Comments on the Proposed Identification of Environmental Tobacco Smoke as a Toxic Air Contaminant by the California Environmental Protection Agency / Air Resources Board

The effort by the California Air Resources Board (ARB) to identify Environmental Tobacco Smoke (ETS) as a Toxic Air Contaminant (TAC) has so much influence from Tobacco Control (TC) program that it is an integral part of it. The enclosed article (Bayer) documents the copious use of marginizalization and stigmatization, by the TC program.

In 1997, James Stratton, the state's deputy director for prevention services said that "Our idea is to make California a hostile environment for smoking,", …."We want to denormalize and deglamorize tobacco.(Katz)"

The Scientific Review Panel (SRP) is heavily influenced by TC interests. Stanton A. Glantz, Ph.D. a mechanical engineer and professor of Medicine with no formal toxicology training, is an avowed anti-smoking advocate and receives funding from the TC interests. Charles G. Plopper, Ph.D., Gary D. Friedman, Paul D. Blanc, M.D. (along with MD Eisner, M.D.), have published extensively on tobacco and ETS from the TC perspective. There has been no balance. The potential for bias is so obvious, as evidenced by the panel's findings. .

The SRP found "…..*there is not sufficient available scientific evidence to support the designation of a threshold exposure level to ETS below which no significant adverse health effects are anticipated.*" The lower boundary is the hallmark of well done toxicology studies. If it can't be measured, it's not there. However, the SRP recommends declaring ETS a toxic contaminant anyway.

The implication of the lack of a lower threshold is that someone in San Diego (or in their private home in Chicago) might inhale a carcinogen from the ETS emanating from Governor Arnold's cigar tent. Because of the trade wind effects, the entire rest of the country breathes the air that California exhales. Yes, as infinitesimally small as it might be, there is still a risk. As absurd as it might sound, without a lower boundary, smoking would have to be outlawed everywhere.

Yes, the Tobacco Control interests would be happy. After all, the tacit prohibition of tobacco everywhere is their plan. However, declaring ETS a toxic contaminant without a lower threshold would also set a precedent for legal action throughout the country against the State of California and its' citizens for ETS, car exhaust, factory emissions and river effluent claims. This would be a nightmare.

The other problem is that, of the many potential harmful carcinogenic constituents in ETS, the individual constituent(s) causing the problem have not been uniquely identified as the cause of the specific illnesses attributed to ETS. It is easier to blame ETS in general. And, of course, if the measurable constituent(s) were to be identified, they could probably be removed or reduced to an acceptable level. But, actually solving the problem is not TC's plan, but instead to make California a hostile environment for smoking.

My response to previous versions of the report indicated that the stress of Adverse Childhood Experiences (Anda) has not been adequately considered as a confounding factor in any of the studies. It was simply dismissed, as were the thoughts of other private citizens and independent researchers. The tobacco company representatives received more respect. My follow-up response to the SRP dismissal has not been answered and has not been included in the report.

Are we really to believe that the effort by the CAL EPA and ARB has anything to do with improving the quality air and ultimately improving health? No! This is nothing more than an attempt to stigmatize an already vulnerable population, blaming those who smoke for others illness. It is an integral part of the tobacco behavioral control program. ETS should not be declared a TAC, and the program should not be continued.

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REFERENCES:

Anda RF, Croft JB, Felitti VJ, et al.
Adverse childhood experiences and smoking during adolescence and adulthood.
JAMA. 1999;282:1652B1658. [PubMed]
http://jama.ama-assn.org/cgi/content/abstract/282/17/1652

Bayer R, Stuber J.
Tobacco control, stigma, and public health: rethinking the relations.
Am J Public Health. 2006 Jan;96(1):47-50. Epub 2005 Nov 29.
[PubMed] http://www.ajph.org/cgi/content/abstract/96/1/47

Katz NL.
Wind Shift in California's Battle Against Teen Smoking
Christian Science Monitor - November 28, 1997
http://csmonitor.com/cgi-bin/durableRedirect.pl?/durable/1997/11/28/us/us.5.html

Silva GE, Sherrill DL, Guerra S, et al.
Asthma as a Risk Factor for COPD in a Longitudinal Study.
Chest. 2004 Jul;126(1):59-65. [PubMed]
http://www.chestjournal.org/cgi/content/abstract/126/1/59

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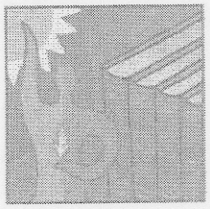

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Tobacco Control, Stigma and Public Health: Rethinking the Relations

Ronald Bayer, PhD, and Jennifer Stuber, PhD

The AIDS epidemic has borne witness to the terrible burdens imposed by stigmatization and to the way in which marginalization could subvert the goals of HIV prevention. Out of that experience, and propelled by the linkage of public health and human rights, came the commonplace assertion that stigmatization was a retrograde force.

