A Clash of Rights: Should Smoking Tobacco Products in Public Places be Legally Banned?

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Introduction

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There is little question that smoking tobacco products is an important contributor to the development of many kinds of cancer, as well as to morbidity through its effects on lungs, blood vessels, and other vital organs and processes. Virtually all thoracic surgeons advise their patients who smoke to stop smoking because of the risks it poses to health, both short-term and long-term. Yet, it is a valid question to ask whether or not or to what extent these medical facts constitute justification of coercive action against smokers through enactment of laws.

There seems to be strong sentiment among thoracic surgeons in support of such laws, probably driven largely by their personal experiences with the pathology that smoking visits on those who are exposed to it. They are not as vocal, however, about the need for laws to control other destructive habits, such as eating too much (obesity is also a major cause of morbidity) or drinking too much (prohibition of alcohol early in the last century was not notably successful in reducing the damage caused by drinking, and was eventually repealed).

Much discussion in the popular media and medical literature has focused on what might be gained by legal prohibition of smoking in public places, but relatively little discussion has focused on what might be lost by enacting such laws. To put the arguments of both sides of this issue on the table for our inspection and thoughtful consideration, we present the case of a conflicted legislator who is also a thoracic surgeon.

The Case of the Ambivalent Surgeon

Dr Thomas Brady, a thoracic surgeon, has never had strong political inclinations, but he is very concerned that politicians seem to have little appreciation of the complexities of the contemporary healthcare system. In a moment of what he would have considered lunacy when he was younger, he decided to run for public office. He took his campaign seriously and worked hard, but realistically, he had little hope of winning. To his considerable surprise, however, he awoke on the first Wednesday of November to find himself elected to membership in his state's House of Representatives. He put much effort into learning the ropes of how the political system works. He discovered the truth in Otto von Bismarck's celebrated remark, "Laws are like sausages. It's better not to see them being made." Nevertheless, he thoroughly studied major bills before voting on them, and become known as an honest and thoughtful legislator.

Ever since his earliest days of training as a surgeon, he has known of the many dangers of cigarette smoking. The cancers of the lungs, head and neck, and bladder caused by smoking disturb him, as do the effects of smoking on lung function and blood flow, especially to the heart and brain. Secondhand smoke, he is convinced, damages people who don't smoke at all, especially those who live with or are otherwise in close proximity to someone who smokes. Several years ago, when the president of the airline that serves the major cities of his state announced that all future flights would be smoke-free, Dr Brady wrote a letter of congratulations and gratitude for the president's courage and foresightedness. Recently, he was delighted when several restaurants in his town, following the lead of local hospitals, adopted no-smoking policies. He made a point of going to those restaurants on the occasional nights when he ate out.

He can't say exactly what makes him feel uneasy when the state's second-largest city passes an ordinance prohibiting smoking in any establishment serving the public, such as theaters, restaurants, bars, and laundromats, to name a few. He finds it entirely praiseworthy for the owners of a laundromat or bar to prohibit smoking; it is their space, and if they want to take a chance on losing business, or perhaps gaining business, by prohibiting smoking, then more power to them. Dr Brady doesn't waste much time trying to understand his unease, however; he has plenty of pressing issues to engage his attention.

A bill is filed in the House and it is assigned to the Medical Affairs Committee on which Dr Brady serves. At the committee's hearing on the bill, they listen to several

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proponents testify on the need for a law to protect the health of the public. Smokers may damage themselves, if they so choose, but they have no right to damage others by exposing them to ambient tobacco smoke. A much smaller number of opponents argue that it is legislative overreaching and paternalism to use the force of law to protect people from damage they can easily avoid on their own. Decisions by private business owners, they say, will allow people to make their own judgments about protecting their health, and the free choices of proprietors and customers, taken in aggregate, will arrive at the correct balance between the pleasures of smoking and its dangers to smokers and those around them.

Dr Brady understands the arguments of both sides and is uncertain whether he should vote for the bill, sending it to the House for final action, or vote against it, effectively killing it within the committee. He asks two of his friends, a thoracic surgeon and a philosopher, to help him think through the issues.

Pro

Carolyn Dresler, MD, MPA

Dr Brady is puzzled on how to proceed with his vote and is wondering where to seek advice to help him make his decision. Some basic topics should first be reviewed that are relevant, and this will provide some background for solving Dr Brady's dilemma.

First of all, a review of the science should be made so that it is clearly understood. The recent 2006 United States' Surgeon General report states that the health consequences of involuntary exposure to tobacco smoke result in four key conclusions [1]:

1. Secondhand smoke causes premature death and disease in children and in adults who do not smoke.
2. Children exposed to secondhand smoke are at an increased risk for sudden infant death syndrome, acute respiratory infections, ear problems, and more severe asthma. Smoking by parents causes respiratory symptoms and slows lung growth in their children.
3. Exposure of adults to secondhand smoke has immediate adverse effects on the cardiovascular system and causes coronary heart disease and lung cancer.
4. The scientific evidence indicates that there is no risk-free level of exposure to secondhand smoke.

