Performance-Based Regulation:
Enterprise Responsibility for Reducing
Death, Injury, and Disease
Caused by Consumer Products

Stephen D. Sugarman
University of California, Berkeley

Abstract  This article offers a bold new idea for confronting the staggering level of death, injury, and disease caused by five consumer products: cigarettes, alcohol, guns, junk food, and motor vehicles. Business leaders try to frame these negative outcomes as “collateral damage” that is someone else’s problem. That framing not only is morally objectionable but also overlooks the possibility that, with proper prodding, industry could substantially lessen these public health disasters. I seek to reframe the public perception of who is responsible and propose to deploy a promising approach called “performance-based regulation” to combat the problem. Performance-based regulation would impose on manufacturers a legal obligation to reduce the negative social costs of their products. Rather than involving them in litigation or forcing them to operate differently (as “command-and-control” regimes do), performance-based regulation allows the firms to determine how best to decrease bad public health consequences. Like other public health strategies, performance-based regulation focuses on those who are far more likely than individual consumers to achieve real gains. Analogous to a tax on causing harm that exceeds a threshold level, performance-based regulation seeks to harness private initiative in pursuit of the public good.

Postindustrial societies face a wide range of serious public health problems that arise from a combination of consumer-product characteristics and individual behavior. Products that cause great harm include cigarettes, alcohol, guns, junk food, and motor vehicles. These products often combine risks to users with risks to others. Together they account for a staggering number

I wish to thank Professor Amnon Reichman and Christine Fujita (University of California, Berkeley, J.D. 2009) for their help.
of annual user deaths, injuries, and illnesses (table 1). Third-party vic-

tims include those harmed by homicide, drunk driving, and drifting (“sec-

ondhand”) tobacco smoke. In addition, taxpayers and medical insurance

consumers collectively bear substantial medical costs associated with lung

cancer, cirrhosis, diabetes, and other diseases caused by these products.

The behaviors giving rise to such public health problems—for example,

smoking, drinking, unsafe driving, gun carrying, and overeating—often
develop during childhood and persist into adulthood. This article explores

a bold new idea: the use of “performance-based regulation” (May 2003) to

reduce these problems. What is here called performance-based regulation

is sometimes also called outcome-based regulation. Performance-based

regulation seeks to hold enterprises directly responsible for decreasing the

harms they know their products cause.

In general, public health policy makers search for policy interventions on

a group or population basis rather than seeking strategies aimed directly at

changing behavior individual by individual (as might occur, for example,

through a physician’s personal interaction with a patient). Providing com-

munities with clean drinking water is a classic example of a populationwide

measure. Mass immunization through vaccinations is another.

To be sure, for the public health problems at issue here, our society

would be much healthier if parents trained their children so that through-

Table 1  Annual Deaths

<table>
<thead>
<tr>
<th>Causes</th>
<th>Estimated Number of Deaths per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>438,000\textsuperscript{a}</td>
</tr>
<tr>
<td>Firearms</td>
<td>30,896\textsuperscript{b}</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>37,261\textsuperscript{c}</td>
</tr>
<tr>
<td>Drunk driving</td>
<td>16,885\textsuperscript{d}</td>
</tr>
<tr>
<td>Obesity</td>
<td>111,909\textsuperscript{e}</td>
</tr>
<tr>
<td>Total</td>
<td>More than 630,000</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Based on data from 1997–2001; includes tobacco-related deaths linked to cancer, cardio-

vascular disease, respiratory disease, infant illness associated with the mother’s smoking during

pregnancy, exposure to secondhand smoke, and smoking-attributable fire. See Centers for Disease Control and Prevention 2005a.

\textsuperscript{b}Based on 2006 data, including the following firearm-related causes: suicide (16,883) and


\textsuperscript{c}Based on 2008 data. See NHTSA 2009.

\textsuperscript{d}Based on 2005 data. See Alcohol Alert! 2005.

\textsuperscript{e}Based on 2000 data. See Flegal et al. 2005. This is a more conservative estimate than that

of the Centers for Disease Control and Prevention, which determined that in 2000 obesity from

such causes as poor diet and physical inactivity led to more than three hundred thousand U.S.
deaths.
out their lives they would drink and eat moderately, drive carefully, not smoke, and not use guns irresponsibly. But the reality is that, absent collective intervention, our society will continue to be plagued by a huge amount of death, injury, and disease connected to the use of these products. Many children will already be victims of or addicted to self-destructive behaviors by the time they are adults, assuming they live that long.

The typical public health perspective on such problems is to promote a variety of broad policy changes designed to reduce the socially undesirable consequences. Policy changes such as banning indoor smoking, lowering speed limits, levying alcohol taxes, and restricting the number of fast food outlets in a single neighborhood are all hallmarks of conventional public health tactics aimed at these products.

Public health policy interventions, such as those just listed, may be categorized into different types. Sometimes, public health leaders seek only voluntary changes by target industries. For example, a foundation connected to former president Bill Clinton recently came to an “agreement” with Pepsi, Coca-Cola, and Cadbury-Schweppes in which the three major soda companies announced that they would no longer sell certain sweetened beverages in certain schools (Burros and Warner 2006). Other times, rather than calling on private actors to change their behavior, public health advocates focus on the provision of new services by public agencies (like smoking cessation clinics at public hospitals, nutrition education at public schools, and safer public highways). Neither of these approaches, however, imposes legal requirements on private enterprises, and the imposition of such requirements is the focal point of this article.

The first section (“Applying Performance-Based Regulation”) presents performance-based regulation in some detail. It explains how this strategy might be employed to harness private initiative in pursuit of the public welfare with respect to each of the five key consumer products on which this article focuses. After acknowledging design challenges that confront this approach, I offer reasons why performance-based regulation may nonetheless be a very promising way to deal with behavioral public health issues.

The law can regulate private parties in many ways, and performance-based regulation is but one approach. The second section (“Regulatory Alternatives”) presents a taxonomy of more familiar public health regulatory strategies, offering illustrations of existing or proposed policies with respect to the behavioral public health issues of interest here. I contrast the various strategies and note the differences in their underlying logic, as a way of locating performance-based regulation in this broader context. Given the
shortcomings of these traditional approaches, I conclude that performance-based schemes should be considered as serious policy alternatives to (or options in combination with) the other, more familiar, mechanisms.

**Applying Performance-Based Regulation to Public Health Consequences Arising from the Consumption of Consumer Products**

**How Performance-Based Regulation Works**

In general, performance-based regulation works like this: A firm’s performance target is set, either by legislation or by an administering agency running the scheme. A system of regular measurement is implemented to determine whether the firm is meeting its goal. And a penalty structure is put in place that would impose consequences if a firm fails to meet its goal. Assume for now that the penalties are financial charges, the amount of which depends on the extent of the shortfall.

A good example of performance-based regulation from the environmental law field is a regime that requires a power plant to reduce its emitted pollutants by a specified amount each year. This sort of requirement does not tell the power plant owner whether it should, for example, install different pollution screens, burn different fuel, or make less electricity. The regulation simply requires an improved public health outcome and leaves it to the operator of the power plant to figure out how to comply.

It is worth noting that this example specifies reduced pollution as the target outcome, and, while reduced pollution may be desirable for its own sake, it is probably best understood as something of an intermediate performance target, with the real public health objective being a lower incidence of lung and other diseases. Defining the output target in terms of pollution, therefore, would be based on the conclusion that high pollution levels significantly increase the incidence of those diseases. Notice, then, that an even more demanding performance-based regulatory scheme might directly require power plant operators to reduce the amount of pollution-caused disease in the community in which they operate.

Performance-based regulation is sometimes paired with a “tradable permit” strategy. Broadly speaking, this feature is designed to allow the regulated industry as a whole to achieve the overall social objective most

---

1. For discussion of the increased reliance on such market incentive programs as tradable permits, as compared to traditional command-and-control strategies, see Sugarman and Sandman 2007. See also Drury et al. 1999 (analyzing Los Angeles’ scheme to improve air quality centered on the use of a declining cap in permissible emissions and tradable permits).
efficiently by permitting firms within the industry to buy and sell portions of their allowed negative outcomes among themselves. In this way, it is hoped, power plant pollution reduction will be disproportionately realized at plant sites where doing so is cheapest. Such combined schemes are sometimes termed “cap and trade.”

Although applicable to public bodies rather than private enterprises, the federal educational scheme known as No Child Left Behind (No Child Left Behind Act of 2001, Pub.L. 107–110, 115 Stat. 1425 [2002]), or NCLB, is another good example of performance-based regulation. NCLB does not tell schools or school districts what to do to improve the education they provide (Liebman and Sabel 2003). Rather, it demands results and leaves it up to the educators to determine how to achieve their performance goals. Thus, in using the performance-based approach, regulators need not know what changes to order the regulated firms to make. But they do need to figure out what level of performance to demand — that is, how much of a reduction in the current level of public health harm they can fairly ask the regulated firm to achieve. Of course, performance-based regulators can alter the harm reduction required based on experience. Whether it is better to start by asking for too much and then reducing what is demanded or to start by asking for too little and working up is a difficult problem that I will put aside for now.

Furthermore, enforcing performance-based regulation is itself a delicate matter. A relatively simple approach would have government agencies impose predetermined fines on firms that fail to achieve their performance targets. The goal in setting the penalty levels is to induce socially efficient prevention. Prevention is socially efficient when the cost incurred to prevent harm is less than the total cost that the harm imposes on society. Thus, to entice a firm to pursue the ideal level of prevention, the penalty should equal the social cost. In this way, for cases where efficient prevention is possible, pursuing such prevention will be cheaper for the regulated firm than paying the fines. Whether there should be private enforcement, even individual enforcement, of a firm’s targets is a possibility I mention but put aside for now.

