important Patient Information About . . . Cotinine Testing, http://www.fbr.org/publications/pamphlets/cotinine.html (last visited Apr. 10, 2008).

37. *See* Americans with Disabilities Act, 42 U.S.C. § 12112 (d)(4)(A) (2000). This provision of the ADA states:

> A covered entity shall not require a medical examination and shall not make inquiries of an employee as to whether such employee is an individual with a disability or as to the nature or severity of the disability, unless such examination or inquiry is shown to be job-related and consistent with business necessity.

Id.

38. *See, e.g.*, Jonathan Lynch, *Survey Finds Most Smokers Want to Quit*, CNN.com, July 25, 2002, http://archives.cnn.com/2002/HEALTH/07/25/cdc.smoking/index.html (citing a CDC survey that found that 70% of the 32,374 smokers surveyed responded that they wanted to quit smoking).

39. *See, e.g.*, RIS Media.com, The Top New Year's Resolutions for 2008 and

to help us follow through on these good intentions. For example, employers could pay for smoking cessation programs for employees who want to quit.[40] They could even offer a modest incentive for employees who are successful, such as an extra vacation day or a small amount of money. Such programs are highly cost-effective.[41] The same approach could be equally effective in helping employees who want to lose weight. A more ambitious program would make medical personnel available for voluntary consultations with employees about how to improve their health. This type of program not only avoids the legal and morale problems of the punitive approach but would be perceived as an added benefit by employees.

The fact that so many employers are approaching this issue in a punitive fashion reflects that we have lost our way on smoking in the United States. Our goals should be:

1. Protecting non-smokers from second-hand smoke;

2. Keeping tobacco out of the hands of minors; and

3. Helping smokers who want to quit.

Our actual policy, however, has become eliminating smoking by any means necessary.

You can see this in our official national policy on smoking. The Healthy People Initiative, a program of the Federal Department of Health and Human Services, has a goal of cutting adult smoking in half by the year 2010.[42] Not to protect non-

How to Keep Them (Dec. 20, 2007), http://rismedia.com/wp/2007-12-19/the-top-new-years-resolutions-for-2008-and-how-to-keep-them/.

40. *See, e.g.*, Milt Freudenheim, *Seeking Savings, Employers Help Smokers Quit*, N.Y. TIMES, Oct. 26, 2007, at A1 (citing U.P.S. and Union Pacific Railroad as companies that offer smoking cessation programs).

41. *See* Free & Clear, Inc., Reducing the Burden of Smoking on Employee Health and Productivity, http://www.freeclear.com/case_for_cessation/library/studies/burden.aspx?nav_section=2 ("There is much evidence to support that paying for tobacco cessation treatment is the single, most cost-effective health insurance benefit for adults and is the benefit that has the greatest positive impact on health.") (citing NAT'L BUS. GROUP ON HEALTH, REDUCING THE BURDEN OF SMOKING ON EMPLOYEE HEALTH AND PRODUCTIVITY, VOL. 1, NO. 5 (2003), *available at* http://www.businessgrouphealth.org/pdfs/issuebrief_cphssmoking.pdf).

42. Healthy People 2010 Volume II, Tobacco Use, http://www.healthypeople.gov/Document/HTML/Volume2/27Tobacco.htm#_Toc489766214 (last visited Apr. 6, 2008).

smokers, not to help smokers who want to quit, but to eliminate smoking, period.

This mistake is not merely verbal; it shows in actions as well. Legislation has been enacted in most states prohibiting companies from terminating employees based on off-duty smoking.[43] Such laws do not expose employees to second-hand smoke—they simply protect peoples' right to behave as they want in their own home. Employers can still restrict or ban tobacco use on company property. Anti-smoking groups consistently and vigorously opposed the enactment of these laws.[44] When challenged, they claimed that such laws give undeserved special protection to smokers.[45] But when bills were introduced protecting all forms of legal off-duty conduct, the anti-smoking establishment opposed them too.[46] The only policy consistent with the actions of the anti-smoking establishment is prohibition.

The prohibitionist mentality is not confined to tobacco regulation. Kelly Brownell of Yale University is one of the leading thinkers of the health community. She has proposed that the government create a special tax on junk food so that people will be encouraged to eat less of it.[47] According to Brownell, "the government needs to regulate food as it would a potentially dangerous drug."[48]

43. Thirty states and the District of Columbia have lifestyle discrimination statutes that prohibit employers from firing employees for certain legal, private activities, including smoking. These states include: Arizona, California, Colorado, Connecticut, Illinois, Indiana, Kentucky, Louisiana, Maine, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Virginia, West Virginia, Wisconsin, and Wyoming. NWI ON LIFESTYLE DISCRIMINATION, *supra* note 11, at 11–13.

44. *See, e.g.*, SAMANTHA K. GRAFF, TOBACCO CONTROL LEGAL CONSORTIUM, THERE IS NO CONSTITUTIONAL RIGHT TO SMOKE: 2008, at 3 (2d ed. 2008) (arguing that off-duty restrictions on smoking are not precluded by an employee's right to privacy), *available at* http://tobaccolawcenter.org/documents/constitutional-right.pdf.

45. *See, e.g.*, Matthew Reilly, *Florio Urged to Provide Smokers Bias Protection*, STAR-LEDGER (Newark, N.J.), Jan. 4, 1991 (quoting Regina Carlson, executive director of the New Jersey Group Against Smoking Pollution (GASP), as stating that the passage of a bill that protects the privacy rights of smokers "would elevate drug addiction to civil rights status, along with race and sex").

46. *See, e.g.*, GRAFF, *supra* note 44, at 5 (stating that "smoker protection laws," including laws protecting all off-duty legal conduct, are a "barrier to a smoke-free agenda").

47. *Is it Time for a Fat Tax?*, PSYCHOL. TODAY, Sept.–Oct. 1997, at 16.

48. *Id.*

This is a serious error. Not only is it wrong for any of us to try to tell the rest of us how to live in our own homes, prohibition is unworkable in practice.

America has tried prohibition. In 1919 the Volstead Act prohibited the production or consumption of alcohol.[49] Alcohol production didn't stop; it merely went underground as legitimate companies were replaced by criminals like Al Capone.[50] Nor did Americans stop drinking. They just turned to illegal bars and homemade liquor. This required us to devote vast amounts of our criminal justice resources searching for underground bars and ordinary citizens brewing beer in their bathtubs. Only fourteen years later, Prohibition was universally rejected as a colossal failure and the law was repealed.[51] One definition of insanity is to keep repeating the same behavior expecting different results.

A comprehensive proposal for an alternative national policy is beyond the scope of this paper, but a good first step would be to give the Food and Drug Administration (FDA) jurisdiction over tobacco products. Tobacco is by far the most dangerous consumer substance available in America. To fail to regulate it is indefensible. We regulate air conditioners, hammocks, and even coffee mugs in the interest of public safety.[52] It is absurd not to regulate tobacco. Giving the FDA jurisdiction would also establish that tobacco is a legitimate consumer product that needs to be regulated, not prohibited.[53]

We need to follow a similar regulatory policy regarding other forms of risky behavior; one that focuses on protecting other

49. Darryl K. Brown, *Democracy and Decriminalization*, 86 TEX. L. REV. 223, 238 (2007).

50. *See, e.g.*, Chi. Historical Soc'y, History Files—Al Capone, http://www.chicagohs.org/history/capone/cpn1a.html (last visited Apr. 6, 2008).

51. *See* Brown, *supra* note 49, at 238.

52. *See, e.g.*, 67 Fed. Reg. 36368-01 (Aug. 6, 2002) (to be codified at 10 C.F.R. pt. 430) (concerning the regulation of energy conservation standards for central air conditioners); Christopher D. Zalesky, *Pharmaceutical Marketing Practices: Balancing Public Health and Law Enforcement Interests; Moving Beyond Regulation-Through-Litigation*, 39 J. HEALTH L. 235, 252 (2006) (discussing the FDA's regulation of the advertisement of prescription drugs, including the imprinting of prescription drug names on items such as coffee mugs).