Secondhand smoke, or involuntary exposure to tobacco smoke—this terminology is used to emphasize that it is an undesired or involuntary exposure to tobacco smoke—is unsafe at any level for everyone. This is explicitly clear with solid, scientific evidence. Solid science has also demonstrated several factors: that secondhand smoke bans do increase smoking cessation efforts among smokers, the bans do create more "smoke-free homes," as people are educated about the dangers to loved ones from secondhand smoke, and the bans do not drive businesses to close with loss of profits, as this has been proven to be true around the world nationwide down to cities, from Ireland to El Paso, Texas [2–4]. Studies have demonstrated that people who do not smoke, but work in smoking environments have higher levels of tobacco metabolites than nonsmokers who work in nonsmoking environments, thus clearly demonstrating the exposure and consequent potential health effects from working in a smoky environment [5].

Therefore, the science is clear. However, oddly, science is probably not the issue in this discussion.

As an elected official, it is Dr Brady's responsibility to review or create laws and regulations (or both) that provide for an orderly, yet functional society. The United States often adds a caveat to this mandate that we do not interfere too much and that we value our individual independence! We want as few taxes as possible, yet we also want bridges that do not fall down, and we want firefighters (paid from public monies) who are able to immediately and expeditiously save homes and lives. We want to be able to build those homes where and how we want, with limited government regulations that would inhibit our ability to do so. Here in the United States, we are a very individualistic society, that often tends to look inward for "what is in it for me" versus "what do we owe our society." Arguably, surgeons are perhaps at one end of this spectrum and very much do give to society, but what about the general populace?

What are we owed by our society and what do we owe it? "What" or "who" is our "society" anyway? One could say that our "society" is the group of people with whom we interact. They are the school teachers who teach our children, the people in the grocery store that supply our food, our bankers, the people who staff our hospitals, and our families. Because we are a complex society, our society also includes the people who grow our food, those who ship our food, those who make or sell our clothes, our bus drivers, or for some of us, our housekeepers or our babysitters. In other words, our society includes people from all strata—from the surgeons and corporate CEOs to the people making minimum wage to the mentally ill who are homeless. All of these people make up our society in the environments in which all of us exist, live, work, and play.

What do those people, that is, all of those "other people" owe us. What is meant by "owe" in this case?

One could say that they don't owe anyone else anything. Actually, they do. They owe others the respect of their person and of their ability to exist and prosper within our society. As an obvious example: they are not allowed to kill another person. We, as a society, have decided that killing one another is not allowed. Another example, our society owes individual adults the right to vote, that is, an adult individual has the ability to decide on what the rules and regulations are to be by which we all live. Each person is a part of the society that has decided that one can not be killed by another member of the society. Each person helps decide the penalty for breaking these rules, because each person can vote. To follow this example, as a member of United States society, each adult has the right to due process of law, that one's being or belongings will not be illegally searched or seized. These are all legally protected "rights" and it is the duty of the governing bodies, whom adults of the society have elected or been appointed to provide each of us with these legally protected "rights."

So far, the discussion has reviewed what the society owes each of us, but what does each person owe their society? Depending on how one looks at this question, it is an easier one to answer. Each person owes their society their ability and willingness to follow the rules that govern us all equally. We will treat fellow members of our society with all the respect that we claim for ourselves.

All of this to this point is very basic, we know all of this already, but how can this help Dr Brady make his decision? Actually, a few key words and concepts have been sprinkled into this dialogue; what are they and how can they help us find the answer for Dr. Brady?

First, what are legally protected rights and human rights? They are different, very different, yet one often derives from the other. Human rights are the highest order of "rights" and they supercede any "legally protected" rights. Remember, legally protected rights, such as one person can not be killed by their neighbor, result from laws passed by our elected representatives. Human rights have a very well-delineated description; in legal terminology, these describe what our behavior should be to others in our society, and in addition, what our group or society has a duty to provide to us individually. One of those rights is the right to life, and this human right, in the example of murder, has been codified as a legally protected ability to claim one's life. Conversely, our society has the duty to provide each of us, as individuals in our society, these human rights, and thus, the enforcement of the laws that punish the murderer.

For the purposes of this brief discussion, the legal documents that were created after World War II and the Nuremberg trials will be acknowledged as the impetus in the development of modern human rights discourse. However, three main documents resulted: (1) the United Nations' Charter, (2) the International Convention on Civil and Political Rights, and (3) the International Convention on Economic, Social, and Cultural Rights [6]. These three documents have formed the core of international human rights declarations. The vast majority of countries have chosen to codify these human rights into national law that make them into legally protected rights.