Yet, strikingly, the antitobacco movement has fostered a social transformation that involves the stigmatization of smokers. Does this transformation represent a troubling outcome of efforts to limit tobacco use and its associated morbidity and mortality; an ineffective, counterproductive, and moralizing dead end; or a signal of public health achievement? If the latter is the case, are there unacknowledged costs? (*Am J Public Health.* 2006;96:XXX–XXX. doi:10.2105/AJPH.2005.071886)

Long prohibited on trains, planes, and buses, smoking is increasingly barred in restaurants and bars. In 2004, 10 states had imposed total bans on smoking in restaurants, and 6 had extended such limits to bars.[1] Public beaches in California have enacted smoking prohibitions.[2] Although such restrictions have been imposed on the *act* of smoking, they have inevitably had profound impacts on smokers themselves and their social standing. In any city, smokers can be found huddled outside office buildings no matter how inclement the weather. Firms boldly announce that they will not employ and may even fire smokers because of the additional cost of their medical care,[3] or because smoking does not project the "image" they wish to present to the public.[4]

Commenting on the rise and decline of the cigarette and smoker in America, medical historian Allan Brandt, who in the early 1980s, on the eve of the AIDS epidemic, so carefully examined the stigma associated with sexually transmitted disease, wrote,

> In the last half century the cigarette has been transformed. The fragrant has become foul. . . . An emblem of attraction has become repulsive. A mark of sociability has become deviant. A public behavior is now virtually private. Not only has the meaning of the cigarette been transformed but even more the meaning of the smoker [who] has become a pariah . . . the object of scorn and hostility.[5]

Has this transformation led to a decline in the prevalence of smoking in American society? If so, is this use of stigmatization justified or does it lead to an ineffective or even counterproductive moralistic dead-end?

The efforts propelling this transformation resonate with a long history of stigmatization in public health, especially involving the behavior of the poor, the foreign-born, and racial and ethnic minorities. But they run counter to a revisionist orthodoxy that had emerged during the last years of the 20th century that asserts that stigmatization of those who are already vulnerable provides the context within which disease spreads, exacerbating morbidity and mortality by erecting barriers between caregivers and those who are sick, and by imposing obstacles on those who would intervene to contain the spread of illness. In this view, it is the responsibility of public health officials to counteract stigmatization if they are to fulfill the mission to protect the communal health.

Furthermore, because stigma imposes unfair burdens on those who are already at a social disadvantage, the process of stigmatization, it is argued, implicates the human right to dignity. Hence, to the instrumental reason for seeking to extirpate any stigma, a moral concern was added.

But is it true that stigmatization always represents a threat to public health? Are there occasions when the mobilization of stigma may effectively reduce the prevalence of behaviors linked to disease and death? And if so, how ought we to think about the human rights issues that are involved?

Although interest in how societies stigmatize outsiders and the impact of stigmatization on those marked by unacceptable differences was spurred by Erving Goffman's seminal *Stigma: Notes on the Management of Spoiled Identity,*[6] published more than 40 years ago, and although the sociologists of socially discordant behavior underscored the ways in which a stigma imposed burdens on those who were labeled "deviant,"[7,8] it was the AIDS epidemic both domestically and globally that provided the context for the articulation of a strong thesis linking stigmatization and public health.

Within the United States, discussions centered on the fact that those who were initially most vulnerable to HIV—gay and bisexual men and illegal drug users—were already stigmatized.[9] But even persons considered less culpable for their illness, such as children with HIV or persons infected through tainted blood products, were also the objects of fear, the targets of exclusionary impulses.[10] Globally, in nations where HIV was primarily transmitted heterosexually, a pattern of discrimination and even violence emerged.