53. A bipartisan group of legislators proposed legislation in February 2007 that would give the FDA regulatory power over tobacco. *See* Christopher Lee, *New Push Grows for FDA Regulation of Tobacco*, WASH. POST, Feb. 17, 2007, at A08. The Bush administration and the FDA's skepticism of such a regulatory measure appear to have stalled the movement for now. *See* Marc Kaufman, *Decades-Long U.S. Decrease in Smoking Rates Levels Off*, WASH. POST, Nov. 9, 2007, at A07.

people from the risks we choose to take.

MANDATING A TOBACCO-FREE WORKFORCE: A CONVERGENCE OF BUSINESS AND PUBLIC HEALTH INTERESTS

Micah Berman, J.D.[†] & Rob Crane, M.D.[††]

A growing number of corporate and public employers are mandating that either prospective or current employees refrain from tobacco use at all times, even off the job.[1] This developing trend has led to catchy headlines in the national press such as "You Smoke? You're Fired!"[2] and "A Job or a Cigarette?"[3] plus dozens of articles in local newspapers that detail the conflict between company executives determined to cut healthcare costs and "privacy advocates" (or, in some articles, "civil rights activists").[4] *60*

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1. *See, e.g.*, Tom Anderson, *Smoking Policy Sparks Debate over Wellness Programs,* EMP. BENEFIT NEWS, Apr. 1, 2005; Robert Rodriguez, *If There's Smoke, You're . . . Fired*, FRESNO BEE (Cal.), Oct. 14, 2007, at A1.

2. Stephanie Armour, *You Smoke? You're Fired!*, USA TODAY, May 11, 2005, at 1A.

3. Jennifer Barrett Ozols, *A Job or a Cigarette?*, NEWSWEEK, Feb. 24, 2005, *available at* http://www.newsweek.com/id/48517.

4. *Id.* ("Civil-rights activists accused [Weyco] of discrimination [for

Minutes has run more than one episode about the employees who left Weyco, Inc., in Okemos, Michigan, rather than submit to a nicotine test.[5]

Even among tobacco control advocates, these "tobacco-free workforce" policies are somewhat controversial.[6] Some have argued that such policies constitute unethical discrimination that tobacco control advocates should not countenance.[7] Others, however, have heralded them, predicting that "[a] nonsmoker workforce will clearly become the norm of the future," and noting that such policies, rather than injure smokers by infringing on their rights, help them by encouraging them to quit.[8]

Ultimately, however, it is businesses, not tobacco control advocates or the press, who will decide whether tobacco-free workforce policies make sense for them. We believe that these policies have substantial bottom-line implications for businesses. In fact, making the transition to a tobacco-free workforce may be an easy and cost-effective way for businesses to substantially reduce healthcare costs and increase productivity. Moreover, tobacco-free workforce policies have the potential to dramatically influence general smoking prevalence. This is a case where business interests appear to converge with public health interests.

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dismissing employees that refused to submit to a nicotine test], arguing that [CEO Howard] Weyers was punishing workers for engaging in a legal activity on their own time."). *See also* Joe Robinson, *Light Up, Lose Your Job*, L.A. TIMES, Feb. 19, 2006, at 3 ("Weyco and Scotts Miracle-Gro, based in Marysville, Ohio, are in the vanguard of a growing effort by businesses to brake soaring medical costs by regulating such unhealthy employee behavior as smoking**,** even if it's done off-site. Privacy advocates and legal experts call it the opening round of a corporate takeover of personal lives, but company officials defend what they see as a reasonable business decision.").

5. *See 60 Minutes: Whose Life is it Anyway?* (CBS television broadcast Oct. 30, 2005); *60 Minutes: Whose Life is it Anyway?* (CBS television broadcast July 16, 2006).

6. *Compare* N. John Gray, *The Case for Smoker-Free Workplaces*, 14 TOBACCO CONTROL 143 (2005), *with* Simon Chapman, *The Smoker-Free Workplace: The Case Against*, 14 TOBACCO CONTROL 144 (2005). Others have argued that the tobacco control community should take no position on these policies, either for or against. *See* Ronald M. Davis, Letter to the Editor, *A Middle Ground: Don't Condone or Condemn, But Let Employers Decide*, TOBACCO CONTROL, Mar. 27, 2005, *available at* http://tobaccocontrol.bmj.com/cgi/eletters/14/2/144#310.

7. Chapman, *supra* note 6, at 144 ("I am convinced that to extend such a policy [against hiring smokers] to the wider community—into employment situations where smoking was quite irrelevant—would be unethical.").

8. Action on Smoking and Health, *Employment Policies Against Hiring Smokers*, *available at* http://ash.org/papers/h220.htm (last visited Apr. 27, 2008).

I. BACKGROUND

Scotts Miracle-Gro Company, with $2.9 billion in annual sales and more than 6000 employees, is the world's largest marketer of branded consumer products for lawn and garden care.[9] In December 2005, Scotts, based in Marysville, Ohio, announced that it would no longer hire applicants who smoke.[10] The company further announced that current employees who did not quit smoking by October 2006 could lose their jobs, even if they smoked only outside of work.[11] The company's CEO cited the rising cost of healthcare coverage and the desire to have a healthy workforce as reasons for the tobacco-free workforce policy.[12]

Scotts' approach in implementing a tobacco-free workforce policy is uncommon, but it is certainly not unique. This summer, the Cleveland Clinic, Ohio's second-largest employer with more than 36,000 employees, announced that it would no longer hire people who smoke.[13]

Likewise, Union Pacific Railroad and Alaska Airlines already refuse to hire smokers in states where it is legal to do so.[14] In all of

9. Scotts Miracle-Gro, *Scotts Miracle-Gro Announces Full-Year Financial Results; Sales Improve 6 Percent Led by Strong International Performance*, PRNEWSWIRE, Nov. 1, 2007, *available at* http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/11-012007/0004695132&EDATE= .

10. Shannon Mortland, *Smoke Screening; Employers Using Policies, Incentives to Keep Workers Smoke-Free*, CRAIN'S CLEVELAND BUS., Mar. 13, 2006, at 1.

11. Monique Curet & Ken Stammen, *Your Smokes or Your Job*, COLUMBUS DISPATCH, Dec. 9, 2005, at 1A. As of this writing, Scotts has not conducted any random nicotine tests or terminated any long-term employees for failure to quit smoking. It still maintains, however, that it may do so in the future. Scotts did fire an employee named Scott Rodrigues at one of its Massachusetts locations. Rodrigues was hired by Scotts but then promptly released when his initial nicotine screening came back positive. Sacha Pfeiffer, *Off-the-Job Smoker Sues Over Firing*, BOSTON GLOBE, Nov. 30, 2006, at A1. Rodrigues sued Scotts, alleging, among other things, wrongful termination and violations of Massachusetts' privacy and civil rights statutes. The case is pending in federal court in Boston. Rodrigues v. Scotts Co. LLC, 2008 WL 251971, at *1 (D. Mass) (filed Jan. 22, 2007).

12. James Hagedorn, Letter to the Editor, *Scotts' Smoking Policy Will Make Employees and Company Healthier*, COLUMBUS DISPATCH, Dec. 17, 2005, at 9A. During the transition period, Scotts provided employees with free counseling, nicotine patches, cessation classes, and other support needed to help them quit. The tobacco-free workforce policy is part of Scotts' comprehensive plan to lower healthcare costs and improve the health of the company's workforce. The company also opened a five-million-dollar fitness and medical center at its Marysville headquarters. Curet & Stammen, *supra* note 11, at 1A.

13. Mary Vanac, *Clinic Will Not Hire Any Smokers*, CLEVELAND PLAIN DEALER, June 28, 2007, at A1.

14. Pfeiffer, *supra* note 11, at A1.

these cases, as at Scotts, the tobacco-free workforce policy is part of an overall workplace wellness program.[15] Tobacco-free workforce policies are still far from the norm, however. According to a recent survey by the Society for Human Resource Management, only 3% of employers ask about smoking when hiring.[16]

II. EMPLOYER COSTS

The primary reason that employers have begun considering tobacco-free workforce policies is obvious. According to James Hagerdorn, the CEO of Scotts, "We're being as aggressive as the law will allow us, to keep our costs under control."[17] Average healthcare insurance family coverage premium costs have increased by 78% since 2001, more than four times faster than wages or inflation.[18] As a result, employers are increasingly exploring every possible option that could reduce healthcare costs, and tobacco use is an obvious target.