The International Covenant on Economic, Social, and Cultural Rights discusses human rights, such as the right to work, the right to choose who to marry, the right to health, and with this, the right to a healthy environment. Both the Convention on Civil and Political Rights and the Convention on Economic, Cultural, and Social Rights delineate human rights, that is, rights that accrue* to us as individuals that we have the responsibility to claim, and our society has the duty to provide. We, as individuals in our society have a right to health and the right to a healthy environment. We have the right to claim for ourselves this healthy environment, which is called having the agency to claim our duly owed human right, and our society has the duty to provide that healthy environment.

Some have argued that certain public health measures are examples of a coercive political authority. However, there are public health measures that are allowable even though they could be construed as coercive. Such interventions that serve to benefit the greater whole are allowed to restrict certain "freedoms" of the individual. Such public health interventions are allowable if they are based on three constructs:

1. the magnitude of the problem: greater than 50% of all children in the United States are still exposed to secondhand smoke and 1 in 4 American children between 3 to 19 years of age live in a household with a smoker;
2. logical construct: secondhand smoke causes significant morbidity and mortality with a strong and solid scientific base;
3. legal construct: the right to health; the right to a healthy environment is part of our human rights that needs to be codified into our society's laws.

With such constraints, it is not likely that public health interventions will become insidious.

We have, as individual members of our society, the right, the human right, to a healthy environment. We have this human right because we are a member of our society, our group of people. Our elected representatives have the duty to provide that healthy environment.

So, where is the problem? The United States is not a party to the Economic, Cultural, and Social Rights convention. The United States is one of a small number of countries in the world who have not ratified this convention and made its contents part of the governing laws of the land. Thus, as part of our national governing laws (in which international treaties work), we do not have the *legally protected* human rights: the right to health or the right to a healthy environment. That does *not* change the fact that we have human rights that

*Accrue: *Law*. To become a present and enforceable right or demand.

include the right to health or the right to a healthy environment.

As a society, we owe its members the right to a healthy environment, and as individuals we must have the agency to claim this right. Dr Brady, as our representative, must vote to provide a healthy environment to his society, his constituents, to the best of his ability, because it is the duty of the government to provide such human rights. When such a law is passed that provides a healthy environment, then we have incorporated what is considered a human right into a legally protected right. Human rights trump legally protected rights; they are from a higher order. Our government should move to incorporate our human right to a healthy environment by legally protecting us with a comprehensive smoke-free law.

Con

Mark J. Cherry, PhD

Public health has become the very willing agent of coercive political authority. The power vested in the public health community has become increasingly significant. Its judgment is sought on nearly all aspects of life, from appropriate births and deaths, diets and sexual behaviors, to methods of child rearing and permissible lifestyle choices. Public health expertise serves as the basis of expert testimony in courts of law and, as illustrated by the point-counterpoint discussion in this issue of *The Annals of Thoracic Surgery*, it is widely sought in the framing of governmental policy. Because the concern for "health" has become a pervasive aspect of modern culture, Dr Brady's unease with the proposed smoking ban reflects the circumstance that such agency has the potential to be particularly insidious.

Witness the growing popularity of banning smoking from all so-called "public" venues, including privately owned facilities, such as businesses, bars, and restaurants. Such bans have become popular among state and local governments, with the hope of anti-smoking advocates that "100% of Americans will live in smoke-free jurisdictions within a few years" [7]; smoking bans of various forms exist in California, Hong Kong, Singapore, France, Ireland, and elsewhere worldwide. Advocates argue that smoking bans reduce involuntary exposure to secondhand smoke, especially in workplaces, bars, and restaurants, encourage active smokers to quit altogether, and reduce the public healthcare burden of the chronic illnesses purportedly caused by breathing secondhand smoke.

In contrast to such well-intentioned assertions, this article argues that legislative smoking bans can not be justified either in terms of private good or public good. To justify a smoking ban in terms of private good, the state must overturn longstanding legal and moral considerations that highlight individual autonomy and individual authority of persons over themselves. The weight of this moral and jurisprudential tradition establishes persons as in authority over themselves and as the presumed authoritative judge of their own interests. To justify a smoking ban in terms of the "public good," the state would need to demonstrate that accidental exposure to secondhand smoke in public places significantly increases actual personal risk above the level of background health risks that routinely exist in public. Otherwise, smoking bans simply enact a facile, hyperbolic, and discriminatory solution to what is a very complex moral and scientific issue.

Private Goods

Environmental tobacco smoke, that is, secondhand smoke, in bars, restaurants, and other indoor venues is typically characterized as "involuntary" exposure. Note the recent United States Surgeon General's report on "The Health Consequences of Involuntary Exposure to Tobacco Smoke" [8]. The rhetorical force of this depiction is that nonsmoking patrons and employees are forced into breathing secondhand tobacco smoke, a purported harm, which somehow violates their rights. At least with regard to businesses, bars, restaurants, and other private venues that the public freely choose to patronize, this characterization is inaccurate. Although such establishments are the usual target of legislative public smoking bans, these are not genuinely public places; rather, they are privately owned and operated businesses that the public freely chooses to frequent.