Examples of Performance-Based Regulation Potentially Applied to Key Consumer Products

This section illustrates ways that performance-based regulation could be used to address the five important public health problems mentioned at the outset.
Cigarettes (and Smoking Prevalence). In the years since the surgeon general issued his famous 1964 report on the lethal consequences of cigarettes, adult smoking prevalence rates in the United States have dropped from more than 40 percent to about 20 percent (Kaufman 2007). Earlier informational efforts have been supplemented by higher tobacco taxes, laws restricting where people can smoke, counteradvertising exposing the misconduct of tobacco companies to the public, tougher enforcement of laws barring sale to minors, restrictions on cigarette marketing campaigns, and cheaper access to more effective cessation products and programs (Rabin and Sugarman 2001). These policy initiatives have made a difference in curbing smoking rates.2

Yet cigarettes remain widely promoted and available, and we are nowhere near the long-standing public health goal of reducing the nationwide smoking prevalence rate to below 12 percent.3 Although higher taxes appear to be the most effective of the strategies that have been tried (Chaloupka, Wakefield, and Czart 2001; Chaloupka and Warner 2000), there seems to be a limit on how high policy makers are willing to go with this approach, for two reasons. First, at some point, smuggling and other tax evasion scams can become a serious problem.4 Second, imposing higher and higher costs on increasingly low-income addicted smokers eventually seems too harsh.5 While it is widely agreed that a comprehensive tobacco control plan is the best way to attack the problem, even California, for

2. For example, California's comprehensive tobacco control program — which included elements such as a mass media antismoking campaign, restrictions on areas where people could smoke, and legislation making it more difficult for adolescents to purchase cigarettes — resulted in a decline in smoking rates of 70 percent in twelve- to thirteen-year-olds, 53 percent in fourteen- to fifteen-year-olds, and 34 percent in sixteen- to seventeen-year-olds (Pierce, White, and Gilpin 2005). Researchers concluded that such comprehensive programs “were associated with greater cessation success than were with high cigarette prices alone, although both effects were limited to younger adults” (Messer et al. 2007). See also Hu, Sung, and Keeler 1995 (concluding that “both taxation and antismoking media campaigns are effective means of reducing cigarette consumption”; however, consumption “is influenced by the magnitude of the taxes and the amount of media campaign expenditures” [1218]).

3. The U.S. Public Health Service (2000) set goals to reduce smoking among adults from 23 percent to 12 percent by 2010. See also Centers for Disease Control and Prevention 2004a (noting the premature deaths that could be prevented if the Public Health Service goals are met). But see Mendez and Warner 2000 (suggesting that the Public Health Service goal to cut adult smoking prevalence rates in half by 2010 is unattainable and proposing a more plausible goal).

4. About 30 percent of exported cigarettes are smuggled into other countries (or back into the country of origin). Tobacco taxes as a tobacco control strategy are undermined if taxes are evaded (often accomplished through smuggling) and tobacco products are available at a lower price (Sugarman 2001).

5. For example, in 2006 California voters rejected Proposition 86, which would have raised the excise tax per pack from $0.87 to $3.47 (Harmon 2006).
example, which has such a scheme, is a long way from the 12 percent target.  

Performance-based regulation attacks the issue in an altogether different way. It rests on the simple proposition that the tobacco companies themselves should be required to achieve sharply improved public health outcomes. To be sure, the real public health goal here is a dramatic reduction in the more than four hundred thousand annual deaths from smoking that occur in the United States (Centers for Disease Control and Prevention 2006b). Hence, insisting that cigarette makers take responsibility for curtailing that death rate would be the most direct application of the performance-based regulatory approach. 

Yet there is typically a significant time gap between starting to smoke and the onset of tobacco-related diseases. Hence, if the regulator defined the target as disease reduction, it would take a very long time to determine whether tobacco companies’ disease-reducing measures had been effective. By contrast, changes in smoking rates can be demanded and achieved in the short term. And because reliable data on smoking rates are readily obtained and most smokers are brand loyal (Brandt 2007; Kluger 1997), compliance with the regulatory target would be fairly easily measured. Given the tight connection between use of this product and eventual mortality and morbidity, aiming the performance-based target at smoking rates rather than disease rates seems wisest. 

Imagine, then, that over, say, seven years, tobacco companies were required to cut in half the number of people who smoke their products. Reducing the smoking rate to less than 10 percent would have enormously positive public health consequences. To provide firms with the right sort of incentive, those that fail to achieve their goals would be subject to serious financial penalties. 

The moral argument for this proposal is that cigarette makers — whose products kill when used as directed — should be held accountable for the

6. See Bonnie, Stratton, and Wallace 2007 (proposing a comprehensive tobacco control program — based on a major study of tobacco policy in the United States — that strengthens and implements traditional tobacco control measures and changes the regulatory landscape to permit new policy innovations, such as stronger federal regulation); Centers for Disease Control and Prevention 2000 (noting that economic, regulatory, and comprehensive approaches have the largest span of impact and that the potential for combined effects of various strategies underscores the need for comprehensive approaches); and Myers 2000 (urging policy makers to implement the surgeon general’s recommendations for a combination of comprehensive prevention and cessation programs, regulatory efforts, and economic interventions). Regarding California, see also Centers for Disease Control and Prevention 2005b (noting that in 2004, the cigarette smoking prevalence in the state was 14.8 percent).
death toll. The practical argument is that since tobacco companies have
been so effective in enticing teens and adults to consume their products,
they are also probably best positioned to figure out how to reduce the num-
ber of smokers. To be sure, cigarette makers would not be happy about
having to halve the size of their businesses. But this is an industry that has
been found liable for “racketeering.” Besides, even if tobacco companies
had only half the number of customers they now have, they could still turn
a handsome profit, especially if they retained as customers their heaviest
smokers. Of course, it would be even better if the number of deaths from
smoking fell to zero, or even to nearly zero. And so, if the initial applica-
tion of performance-based regulation were successful in reducing smoking
rates to below 10 percent, even more ambitious goals might be set for sub-
sequent years. In any event, it should be appreciated that sharply reduced
level of smoking achieved by, say, 2016 would be a public health triumph.

Under my proposal, it would not matter whether a firm achieved a
uniform reduction in sales from each of its brands, because the perform-
ance goal would be enterprisewide. Moreover, at least at the outset, the
regulation would be indifferent as to which demographic group experi-
enced decreased smoking rates. For example, the low-hanging fruit might
consist of preventing youths from starting, keeping former smokers from
restarting, and getting social smokers to quit rather than escalate to daily
smoking. Notice that if firms achieved reductions in these segments of
the population, they could still retain their best (i.e., heaviest-smoking)
clients. Even so, the long-run public health benefits would be great.

Firms would be free to achieve their regulatory target in many dif-
ferent ways. One approach might be to provide smokers with subsidized
access to cessation aids and programs. Alternatively, tobacco companies
might increase product prices, try to convince cigarette smokers to switch
to a far less dangerous alternative nicotine delivery device, or engage in
advertising genuinely aimed at discouraging smoking initiation by teens.
Of course, these and other tactics might be used in some combination.
Given the discretion to develop their own methods, tobacco companies
would likely employ some strategies that are unimaginable now. Perhaps
the leading tobacco firms would cooperate in seeking to reduce smoking

7. In 2006 U.S. District Judge Gladys Kessler held in a case brought by the U.S. government
against the tobacco industry, that the tobacco companies had violated the federal Racketeer
Influences and Corrupt Organizations Act “by engaging in a lengthy, unlawful conspiracy to
deceive the American public about the health effects of smoking and environmental tobacco
smoke, the addictiveness of nicotine, the health benefits from low tar, ‘light’ cigarettes, and
their manipulation of the design and composition of cigarettes in order to sustain nicotine addic-
prevalence so as to prevent one firm from free riding on certain efforts that influenced all smokers and not just those of a specific firm’s brands.

The key point is that the legal requirements would focus directly on outcomes, not on techniques aimed at outcomes, which is how tobacco control works now. Admittedly, if smoking prevalence reductions were systematically achieved only for certain racial, ethnic, or religious groups, some might find that troubling. Such a development could be examined before a new round of reductions was imposed. But even this sort of tilted achievement would be an enormous public health gain.

It would be possible to include a “tradable permit” feature in such a performance-based regulatory scheme. As already noted, the idea of such schemes is to force an industry to achieve a certain level of performance without specifying that each enterprise in the industry achieve its own goal. With permit trading, if the target reduction were 50 percent and, for example, R. J. Reynolds reduced its consumer base by more than half, it could sell that excess accomplishment to, say, Philip Morris, which could then exceed its target by the allocation it bought. Overall, the industry would have reached the public health target, and arguably in the most efficient manner.

This idea of using performance-based regulation to reduce smoking rates is not altogether new. I have briefly written about it in the past (Sugarman 2005). Moreover, such a regime (although limited to youth smokers) was included in a bill proposed to Congress as part of the so-called Global Settlement of the wave of state attorneys general tobacco litigation in the 1990s (Pertschuk 2001; Derthick 2001; Wolfson 2001). Despite support of the Global Settlement from the tobacco companies, that arrangement was never enacted. Later, these cases were resolved through the Master Settlement Agreement (1998). But that bargain did not contain this performance-based feature. In the recent Racketeer Influenced and Corrupt Organizations (RICO) case brought by the federal government against the tobacco industry, the Department of Justice asked for a performance-based remedy with respect to youth smoking rates, but this feature was not included in the trial judge’s final order. Even more recently, U.S. Senator

8. Expert witness Jonathon Gruber (2005) testified for the government in Philip Morris that a youth look-back provision was unlikely to be very effective in reducing tobacco industry incentives to attract youths to smoking, and instead proposed a forward-looking outcome-based remedy that imposes a fine if defendants fail to meet targeted reductions in youth smoking. See also Tobacco on Trial 2005 (conveying a U.S. government memorandum proposing outcome-based penalties for missing targets of specific reduction in youth smoking). However, Judge Kessler declined to impose this proposed penalty because it was “not narrowly tailored to prevent and restrain Defendants’ future RICO violations” (Philip Morris, 449 F. Supp. 2d at 1647).
Michael Enzi of Wyoming proposed a strategy similar to that advanced here. His bill, which would apply to all smokers, was offered as a substitute for the bill then before the Senate that would give the Food and Drug Administration regulatory authority over cigarettes. Enzi’s plan (S. 1834, 110th Cong., 1st sess. [2007]) includes a “cap and trade” feature that would, as described above, permit tobacco companies to buy and sell their ever-decreasing quota of legal customers. While Enzi’s approach has not yet won legislative approval, performance-based regulation has been at least considered as a tobacco control mechanism (Sugarman 2008b). That is not the case for other consumer products, as I next explain.