The costs of smoking for employers, individual smokers, their families, and the economy as a whole are enormous. According to the Centers for Disease Control and Prevention (CDC), cigarette smoking and tobacco use is the leading cause of preventable death in the United States, resulting in 438,000 premature deaths each year and an average of 12.6 years of potential life lost per smoker.[19] Smoking causes almost one-fifth of all deaths in the United States, and "at least 6–8% of annual personal health expenditures . . . and quite possibly considerably more, is devoted to treating diseases

15. Union Pacific, for example, was awarded the 2005 C. Everett Koop National Health Award for its innovative worksite wellness programs. Union Pacific, *Union Pacific Receives 2005 C. Everett Koop National Health Award*, *available at* http://www.uprr.com/newsinfo/releases/human_resources/2005/1208_koop.html (last visited Apr. 27, 2008).

16. Sharon Linstedt, *A Smoker on Payroll Can Cost Firms up to $3,800*, BUFFALO NEWS, Feb. 21, 2006, at B7.

17. Monique Curet, *Getting Tough on Health*, COLUMBUS DISPATCH, Dec. 9, 2005, at 1G.

18. Press Release, Kaiser Family Found., Health Insurance Premiums Rise 6.1 Percent in 2007, Less Rapidly Than in Recent Years But Still Faster Than Wages and Inflation (Sept. 11, 2007), *available at* http://www.kff.org/insurance/ehbs091107nr.cfm.

19. Ctrs. for Disease Control & Prevention, *Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses—United States, 1997–2001*, 54 MORBIDITY AND MORTALITY WKLY. REP. 625 (July 1, 2005), *available at* http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5425a1.htm [hereinafter *Annual Smoking*].

caused by smoking."[20] In 2002, the CDC calculated costs associated with smoking and found that smoking-attributable personal healthcare medical expenditures totaled $75.5 billion per year.[21]

In the same study, the CDC also calculated that productivity losses due to smoking were $81.9 billion each year.[22] The CDC's calculation of lost productivity costs, however, included only those attributed to premature mortality and did not consider employer-related costs such as absenteeism or diminished on-the-job productivity. Despite this imprecise calculation, it is clear that in comparison to non-smoking employees, employees who smoke are likely to impose considerable extra costs beyond medical care on the companies that employ them. These include daily productivity losses due to smoking breaks, extra time off work due to illness, increased workers' compensation utilization, and generally lower job-related productivity.[23] For example, despite the difficulty of calculating "presenteeism" (lower on-the-job productivity), studies have consistently demonstrated that employees who smoke are less productive than employees who do not. For example, one recent study reviewed more than 45,000 employee surveys from 147 U.S. employers.[24] It found that mean hours of lost productivity per year due to presenteeism were 76.5 hours for a smoker compared to 42.8 hours for a never smoker and 56.0 hours for a former smoker.[25] The excess presenteeism of 33.7 hours per year (for a smoker compared to a never smoker) equals approximately 2% of hours worked per year.[26] In addition, employers who allow smoking in or around their facilities or vehicles experience extra housekeeping, maintenance, ventilation, and fire insurance costs,

20. Kenneth E. Warner et al., *Medical Costs of Smoking in the United States: Estimates, Their Validity, and Their Implications*, 8 TOBACCO CONTROL 290, 299 (1999).

21. *Annual Smoking*, *supra* note 19.

22. *Id.*

23. *See generally* Harold S. Javitz et al., *Financial Burden of Tobacco Use: An Employer's Perspective*, 5 CLINICS IN OCCUPATIONAL & ENVTL. MED. 9 (2006).

24. William B. Bunn, III et al., *Effect of Smoking Status on Productivity Loss*, 48 J. OCCUPATIONAL & ENVTL. MED. 1099, 1100–01 (2006).

25. *Id.* at 1103 tbl.2.

26. *See also* Wayne N. Burton et al., *The Association of Health Risks with On-the-Job Productivity*, 47 J. OCCUPATIONAL & ENVTL. MED. 769 (2005) (studying a cohort of employees at a Midwestern financial-services company and concluding that smoking was associated with a 2.8% reduction in on-the-job productivity).

as well as potential legal liability for secondhand-smoke exposure to non-smoking employees.[27]

Beyond these costs are increased risks of occupational disease compensation for those employees who may already have exposure to other health risks such as asbestos, irritant gasses, or inhaled particulates.[28] Smoking employees are also more likely to suffer work-related disability and on-the-job accidents, injuries, and fatalities.[29] There also may be intangible costs associated with a smoker's personal presentation to customers or the public, especially in health-related industries.[30]

The only potentially offsetting savings associated with smoking employees is diminished use of pension benefits in defined-benefits plans due to premature death.[31] This "death benefit," however, is only relevant for employers who use defined-benefit pension plans—currently fewer than one in four private employers.[32] It does not impact the larger number of employers who use defined contribution plans such as 401(k)s. Even for employers with defined-benefits plans, however, the amount of the "death benefit" is clearly dwarfed by the aggregate of other costs incurred.[33]

27. *Id.* *See also* Chris Hallamore, Conference Board of Canada, *Smoking and the Bottom Line: Updating the Costs of Smoking in the Workplace* (2006); Leslie Zellers et al., *Legal Risks to Employers Who Allow Smoking in the Workplace*, 97 AM. J. PUB. HEALTH 1376 (2007).

28. Anthony J. DeLucia, *Tobacco Abuse and Its Treatment: Turning Old and New Issues into Opportunities for the Occupational Health Nurse*, 49 AM. ASS'N OF OCCUPATIONAL HEALTH NURSES J. 243, 247 (2001).

29. Javitz, *supra* note 23, at 18, 21. *See generally* Shirley Musich et al., *The Association of Health Risks with Workers' Compensation Costs*, 43 J. OCCUPATIONAL & ENVTL. MED. 534 (2001).

30. *See, e.g.*, Sarah-Kate Templeton & Nina Goswami, *Job Vacant . . . But Not for Smokers*, SUNDAY TIMES (London), Oct. 3, 2004 at 12 (quoting the managing director of a website design company as saying, "People who smoke smell and that is not acceptable if they are dealing with clients. If someone has been smoking in their car and then they are introduced to a client, it is pretty unpleasant.").

31. *See, e.g.*, Jon D. Hanson & Kyle D. Logue, *The Costs of Cigarettes: The Economic Case for Ex Post Incentive-Based Regulation*, 107 YALE L.J. 1163, 1180 (1998) (considering and rejecting the argument that smokers "produce a windfall social gain because of the savings resulting from cigarette-induced premature deaths—savings mostly in the form of smokers' unclaimed pension and nursing home entitlements").

32. Stephanie L. Costo, *Trends in Retirement Plan Coverage Over the Last Decade*, MONTHLY LAB. REV. 58, 58 (Feb. 2006), *available at* http://www.bls.gov/opub/mlr/2006/02/art5full.pdf.

33. *See generally* FRANK A. SLOAN ET AL., THE PRICE OF SMOKING 177 (2004) (finding that on average, each male smoker in a defined-benefit plan subsidized nonsmoker's pension plans by $10,123, and each female smoker by $383). The

Given these healthcare and productivity costs, the smoking employee brings a substantial financial burden with him to work, even if he does not smoke while he is there.[34] The extra cost of a smoking employee obviously varies considerably across industries, occupations, and benefit packages. Our review of previously published studies, however, suggests that, on average, private employers incur excess costs exceeding $4000 per year for each employee who smokes (in comparison to a non-smoking employee).[35] These results are summarized in Table 1 on the following page. The CEO of any business would be irresponsible to ignore costs of this magnitude.

study was based on self-reported data collected from more than 10,000 subjects for the Health and Retirement Study at the University of Michigan Institute for Social Research. Annualizing this subsidy over the average years of employment per smoker, the estimated average annual "death benefit" is approximately $250 per employee who smokes. *Id.*

34. *But see* Chapman, *supra* note 6, at 144. Simon Chapman argues against tobacco-free workforce policies, stating that "while it is true that smokers as a class are less productive through their absences, many smokers do not take extra sick leave or smoking breaks." *Id.* This may be correct, but it is irrelevant. Employers take group characteristics and tendencies into account all the time, particularly when it is impossible or impractical to make case-by-case determinations. For example, some high school graduates may be better and more productive employees than most college graduates. But companies often require college graduation as a minimum job requirement, using college graduation as a proxy for employees that are likely to be more productive. In some sense, this may be unfair to particular individuals who would excel at a given job if given an opportunity, but it is generally considered to be a reasonable business practice.