Consider bars and restaurants that permit smoking. Patrons who choose to enter thereby volunteer to breathe the internal air, including ambient viral and bacterial loads (eg, influenza spread by the sneezing individual next to you), bad breath, body odor, smelly food, flower pollens, nauseating perfumes and scented candles, and present levels of tobacco smoke. Those who do not wish to inhale the establishment's internal air may leave; each is free to seek establishments with a personally acceptable (by whatever criteria) internal atmosphere. Whereas employers are typically at liberty to craft no-smoking policies, employees who chose to work in smoking establishments have consented to such risks; each person is free to seek a profession with types and levels of risk that one finds acceptable. As others have noted, employers pay a premium when they expose their workers to risky or unpleasant environments, such as demands for higher pay and a smaller pool of applicants [9, 10]. Moreover, smokers seem to be well-informed regarding the poten-

tial health hazards of smoking; indeed, they routinely overestimate the actual risk level [10]. Whereas, it may be true that coercively imposing smoke-free workplaces would decrease secondhand smoke exposure, with some possible health benefits, it is significantly evident that because persons continue to patronize smoking establishments and work in bars and restaurants with a smoking acceptance policy, they do prefer the benefits of the market opportunity, the pleasurable company, the inexpensive drinks, or other goods, or the combination thereof, as opposed to different opportunities with fewer tobacco-based risks.

In general, one may permissibly engage in more or less risky activities, such as joining the military or the police, working on oil rigs, climbing mountains, donating a kidney or liver segment while alive [11], parachuting out of airplanes, undergoing elective plastic surgery, engaging in promiscuous sex, piercing body parts, having oneself tattooed, and so forth, setting life and health at risk for national patriotism, career advancement, monetary profit, recreational or altruistic interests, personal pleasure, or to enhance one's attractiveness to potential sexual partners. In part, such judgments reflect a cultural affirmation of the moral importance of respecting the choices of individuals. They reflect an appreciation of persons as possessing a dignity that should not be violated by unauthorized touching (battery), but who may consent to more-or-less risky activities. It is an acknowledgement of the authority of persons over themselves. Persons are recognized as in authority to make their own judgments regarding acceptable risks and benefits as they collaborate with others through freedoms of association and contract (eg, become an experimental subject in a surgery protocol; drink, or serve at a smoke-filled bar). Persons may thus grant permission to be touched or used in ways that (absent their permission) could profoundly harm them (eg, kidney donation vs assault or free love vs rape). In each case, the outcomes are not necessarily approved as good (some may decry various consequences as unwelcome), rather there is a prima facie lack of moral authority to interfere in the free choices of persons. Such moral and legal considerations constitute, for example, one of the central justifications of the practice of informed consent in medicine [12].

Such judgments recognize, as well, the difficulty of choosing correctly in a secular, morally pluralistic society. Which choice is morally preferable, working at a higher risk job with greater pay (eg, a high-paying job at a smoking-permitted workplace or performing thoracic surgery on HIV-positive patients) or accepting a lower paying, less risky job? Why would those who choose higher paying, but riskier, forms of employment be either irrational or immoral? Absent agreement regarding the requirements of God or the demands of moral rationality, individuals have been identified within rather expansive areas of life as the best judges of their own interests and of their own preferred methods for attempting to realize such interests [12]. This is the affirmation of a liberty interest (ie, an endorsement of the value of individual freedom or autonomy) which constitutes another central element in the justification of the practice of informed consent.

Advocates of smoking bans often rationalize that ". . . the general public accepts smoke-free bars and restaurants and that such smoke-free laws will not cause their targets to lose money" [13]. Conclusive empirical data is needed to document such contentious claims, as many businesses continue to maintain that anti-smoking laws drive away customers and reduce profits. Moreover, in Texas, "smoking permitted" bars have sprung up outside the legal jurisdiction of smoking bans. If switching to a smoke-free policy would obviously raise profits, many self-interested owners would move to a smoke-free environment on their own simply for profit maximization.

As Lambert notes:

> If patrons and employees are willing to pay more for a smoke-free environment (via, respectively, higher prices for the business's goods and services, or lower wages) than smokers are willing to pay for the right to smoke, then business owners will be motivated to ban smoking. Otherwise they will not [9].

Therefore, coercive bans should be unnecessary, because the market will address the problem indirectly, creating competing smoking and nonsmoking establishments, as owners respond to employee and customer demands. Or, perhaps the conclusion that smoking bans do not harm businesses is flawed.