**Junk Food (and Childhood Obesity).** Childhood obesity is now widely understood to be a critical public health problem (Koplan et al. 2007). Not only is one in six American schoolchildren obese, but the obesity prevalence in this group has tripled since the late 1970s (Centers for Disease Control and Prevention 2006a). Early obesity leads to early diabetes, high blood pressure, and other adverse health consequences (Koplan et al. 2007).

Policy advocates have just recently given serious attention to this issue, and most of their proposals reflect traditional regulatory approaches, such as banning sodas in schools, requiring fast food sellers to post calorie counts on menu boards, banning junk food ads on children’s TV shows, taxing candy and sodas, and suing McDonald’s (Gostin 2007). So far there is no indication whether any of these approaches will make important inroads into the obesity crisis.

In a context of uncertainty as to which public interventions will actually help solve the problem, performance-based regulation would be an innovative strategy (Sugarman and Sandman 2007, 2008). The most direct performance-based regulatory approach would demand that junk food sellers achieve reductions in childhood diabetes (and perhaps in hypertension among youths as well). Yet, because of measurement problems, a wiser regulatory target would be childhood obesity rates.

Under this proposal, large firms selling food and drinks that are high in sugar or fat are deemed to be “junk food” sellers and will be assigned the responsibility of reducing childhood obesity based on their share of the

---

junk food market. It seems only fair for firms selling unhealthy products
to be obligated to address the childhood obesity problem. I have in mind
here both junk food product makers like candy bar companies and junk
food retailers like Burger King and Wal-Mart (to the extent that Wal-Mart
sells products under its own brands).

To ensure accountability, the scheme must assign a specific pool of
children to a covered firm. If, instead, all firms were held responsible for
a share of the improved health goal of all covered children nationwide, no
one could tell which firm actually accomplished any health improvement
in any individual child. That, in turn, would give firms an incentive to
free ride on each other, with the upshot that, absent some complex agree-
ment among the firms or the threat of draconian penalties that would be
imposed on everyone, all firms would likely hold back and do nothing.

My solution is to assign children to the regulated firms by pairing the
firms with geographically proximate schools where obesity rates are cur-
rently above the plan’s nationwide target rate of 8 percent (which is about
half of the current rate). Coca-Cola, for example, might be given responsi-
bility for all of the relevant children in the company’s home state of Geor-
gia. Over a several-year period, each regulated firm would be required to
cut in half the obesity rate in the schools for which it is responsible.

To be sure, some firms might initially reformulate their products so as
to fall below the nutritional threshold triggering a regulatory obligation.
Other things being equal, this too would yield a public health gain, even
if the reformulation put the product just below the cutoff line. Moreover,
in later regulatory rounds, the qualifying criteria (here, a product’s share
of calories from fat or sugar) could be made even lower. Subsequent regu-
lation might have to deal with other problems as well. For example, if
regulated firms got people to substitute eating leafy green vegetables for
high-sugar candy, that would be good, but if they lured children away
from high-sugar candy by offering them larger helpings of candy with
sugar levels just below the cutoff, that would probably be unhelpful.

Under my proposal, the regulated firms would likely conclude that their
primary strategy would be to keep young children slim rather than getting
already-obese children to lose weight. Assuming this was their strategy,
a firm might first focus its attention on preschool children who would age
into the pool for which that firm is responsible as the regime ages and
the penalty structure comes into place. Concentrating on prevention is at
the center of the public health tradition. Just how regulated firms would
accomplish obesity prevention (which would have to continue throughout
the target children’s years in school) would be up to the firms to figure
out. Firms might sponsor more vigorous physical education or subsidize
the substitution of healthy food and activity for nonnutritious meals and
sedentary routines in preschools and day care centers.

This proposal focuses on the United States even though I recognize that
childhood obesity is a problem throughout the world (Koplan et al. 2007)
and many of the key product makers are multinational corporations. Yet,
if my proposal were adopted in the United States, other nations could fol-
low suit to deal with childhood obesity in their own country; indeed, per-
haps this performance-based regulatory scheme for obesity will be tried
first elsewhere.

Alcohol (and Drunk-Driving Deaths). Excessive consumption of alcohol
is responsible for more than seventy-five thousand deaths a year in the
United States (Centers for Disease Control and Prevention 2004b). One
could imagine a performance-based regime for this public health problem
that is somewhat similar to that described above for smoking. Just for pur-
poses of illustration, rather than focus on all of the negative consequences
of excessive drinking, I consider here applying performance-based regu-
lation solely to the problem of drunk driving. About seventeen thousand
annual auto fatalities are traceable to drunk driving (Alcohol Alert! 2005).
Imagine a performance-based regulatory scheme requiring the alcohol
industry to reduce that number to below nine thousand in seven years.
Existing measures aimed at drunk driving have helped, but there is little
reason to hope for that sort of reduction under the current regime (Howat
et al. 2004).

People often drink more than one alcohol product before they drive dan-
gerously, so for that and other reasons, tracing individual alcohol products
to specific drunk-driving deaths may be cumbersome. Therefore, instead
of connecting a specific alcoholic-beverage manufacturer with a specific
drunk-driving fatality, each major alcohol provider might be assigned a
share of the existing problem proportional to its market share. Analogous
to my proposal to fight childhood obesity, each of the regulated firms
might then be given a geographic section of the nation whose proportion
of current annual drunk-driving fatalities equals the firm’s market share.
A firm then would have to halve the drunk-driving death rate in its region.
Each firm would independently decide how to do this.

For example, a firm might provide financial incentives for the installa-
tion of Breathalyzers in the vehicles of persons convicted of drunk driv-
ing; it might invest in treatment efforts for drunk drivers; or it might press
bars, restaurants, and retailers to exercise tighter control over how much
alcohol their customers drink or buy. Maybe a firm would advertise non-alcoholic (or lower-alcohol) substitutes or subsidize taxi service in areas where people drink alcohol and cannot readily get home on foot or on public transportation. Most likely, firms would use a combination of measures, including some that no one has yet seriously proposed. Notice that a firm could achieve its target without reducing the overall level of sales of its alcoholic beverages, provided that it was effective in targeting behavioral changes at those who now drink and drive.

_Guns (and Homicides)._ Imagine a similar regime applying to gun deaths. Perhaps the performance goal would be to reduce the approximately thirty thousand annual deaths in the United States caused by guns, including deaths caused by suicide, by accident, by self-defense, and by the lawful actions of law enforcement officials (Heron et al. 2009). But in terms of what is generally seen as the most pressing social problem, a performance-based regulatory scheme might focus exclusively on reducing the more than ten thousand annual gun-based homicides in the United States.

Again, as just suggested with respect to junk food and alcohol, an individual gun maker might be given responsibility for a geographic area representing its market share. But in this setting, perhaps responsibility might instead be linked to the manufacturer of the specific weapon used in any homicide. That is possible because “tracing” data should allow regulators to produce a statistically reliable estimate of the number of deaths caused by the guns sold by any gun company. In any event, the gun makers would have to decide how best to meet their goal, which they would have several years to achieve.

Notice, however, that the strategy gun makers employ might vary depending on how the responsibility is cast. For example, if each firm’s obligation were to reduce the number of murders caused by shots fired from guns manufactured by that company, then perhaps firms would concentrate on fingerprint-based trigger locks that prevent anyone but the registered owner from firing the weapon, combined with tighter retail screening practices by those who sell the firm’s products. If, instead, a gun maker had a geographically based obligation of the sort proposed here with respect to childhood obesity, the firm might pursue a different strategy. Perhaps it would choose to invest in finding jobs and recreational outlets for young men who might otherwise become violent gang members, or it might work with police and community organizations in other ways to curtail gang violence.
Motor Vehicles (and Auto Accidents). From 1993 through 2007, between 40,000 and 44,000 Americans were killed annually in highway driving accidents; while there was a substantial drop to just over 37,000 in 2008, this may have been a temporary change owing to an unusually rapid increase in gasoline prices (National Highway Traffic Safety Administration [NHTSA] 2009). The number of deaths per miles driven has very slowly dropped since 1993 (ibid.). Some specific features of cars that make them safer have resulted from command-and-control regulation imposed by the NHTSA, such as air bags (Evans 1991; Mashaw and Harfst 1990). Tort liability may also have played a role in causing cars to become more “crashworthy” and hence safer (Larsen v. Gen. Motors Corp., 391 F.2d 495, 502 [8th Cir. 1968]; Nader and Page 1967). Nonetheless, it would be overly optimistic to think that the yearly death toll will fall close to twenty thousand without significant additional intervention.

As with cigarettes, alcohol, guns, and junk food, the moral claim for performance-based regulation is that makers of cars and trucks benefit from the sale of products that they know will kill both users and third parties. The practical claim is that, if held to performance standards, vehicle makers would find ways to ensure that consumers use safer products more safely. Whether that would involve new vehicle design or something else would be left to the vehicle makers to decide. While car companies probably have the greatest control over their vehicles’ safety features, today there is more of an incentive for them to focus design innovations on selling points like speed, style, and comfort. Under a performance-based regulation scheme, this would change. Car companies might decide to focus as well on changing driver conduct, improving roadway conditions, increasing effectiveness of postaccident rescue, or some combination of these. And unless highway deaths from drunk driving were separately regulated, vehicle makers themselves might, for example, decide to install Breathalyzers in all new vehicles. To be sure, some of these strategies could not be implemented by the car companies alone and would require them to win the cooperation of other key actors. But promoting such cooperation may be desirable, because vehicle makers could become powerful allies of the public health community.