35. Mehmet Munur, Micah Berman & Rob Crane, *The Cost of Smoking Employees* (manuscript at 2, on file with authors).

Table 1 - Total Annual Excess Cost of a Smoking Employee to a Private Employer[36]

Cost	Annual Amount	High Range	Low Range
Excess Absenteeism	489.26	545.71	169.36
Presenteeism	442.21	1768.84	442.21
Smoking Breaks	2916.713	2916.713	782.216
Excess Healthcare Costs	552.480	966.840	Undetermined
Fire Insurance	17.06	17.06	0
Ashtray Costs	25.72	25.72	0
Ventilation	89.59	89.59	0
Pension Benefit	(254.33)	0	(254.33)
Total Costs	**$4278.703**	**$6360.473**	**$1139.456**

Moreover, nicotine-addicted smokers cannot truly leave their addiction at the door when they enter the workplace. Their use of nicotine and its delivery system, the cigarette, has an ongoing impact on their personality and their behavior long after their last inhalation.[37] Chronic smokers are in fact drug addicts—even if their addiction is to a legal drug. A pack-a-day smoker takes approximately 200 "puffs" during each twenty-four hour period. Each inhalation drives a pulse dose of nicotine to the brain faster

36. *Id.* This table was assembled by reviewing previously published literature on these subjects and then adjusting the results to reflect the average annual cost for a private sector employee in the United States. For example, if a study found that smokers were on average absent from work 2.6 days more per year than non-smoking employees, we multiplied that number by the average hours worked per day (7.5, according to the Bureau of Labor Statistics) and the average hourly wage ($25.09, according to the Employee Benefit Research Institute) to arrive at an average annual cost of $489.26. The high and low range numbers reflect the variation in previous studies examining these issues. The "annual amount" is based on our best effort to average previous studies, in some cases adjusting for outlying results.

37. Regina de Cássia Rondina et al., *Psychological Characteristics Associated with Tobacco Smoking Behavior*, 33 J. BRASILEIRO DE PNEUMOLOGIA 592, 593 (2007) ("The [withdrawal] symptoms vary in intensity among people, and generally start within hours . . . ."), *available at* http://www.scielo.br/pdf/jbpneu/v33n5/en_v33n5a16.pdf.

and more efficiently than even intravenous injection.[38] These potent spikes of nicotine to the central nervous system have a nearly instantaneous effect; however, their duration is brief, so that within thirty minutes after finishing the last inhalation, a smoker is already experiencing both physical and psychological withdrawal.[39] Manifestations of withdrawal include anxiety, restlessness, anger, irritability, diminished concentration, impaired task performance, sleep disturbance, drowsiness, and fatigue—and these manifestations build over time.[40] Much of what addicted smokers perceive as a relaxation effect from smoking is actually relief from their acute withdrawal symptoms. Now that the vast majority of workplaces are smoke-free, the repetitive, prolonged withdrawals that smoking employees suffer are likely to diminish both their productivity and affability while at work.[41]

This chronic repetitive withdrawal provides an argument beyond medical-care costs for requiring that employees not smoke on or off the job. Most human resource departments have experience in dealing with problems caused by employees who abuse illegal drugs, prescription drugs, and alcohol. Nicotine addiction, however, brings costs to the employer that dwarf the costs imposed by these other addictions.[42]

III. ARE TOBACCO-FREE WORKPLACE POLICIES LEGAL?

Though many employers instinctively believe that they cannot consider tobacco use when making employment decisions, tobacco-free workplace policies are perfectly legal in at least twenty-one states. The other twenty-nine states have "smokers rights" laws that were passed at the urging of the tobacco industry (with assistance

38. J.E. Henningfield et al., *Higher Levels of Nicotine in Arterial Than in Venous Blood After Cigarette Smoking*, 33 DRUG ALCOHOL DEPEND. 23–29 (1993).

39. Neal L. Benowitz, *Pharmacology of Nicotine: Addiction and Therapeutics*, 36 ANN. REV. OF PHARMACOLOGY & TOXICOLOGY 597, 599–600 (1996).

40. John R. Hughes et al., *Symptoms of Tobacco Withdrawal: A Replication and Extension*, 48 ARCHIVES GEN. PSYCHIATRY 52 (1991). *See also* Rob Crane, *The Most Addictive Drug, the Most Deadly Substance: Smoking Cessation Tactics for the Busy Clinician*, 34 PRIMARY CARE CLINICAL OFF. PRAC. 117, 119 (2007); Steven A. Schroeder, *What to Do with the Patient Who Smokes*, 294 J. AM. MED. ASS'N 482, 483 (2005).

41. *Cf.* Joan Arehart-Treichel, *Smoking and Mental Illness: Which One's the Chicken?*, PSYCHOL. NEWS, Oct. 3, 2003, at 34 (reporting on study finding that employees with nicotine addiction were substantially more likely to suffer from anxiety and depressive disorders than other employees).

42. *See generally* Javitz, *supra* note 23, at 10.

from the American Civil Liberties Union), mostly between 1989 and 1993.[43] These laws may limit the ability of employers in those states to make hiring decisions based on whether employees use tobacco off the job.

Most states follow the "employment-at-will" doctrine, meaning that employers are generally free to set the standards for what type of employees they will hire, and they can terminate the employer-employee relationship at their discretion, absent contrary contractual terms.[44] However, the "employment-at-will" doctrine is limited by federal law, state and local laws, and, in the case of government employers, constitutional limitations.[45] Generally speaking, these laws and constitutional guarantees are intended to protect employees from discrimination on the basis of immutable characteristics (like gender, race, and nationality).[46]

Contrary to the imprecise rhetoric sometimes used by opponents of tobacco-free workplace policies (or any other tobacco

43. *See infra* Table 2 (listing these laws). *See* Christopher Valleau, *If You're Smoking You're Fired: How Tobacco Could Be Dangerous to More than Just Your Health*, 10 DEPAUL J. HEALTH CARE L. 457, 484–92 (2007) (discussing the legislative campaign by the ACLU and the tobacco industry).

44. Richard A. Lord, *The At-Will Relationship in the 21st Century: A Consideration of Consideration*, 58 BAYLOR L. REV. 707, 707 (2006) ("The basic rule, applied by the vast majority of jurisdictions, concerning the at-will relationship—that either party may terminate the relationship at any time, for any reason or no reason, and with or without notice—has been the law in the United States for well over a century."); Mers v. Dispatch Printing Co., 483 N.E.2d 150, 153 (Ohio 1985) ("Unless otherwise agreed, either party to an oral employment-at-will agreement may terminate the employment relationship for any reason which is not contrary to law. This doctrine has been repeatedly followed by most jurisdictions, including Ohio, which has long recognized the right of employers to discharge employees at will.").

45. *See, e.g.*, Robert Sprague, *Fired for Blogging: Are There Legal Protections for Employees Who Blog?*, 9 U. PA. J. LAB. & EMP. L. 355, 362 (2007):

> An employer can be civilly liable for wrongful discharge if an employee is dismissed in violation of an applicable employment-related statutory provision. The most obvious example of this type of wrongful discharge is when an employee is discharged (or forced to resign) in violation of Title VII of the Civil Rights Act of 1964, as well as any of its applicable state-law equivalents.

Id.