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Whenever stigmantization occurred, the negative consequences were predictable. Herek,[11] who has studied AIDS-related stigma, noted,

> The widespread expectation of stigma combined with actual experiences with prejudice and discrimination exerts a considerable impact on [people with HIV], their loved ones and caregivers. It affects many of the choices [they] make about being tested and seeking assistance for their physical, psychological and social needs. . . . Fearing rejection and mistreatment many . . . keep their serostatus a secret.[11]

Stigmatization also functioned to buttress the social subordination of those who were already marginalized.[12]

Speaking before the UN General Assembly in 1987, Jonathan Mann, director of the World Health Organization's Global Program on AIDS, underscored the significance of stigmatization and the social and political unwillingness to face the epidemic as being "as central to the global AIDS challenge as the disease itself."[12] A year later, the world summit of health ministers adopted a declaration (as did the World Health Assembly) that underscored the obligation of governments to protect people with HIV from stigmatization. There was a "need in AIDS prevention programs to protect human rights and human dignity. Discrimination against, and stigmatization of HIV infected people and people with AIDS . . . undermine public health and must be avoided."[12] At the beginning of the 21st century, the persistence of stigmatization and the need to confront it remained central concerns of international public health. Peter Piot, director of the Joint United Nations Programme on HIV/AIDS, asserted that the "effort to combat stigma" was at the top of his list of "the five most pressing items on [the] agenda of the world community."[12]

Stigmatization represented a profound psychological and social burden on those with AIDS or HIV infection and it also fuelled the spread of the epidemic. Both these elements were central to asserting the link between public health and human rights. Writing some years after he had left the World Health Organization, Mann drew a conclusion about the need to fight stigmatization that was far broader than the pressing and immediate concern about AIDS. Indeed, it was Mann's central mission to extend to public health in general the lessons he had learned from his encounter with AIDS.

> The evolving HIV/AIDS pandemic has shown a consistent pattern through which discrimination, marginalization, stigmatization and more generally a lack of respect for the human rights and dignity of individuals and groups heightens their vulnerability to being exposed to HIV. In this regard HIV/AIDS may be illustrative of a more general phenomenon in which individual and population vulnerability to disease, disability and premature death is linked to the status of respect for human rights and dignity.[13]

Against this backdrop, the course of antitobacco advocacy and policy seems all the more striking. Tobacco consumption accounts for close to 400 000 deaths a year in the United States. Globally, nearly 5 million deaths a year are attributed to cigarette smoking.[14] By any measure, tobacco-associated morbidity is a grave public health threat. Yet, in this instance, the concerns about the impacts of stigmatization have been given little consideration. In some public health circles, there has even been a return to an older public health tradition, one that seeks to mobilize the power of stigmatization to affect collective behavior.

The 1964 surgeon general's report on smoking and health, a watershed in American public health, was issued at a moment when tobacco consumption was ubiquitous. In the United States, 50% of men and 35% of women smoked. Inadequate campaigns against the tobacco industry emerged, and those who smoked were warned weakly about the dangers of cigarettes. Some limits were imposed on advertising.[15] But it was the gradual framing of smoking as an environmental health issue by antismoking activists, even when scientific evidence was far from definitive, that began to transform the social context of smoking as normal adult behavior.[16]

By the end of the 1970s, evidence began to mount that smoking was increasingly being viewed as undesirable by significant proportions of nonsmokers. In 1 survey, a third of smokers agreed. In 1979, Markle and Troyer wrote,

> In addition to being seen as harmful to health, smoking came to be seen as undesirable, deviant behavior and smokers as social misfits. In fact data shows that people increasingly view smoking as reprehensible.[17]

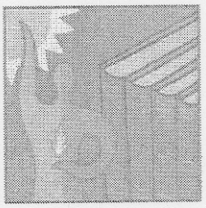
To confront such malefactors, some believed, anything that might work had to be considered, even heavy-handed moral opprobrium. In the *New York Times*, a psychiatrist wrote,

> What we need is a national campaign that results in the stigmatization rather than the glorification of the smoker. This, in my opinion, would be the most effective way of reducing the number of smokers and confining their smoke to the privacy of their homes.[18]