Under performance-based regulation, vehicle makers might be assigned the obligation to reduce, by about 50 percent over seven years, the number of occasions in which one of their cars is centrally involved in a fatal accident. This might be measured first by counting every driver or passenger inside one of their models who was killed in an accident. But the tally might also include any pedestrian or occupant of another vehicle killed...
on impact with one of their models. In this way, deaths in two-car crashes
could be assigned to makers of both cars, with the performance-based
goals and measures of success fashioned accordingly.

Under performance-based regulation, Toyota might be required to
reduce auto fatalities connected to its vehicles from, say, ten thousand to
two thousand by a certain date, and if it failed to reach that goal, it would
pay a fee (call it a fine, or penalty, or a tax if you like) based on how many
deaths were attributed to it beyond two thousand. Critically, the amount of
the penalty per extra death would have to be high enough that, if sensible
precautionary efforts were feasibly available, Toyota would find it cheaper
to spend money on those than to pay the shortfall fees.

Some Concerns Acknowledged

I concede that any performance-based regime will be imperfect in prac-
tice. Here are some potential pitfalls.

First, firms might try to achieve their goals by engaging in, or push-
ing others to engage in, socially unacceptable behaviors. For example, it
would be misguided to substitute a wave of anorexia for childhood obe-
sity. Even a campaign that shamed highly overweight children as a way
to discourage others from becoming obese might be viewed as having
unacceptable social costs. Similarly, with respect to cars, at some point the
benefits of increased car safety might be outweighed by resulting harms.
For example, if car manufacturers responded to the performance-based
regulation exclusively by making heavier, less fuel-efficient vehicles, the
costs to society would include greater gasoline consumption and more
pollution. Therefore, as part of any performance-based regulation, firms
should be required to disclose their compliance plans to the administering
agency and the agency should have the authority to veto socially unac-
cetable plans.

I admit that this will be a difficult job to do. On the one hand, if reg-
ulated firms’ plans are regularly vetoed, they may become belligerent,
claiming that the scheme prevents them from doing what the public wants
of them. And if they throw up their hands in dismay and just pay the
penalty fees, then a lot of effort will have been expended to wind up with
the equivalent of a tax that could more simply have been imposed at the
outset. On the other hand, if the regulated firms are permitted to engage
in activities that help them achieve the public health goals but which also
carry with them other negative social consequences, the regulators who
approved such activities will probably have to take the blame for those
negative consequences. This could be politically difficult, even if, on balance, the social gains exceed the social costs. In short, agency objectives and the overall public interest might not be fully in sync.

Second, one has to specify the performance goal precisely to avoid the possibility that compliance will not achieve the desired result. This risk has been noted with respect to performance goals in the education context. Goals that focus on children passing tests only in English and math may cause schools either only to teach to the test or only to teach those subjects, thereby not accomplishing the real social goal of better educated youngsters. Or, for example, few would claim progress in public health if cigarette smoking were substantially replaced by cigar and cocaine smoking. Similarly, it is hard to see how it would be better if gun suicides were fully replaced by drug-overdose suicides. It is also worth noting that to simplify my proposal, I have focused on using performance-based regulation primarily to reduce the death rate (tobacco company regulation aside). But of course, reducing illness and injury rates are also of great social concern, and death rates alone may not always be a good measure of both mortality and morbidity. Hence an actual implementation might include requiring reductions in both fatality and nonfatality outcomes.

Third, the administering agency must worry about the reliability of the measurement system. Suppose food companies entice obese children to stay home from school on the day that official weight measurement occurs. Suppose gun makers respond to the regime by making generic weapons that are no longer traceable to them. Or consider the difficulty in identifying the make of vehicles that cause crashes but are no longer at the scene when the police arrive, as with drivers who swerve and cause other drivers to collide or drivers involved in hit-and-run accidents.

Fourth, the performance-based plans outlined above are based on two assumptions. On the one hand, individual users (drinkers, smokers, drivers, gun users, and junk food consumers) are not going to solve these public health problems on their own, and on the other hand, the product providers can and fairly should take responsibility for finding at least partial solutions. Sometimes, however, the target enterprises may not turn out to be the actors best suited to solve the problems. Conceding this point, I argue that it is not an insurmountable hurdle to the adoption of these performance-based plans. After all, the regulated firms can by contract (or political lobbying) entice others to act.

A related point I concede is that the specific product makers I have identified are not the only ones who might be asked to take responsibility for the same bad public health outcome. For example, when it comes
to road deaths, how should responsibility be allocated between vehicle
manufacturers and makers of alcoholic beverages? In the same vein, to
what degree should the regulatory focus be on the product makers as com-
pared with, say, the retailers (assuming that they are different enterprises)?
Moreover, other enterprises are also arguably connected in various ways
with the existing negative public health outcomes. When it comes to road
deaths, for example, there are those firms that make and repair the roads,
as well as the gasoline companies and the retailers that facilitate private
motoring. Notwithstanding such arguments, I believe there would be a
rough public consensus as to which enterprises are morally and culturally
understood to be the primary causes of the particular public health prob-
lems discussed here. In addition, it should always be kept in mind that I am
not advocating a regulatory solution in which the regulated parties must
altogether eliminate the public health harm. Moreover, if I am wrong and
more firms involved in the problem were included in the regulation, that
is fine with me. In short, as in many policy arenas, while some minimum
moral connection is probably required between the regulatory target and
the problem to be solved, just who must bear the burden of compliance is
often a matter of administrative practicality and political framing by those
promoting the regulatory scheme.

Still, this raises a fifth and more general concern about what a realistic
target for improved public health in any designated arena should be. For
purposes of illustration, I have been assuming a target reduction of 50
percent over seven years, but that may be too ambitious (or too modest).
Generally, if the target is set too low, some public health gains which are
efficiently able to be reached will probably not be achieved, because the
regulated firms will have little incentive to go beyond their target. On the
other hand, if the target is set too high, firms may pay penalties for failing
to achieve public health gains that are practically beyond them. Yet the
latter may not be a terrible outcome, because the ultimate result would be,
in effect, a tax on the product passed on to consumers in the marketplace.
Such a result could in itself be justified as helping internalize into the price
of the product some of the continuing externalities in the form of death,
injury, or disease beyond the firm’s target.

The concern about getting the target right is tied as well to a sixth
concern—how should the penalty for noncompliance be set? Ideally, it
would seem that the fee for failure to meet a firm’s target should be set
to equal the social cost of the public health harm, and that the target be
set to the level of prevention for which the marginal cost of prevention
just equals the marginal social cost of the harm. This way, the firm has
an incentive to prevent harm up to, but only up to, the point where it is
efficient to do so. By contrast, if the penalty is set too low, then firms
might elect to pay penalties when they could have efficiently achieved
additional desired public health gains. On the other hand, if the penalty is
set too high, then firms may find it financially desirable to invest in public
health gains that are not actually worth their cost (from a social account-
ing perspective). Of course, much stronger penalties could be threatened
for failure to achieve the target, including forcing a firm to cease produc-
ing the relevant product (Cooter and Porat 2007). While this may give
the regulated firm an even stronger incentive to achieve its performance
goal, if the target turns out to be set unrealistically high, the enforcement
of such a harsh penalty is likely to be seen as unfair. Moreover, imposing
the threat of such a heavy penalty may politically require setting the target
lower than socially desirable. On balance, this sort of compromise (higher
penalty but lower target) is probably less desirable than trying to choose
the socially efficient target and imposing socially appropriate penalties for
failure to meet that target.

If the scheme is highly effective, there will be major public health gains
and no penalties imposed. Of course, funding would still be required for
the administrative operation of the scheme. So if there are some failures
and some penalties imposed, that revenue can be devoted first to paying
for the plan’s operation.

Because it is difficult to know the social cost of public health harms
with precision, at the outset the administrator should not expect to position
the required performance levels and the noncompliance penalties exactly
right. As more information becomes available, however, the regime can
be adjusted. For example, the administrator can set certain targets and
penalties for the first five years and then reset them for the next five years.
With respect to both the target and the penalty levels, it would be better
initially, as a technology-forcing strategy, to err on the high side. If firms
later can show that they are spending more money to reduce harm than is
socially desirable and that prospects for achieving those outcomes at lower
cost are dim, then a convincing case for lower targets or lower penalties
will have been made. To counter protests by firms claiming that they are
being asked to achieve too much too soon, the scheme could phase in
the required targets by calling for a 20 percent reduction in fatalities (or
whatever the performance target is) by year 4, with incrementally higher
goals in subsequent years, reaching a 50 percent reduction by year 7. So,
too, penalties might be phased in, say, starting only in year 3 or 4. The
general point here is that regulators might not have the information at the outset to know precisely what outcome to demand.

Seventh, in settings where I have imagined attacking the public health issue by dividing up firm responsibility geographically, it may turn out that some firms could actually be most effective in areas where they do not have responsibility, and some firms might achieve gains in areas assigned to them by imposing costs in other areas. However, these shortcomings might be overcome by a cooperative agreement among the regulated firms, or by including a “tradable permits” feature as already discussed.

Eighth, tricky issues are bound to arise if other new public policies are being implemented at the same time as performance-based regulation. Suppose, with respect to both tobacco and alcohol, the government simultaneously adopts both performance-based regulation and other policies (such as higher cigarette taxes and tougher drunk-driving penalties). If those other policies are effective, public health harms will abate and firms will get credit for achieving at least part of their performance goals without doing anything on their own. While, of course, it would be good to have the public health gains in any event, it misses the point of performance-based regulation to credit firms with social benefits they did not achieve. Yet regulators traditionally have been unwilling to resist the temptation to try to implement command and control or other policy interventions they strongly believe will be socially helpful. At a minimum, I would urge those regulators running the performance-based plan first to publicize and recommend new strategies, leaving it to the regulated enterprises to adopt those ideas on their own. In this way, public safety experts could continue to hone their skill in identifying the best ways to produce public health gains, but they would act as consultants offering advice rather than regulators issuing commands.