46. Cynthia L. Estlund, *The Workplace in a Racially Diverse Society: Preliminary Thoughts on the Role of Labor and Employment Law*, 1 U. PA. J. LAB. & EMP. L. 49, 78 (1998) ("Most of those [exceptions to the doctrine of at-will employment] can be characterized as either anti-retaliation doctrines, designed to protect socially valued speech or conduct, or anti-discrimination doctrines, designed to prohibit adverse treatment on the basis of traits—usually *immutable* traits—or group membership.") (emphasis added).

control policy), there is no "right to smoke" granted by the U.S. Constitution or any state constitution, and no federal law has ever been held to prohibit making employment decisions on the basis of tobacco-use status.[47] The case law goes back more than twenty years to *Grusendorf v. Oklahoma City*, where a federal court of appeals upheld an Oklahoma City Fire Department policy of prohibiting smoking (on or off the job) by firefighting trainees.[48] The court wrote that since smoking is not a "fundamental right" entitled to special legal protection, the government need only have a rational basis for its policy.[49] It concluded that "[w]e need look no further for a legitimate purpose and rational connection than the Surgeon General's warning on the side of every box of cigarettes sold in this country that cigarette smoking is hazardous to health."[50] All courts that have subsequently considered this issue have arrived at the same conclusion.[51]

In the case of private employers, the constitutional questions do not apply, and the only issue is whether any federal, state, or local laws prohibit hiring policies that consider tobacco-use status. Plaintiffs have argued without success that federal law imposes such a limitation on employers. For example, courts have rejected the argument that people addicted to nicotine are "disabled" and therefore entitled to the anti-discrimination protections of the Americans with Disabilities Act.[52]

47. *See generally* Samantha K. Graff, Tobacco Control Legal Consortium, *There is No Constitutional Right to Smoke* (2005), *available at* http://www.wmitchell.edu/tobaccolaw/resources/No+Constitutional+Right+to+Smoke.pdf.

48. Grusendorf v. Oklahoma City, 816 F.2d 539, 543 (10th Cir. 1987).

49. *Id.* at 541–43.

50. *Id.* at 543.

51. *See, e.g.*, City of N. Miami v. Kurtz, 653 So. 2d 1025, 1028 (Fla. 1995) (upholding city's policy of refusing to hire anyone who had smoked in the past year); Town of Plymouth v. Civil Serv. Comm'n, 686 N.E.2d 188, 190 n.4 (Mass. 1997) (upholding town's decision to fire police officer for tobacco use). Courts have also rejected the claim that smokers are a "protected class" subject to heightened protection under the Equal Protection Clause of the Fourteenth Amendment. For example, in NYC C.L.A.S.H., Inc. v. City of New York, 315 F. Supp. 2d 461, 482 (S.D.N.Y. 2004), the court wrote that "[s]moking, as a discretionary or volitional act, does not merit heightened scrutiny because the Supreme Court has rejected the notion that a classification is suspect when entry into the class . . . is the product of voluntary action." (internal quotation marks omitted).

52. *See, e.g.*, Brashear v. Simms, 138 F. Supp. 2d 693, 695 (D. Md. 2001) (writing that "common sense compels the conclusion that smoking, whether denominated as 'nicotine addiction' or not, is not a 'disability' within the meaning of the ADA."). *Cf.* Stevens v. Inland Waters, Inc., 559 N.W.2d 61, 62 (Mich. Ct.

However, some states' "smokers' rights" laws may have an impact on the ability of employers to implement tobacco-free workforce policies.[53] These laws come in two forms: seventeen states prohibit employers from making employment decisions on the basis of off-duty tobacco use, while eleven states more generally prohibit employers from making employment decisions on the basis of off-duty lawful activity or off-duty use of legal consumable products.[54] One state, Virginia, restricts the ability of the state as an employer to make employment decisions based on off-duty tobacco use.[55] It does not appear that Virginia's statute applies to private employers.[56]

Employers interested in implementing tobacco-free workforce policies should carefully review the laws of the states in which they operate. Even in the twenty-nine states with "smokers' rights" laws governing private employers, there may be legal latitude. For example, several state laws provide an exemption if the off-duty activity "adversely affect[s] [the employee's] ability to perform his job."[57] Clearly, employers have a solid foundation from which to argue that off-duty tobacco use has an impact on job performance. Other state laws "only offer protection to current employees and do not prevent an employer from discriminating against prospective employees on the basis of tobacco use."[58]

Thus, whether or not a tobacco-free workforce is a viable option will depend upon state law and the specifics of an employer's situation. Employers should consult legal counsel when developing such a policy, but many are likely to find that there are no legal barriers to implementation.[59]

App. 1996) (rejecting claim that firing employee for smoking constituted disability discrimination under the Michigan Handicappers' Civil Rights Act).

53. *See infra* Table 2 (listing these laws).

54. States with statutes specifically focused on off-duty tobacco use: New Jersey, Missouri (alcohol or tobacco), Oregon, Rhode Island, Oklahoma, New Mexico, New Hampshire, Mississippi, Maine, Louisiana, Kentucky, Indiana, Connecticut, West Virginia, South Dakota, South Carolina, Wyoming. States with statutes directed towards off-duty use of lawful products: Nevada, Illinois, Montana, California, North Dakota, North Carolina, New York, Minnesota, Colorado, Tennessee, Wisconsin. For citations, see Table 2.

55. VA. CODE. ANN. § 2.2–2902 (2008).

56. *Id.*

57. NEV. REV. STAT. § 613.333(1)(b) (2006).

58. Valleau, *supra* note 43, at 479.

59. This article does not address potential testing for compliance with a tobacco-free workforce policy, which may raise separate legal issues. Any testing mechanism should be able to distinguish between active tobacco users and those

It should also be noted that, in our opinion, the "smokers' rights" laws in effect in twenty-nine states constitute poor public policy and should be reconsidered. To elevate the nation's leading cause of preventable death to the status of a protected civil right is illogical, undermines health education messages, and trivializes the concept of civil rights.[60] Employment-discrimination laws should focus on protecting employees from invidious discrimination based on immutable characteristics or the exercise of constitutionally protected rights. They should not be used as tools to block employers from promoting healthy lifestyle choices.

who are using only nicotine replacement therapies (NRT) such as nicotine patches or nicotine gum. Nicotine use alone does not impose substantial health costs on employers, and employees should be encouraged to use NRT products in their efforts to keep from smoking—not punished for doing so.

60. After vetoing a proposed "smokers' rights" bill in Arkansas, then-Governor Bill Clinton said:

> While Americans plainly may smoke in many circumstances, smoking is an acquired behavior and giving the overwhelming evidence of the toll it takes every year in disease and death, it should not be accorded legal protection like Freedom of Speech, nor should smokers be a protected class like those who have been wrongly discriminated against because of race, sex, age or physical handicaps.

Michael Arbanas, *'Smokers Rights' Bill Vetoed*, ARK. DEMOCRAT-GAZETTE, Feb. 27, 1991 (page number not available). Virginia Governor L. Douglas Wilder vetoed a "smokers' rights" bill in Virginia, stating that he was "offended by the suggestion that smokers deserve the same type of civil rights shield that had been used to fight prejudice against blacks and other minorities." Valleau, *supra* note 43, at 487.

Table 2 – State Smoker Protection Laws[61]

State	Year	Code Section
Arizona	1991	ARIZ. REV. STAT. ANN. § 36-601.02 [62]
California	2003	CAL. LABOR CODE §§ 96(k) & 98.6
Colorado	1990	COLO. REV. STAT. § 24-34-402.5
Connecticut	2003	CONN. GEN. STAT. § 31-40s
District of Columbia	1993	D.C. CODE § 7-1703.03
Illinois	1987	820 ILL. COMP. STAT. 55/5
Indiana	2006	IND. CODE §§ 22-5-4-1 to -3
Kentucky	1994	KY. REV. STAT. ANN. § 344.040
Louisiana	1991	LA. REV. STAT. ANN. § 23:966
Maine	1991	ME. REV. STAT. ANN. tit. 26, § 597
Minnesota	1992	MINN. STAT. § 181.938
Mississippi	1994	MISS. CODE ANN. § 71-7-33
Missouri	1992	MO. REV. STAT. § 290.145
Montana	1993	MONT. CODE ANN. §§ 39-2-313 to -314
Nevada	1991	NEV. REV. STAT. § 613.333
New Hampshire	1991	N.H. REV. STAT. ANN. § 275:37-a
New Jersey	1991	N.J. STAT. ANN. §§ 34:6B-1 to -4.
New Mexico	1991	N.M. STAT..§§ 50-11-1 to -6
New York	1992	N.Y. LAB. LAW § 201-d
North Carolina	1991	N.C. GEN. STAT. § 95-28.2
North Dakota	1993	N.D. CENT. CODE §§ 14-02.4-01 to -09.
Oklahoma	1991	OKLA. STAT. tit. 40, § 500
Oregon	1989	OR. REV. STAT. § 659A.315
Rhode Island	2005	R.I. GEN. LAWS § 23-20.10-14
South Carolina	1990	S.C. CODE. ANN. § 41-1-85
South Dakota	1991	S.D. CODIFIED LAWS § 60-4-11
Tennessee	1990	TENN. CODE ANN. § 50-1-304
Virginia	1989	VA. CODE ANN. § 2.2-2902
West Virginia	1992	W. VA. CODE § 21-3-19
Wisconsin	1991	WIS. STAT. §§ 111.31–.322
Wyoming	1992	WYO. STAT. ANN. §§ 27-9-101 to -106

61. Am. Lung Ass'n, *State Legislation Actions on Tobacco Issues: 2007*, *available at* http://slati.lungusa.org/reports/SLATI_07.pdf.