Furthermore, not all important interests are health-directed or profit-minded. Consider a good old-fashioned, Texas bar owner, Billy Bob, a Bible-belt Christian, who combines his interests in profits with other personal interests, such as sermonizing, hunting, drinking, and smoking. In addition to bourbon and single-malt whisky, patrons are offered the opportunity to listen to the occasional sermon, admire the preserved animal heads lining the walls, and purchase cigars and cigarettes for the pleasurable activity of smoking with friends and colleagues. The sign outside his door reads: "Smoke if you wish, but blasphemers and animal rights activists will be shown to the door." Billy Bob realizes that his facility stands out as different from the more "up-scale" bars, like the *La Grenouille Qui Danse*, a nonsmoking wine-tasting bar up the street. He reasons: "I am for a market that offers different products, and therefore I am very, very suspicious of any attempts to set the same criteria across the board to all members of society." No one is forced to enter his establishment, and no one is hindered from leaving. He offers a choice of lifestyle, social risks, and freedom of association with others of similar tastes and interests. It is his venture capital or his private property at stake; his business is open to success or failure based on the free choices of others. Again, this is not a genuinely public space; rather, it is a private establishment to which members of the public are invited to frequent. Here, note the increasing popularity of

cigar-bars and other establishments dedicated to the enjoyment of high-quality tobacco.

Public Goods

"The comprehensive body of research documenting the serious adverse health effects of passive smoking provides a powerful rationale for prohibiting smoking in all public places. The time has come to clean the air" [13]. So concludes yet another advocate of smoking bans, but let us honestly consider the case of public risks and the element of accidental exposure to environmental tobacco smoke in the overall level of social risk.

Consider just a few sources of indoor air pollution in public places. According to the American Lung Association, radon, which is a tasteless, colorless, odorless gas, naturally occurring in the environment as a product of decaying uranium that becomes trapped in well-insulated buildings, is the likely cause of approximately 21,000 annual lung cancer deaths [14]. The American Lung Association also cites biological pollutants, such as molds, dust mites, animal dander, formaldehyde, asbestos, fumes from household cleaning chemicals, pesticides, paints, and other hobby products, as well as carbon dioxide and carbon monoxide from fuel burning stoves and furnaces, as major sources of indoor air pollution leading to respiratory illness, coughing, eye, nose, and throat irritation, skin rashes, headaches, and lung diseases, including cancer. They note the role that indoor air plays in spreading viruses and bacteria, which likewise cause disease and premature death [15, 16].

Consider some sources of public outdoor air pollution. Ozone, the central component of most ground-level smog, is formed when hydrocarbons and oxides of nitrogen react with volatile organic compounds in sunlight. Ozone is considered a powerful oxidizing agent that can damage lung tissue [17]. Sources of hydrocarbons and nitrogen oxides include automobile emissions, electric utilities, refineries, waste storage, recycling, and chemical solvents. Studies have tied ozone exposure to declines in lung function and general respiratory health [18–20], increased incidences of asthma [21], and a risk factor for premature morbidity [22]. Other sources of airborne pollutants (including carbon monoxide, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter) are chemical plants, steel mills, dry cleaners, gas stations, wildfires, prescribed burnings, automobiles, buses, heavy construction vehicles, aircraft, commercial marine vehicles, and locomotives, as well as the heating and cooling equipment of homes, businesses, and large office buildings, to name a few.

Airborne particulate pollution also reportedly plays a role in human health. According to one study of six small cities, residents of more polluted cities have increased risk of premature morbidity as compared with other less-polluted cites. Residents of Steubenville, Ohio, the most polluted city studied, had as much as a 26% increased risk of premature death, compared with the cleanest cities studied [23]. Investigators found an association between increased risks and differences in ambient fine particle concentrations of 18.6 $\mu g/m^3$ of air between the most and least polluted cities. This study focused solely on particulate air pollution, adjusting the study design to account for other personal exposures, such as occupational contact and smoking habits. A California research team concluded that children who live within approximately one third of a mile of busy freeway traffic have decreased lung function and lung growth [24, 25]. The National Morbidity, Mortality, and Air Pollution Study (NMMAPS) argued that in large American cities, increases in particulate pollution led to increased hospital admissions for cardiovascular disease, pneumonia, and chronic pulmonary disease. The study examined the following most widespread outdoor air pollutants: ozone, sulfur dioxide, nitrogen dioxide, particulate matter, and carbon monoxide [26].

Consider other risks to life and health in the public space. According to the National Highway Traffic Safety Administration, there were some 42,636 automobile traffic fatalities and 2,788,000 injuries in the United States in 2004 [27]. Approximately 76 million individuals contract food-borne illnesses, leading to some 325,000 hospitalizations and more than 5,000 deaths each year in the United States, with salmonella, listeria, and toxoplasma each responsible for more than 1,500 deaths each year [28]. In 2005, the United States Department of Labor reported 4.2 million nonfatal occupational injuries and illnesses [29], with 5,702 work-related fatalities [30]. Noise pollution similarly impacts health and well-being. Researchers have linked noise to risk of cardiovascular disease, accelerated heart beat and high blood pressure, gastrointestinal disease, decrease in alertness, nervousness, pupil dilation, insomnia, bulimia, anxiety, depression, and sexual debility [31]. Among the leading causes of death for 2003, the Centers for Disease Control (CDC) lists 109,277 deaths due to accidental injury and 65,163 due to influenza and pneumonia. The CDC estimates that between 5% and 20% of residents in the United States suffer from influenza each year, with more than 200,000 requiring hospitalization and more than 36,000 Americans dying yearly from influenza complications [32]. The United States does not forcibly inoculate for influenza and pneumonia, but rather stipulates classes of high-risk persons and recommends that they and others should likely seek immunization.