Finally, it is also imaginable that government interventions aimed at different social policy objectives would undercut the gains that firms subject to performance-based regulation are otherwise achieving. For example, suppose car companies are directed to reduce highway deaths, but at the same time and for altogether different reasons, the government reduces the minimum driving age, or raises the speed limit on two-lane roads, or reduces the gasoline tax—all of which could bring about more highway fatalities. These examples illustrate that substantial care must be exercised when combining policies that, intentionally or not, impact the same behavior.
Practicalities

Perhaps readers can gain a better feel for both the practical feasibility and the administrative difficulties facing the actual implementation of performance-based regulation for public health through a more detailed description that shows how the idea might be applied to at least one of products more briefly described above. Hence I focus here on motor vehicle fatalities.

First, which agency would be responsible for administering the scheme? For these purposes I propose the NHTSA, since that agency already concerns itself with highway safety. Next, one would have to determine the precise outcome measure by which vehicle makers are to be judged. I have so far talked of highway fatalities. Notice that this would include truck, bus, motorcycle, and other motor-vehicle-related deaths and not just automobile-related deaths, and if we stick with that scope for the plan, it would bring into the scheme the makers of those products as well as automakers. Notice too that this would exclude highway deaths from the use of nonmotorized vehicles (like bicycles) that do not also involve motor vehicles. And so too it would exclude deaths from the nonhighway use of motorized vehicles, such as from the off-road recreational use of all-terrain vehicles or from the use of power boats on lakes and rivers. Obviously, there is no self-evidently most desirable boundary on the scope of this sort of scheme. Again, framing is probably critical, and in that light it would seem practically sensible to start with highway accidents from motor vehicles because this is already a politically salient category (e.g., the NHTSA’s focus) and a way that a very important social problem is already currently understood by the public at large. It also has the advantage, at least at the start, of narrowing the range of regulated firms to a reasonably small number, even if truck, bus, and motorcycle makers are included along with automakers.

A further consideration is whether the target should only be reduced highway deaths or whether injury reduction, or at least serious-injury reduction, should also be part of the required outcome. As a policy matter, surely we want injury reduction as well; moreover, we would feel much better about fatality reductions if what used to be deaths were converted into accidents avoided altogether instead of merely converted into serious injuries. Still, even the latter shift is not to be sneezed at. Yet we are likely to be much more confident that we are properly measuring outcomes if the plan is restricted to fatalities. Perhaps the answer to the question of what sort of outcomes to demand here depends on how much, as a general matter, measures that are effective in reducing fatalities will also
bring with them reductions in serious injuries even if not required by the plan. If one could be confident that that were the case, then to restrict the plan to deaths probably makes the most practical sense. However, if there were good reason to fear that the regulated firms would adopt measures that, while saving lives, sharply increased the number of serious injuries, that undesirable consequence would push in the direction of adopting a broader performance-based measure.

Assuming for now that the plan is aimed at highway fatalities, we would need a fair and reliable way of attributing each fatality to a specific vehicle or vehicles. For what are truly one-car crashes, this seems unproblematic. Notice here that, for these purposes, it does not matter why the car crash happened. There may have been nothing wrong with the car in the traditional sense, that is, no defects that caused the vehicle to, say, roll over or crash into a center divider. The whole point here, after all, is to prod car companies to take new measures to contend with these sorts of consequences of humans piloting heavy vehicles at high speeds under all sorts of conditions (including varying road conditions, varying weather conditions, and varying conditions of the driver). One-car crashes that kill bicyclists and/or pedestrians would also be assigned to the maker of the motor vehicle involved.

Two-vehicle crashes are more complicated. Victims in such cases could be drivers or passengers of either vehicle or both (and pedestrians and bicyclists could also be killed, a matter put to side for now). One solution in such cases would be to assign the deaths to the maker of the vehicle in which the victims were riding. This gets vehicle makers to focus on occupant safety. A second solution would be to assign the deaths to the maker of the other vehicle. This gets vehicle makers to focus on making their products less lethal to others. A third solution, which seems wisest to me, would be to assign all the deaths to makers of both vehicles so as to widen their focus to include both types of safety. If the latter, then a decision would have to be made as to whether, in weighting deaths in one-car crashes as compared with two-car crashes, the assigned number of deaths allocated in the latter should be halved for each firm, which is perhaps the most sensible outcome. Whether the same approach should apply in dealing with crashes involving vehicles of a considerably different character is another matter—say, bus/car crashes or car/large truck crashes, or even car/motorcycle crashes. All of these examples demonstrate that it is not simple to decide how to assign responsibility. And yet I have little doubt about the NHTSA’s ability to resolve these questions in a reasonably fair and sensible way via normal administrative rule-making procedures.
I have been assuming for purposes of illustration that the industry target for reduced highway fatalities would be 50 percent over seven years, or about a 7 percent reduction per year (or possibly an 8 percent reduction over years 2–7 after a grace year at the outset, or yet another schedule that yielded the same result by the end of year 7). But of course, both the extent of fatality reduction and the period over which it is to be achieved can be contested and set otherwise. As noted already, I favor an ambitious target. Still, if the target is seen as wholly implausible, then it may well be politically difficult to impose anything but minor penalties for noncompliance, a combination that risks having the regulated firms ignore their target and just pay small fines. On the other hand, it is probably a waste of time and money to put into place the administrative machinery of a performance-based regulatory scheme if the intended safety gains are not large. Past improvements could provide relevant information; for example, if seat belts and air bags together currently save, say, eight thousand lives a year, that provides some context for asking the motor vehicle companies to save perhaps another twenty thousand lives annually. Again, I think that sensible targets could be arrived at either through administrative rule making or through congressional hearings before enactment of the scheme that results in the inclusion of the plan’s targets in the legislation.

The plan would also have to determine for each of the regulated firms both its current level of assigned deaths and its reduced-death target. When it comes to cigarette makers, I envision a uniform required reduction target for each company, because all cigarettes are, so far as I know, essentially equally dangerous. But for motor vehicle makers this is probably not true. Certain firms already produce products that are disproportionately more or less involved in highway fatalities, given their market share. Hence we would want to demand less from firms that already make safer vehicles as compared with those making more dangerous ones. A straightforward way to allocate responsibility, then, would be this. Assume that the year 7 target for the industry as a whole is a reduction in highway fatalities from forty-four thousand to twenty-two thousand. For that last year (with similar targets along the way) a firm could be allocated a maximum number of deaths assigned to its vehicles based on its market share of vehicles on the road. So, for example, if Honda had 15 percent of the market, its target would be 15 percent of twenty-two thousand, or thirty-three hundred. So, too, if Ford had 15 percent of the market, its target would be the same as Honda’s. But achieving that target might require more or less from Ford than from Honda, depending on what share of the existing forty-four thousand deaths were assigned to it. If Fords were safer than Hondas
already, then the data might show that Ford were currently responsible for
only, say, fifty-five hundred deaths rather than sixty-six hundred deaths,
which would reflect its 15 percent market share. In such event, Ford would
need to achieve a reduction of only twenty-two hundred deaths to meet its
target. Under this assumption, Honda (or some other firm) would have a
disproportionately higher share of existing deaths assigned to it and hence
would have farther to go to meet its target. Notice, too, that the allocation
of allowable deaths (i.e., the number that are allowed without penalty) may
be based on something other than simple market share data. Perhaps the
number of miles a firm’s vehicles are driven, as compared with total miles
driven, could be used in setting targets. Perhaps vehicle weight could also
be taken into account.

Another issue to face is whether a firm’s market share (or whatever the
target is based on) at the start of the regulatory scheme should be used to
set an individual firm’s target for at least the first round of the plan (say,
seven years), or whether there should be ongoing adjustments based on
market share. A related problem concerns new entrants, if any, during
the scheme’s operation, although my presumption is that those would be
assigned a target of zero fatalities, so that if they wanted to function with-
out paying penalties, they would have to purchase fatality allowances from
firms operating at the start of the scheme. Again, these are all matters
that I believe could be sensibly resolved through normal administrative
processes or even through congressional hearings held in connection with
the adoption of the plan.

To gain public and industry confidence, the plan would have to provide
assurances that the number of highway fatalities allocated to each regu-
lated firm was reasonably accurate and that suitable statistical adjustments
were being made to attribute fatalities in cases in which there had been a
highway death but no vehicle could be identified (or only one of clearly
two or even more vehicles involved had been identified). But because of
police and ambulance service involvement in motor vehicle deaths, the
frequency of insurance claims and lawsuits filed in case of such deaths,
and the typical availability of witnesses to such accidents, I think that once
it was legally determined how deaths were assigned, the NHTSA could
readily develop a good reputation for properly assigning death counts to
the right enterprise. While there is always a risk that the regulated parties
will figure out how to game the system by showing illusory public health
gains, that risk seems minor in this instance.

Under these assumptions, the key remaining task is to determine the
penalty for failing to achieve a firm’s target and collecting funds if the
target is not met. For now, I put aside the latter, even while admitting
the financial precariousness of automakers in the current financial crisis.
Agencies like the NHTSA are already experienced in assigning values
to lives lost, and let us assume a number like $5 million for purposes of
illustration here. That number could well be the figure used in setting
the fine for exceeding the allowable target. But it is more complicated
than that. First of all, assuming that we believe that measures that reduce
highway deaths also reduce serious injuries, then the failure to achieve,
say, a reduction of one hundred deaths means an even greater social loss
and hence may call for a larger penalty. Second, because firms will have
penalties starting, for instance, in year 2 or 3 of the plan with intermediate
targets along the way, it is critical to decide whether the penalties imposed
are once and for all or repetitive. For example, suppose General Motors
(GM) starts with nine thousand deaths assigned to it and it is supposed to
reduce that number to seven thousand by the end of year 3, to six thousand
by the end of year 4, and so on until it reaches four thousand by the end of
year 7. But suppose seventy-five hundred deaths are assigned to it in year
3, so that it has a five-hundred-fatality excess. Once it pays its year 3 fine,
are those five hundred excess deaths forever ignored, or is GM fined again
if by the end of year 4 it has achieved the one-thousand-death reduction
envisioned for that year but, because of past failures, is still responsible in
year 4 for sixty-five hundred deaths? I tend to favor ongoing responsibil-
yty, but that would seemingly call for a different penalty amount than a
once and for all penalty. Again, these are important details with which the
NHTSA would have to grapple.