62. This statute was repealed by the passage of Proposition 201, the "Smoke-Free Arizona Act." The Act became effective on May 1, 2007.

IV. ON OBJECTIONS TO SMOKE-FREE WORKFORCE POLICIES

Aside from legal concerns, two main objections to tobacco-free workforce policies arise. The first is that these policies inappropriately interfere with employees' privacy.[63] The second is not a direct objection to the policy, but rather a concern that the policy would constitute a "slippery slope" and lead to employers refusing to hire other types of employees.[64] Often this is framed as a concern that overweight employees or employees with high cholesterol might be the next target of overzealous employers seeking to reduce healthcare costs. Both of these concerns were eloquently expressed by Lewis Maltby, President of the National Workrights Institute, at the Tobacco Control Legal Consortium's October 2007 symposium.[65]

A. Privacy Concerns are Overstated

On the privacy issue, it is clear that tobacco-free workforce policies do not interfere with employee privacy in a legal sense. Although an implied right to privacy has been recognized by the U.S. Supreme Court, and several state constitutions expressly grant the right, no court has ever found that smoking is included in the right to privacy.[66] The right to privacy in the U.S. Constitution has been limited to a narrow range of family issues including

63. *See, e.g.*, Pfeiffer, *supra* note 11, at A1 ("'Employers should be greatly concerned about how employees perform their jobs and what happens in the workplace, but how employees want to lead their private lives is their own business,' said Boston lawyer Harvey A. Schwartz, who represents Scott Rodrigues in his civil rights and privacy violation lawsuit against Scotts.").

64. For example, in response to the Cleveland Clinic's decision to hire only non-smokers, an op-ed in the *Cleveland Plain Dealer* asked, "[i]f the Clinic can cut smokers out of the job pool as expensive health risks, might overweight people be next, or sexually active gay males?" Kevin O'Brien, *Tobacco Policy a Breath of Foul Air*, CLEVELAND PLAIN DEALER, July 4, 2007, at B7.

65. As discussed at the symposium, Lewis Maltby was actively involved in the ACLU's efforts (funded in part by the tobacco industry) to encourage states to adopt "smokers' rights" legislation. *See supra* note 43 and accompanying text.

66. *See, e.g.*, City of N. Miami v. Kurtz, 653 So. 2d 1025, 1028 (Fla. 1995) (finding that the city's policy of refusing to hire applicants who had smoked in the past year did not violate the privacy rights protected by either the U.S. or Florida Constitution). Likewise, the argument "that an employer's consideration of leisure-time smoking violates a legally protected common law privacy interest . . . is without legal merit." Karen L. Chadwick, *Is Leisure-Time Smoking a Valid Employment Consideration?*, 70 ALB. L. REV. 117, 127 (2006).

"marriage, procreation, abortion, contraception, and the raising and educating of children."[67]

Even though there is no legal objection to tobacco-free hiring policies, many people strongly believe that off-duty conduct—even if dangerous or unhealthy—is simply none of an employer's business.[68] This argument would be more convincing if not for the fact that employees, as we have explained, bring their nicotine addiction to work. Their withdrawal symptoms in the workplace reduce productivity and impose substantial costs on their employers and on other employees.[69] Most employers already prohibit—and often test for—the use of narcotics and other psychoactive and addictive drugs that impact employment performance.[70] These policies are not implemented because the substances in question are illegal—employers have no obligation (and probably no interest) in assisting law enforcement efforts. Rather, employers have found that employees dealing with drug addiction or withdrawal are less productive, sometimes dangerous, and impose costs on the business as a whole.[71] Nicotine addiction is no different.

It could be argued that even if tobacco use imposes some cost on employers, it is a cost that society must pay for respecting the privacy and autonomy of adults who make the decision to use a legal product. This argument fails for two reasons. First, smoking is rarely an adult decision. The vast majority of smokers begin smoking before the age of eighteen, when they develop a nicotine addiction that keeps them smoking into adulthood.[72] Indeed, poll

67. Graff, *supra* note 47, at 4.

68. *See, e.g.*, NAT'L WORKRIGHTS INST., LIFESTYLE DISCRIMINATION: EMPLOYER CONTROL OF LEGAL OFF DUTY EMPLOYEE ACTIVITIES, http://www.workrights.org/issue_lifestyle/ldbrief2.pdf ("The real issue here is the individual right to lead our lives as we choose. It is important that we preserve the distinction between company time and the sanctity of our private lives.").

69. *See supra* notes 41–42 and accompanying text.

70. Gary White, *Job Applicant? Expect a Drug Test*, THE LEDGER (Lakeland, Fla.), Feb. 6, 2007, at A1 ("A 2006 survey by the Society for Human Resource Management found that 84 percent of employers required new hires to pass drug screenings . . . .").

71. Dalia Fahmy, *Aiming for a Drug-Free Workplace*, N.Y. TIMES, May 10, 2007, at C6 ("Drug users are almost four times as likely to be involved in a workplace accident as sober workers and five times as likely to file a workers' compensation claim, according to government data. Drug users miss more days of work, show up late and change jobs more often.").

72. M. Mathers et al., *Consequences of Youth Tobacco Use: A Review of Prospective Behavioural Studies*, 101 ADDICTION 948, 948 (2006) ("Most tobacco users initiate

after poll shows that more than 70% of smokers would like to quit.[73] Tobacco use is in most cases an addiction, not—despite the rhetoric of the tobacco industry—an "adult choice." On the contrary, it is an ongoing public health disaster resulting from years of aggressive tobacco industry marketing to youth and young adults.[74] However, individuals can and do quit. There are currently more ex-smokers (forty-six million) in the United States than there are current smokers (forty-five million).[75] Unfortunately, many smokers do not quit until they have already suffered permanent health damage.[76] A smoke-free workplace provides gentler and timelier motivation for quitting than a heart attack or cancer.

Secondly, the argument that employers are running roughshod over employees' privacy rights is less convincing where—as in the case of Scotts and Weyco—the employer is willing to provide all the cessation assistance necessary to help the employee break his or her nicotine addiction.[77] Indeed, the CEO of Scotts said that the company will *not* fire employees who are

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and develop their smoking behaviour in adolescence, with very few people beginning their smoking habit as adults.").

73. Jeffrey M. Jones, *Smoking Habits Stable; Most Would Like to Quit*, GALLUP NEWS SERV., July 18, 2006, *available at* http://www.gallup.com/poll/23791/Smoking-Habits-Stable-Most-Would-Like-Quit.aspx. In 2006, 75% of smokers said they would like to give up smoking, while just 22% said they would not. *Id.* Each time Gallup has asked this question since 1977, at least six in ten smokers have said they would like to quit. *Id.*

74. *See., e.g.*, WORLD HEALTH ORG., WHO REPORT ON THE GLOBAL TOBACCO EPIDEMIC, 2008 21 (2008), *available at* http://www.who.int/tobacco/mpower/mpower_report_tobacco_crisis_2008.pdf.

> The epidemic of tobacco use and disease as we know it today would not exist without the tobacco industry's marketing and promotion of its deadly products over the past century. Tobacco companies have long targeted youth as "replacement smokers" to take the place of those who quit or die. The industry knows that addicting youth is its only hope for the future.