The actual health risk of accidental exposure to environmental tobacco must be appreciated in light of the overall level of background public risks. Given this lengthy, but incomplete, list of health risks to which individuals are exposed daily, it is arbitrary to hold smoking to a significantly higher standard than we hold other types of pollution or hazards to the "public health." Many diseases, including lung cancers and coronary diseases, have multi-factorial causation, with genetic components, environment, pollution, and lifestyle choices playing more-or-less important causal roles. Smoking ban advocates need to definitely establish that accidental exposure to secondhand smoke as a

specific hazard significantly increases personal risk above the background health risks that routinely exist in the public space. For example, in major metropolitan areas, true involuntary exposure to environmental tobacco smoke (ie, tobacco smoke to which one has not consented to be exposed) will likely constitute only a small element of one's daily overall level of health risk (eg, environmental hazards, pollution, disease exposure, car exhaust, loud noises, traffic accidents, extreme weather, and so forth).

Governments lack legitimate authority to restrict individual freedom to smoke in public places unless the risk to others is greater than the normal background risks that persons assume simply by going about their daily lives. Persons consent to many background risks as they venture into the public space, but not to all risks. For example, highway drivers consent to the usual risks of driving (eg, the slipperiness of a wet road, possible automobile failure, and so forth), but not to all risks (eg, the risk that others are driving under the influence of heroin).

Similarly, persons consent to many health risks, but not usually to the risk of picking up a highly contagious and crippling or deadly disease, which can be passed on to others through casual public contact. As Engelhardt notes:

> If others are likely to contract a disease if left unvaccinated and spread it to innocent individuals who can not vaccinate themselves or otherwise protect themselves, force may be justified to require vaccination to protect individuals who would otherwise be brought into contact with the disease without their consent, without an opportunity to avoid the contact, and without an opportunity to avoid contracting the disease [33].

Such an argument likely justifies compulsory vaccination for diseases, such as polio and smallpox, which are dangerous and highly contagious through casual contact. It might even justify quarantine for persons with highly infectious and dangerous diseases. The risks associated with such diseases are significantly greater than the background risks that one generally assumes in daily life.

Legitimate governmental authority does not exist, however, to forced vaccination in cases in which the risk factors for disease exposure are direct actions that are already generally known to possess certain dangers. For example, licit political authority does not exist for state coerced immunization against human papillomavirus (HPV) or AIDS, even if effective immunization existed. "It is hard to step out of the way of highly contagious diseases such as smallpox, but easy to step out of the way of diseases such as AIDS" [33]. It may be prudent for those whose occupations, lifestyles, and social circumstances place them at significant risk of exposure to obtain vaccination. However, it may be most prudent to forgo both the risky behavior and the vaccination (eg, to abstain from all extramarital sexual activity while also not being vaccinated against HPV or AIDS).

To bring these reflections to bear on smoking bans: it is fairly straightforward to step out of the way of most environmental tobacco smoke (eg, ceasing to patronize a smoking permitted bar) and to avoid most truly involuntary environmental tobacco smoke (eg, moving to a different bench at a public park). Perhaps with sufficient data regarding environmental hazards, pollution levels, and other background public risk factors, such reflections might support a sliding scale for the standard of proof necessary to justify a smoking ban in truly public locations, considering both risk level and ease of avoidance. In areas with very little pollution, involuntary exposure to environmental tobacco smoke in public places might significantly increase individual health risks above local background risk levels. However, in many other locales such truly involuntary exposure will likely constitute only a very small element of one's daily overall level of health risk. Therefore, the burden of proof to justify a public smoking ban will be easier to satisfy in lightly polluted areas than in heavily polluted areas. It will likewise be easier nonarbitrarily to justify a smoking ban on a city bus, where it may be difficult to avoid accidental exposure, than in a state park. As a result, among small towns in sparsely populated areas of the country, such as nonmetropolitan areas of Montana, Texas, or Alaska, where there is very little environmental or urban pollution, the standard of proof necessary nonarbitrarily to justify a smoking ban in public places would be less than the standard of proof necessary to justify a ban in larger, more polluted urban areas, such as Los Angeles or New York City, where the everyday background risk to health is much greater.