Furthermore, it may be noted that a more modest scheme than the one
I have been presenting could be adopted with respect to motor vehicles. It
would focus only on vehicles sold after the date of the plan’s enactment.
In effect, a firm would be permitted (without fine) to have its new vehicles
sold after the start of scheme to be involved in only $x$ highway fatalities
per, say, one hundred thousand vehicles sold. Over time, of course, the
new scheme would approach the features of the one I have been describing
in detail, as the vehicles on the road at the start of the scheme became a
minimum share of the total.

Finally, I recognize that it is a long way from simply demanding high-
way fatality reduction to understanding precisely what motor vehicle com-
panies would actually do to avoid the penalties discussed here. It might be
very difficult and costly for firms to meet their goals, or it might not be.
They might be able to achieve their goals largely through actions taken
in isolation with respect to the design of vehicles and perhaps through
changes in their marketing practices and restrictions imposed on those
to whom their vehicles are sold (with conditions attached to resale as
well). Yet it might also take considerable cooperation with other motor
vehicle makers on various fronts. One issue is vehicle compatibility with
respect to matters such as how high bumpers are set or relative weight and
speed of vehicles. Another concerns possible cooperation with respect to
changes in highway safety that would impact the operation of the entire
motor vehicle fleet, changes that might include speed limits, road condi-
tions, police presence, rescue operations, and more. The central point that
bears reemphasis here is that all of this would be for the motor vehicle
industry to figure out. Of course, auto makers would engage experts in
highway safety to help them. But it would be their responsibility to take
the most effective action to bring the fatality rate down. As noted earlier,
firms would be required to disclose their plans to meet their targets so that
the NHTSA could be sure that they were not doing so in ways that caused
other unacceptable outcomes as well. Disclosures of this sort would also
help others in the industry better learn from each other so that, through
competition, the most cost-effective ways of lowering highway fatalities
might be achieved on an industrywide basis.

To be sure, the NHTSA’s mission would be redirected by this proposal,
and there surely would be substantial costs involved in establishing the
data collection regime needed to monitor and enforce the scheme. More-
ever, the NHTSA is likely to face some problems in managing such a
scheme, many of which probably cannot be anticipated in advance. The
goal here, however, is no more to achieve perfection than it is to eliminate
highway deaths entirely. Rather, the goal is rather the ambitious public
health aim of halving motor vehicle fatalities on the road, a goal which, if
even mostly accomplished, would be an enormous contribution to overall
societal well-being.

Regulatory Alternatives

So far I have shown how performance-based regulation might be adopted
to deal with each of the five major consumer products under consideration
here (having given special attention to its specific application to highway
fatalities). I have also conceded some of the potential problems gener-
ally confronting this approach. I next describe alternative approaches to
regulating hazardous products. These are mostly (but not entirely) con-
ventional strategies. I provide examples relevant to automobiles, guns,
cigarettes, alcohol, and junk food, noting the shortcomings of each of
these strategies. My overall message is that performance-based regulation is a promising strategy as compared to other more conventional options, which have all too often had disappointing results.

Command and Control

In the most common regulatory strategy, command and control (Stewart 1988, 1987, 1985; Ackerman and Stewart 1985), the regulator (e.g., legislature, agency, or commission) requires the regulated party (e.g., manufacturer, retailer, or possibly user) to take specific measures that the regulator believes will mitigate potential harms. For example, to promote auto safety, a regulator might require car manufacturers to include air bags. To avoid accidental shootings, gun makers might be required to include trigger locks in the design of new guns. Secondhand smoke injuries might be curbed by requiring employers to adopt and enforce a ban on workplace smoking. Alcohol-related fatalities might be lowered by limiting how much alcohol may be contained in the malt liquor that supermarkets and liquor stores sell. Childhood obesity might become less prevalent by forcing TV broadcasters to eliminate junk food advertising on programs aimed at children. Notice that in some of these examples the command-and-control regulation is directed toward a product maker (e.g., car companies or gun makers), while in others it is directed toward other actors, like retailers (the malt liquor example) or employers (the second-hand smoke example).

Command-and-control schemes rest on the belief that the regulator knows the best way (or at least a good way) to attack the public health problem. As is usual with command-and-control schemes, all of the examples above call for “input” changes. This is in marked contrast to performance-based regulation, which targets outcomes. Input strategies ordinarily assume that if enterprises make the ordered behavioral changes, then improved public health performances will follow. To be sure, sometimes the regulator only imposes what looks like a promising solution in hopes of success. Put more generally, regulators implement command-and-control strategies to attack apparent risk factors and strive to bring about better social outcomes, but recognize that such outcomes are not guaranteed. For example, eliminating junk food ads on TV might not actually lead to lowered childhood obesity rates. So, too, requiring trigger locks on guns might have a negligible impact on accidental shootings and no impact at all on homicides or suicides.

Although command-and-control regulations are imposed by regulators,
it is not as though the regulators work in isolation. They typically come to
conclusions about precisely which command-and-control rules to impose
through a procedure that involves public input. For example, they can use
a variety of formal and informal mechanisms (such as hearings, notice and
comment procedures, or negotiations) to involve those potentially subject
to regulation as well as other relevant actors (such as nongovernmental
organizations [NGOs]) (Bamberger 2006).

While command-and-control mistakes can be corrected, the major
problem with this approach is that the regulator may not order the right
changes, even after a number of tries, or that it will take too long to get it
right (Komesar 1985, 1990; Page 1991; Trebilcock 1991). This could be
because the self-interest of the regulators does not match that of the public;
they may be corrupt, subject to undue influence by those being regulated,
inept, or simply eager to maximize the size and budget of the agency.
Even assuming the best of intentions, regulators simply may not possess
or be able to acquire the information to determine the most efficient and
effective changes to require. Worse yet, they may lock enterprises into
outmoded and unduly costly technologies.

Furthermore, even if the regulators reach a partial solution, they may
lack a solid approach to another, perhaps key, aspect of the problem. For
example, maybe trigger locks on guns would substantially reduce acciden-
tal shootings, and hence could be socially quite valuable, but such shoot-
ings account for only a very small share of gun deaths and injuries (fewer
than a thousand annually) (Anderson et al. 2004; Jacobs 2002).

In addition, command-and-control public health interventions are
sometimes plagued by special political problems. Even if policy experts
generally agree that net social gains would occur through some regula-
tory intervention, the limits on individual liberty that would be imposed
(and the accompanying complaints about the “nanny” state) could doom
the adoption of otherwise helpful policy initiatives. How else to explain,
for example, the tenacious opposition to requiring motorcyclists to wear
helmets?

Taxes and Subsidies

Second, instead of demanding a change to the specific inputs of a product
or directly regulating the manner of its sale or use, the regulator might
try to influence the level of production or consumption of the product by
imposing an excise tax or granting a subsidy (or adjusting existing levels
of taxes or subsidies). Taxes on tobacco and alcohol are familiar examples.
Also in this vein, the regulator might impose a substantial license fee for a gun permit or allow consumers to claim a tax credit for purchasing a car with antilock brakes. So, too, in order to address obesity, the government might decrease subsidies for high fructose corn syrup while creating subsidies for fresh fruits and vegetables.

This approach is arguably less direct than command-and-control regulation (although enforcement sometimes can be much easier). The tax approach assumes that price effects of taxes and subsidies will cause changes in consumption patterns that will in turn lead to improved public health outcomes. To be sure, some command-and-control requirements may add to a product’s cost and thereby diminish its sales, resulting in an overlap between these first two regulatory mechanisms. But regulators are doing quite different things when they tax gun sales generally and when they increase gun costs by requiring trigger locks.

The success of tax and subsidy strategies in lowering the level of a dangerous activity is likely to depend first on “elasticity of demand” — how sensitive consumers are to price, which depends in part on the price and suitability of substitute products. Thus, when demand is highly inelastic, behavioral effects from price changes may be very modest. Still, taxes also have an “income” effect, altering consumers’ overall spending patterns, including purchases of the taxed item. Moreover, industry responses to taxes and subsidies can both undermine and exaggerate intended policy impacts. Consider the example of concentrated industries with price leaders. On the one hand, if firms in such an industry are willing to temporarily take lower profits, they may choose to avoid passing higher taxes on to consumers in the form of higher prices. In the analogous case for subsidies, such firms may be able to temporarily take higher profits by not passing subsidies on to consumers in the form of lower prices. On the other hand, taxes sometimes have an even greater effect than regulators imagined. For example, sellers might use the occasion to raise prices more than the amount of the tax and reap (at least temporarily) higher profits. All of this suggests that excise taxes (and subsidies) are somewhat blunt policy instruments.

Furthermore, taxes designed to promote public health tend to have an overbreadth problem. For example, all drinkers will have to pay more for alcohol when it costs more because of tax increases, but most of those who consume less as a result are not alcoholics or irresponsible users. Thus, public-health-based taxes will frequently suffer from “target inefficiency.” Even cigarette taxes — which are great to the extent they cause people to quit, not to relapse and start smoking again, and not to start in the first place — do nothing to improve public health to the extent heavy
smokers respond to the higher cost by switching from premium to lower
cost brands.