Under certain circumstances, parents who smoked in the presence of their children were accused of abuse and neglect.[19]

Responding to changing public attitudes, local lawmakers throughout the country began to impose restrictions on where smoking could occur. By the mid-1980s, 80% of the US population lived in states where some limits on public smoking had been imposed.[20] Research suggesting that passive smoking increases the risk of heart disease and cancer made it possible to assert that those who smoked in public were culpable of the deaths of innocents. Joseph Califano, former secretary of the US Department of Health, Education, and Welfare, if in a hyperbolic manner, gave voice to a mood that provided the impetus for such efforts. Cigarette smoking, he asserted, was

> America's top contagious killer disease. . . . Cigarette smoking is



> slow motion suicide. It is tragic when people do it to themselves. But it is inexcusable to allow smokers to commit slow motion murder.[21]

In an editorial commenting on research implicating passive smoke in the deaths of nonsmoking spouses, the *New York Times* wrote of "Smoking Your Wife to Death."[22] Ironically then, the focus on the potential environmental impacts of smoking opened the way to a characterization of smokers that was more stigmatizing than had been the rationale of public policy, i.e., the self-harming aspects of tobacco use.

As smoking rates declined in the 1980s and 1990s, and more importantly as the social class composition of smokers underwent a dramatic shift downward—those with more education were quitting, while those at the bottom of the social ladder continued to smoke—states with more aggressive antismoking campaigns moved beyond a focus on the deleterious consequences of public smoking for nonsmokers. Against a backdrop of massive advertising and promotion that linked cigarettes to athletic prowess, success, and sexual attraction, public health officials needed a powerful counterweight. And so they began to embrace a strategy of denormalization to further shift population norms about smoking—and that pits nonsmokers against smokers. Whether intentionally or inadvertently, this strategy provided fertile ground for stigmatization, at once discouraging new smokers and prodding those who smoked into giving up their toxic habit.

The Massachusetts tobacco control program noted, "Norms that allow smokers to smoke in most venues, including while at work or *home*, provide little incentive to quit."[23] Florida's tobacco control efforts sought to "deglamorize" smoking, and the extent to which students were "less likely to buy into the allure of tobacco"[24] was viewed as a mark of their impact. California's campaign to "denormalize" tobacco consumption sought "to push tobacco use out of the charmed circle of normal desirable practice, to being an abnormal practice."[25] Lauding the efforts of the California Health Department, Gilpin et al. embraced the force of social conformity, noting, "In a society where smoking is not viewed as an acceptable activity, fewer people will smoke, and as fewer people smoke, smoking will become ever more marginalized."[26]

The social transformation of the smoker has occurred in other industrialized nations as well. In Germany, for example, the image of the smoker as a handsome, successful executive has been increasingly displaced by one that depicted smokers as asocial, irresponsible, and self-destructive.[27] Even in Denmark, which viewed itself as immune to the lures of moral crusades, there are indications that the aura surrounding tobacco has been transformed.[28]

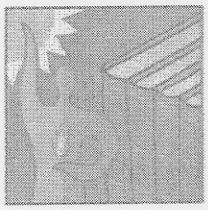
The embrace of a strategy of denormalization by public health officials and antitobacco activists has been fueled by suggestions that the stigmatization of smoking has in fact had an impact on smoking behavior. One study noted in 2003, "Cigarette smoking is not simply an unhealthy behavior. Smoking is now considered a deviant behavior—smokers are stigmatized." Such stigmatization, the authors conclude, "may have been partly responsible for the decrease in the smoking population."[29] The advocacy group Americans for Non-Smokers' Rights noted that tobacco control advocates had stumbled onto the best strategy for reducing tobacco consumption, "encouraging society to view tobacco use as an undesirable and antisocial behavior."[30]

What is most striking about these analyses is the extent to which they ignore without comment the overarching concerns raised in prior years about the relation between stigmatization and effective public health interventions. Certainly there are people within the public health community who believe that they are stigmatizing a behavior and not smokers themselves, and for them this distinction is crucial. However, whether it is in fact possible to make such a distinction is an empirical question.