Id.

75. Ctrs. for Disease Control & Prevention, *Cigarette Smoking Among Adults—United States, 2006*, 56 MORBIDITY & MORTALITY WKLY. REP. 1157 (2007), *available at* http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5644a2.htm.

76. *See, e.g.*, Donald H. Taylor et al., *Benefits of Smoking Cessation for Longevity*, 92 AM. J. PUB. HEALTH 990, 995 (2002) (observing in Table 5 that men who quit smoking at age thirty-five gained eight-and-a-half years of life expectancy relative to a continuing smoker, whereas men who quit smoking at age sixty-five gained only two years of life expectancy).

77. *Countdown* (MSNBC television broadcast Jan. 12, 2006) (Scotts CEO James Hagedorn said, "[W]e'll give them pharmaceuticals, we'll give them counseling—whatever they need, we'll give them. And there's no expense on what we'll do to get people to quit.").

actively trying to quit smoking, even if it takes years of effort.[78] Rather than being forced out of a job because of their nicotine addiction, smokers are being asked to attempt smoking cessation. Provided that employers have an appropriate understanding of the difficulty of breaking nicotine addiction (and the multiple attempts that may be involved), it is hard to see how a requirement to attempt smoking cessation infringes on personal privacy more than a myriad of other decisions that people must make in order to keep their jobs. In order to accept or maintain a job, people are often required to make significant life changes such as moving, relinquishing other outside employment, refraining from using or endorsing competitors' products, cutting their hair, and rearranging their schedules. There is no reason that smoking should be prioritized above other activities in which employees may wish to engage outside of work. In fact, given the costs smoking imposes on others, there is considerably less justification for making it a protected activity.

B. Slippery Slope Concerns are Weak

Besides privacy-related arguments, the "slippery slope" argument seems to be the most common objection to tobacco-free workforce policies. In response to the World Health Organization's decision to stop hiring smokers, one commentator wrote that "WHO's next logical step in amending its application is to ask for the height and weight of applicants so it can discard the applications of obese people."[79] Tobacco use, however, remains in a class by itself. Tobacco use is known to cause the deaths of five million people worldwide[80] (and approximately 438,000 in the United States)[81] each year—an entirely preventable public health crisis. Tobacco is the only legal consumable product that kills approximately one-half of the people who consume it, it is highly

78. Interview with Scotts CEO James Hagedorn (CNBC television broadcast Jan. 10, 2006) ("[W]hat we've told people is everybody who's making an effort to quit will not be impacted . . . . [A]nybody who's making a good faith effort to quit smoking, with all the tools we're going to give them, will not be impacted, even if takes a year, two years, three years, for them to quit.").

79. Leonard Glantz, *Smoke Got In Their Eyes*, WASH. POST, Dec. 18, 2005, at B07.

80. World Health Org., *Tobacco Free Initiative: Why is Tobacco a Public Health Priority?*, http://www.who.int/tobacco/health_priority/en/index.html (last visited Jan. 8, 2007).

81. *Annual Smoking*, *supra* note 19.

addictive, and it cannot be used safely in moderation.[82] All of these factors are clear bases on which tobacco use can be distinguished from other potentially hazardous activities.[83]

Discussing the argument that prohibitions on "egg eating and beer drinking" could come next, Professor Karen Chadwick at Michigan's Thomas M. Cooley Law School recently outlined the weaknesses of the slippery slope argument:

> When closely examined, the slippery-slope argument as applied to employment policies on smoking is problematic. No one seriously disputes that obesity and other conditions that impact health, like smoking, impose significant health and productivity costs on employers. However, although there is considerable evidence that smoking is directly related to significant lost productivity and increased employer health care costs, there is little data supporting the contention that off-duty egg eating and beer drinking result in similar directly correlative costs.
>
> Unlike smoking, consuming eggs and beer is not addictive. Smoking directly correlates with deleterious health consequences. But unlike smoking, the causes of obesity, heart disease, diabetes, alcoholism, and other conditions are the result of a complex number of factors, not just egg or beer consumption. Thus, discrimination against lifestyles which include beer drinking, egg eating, or other similar behaviors would impose employer monitoring costs without obvious directly correlative benefits.[84]

82. *See* Valleau, *supra* note 43, at 491; Joseph R. DiFranza et al., *Initial Symptoms of Nicotine Dependence in Adolescents*, 9 TOBACCO CONTROL 313, 313 (2000) (finding that "[t]he first symptoms of nicotine dependence can appear within days to weeks of the onset of occasional use, often before the onset of daily smoking.").

83. *See* Michele L. Tyler, *Blowing Smoke: Do Smokers Have Rights? Limiting the Privacy Rights of Cigarette Smokers*, 86 GEO. L.J. 783, 794–803. As Tyler has written, the slippery slope argument is "emotionally powerful" but "practically weak." *Id.* at 794. She writes:

> Tobacco is unlike any other legal product; it is the only available consumer product that is hazardous to health when used as intended. As a result, the use of tobacco can be set apart analytically from other legal activities. . . . [T]obacco use differs from consumption of other products in both the magnitude of its abuse and the magnitude of the resultant risk of disease.

Id.

84. Chadwick, *supra* note 66, at 139–140.

Furthermore, the slippery slope concerns are entirely speculative. No employer has extended a tobacco-free workforce policy to exclude other types of employees who might increase healthcare costs. To the contrary, nearly all of the employers of whom we are aware who have instituted tobacco-free workforce policies have done so as part of a larger workforce-wellness agenda. These companies have built state-of-the-art gyms, provided healthier food in workplace cafeterias, provided coaches to help employees develop personal fitness plans, and more.[85] Far from discriminating against employees who may face higher health costs, these employers have actively sought to help them reduce their health risks. These employers should be applauded for their efforts, not vilified.

Some argue that employers might move beyond tobacco to prevent other high-risk behaviors like riding a motorcycle or hang-gliding.[86] This is speculative as well, and again, tobacco use (in the aggregate) imposes much more serious costs on employers than other risky activities.[87] Our legal system recognizes that employers have the right to set the conditions of employment, so long as they are not engaging in invidious discrimination.[88] An employer could choose to hire only people who did not hang-glide, provided that the employer was not in a state with a very broad "smokers' rights"

85. *See., e.g.*, Michelle Conlin, *Get Healthy—Or Else; Inside One Company's All-Out Attack on Medical Costs*, BUS. WEEK, Feb. 26, 2007 (discussing wellness programs at Scotts and other companies).

86. *See, e.g.*, Dick Dahl, *Employers Take Action to Control 'Unhealthy' Employee Lifestyles*, LAW. USA, Feb. 12, 2007 (quoting a corporate attorney suggesting that "[t]here's a lot of speculation about where you should draw the line. Should you try to restrict other 'risky activities' like hang gliding or overeating?"); Interview by Carol Lin with Lewis Maltby, President, National Work Rights Institute (CNN television broadcast Dec. 10, 2005), *transcript available at* http://transcripts.cnn.com/TRANSCRIPTS/0512/10/pitn.01.html:

> [Y]ou can't fire people—at least, you shouldn't, for doing something that might make them sick someday. We all do things in our private life that could adversely affect our health. It could be smoking, it could be drinking, it could be junk food, it could be riding a motorcycle**,** could be practicing unsafe sex, could be having too many children. If we let our employers start telling us what to do in our private lives, because it effects our health care costs, we can all kiss our private lives good-bye.

87. Ali H. Mokdad et al., *Actual Causes of Death in the United States, 2000*, 291 J. AM. MED. ASS'N 1238, 1240 Table 2 (2004) (finding that in 2000, tobacco use accounted for 18.1% of deaths in the United States, whereas illicit drug use, sexual behavior, firearms, and motor vehicle accidents *combined* accounted for 4.5% of all U.S. deaths).

88. *See supra* notes 44–46 and accompanying text.

law that applies generally to off-duty lawful activities.[89] However, a reasonable employer would consider the potential benefits of the policy in relation to the policy's costs—most notably, a reduction in the pool of qualified employees. For this reason, an employer is highly unlikely to propose such a policy unless the activity in question is imposing substantial costs on the business. It is no coincidence that we are seeing more and more tobacco-free workforce policies, but no "hang-glider-free workforce" policies.