To return to the point-counterpoint discussion, Dr Brady's decision against legislative smoking bans ought to be made in recognition of the limits of moral political authority—much to the frustration of many public health advocates. Morally permissible legislation does not extend to the coercive imposition of paternalistic regulations on free citizens, as if they were mere children. Smoking bans that target restaurants, bars and other private establishments, seek to overturn a longstanding moral and jurisprudential tradition that highlights the authority of persons over themselves to make their own judgments regarding acceptable costs and benefits, risks and pleasures. Smokers enjoy the taste and smell of fine tobacco, and smoking provides stress relief and other benefits; those who frequent smoking establishments evidently prefer these opportunities, pleasures, and other benefits to different opportunities with fewer tobacco-associated risks. As noted, this tradition of personal choice and individual autonomy is central to the justification of the practice of free and informed consent in medicine. In addition, Dr Brady ought to appreciate that smoking bans in truly public places simply pick out one small element of overall health risk for social approbation, civil liability, and political criminalization, and there-

fore constitute biased and unjust discrimination. It may be easier, less expensive, and more politically expedient coercively to ban smoking rather than to encourage the reduction of other much more substantial sources of public pollution, or to persuade individuals to engage in less risky behavior, but such factors do not change the strongly paternalistic and discriminatory character of legislative smoking bans.

Concluding Remarks

Robert M. Sade, MD

Our fictional legislator, Dr Brady, has received the advice he sought. He suspected that his cardiothoracic surgeon friend would advise in favor of the bill banning smoking in public places and that his philosopher friend would advise him to reject the bill. He was correct on both counts.

The surgeon, Dr Carolyn Dresler, argues from a social perspective. She points to obligations that society owes to us and, conversely, obligations that we as individuals owe to society. Society's duties to us are spelled out in our constitutionally based legal system, but what we owe to society is more clearly delineated in international human rights declarations, which the United States government has not adopted. Included among these human rights are the rights to health and to a healthy environment. Although our government does not recognize these rights, Dr Dresler says, "Human rights trump legally protected rights . . ." Therefore, Dr. Brady must vote in support of the ban to provide a healthy environment to his constituents and to his society.

Dr Cherry distinguishes between private goods (what is good for individuals) and public good (what is good for communities), arguing that a legal ban on smoking in public places is good for neither. With respect to private goods, such a ban would undermine our nation's longstanding legal and moral priority of individual autonomy. With respect to public good, such a ban could be justified only if it could be shown that secondhand smoke significantly increases risk to others above substantially larger background risks in public places. He further distinguishes between genuinely public places, such as public parks, and privately owned businesses, such as restaurants and bars, that are not truly public. These establishments can be freely entered and exited according to personal preferences, so exposure to smoke in these businesses can not rightly be labeled "involuntary." He advises Dr Brady in this way: "Morally permissible legislation does not extend to the coercive imposition of paternalistic regulation on free citizens, as if they were mere children."

Each essayist fails to address key points made by the other. Dr Dresler does not consider the distinction between public places that are privately owned and those that are held in common. She does not explain why international declarations are superior to the national law cited by Dr Cherry. She does not justify the requirement for laws focused on mitigating the harms caused by secondhand smoke when there are so many other agents that may, singly or in aggregate, cause even greater harm. Dr Cherry speaks only of state and federal law and does not mention international conventions and declarations, which assert that health and a healthy environment are basic human rights that take precedence over national laws. He does not explain why national law should override international conventions.

Comments made by thoracic surgeons at our meetings and in other public forums nearly uniformly support legal prohibition of smoking in public places. This attitude is easy to understand, because we all have seen firsthand the devastation inflicted by the diseases caused by smoking. We routinely use military metaphors regarding our clinical work: we "fight" against disease, make "war" on cancer, assess our "arsenal" of drugs and other therapies, and add new treatments to our "armamentarium" of procedures. When fighting an enemy, one is justified in using every weapon at one's disposal, and a law banning a harmful agent is just such a weapon. But this rationale may be overly simplistic. We feel revulsion when our patients, friends, or family members voluntarily and ill-advisedly use the agents that we know cause the diseases we treat, and we want to do something about it. Repugnance, however, is a poor basis for legislation [34]. When considering the arguments advanced by Drs Dresler and Cherry, we should put aside the biases that arise from our personal experiences. We should instead dispassionately consider not only what we as individuals and as a society have to gain, but also what we have to lose by passing laws that go beyond the hortatory messages we have been giving to our patients and to the public for decades.

This debate was presented orally at the 2007 Annual Meeting of The Society of Thoracic Surgeons. The effectiveness of the respective arguments was illustrated by comments from two members of the audience, both leaders of our specialty, immediately after the session. One asserted, "Carolyn was great! She clearly won this one—her arguments were right on target!" The second said, "I came into this meeting room knowing that bans on smoking were necessary. Now, I'm not so sure. I believe Mark may be right." Think about it.