Some commentators have also expressed concern about a process that seems to blame smokers rather than the industry that has ensnared them. Furthermore, critics have voiced concerns, well known from the literature on AIDS, that stigmatization may in the end be counterproductive. But there are also antitobacco advocates who believe that to the extent that stigmatization limits smoking behavior, it is to be deployed rather than eschewed. For them, the moral question of how to balance the overall public health benefit that may be achieved by stigmatization against the suffering experienced by those who are tainted by "spoiled identities" is virtually never addressed. The issue becomes all the more pressing as stigmatization falls on the most socially vulnerable—the poor who continue to smoke.

The AIDS epidemic bore witness to the terrible burdens imposed by stigmatization and to the way in which marginalization could subvert the goals of HIV prevention. Out of that experience and propelled by the linkage of public health and human rights, it became commonplace to assert that stigmatization was a retrograde force. Some might dismiss the parallel we have drawn between the role of stigmatization in the AIDS epidemic and its use by antitobacco advocates. Surely, the former case is more severe. But the experience of confronting AIDS stigmatization compels us to rethink these issues because many public health advocates have explicitly taken the experience of AIDS to draw a generalized lesson about the relation between stigmatization and public health.

If stigmatization does contribute to reducing the human costs of smoking by encouraging cessation or preventing the onset of tobacco use, are the personal burdens it creates morally justifiable? Although it provides a point of departure, the utilitarian calculus, so vital to public health



thinking, is insufficient for answering the question.

Much will depend on the nature and the extent of stigma-associated burdens and on how the antitobacco movement deploys stigmatization as an instrument of social control. For example, policies and cultural standards that result in isolation and severe embarrassment are different from those that cause discomfort. Those that provoke a sense of social disease are not the same as those that mortify. Acts that seek to limit the contexts in which smoking is permitted are different from those that restrict the right to work, to access health or life insurance, or to reside in communities of one's choice.

The extent to which the deployment of stigmatization exacerbates already-extant social disparities or has long-term counterproductive consequences for the effort to confront the epidemic of smoking-related morbidity must also be considered. And what is true for smoking may have broader applicability for other individual behaviors deemed unhealthy such as "overeating" and illegal drug use.

Only when we understand the circumstances under which stigmatization transforms behaviors linked to disease and early death and are able to distinguish these from the circumstances in which stigmatization has negative impacts on public health will it be possible to weigh the competing moral claims of population health and the burdens that policy may impose on the socially vulnerable. Then it will be possible to make choices informed by hard evidence rather than wishful thinking. ■

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References

1. American Lung Association. State of tobacco control: 2002. Available at: http://www.lungaction.org/reports/tobacco-control.html. Accessed March 16, 2005.

2. Marshall C. San Francisco bans smoking in parks and other open spaces. *New York Times.* February 13, 2005;5:2.

3. Peters J. Company's smoking ban means off-hours, too. *New York Times.* February 8, 2005;C5.

4. Holt S. Saying no to smokers. *Seattle Times.* October 10, 2004:E1.

5. Brandt A. Blow some my way: passive smoking, risk and American culture. In: Lock S, Reynolds L, Tansey E, eds. *Ashes to Ashes: the History of Smoking and Health.* Amsterdam, The Netherlands: Rodopi BV; 1998:164–191.

6. Goffman E. *Stigma: Notes on the Management of Spoiled Identity.* Englewood Cliffs, NJ: Prentice Hall; 1963.

7. Becker H. *The Outsiders.* New York, NY: Free Press; 1963.

8. Schur E. *Labeling Deviant Behavior.* New York, NY: Harper & Row; 1971.

9. Poirier R. AIDS and traditions of homophobia. *Soc Res.* 1988;55:460–475.

10. Kirp DL, Epstein S. *Learning by Heart: AIDS and Schoolchildren in America's Communities.* New Brunswick, NJ: Rutgers University Press; 1989.

11. Herek G. AIDS and stigma. *Am Behav Scientist.* 1999;42:1102–1112.

12. Parker R, Aggleton P. HIV and AIDS-related stigma and discrimination: a conceptual framework and implications for action. *Soc Sci Med.* 2003;57(1):13–24.

13. Mann J, Gostin J, Gruskin S. Health and human rights. *Health Hum Rights Int J.* 1994;1(1):1–14.

14. World Health Organization. Global tobacco treaty enters into force with 57 countries already committed. Available at: http://www.who.int/mediacentre/news/releases/2005/pr09/en. Accessed March 16, 2005.