Any concern about a "slippery slope" can be monitored, and future policy developments can be debated and, if necessary, reined in through the political process.[90] For the moment however, the "slippery slope" argument does not provide a compelling basis for preventing employers from implementing tobacco-free workplace policies. In addition to the positive impact on business productivity, these policies are likely to reduce tobacco use and save lives.[91] They should not be prohibited or delayed in deference to hypothetical "slippery slope" concerns.

V. A SHAKY MIDDLE GROUND: INSURANCE SURCHARGES

Karen Chadwick has argued that, given the tension between employer costs and privacy concerns, we should settle on a "middle ground" that would prohibit employers from making hiring decisions based on smoking but allow them to "pass on health care costs attributable to smoking to those employers that smoke."[92] We agree that employers should have the option to impose health insurance surcharges on employees who smoke. But we see practical, legal, and logical problems with a regime that allows employers to charge health-care surcharges but proscribes tobacco-free workforce policies.

89. *See supra* Part III.

90. Lewis Maltby's reference to Henry Ford's own private police force proves too much. Perhaps employers *could* adopt similar policies today, but they don't. Any company that attempted to monitor its employees' off-duty morality would likely see a dramatic reduction in job applicants without any corresponding cost savings. To put it more directly, any company that announced such a policy would be relentlessly ridiculed. This alone should suggest that the "slippery slope" argument is overstated.

91. In the case of Weyco, for example, of the twenty-eight smokers employed by the company at the time the tobacco-free workforce policy was implemented, twenty-four quit smoking. Robinson, *supra* note 4, at 3.

92. Chadwick, *supra* note 66, at 137.

First, Chadwick's proposal does not take into account the fact that employees who smoke impose substantial costs on employers that go beyond healthcare costs.[93] These costs, such as lost productivity and excess workers' compensation claims, are outlined above.[94] Secondly, even if looking only at health-related costs, companies may be legally barred from imposing a health insurance surcharge high enough to fully recoup smoking-related expenses. Pursuant to administrative rules implementing the Health Insurance Portability and Accountability Act (HIPAA), employers can only add a premium surcharge of up to 20% of the total cost of employee-only coverage for employees who use tobacco.[95] Moreover, employers are prohibited from imposing the surcharge on current tobacco users for whom it is "unreasonably difficult... to stop smoking."[96]

Given these legal limitations, it is unlikely that surcharges would truly be able to recover the excess costs imposed by tobacco users, and it is equally unlikely that the surcharges would be effective at motivating employees to quit (particularly when they can just claim that quitting is "unreasonably difficult").[97] Indeed, the HIPAA limitations were reportedly one factor that led Scotts to adopt a smoke-free workforce policy.[98] Third, as Lewis Maltby noted at the Tobacco Control Legal Consortium symposium, enforcing a surcharge policy implicates all of the same privacy concerns as a smoke-free workforce policy.[99] Thus, it does nothing

93. *See supra* Part II.

94. *See supra* Table I.

95. *See* 45 C.F.R. § 146.121(f)(2)(i) (2007).

96. 45 C.F.R. § 146.121(f)(2)(iv), (3)(Ex. 5) (2007). Those for whom quitting is "unreasonably difficult" can be required to participate in a cessation program. However, the surcharge cannot be applied so long as they participate in the cessation program, even if they continue to use tobacco afterwards. *Id.*

97. *See* Conlin, *supra* note 85 ("Some theorized that higher co-payments and pricier premiums would get people to take better care of themselves. It's not happening.").

98. John Jarvis, *Marysville Company Forcing a Healthy Choice: If You're a Smoker, You Can't Work Here*, MARION STAR (Ohio), Jan. 22, 2006 ("In making their decision, company officials also took into account that the law doesn't allow a company to deny health coverage to employees who are smokers or add fees to their premium that 'accurately reflect the true cost of smoking,' [Scotts spokesman Jim] King said.").

99. *Cf.* Tyler, *supra* note 83, at 795 ("Nor does this [surcharge] solution address the slippery slope problem. Instead, it encourages employers to further invade informational privacy rights by making other 'unhealthy' behaviors, such as poor diet, and risky hobbies such as sky-diving, cause to terminate or reduce an employee's health insurance.").

to address the tension between employer interests and privacy concerns.

In addition, hiring tobacco users but then implementing and enforcing a surcharge system creates a strong incentive for employees to mislead their employers. It is likely that at least some new employees who are current smokers will claim that they are non-smokers (or former smokers who have recently quit) in order to avoid paying the healthcare surcharge. Companies that are committed to enforcing the surcharge policy may conduct random tests to verify smoking status. If, however, tests later reveal that an employee has been untruthful, the company is left in a no-win situation. The company could dismiss the employee for lying on the health insurance application, but by that point, the company may have spent thousands of dollars in training expenses. Firing the employee may also lead to a wrongful termination suit, costing the company even more in legal bills. Companies would be far better off if they were able to do pre-employment testing and avoid these potential problems. Relative to a smoke-free workforce policy, the surcharge option may create far more practical and legal headaches.

In sum, we think this area is one where employers should have the ability to choose the option that works best for them—whether it is the status quo, tobacco use surcharges, or a tobacco-free workforce policy.[100] Tobacco use surcharges may work for some employers, but surcharges are certainly not a one-size-fits-all panacea that will work for all businesses.

VI. CONCLUSION

Though there are likely to be substantial public health implications to the widespread adoption of tobacco-free workforce policies, it is businesses owners and managers who must decide whether such policies make sense for their businesses. Tobacco-control advocates and business groups do not always see eye-to-eye, but this appears to be a case where business and public health interests converge. In addition to improving employee health and

100. Lewis Maltby stated at the TCLC symposium that before initiating a surcharge program backed up by testing, "employers need to consider how employees will react." We completely agree. Employers are the ones who know their workforce and their workplace best. It should be left to the employer to balance the competing considerations and determine what policy works for a given company.

workforce productivity, tobacco-free workforce policies will send a strong signal to college students and young adults to stay away from tobacco (just as current drug-testing programs by employers discourage the use of illegal drugs).[101]

Facing the preventable, premature deaths of over 400,000 Americans each year and annual excess costs of more than $160 billion,[102] the U.S. Department of Health and Human Services goals delineated in *Healthy People 2010* a target U.S. adult smoking prevalence of only 12%.[103] Though the target date is less than two years away, we are still a long way from achieving that goal. The current adult smoking rate is over 20%,[104] and we have seen only minimal declines in smoking rates over the last decade.[105] Current tobacco control efforts are simply not reducing smoking rates quickly enough to derail the continuing public health catastrophe caused by cigarette smoking. If we are to make further progress in reducing the horrendous toll imposed by cigarettes, tobacco control advocates must be willing to work with the private sector and to support novel private-sector initiatives such as tobacco-free workforce policies.

101. Indeed, college students are already beginning to take notice. College newspapers across the country have covered companies' decisions to implement tobacco-free workforce policies. For example, a recent article in the University of Maryland's student newspaper warned students that "[a] cigarette drag is no longer just a health risk; it's a career liability." Ben Block, *Employers Less Likely to Hire Smokers*, THE DIAMONDBACK, Dec. 15, 2005, *available at* http://media.www.diamondbackonline.com (search "Employers Smokers").

102. *Annual Smoking*, *supra* note 19.

103. U.S. DEPT. OF HEALTH & HUMAN SERVS., HEALTHY PEOPLE 2010—TOBACCO USE (Nov. 2000), http://www.healthypeople.gov/document/html/volume2/27tobacco.htm#_Toc489766214.

104. CTRS. FOR DISEASE CONTROL & PREVENTION, BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, PREVALENCE DATA—NATIONWIDE (STATES AND DC)—TOBACCO USE 2006, http://apps.nccd.cdc.gov/brfss/display.asp?yr=2006&cat=TU&qkey=4396&state=UB.

105. *See* Ctrs. for Disease Control & Prevention, *Cigarette Smoking Among Adults—United States, 2006*, *supra* note 75 (noting that the adult smoking rate has declined from 24.7% in 1997 to 20.6% in 2006, but has remained virtually unchanged since 2004).