In contrasting conventional tax strategies with the performance-based
regulatory scheme, two key distinctions should be emphasized. First,
excise taxes are rarely proposed (or enacted) that are at a high enough
level to be construed as internalizing the full social costs of the prod-
uct into its price. By contrast, the penalties imposed via performance-
based regulation are envisioned to be of this magnitude. Second, the tax
strategy is generally intended to apply to all sales, and is unresponsive
to any efforts firms make to reduce the negative social consequences of
their products. Rather, public health gains are envisioned as arising from
purchasing responses by consumers to the tax itself, assuming that the
tax is passed on to consumers (subject to possible monopolistic responses
already noted). Under performance-based regulation, by contrast, the
penalty—which admittedly may be viewed as a special sort of tax—only
applies to negative consequences beyond a firm’s target and is measured
by the extent of the shortfall from the target. Hence it is highly responsive
to a firm’s efforts to reduce those consequences. For this reason, if some
firms successfully meet their targets and others do not, it may be difficult
for the firms that fail to pass the cost of these penalties on in the price of
their product.

Participation

Third, the regulator might instead insist on the participation of public
health activists or consumer advocates in private business decision mak-
ing. An example from the field of occupational safety is the requirement
that firms have at-risk employees participate in worksite safety commit-
tees (Lobel 2005). Another good example of this participatory strategy
outside of the public health arena is the requirement that independent
directors be included in the composition of corporate boards to discour-
age excessive executive compensation and inappropriate self-dealing by
officers (Bebchuk and Fried 2005).

For this article’s focal areas, then, imagine requiring beer companies
to include public health advocates on their corporate boards; food com-
panies to appoint independent nutritionists to their product development
teams; manufacturers to appoint independent safety engineers to work
with company employees designing new car and gun models; or tobacco
companies to give representatives of former smokers a role in shaping
product advertising campaigns.
This participatory approach rests broadly on the twin beliefs that the regulator probably does not know exactly what to “command” firms to do right now and that technological development and other changes may soon make obsolete current regulatory solutions. Participation requirements, by contrast, are meant to force firms to pay ongoing attention to public health objectives. Of course, the actual influence of the public health participants could vary greatly, depending on factors such as how much power they have and how many of them there are.

Yet, even if publicly appointed participants have little formal power within the firm, they may well have the power of publicity, creating transparency in the decisions that go against the interest of public health. That power of disclosure may in turn increase the attention that firms pay to the participants’ recommendations. On the other hand, one risk of participatory regulation is that it becomes all show and no action. Just as regulated firms can “capture” the agencies that are supposed to regulate them (for example, by using political contributions to entice officials to appoint regulators who are overly friendly to the firms they are supposed to regulate), firms can also “capture” these publicly appointed participants that are supposed to represent the public interest.

Participation of the sort imagined here is a largely untried strategy. Its prospects for enactment are difficult to assess, as are its likely impacts even if put into place. The key point to emphasize, in comparison with performance-based regulation, is that the participation approach in no way insists on positive public health outcomes.

Litigation

Fourth, litigation is yet another regulatory strategy that can be employed in furtherance of public health goals (American Law Institute 1991; Sugarman 2008a; Komesar 1990). One way to understand this strategy is to see lawyers, judges, and juries as replacing lobbyists, agency personnel, and legislators in shaping public health policy (Jacobson and Warner 1999). From this perspective, resort to litigation may be based on a judgment about command-and-control failures of the sort noted already, like regulatory capture (by industry), regulator ineptness (in the form of an unresponsive or incompetent bureaucracy), or regulatory gaps (such as tobacco products until recently falling outside the jurisdiction of both the Food and Drug Administration and the Consumer Product Safety Commission).

Specifically, I have in mind common-law tort litigation based on claims of negligence, or what is largely the same thing — product liability claims
based on the assertion that the product suffers from a design, marketing, or warning defect (Restatement [Third] of Torts: Product Liability, sec. 2 [American Law Institute 1998]). These are cases in which a private victim seeks money damages. Examples of tort claims within the behavioral health contexts at issue in this article include suing bars that serve alcohol to people who then injure victims with their cars, suing gun sellers whose guns are used to kill, and suing tobacco companies for smoking-related deaths. When victims base their tort claims on the doctrine of “negligence per se” (Martin v. Herzog, 126 N.E. 814 [N.Y. 1920]), arguing that the party who injured them violated a statute or regulation, this sort of lawsuit is perhaps best classified as an example of the private enforcement of a command-and-control provision (Rabin 2000).

Even though a common-law tort plaintiff normally seeks money damages only after suffering harm, the regulatory theory underlying tort litigation is that firms will take health and safety precautions in advance in hopes of avoiding lawsuits (and will even more seriously address the consequences of their products after a litigant successfully sues them or their direct competitors) (Calabresi 1970; Landes 1987). Indeed, sometimes the private litigants’ preferred legal remedy is an injunction to prevent ongoing or future harm.

Furthermore, tort litigation is not the only option. Alternatively, publicly employed lawyers like state attorneys general or city attorneys might haul before judges those manufacturers (or even sellers) of consumer products who should be doing more to reduce the behavioral public health problems described here. I am not referring to in-court enforcement of detailed regulatory or statutory rules, which I see as part of the command-and-control strategy set out above. Rather, I am thinking here of litigation that seeks to apply general consumer protection laws, like those making illegal certain kinds of fraud or other unfair business practices, to public health problems. In such cases, as with common-law tort claims, it is judges (and juries) who give specific content to the broad legal norms, deciding, in effect, which specific behaviors by private firms are required and forbidden.10

10. For example, California’s Unfair Competition Law (California Business and Professions Code, sec. 17200 [West 1997]), which prohibits “any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising” was enacted to protect consumers. Anunziato v. eMachines, Inc., 402 F. Supp. 2d 1133 (C.D.Cal. 2005). The “unfair” prong intentionally provides courts with broad discretion to prohibit new schemes to defraud. UCL Paulus v. Bob Lynch Ford, Inc., 43 Cal. Rptr. 3d 148 (Cal. Ct. App. 2006). Several California cities, including Los Angeles and San Francisco, have attempted to sue gun manufacturers under section 17200. See Wallenstein 2001.
Yet litigation has its own drawbacks. For one thing, it can be quite expensive, especially the cost of the lawyers. Second, most tort litigation is not policy oriented. It is not about identifying and blocking new dangers, such as cars that are not “crashworthy” or guns that are irresponsibly marketed. Rather, most torts cases involve routine claims such as for compensation of victims of inattentive drivers or careless property owners; or they are the hundreds or thousands (or more) follow-on claims against, say, a pharmaceutical company whose drug has already been clearly shown to have been inadequately tested (Hensler et al. 1987; Hensler and Peterson 1993). Third, even though both sides in complicated torts cases call expert witnesses to testify in court on their behalf, there is reason to be skeptical that juries fully understand the tradeoffs involved in deciding, for example, whether a product’s design is unreasonably dangerous, or whether it is reasonable to condemn the product maker for not having provided a better warning or not having marketed the product in a different way. Finally, many victims of wrongdoing will not bring tort claims because they do not realize how they were injured, they cannot gather proof of the fault of the enterprise that harmed them, or the amount of their injury is sufficiently small that they cannot get a good lawyer to take their case (Felstiner, Abel, and Sarat 1980).

Management Regulation

Fifth, perhaps best visualized as lying somewhere inside a square in which self-regulation, participation, command-and-control regulation, and performance-based regulation occupy the corners, is a strategy sometimes called “management” regulation or “co-regulation” (Coglianese and Lazer 2003; Kagan 2001). Although these labels may apply to a variety of ideas, a typical scheme requires a firm that creates a risk to devise a plan to reduce that risk, publicly announce the plan, and then implement it (Bamberger 2006; Lobel 2005). This is more than self-regulation because action is legally required. Both government and private firms participate in the process, with perhaps NGOs participating as well. It is not a command-and-control regime, however, because the requirement is only to have a plan, and the regulators do not dictate the details of the plan. Neither is it performance-based regulation because there is no penalty if the plan does not work. I mention the management regulation strategy primarily to include it in my taxonomy and to distinguish it from the others. Its central virtue is its easy enforcement since the regulator need only determine whether the private firm engaged in the process of adopting an action plan.
Its downside is that firms will adopt unambitious and unimaginative plans or will not seriously carry out what they planned to do.

**Comparing Performance-Based Regulation**

As already emphasized, the core idea behind the performance-based approach is that firms whose products are inextricably linked to behavioral public health problems should take responsibility for the resulting harms. That is, firms should not be able to wash their hands of responsibility for how their products are used. Performance-based regulation works by simply insisting on a reduction in those negative public health consequences.

This approach differs from typical command-and-control regimes in two crucial respects. One, rather than empowering the regulators to dictate required changes to firms, the firms themselves decide what to change to achieve the desired results. Two, rather than focusing on inputs (as command-and-control regimes do), performance-based regulation focuses on results.

As contrasted with other strategies, performance-based regulation requires neither product price changes nor participation in enterprise decision making by public health representatives. Yet, under performance-based regulation, if regulated firms conclude that participation or price manipulation strategies will help them achieve their required public health gains, they are free to employ them. And this is a central advantage of performance-based regulation—it prods firms whose products cause harm to figure out ways to reduce that harm at a time when other regulatory approaches have left society with death, injury, and disease levels far in excess of what I think is socially acceptable.

Note that fault-based litigation, like command-and-control regulation, is also input oriented. Under tort law, the legal system (judges and juries) tells firms how they should have behaved to reduce risk. That is, negligence law generally requires a finding as to what precisely the defendant ought to have done to have prevented the harm. In special circumstances, the doctrine of *res ipsa loquitur* may be an exception to this rule, although it is more often used as a procedural device to shift the burden of proof to defendants. The key point, however, is that fault-based litigation differs sharply from performance-based regulation.