References

1. United States Department of Health and Human Services. The Health Consequences of Involuntary Exposure to Tobacco Smoke: a Report of the Surgeon General—Executive

Summary. United States Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for chronic disease Prevention and Health Promotion, Office on Smoking and Health, 2006.
2. Dearlove JR, Bialous SA, Glantz SA. Tobacco industry manipulation of the hospitality industry to maintain smoking in public places. Tobacco Control 2002;11:94–105.
3. Phillips R, Amos A, Ritchie D, Cunningham-Burley S, Martin C. Smoking in the home after the smoke-free legislation in Scotland: qualitative study. BMJ 2007;223:521–2.
4. Howell F. Smoke-free bars in Ireland: a runaway success. Tobacco Control 2005;14:73–4.
5. Stark MJ, Rohde K, Maher JE, et al. The impact of clean indoor air exemptions and preemption policies on the prevalence of a tobacco-specific lung carcinogen among nonsmoking bar and restaurant workers. Am J Public Health 2007;97:1457–63.
6. International Human Rights Laws. Available at http://www.ohchr.org/english/law/index.htm. Accessed November 2007.
7. Griffith M. Smoking bans cover half of all Americans. Seattle Times; Sunday, January 21, 2007.
8. United States Department of Health and Human Services. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.
9. Lambert TA. The case against smoking bans. Regulation 2006–2007; Winter.
10. Viscusi WK. Smoke filled rooms: a postmortem on the tobacco deal. Chicago: University of Chicago Press; 2002.
11. Cherry MJ. Kidney for sale by owner: human organs, transplantation, and the market. Washington, DC: Georgetown University Press; 2005.
12. Engelhardt HT, Cherry MJ. Informed consent in Texas: theory and practice. J Med Philos 2004;29:237–52.
13. Eisner MD. Banning smoking in public places: time to clear the air. JAMA 2006;296:1778–9.
14. American Lung Association. Radon fact sheet. Available at www.lungusa.org. Accessed January 31, 2007.
15. American Lung Association. Indoor air pollution fact sheet. Available at www.lungusa.org. Accessed January 31, 2007.
16. American Lung Association. Carbon monoxide fact sheet. Available at www.lungusa.org. Accessed January 31, 2007.
17. American Lung Association. Annotated bibliography of recent studies of the health effects of ozone air pollution 1997–2001. Available at www.lungusa.org. Accessed January 31, 2007.
18. Kinney PL, Lippmann M. Respiratory effects of seasonal exposures to ozone and particles. Arch Environ Health 2000;55:210–6.
19. Künzile N, Lurmann F, Segal M, Ngo L, Balmes J, Tager IB. Association between lifetime ambient ozone exposure and pulmonary function in college freshmen—results of a pilot study. Environ Res 1997;72:8–23.
20. Galizia A, Kinney PL. Long-term residence in areas of high ozone: associations with respiratory health in a nationwide sample of nonsmoking adults. Environ Health Perspect 1999;107:675–9.
21. McDonnell WF, Abbey DE, Nishino N, Lebowitz MD. Long-term ambient ozone concentration and the incidence of asthma in nonsmoking adults: the Ashmog study. Environ Res 1999;80:A110–21.
22. Frischer T, Studnicka M, Gartner C, et al. Lung function growth and ambient ozone: a three-year population study in school children. Am J Respir Crit Care Med 1999;160:390–6.
23. Dockery DW, Pope CA, Xu X, et al. An association between air pollution and mortality in six U.S. cities. N Engl J Med 1993;329:1753–9.
24. Gauderman WJ. Effect of exposure to traffic on lung development from 10 to 18 years of age: a cohort study. Lancet 2007;369:571–7.
25. Sandström T, Brunekreef B. Traffic-related pollution and lung development in children. Lancet 2007;369:535–7.
26. Samet JM, Domnici F, Curriero FC, Coursac I, Zeger SL. Fine particulate air pollution and mortality in 20 U.S. cities, 1987–1994. N Engl J Med 2000;343:1742–9.
27. National Highway Traffic Safety Administration. Traffic Safety Facts 2004. Washington, DC: NHTSA, 2005. Available at www.nhtsa.dot.gov. Accessed January 31, 2007.
28. Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States. Emerging Infectious Diseases 1999;5:607–25.
29. United States Department of Labor, News. Workplace injuries and illnesses in 2005. Washington, DC: Bureau of Labor Statistics 2006. Available at www.bls.gov/iif/home.html. Accessed February 10, 2007.
30. United States Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2005.
31. Bequette F. Defeating decibels. UNESCO Courier; 47:23–6.
32. Centers for Disease Control. Influenza (Flu): Questions & Answers: The Disease. Available at www.cdc.gov/flu/about/qa/disease.htm. Accessed February 20, 2007.
33. Engelhardt HT Jr. The foundations of bioethics, 2nd ed. New York, NY: Oxford University Press; 1996:365.
34. Roth AE. Repugnance as a constraint on markets. J Econ Perspectives 2007;21:37–58.