By contrast, were tort law to impose true "strict liability," that would be much more analogous to performance-based regulation because firms would be held liable for injury regardless of how they behaved, and no
specific precautionary behavior is required of them. However, American
tort law rarely imposes this sort of outcome-oriented responsibility; if
anything, tort law is moving away from that approach. To be sure, tort
law does impose strict liability for manufacturing mistakes (defectively
manufactured products) and for ultrahazardous activities (like dynamite
blasting), but not for products that are said to be defective because of their
design, warning, or marketing; in those cases, proof of reasonable alterna-
tive conduct is generally required.

However, a true regime of strict tort liability would hold product makers
responsible for all of their negative public health outcomes. That would
include deaths that everyone agrees cannot be prevented. That is because,
once a court determines that a given type of harm, say, damage from
dynamite blasting, should give rise to strict liability, all victims of dyna-
mite blasting are entitled to relief. So if obesity, say, were considered a
harm to which strict liability applied, then the food industry would be
legally responsible for all obese plaintiffs. By contrast, as already empha-
sized, under performance-based regulation, public health improvements
could be more carefully tailored to realistic goals. In the case of obesity,
the food industry might be induced merely to reduce the prevalence of
childhood obesity by, say, half, rather than required to eliminate it entirely.

I should also emphasize that under strict liability individual victims have
to prove that their harm was actually caused by the firm’s product and
that their injury, death, or disease would not have occurred anyway. This
is sometimes very difficult to do. By contrast, this individualized cau-
sation requirement is replaced in performance-based regulation by the
plan’s specified target for each firm (and the agreed-on basis of measuring
whether the target has been met).

Some years ago Howard A. Latin (1985a, 1985b) advocated using strict
liability in tort to hold car companies strictly responsible for those injured
or killed by their cars on the theory that this would induce the compa-
nies to more quickly introduce safer vehicles (or related safety-improving
measures). This idea strongly resembles my performance-based regula-
tory proposal. Nonetheless, important differences between his scheme and
ours are that Latin’s plan would impose costs on vehicle makers for all
highway fatalities and the money would go to victims; by contrast, in my
proposal, no payments would be made if vehicle makers met their goals,
and if they did not, the payments would go to the government. Still, the
proposals share the broader notion that car companies should be prodded
to deal more effectively with the harms caused by their products.

I want to reemphasize that one way to view performance-based regula-
tion is as a scheme of taxation. But this is taxation imposed, not on product sales, but on a specified level of bad outcomes. In other words, rather than being taxed at, say, $1 per pack of cigarettes made or sold, the tobacco industry would be annually taxed, say, $10,000 for every smoker of their brand beyond their allowable limit. These “taxes” would be the fees, fines, or penalties imposed on firms for failing to achieve the mandated reduction in their performance targets. Unlike that of the excise tax, however, the policy goal of performance-based regulation is not to collect taxes but to stimulate public health gains that relieve firms of those taxes. In a similar vein, notice that strict liability in tort can also be seen as a “tax” scheme (in which victims and their lawyers get the tax proceeds). But, as emphasized above, under strict tort liability the firms’ targets would, in effect, be set to zero since the strict liability payment obligation (the “tax”) would apply to all harms, and not only to the harms beyond the firm’s target set by performance-based regulation.

As mentioned already, although it might seem from the way I have described these various regulatory approaches that they are exclusive alternatives, this is not the case. In both theory and practice, more than one strategy may be used to deal with the same public health problem. As obvious examples, both tobacco and alcohol products are currently subject to both excise taxes and command-and-control regimes, and for both fields personal injury lawyers have additionally sought further regulation through tort actions. Nonetheless, the regulatory approaches described here do represent very different ways of thinking about how to solve a particular social issue, and in some respects combining certain of the approaches can be awkward and potentially counterproductive. In particular, because performance-based regulation goes directly to the public health goal and asks industry to achieve that goal, one must be especially cautious in mixing it with the other approaches.

Acknowledging that systemic problems confront performance-based regulation, it is important to review its potential advantages, especially given the shortcomings of the regulatory alternatives.

Most important, performance-based regulation is designed to unleash private innovation and competition. The same features that we value in the production of goods in a capitalist system can now be specifically turned toward promoting safety and health. Along with this decentralized compliance arrangement should come experimentation, and mutual learning as some strategies prove more successful, to say nothing of the technology-promoting force of the call for ever greater public health gains over time.
Although existing agencies might promote performance-based regulation as an alternative to their own current regulatory arrangements, let us assume for now that adoption of my proposal will require legislative action. This raises the question of whether performance-based regulation is politically plausible. At the outset, opposition might well come from both the public health community and the potentially regulated firms. After all, many public health advocates distrust business and instinctively would be hesitant to rely for solutions on an industry they already blame for the social problem being addressed. Think about how strongly the tobacco control community detests cigarette companies. On the other hand, there are some public health leaders who, although they strongly believe that industry must be part of any solution to the problems connected with their products, are committed to voluntary self-regulation strategies. Corporate social responsibility is the banner they typically fly. At a minimum, winning both of these wings of the public health community over to trying out performance-based regulation requires convincing them that their current approaches are destined to fail short.

Because it is easy to keep pushing the same long-favored ideas, perhaps some special event is required to shake people’s confidence and allow them to open themselves up to exploring something new. With respect to guns, for example, maybe the recent U.S. Supreme Court decision interpreting the Second Amendment as generally giving individuals a constitutional right to possess a weapon at home for purposes of self-defense will become such an event. Because this case threatens conventional gun control strategies, it just might prompt those who previously had been committed to using command-and-control approaches to reduce gun deaths to consider an altogether different strategy. Were there to be a lengthy stall in the downward trend in smoking prevalence rates, that might move public health leaders to look elsewhere instead of relying on the package of approaches that are currently thought most effective. As the American automakers came to Congress for a financial bailout during the financial crisis of 2008–2009, we saw congressional leaders talking about imposing conditions that promised greater fuel efficiency or even a shift to vehicles that ran entirely without internal combustion. But with the right initiative, accident-reduction (or vehicle-related fatality-reduction) conditions might easily have been attached as well.

Enterprises, of course, are not eager for more regulation—including performance-based regulation—and as I have noted throughout, their general framing strategy to resist regulation is to cast the problems under discussion here as arising from user abuse. Nevertheless, I want
to emphasize that, as compared with other regimes, performance-based regulation also has some attractions for the regulated parties. For example, rather than being told what to do, as happens with command-and-control regimes, firms may greatly prefer to control how they will satisfy their obligations. Individual public health experts could play a role, as regulated firms might choose to bring them in to help achieve the performance targets. As already noted, however, these experts would have to convince the firms that what they have to offer will make a real difference, in contrast to other regulatory approaches in which experts are empowered to compel behavior on the part of firms. Moreover, if successful, the regulated firms can praise themselves for the public health harm reduction they achieve. This is in contrast to the bad publicity they typically suffer when successfully sued, or the likelihood that they receive no added goodwill for merely complying with regulatory commands.

The strategy for bringing industry around to supporting performance-based regulation probably depends on convincing the target enterprises that it is a less bad result for them. In other words, if they genuinely foresee what, from their viewpoint, is a highly undesirable command-and-control scheme in the offing, then performance-based regulation may be a far more palatable alternative. Furthermore, it might be possible to win industry support by trading it off with the repeal of existing regimes. For example, perhaps firms in the motor vehicle industry that meet their targets under a performance-based regulatory plan should be freed from existing tort liability for claims of product defect. Or perhaps existing and future NHTSA safety measures could become recommendations instead of requirements for vehicle makers that reached their fatality reduction target. In effect, meeting the performance-based regulation goal would provide a firm with a safe harbor with respect to other safety regulation.

If the political prospects for adopting performance-based regulation in the areas under discussion here still seem remote, think about how rapidly our perspectives on global warming have changed. Not that many years ago it was unimaginable that large emitters of carbon dioxide would be expected to take responsibility for dramatically reducing their carbon footprints. Moreover, if one imagined future regulation in the fight against climate change, one probably would think first of devices or processes that governments would order power plants, factories, and vehicle makers to employ. Instead, at least for now, there appears to be widespread support from policy makers and at least grudging acceptance from large carbon dioxide polluters to try some sort of performance-based regulation approach that at least leaves it to industry to figure out the cheapest way
to curtail their emissions. As with global warming, it will probably take creative and entrepreneurial political leaders and policy analysts to lead public opinion in the direction of performance-based regulation for the public health problems addressed here.

As a fresh approach that relies on enterprises to solve problems they create, performance-based regulation, if positioned properly, could have wide political cachet. Indeed, it can appeal to those who think firms are more nimble than regulators as well as those who want firms to take responsibility for the public health problems their products cause. For this reason, I think regulation that imposes performance goals and fines for noncompliance is more politically attractive than a somewhat similar scheme that would provide affirmative financial rewards to firms that achieve public health gains. Yet a combination of penalties and rewards may ultimately be even more attractive. Applying this idea to highway fatalities, for example, a performance-based penalty and reward scheme might work like this. Instead of demanding a 7 percent annual reduction in the fatality rate associated with any firm’s vehicles, the plan could, say, require a 4 percent reduction but at the same time provide generous bonuses (perhaps equivalent to the fines firms would face for failing to reach the 4 percent target) to those firms that achieved reductions beyond 4 percent. In that way, firms could do well by doing a lot better than they do today in minimizing the negative outcomes of their products.

As emphasized throughout, perhaps the most important feature of any political campaign promoting performance-based regulation to address a behavioral public health issue is the framing of the problem. Performance-based regulation ties together the freedom to sell products with the responsibility for resulting negative consequences, leaving it to the firms to tailor the former in ways that minimize the latter. This may not be the easiest message to sell politically at a time of constant objections to the “nanny” state and pressures for deregulation. Yet, as with global warming, with the right political entrepreneurs taking the lead in framing the problem, public perception can be changed. What before may have sounded like too much regulation can instead be understood as appropriate restrictions on enterprises that now irresponsibly harm the public health.
References