15. McAuliffe R. The FTC and the effectiveness of cigarette advertising regulations. *J Public Policy Marketing.* 1988;7:52.

16. Bayer R, Colgrove J. Children and bystanders first: the ethics and politics of tobacco control in the United States. In: Feldman EA, Bayer R, eds. *Unfiltered: Conflicts Over Tobacco Policy and Public Health.* Cambridge, Mass: Harvard University Press; 2004:9–37.

17. Markle G, Troyer R. Smoke gets in your eyes: cigarette smoking as deviant behavior. *Soc Problems.* 1979;26:611–625.

18. Gardner R. Fatuous and futile road to self-esteem [letter to editor]. *New York Times.* July 30, 1977:A13.

19. Clark C. An argument for considered parental smoking in child abuse and neglect proceedings. *J Contemp Health Law Policy.* 2002;19:225–246.

20. *The Health Consequences of Involuntary Smoking.* Washington, DC: US Department of Health and Human Services; 1986.

21. Califano JA Jr. Testimony. In: *Hearings Before the Subcommittee on Civil Service, Post Office, and General Services of the Committee on Governmental Affairs, United States Senate.* Washington, DC: US Government Printing Office; 1985.

22. Smoking your wife to death [editorial]. *New York Times.* January 21, 1981:A22.

23. Commonwealth of Massachusetts Department of Public Health. Chapter 6: Changing Social Norms. Available at: http://www.mass.gov/dph/mtcp/reports/2000/aptrep_2000social.htm. Accessed September 24, 2005.

24. Bauer UE, Johnson TM, Hopkins RS, Brooks RG. Changes in youth cigarette use and intentions following implementation of a tobacco control program: findings from the Florida youth tobacco survey, 1998–2000. *JAMA.* 2000;284:723–728.

25. *A Model for Change: The California Experience in Tobacco Control.* Sacramento, Calif: Tobacco Control Section, California Department of Health Services; 1998.

26. Gilpin E, Lee L, Pierce J. Changes in population attitudes about where smoking should not be allowed: California versus the rest of the USA. *Tob Control.* 2004;13:38–44.

27. Frankenberg G. Between paternalism and voluntarism: tobacco consumption and tobacco control in Germany. In: Feldman EA, Bayer R, eds. *Unfiltered: Conflicts Over Tobacco Policy and Public Health.* Cambridge, Mass: Harvard University Press; 2004:161–190.

28. Albaek E. Holy smoke, no more? Tobacco control in Denmark. In: Feldman EA, Bayer R, eds. *Unfiltered: Conflicts Over Tobacco Policy and Public Health.* Cambridge, Mass: Harvard University Press; 2004:190–218.

29. Kim SH, Shanahan J. Stigmatizing smokers: public sentiment toward cigarette smoking and its relationship to smoking behaviors. *J Health Commun.* 2003;8:343–367.

30. *Recipe for a Smoke Free Society.* Berkeley, Calif: Americans for Nonsmokers' Rights; 2003.

31. Katz S. Secular morality. In: Brandt AM, Rozin P, eds. *Morality and health.* New York, NY: Routledge; 1997:297–307.

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TOBACCO CONTROL?

In the February issue of the Journal, 3 former surgeons general emphasize the need for reducing tobacco addiction and disease.[1] Fiore et al.[2] make a case for the $14 billion National Action Plan for Tobacco Cessation,[3] which consists of a national quit hotline, a media campaign, cessation benefits for federally funded health care programs, more research, and training for health care providers. This is to be paid for out of $28 billion generated by a $2-per-pack excise tax on tobacco.

Missing from all studies on the purported harmful effects of tobacco use on morbidity and mortality is an analysis of the confounding influence of exposure to adverse childhood experiences[4] and of the stress of the anti-tobacco program itself. This at-risk population has already been exposed to more than its share of dysfunctional authority figures and, in extreme cases, actual child abuse. Characteristic of this experience is subjection to excessive control, distorted guilt, marginalization, and copious punishment. Survivors of such challenging childhoods are all too often mistaken for easy targets for exploitive behavior.

The current cessation program relies heavily on the use of distorted blame, social ostracism, and punishment in the form of job discrimination and exorbitant taxes. These methods do work on the easy subjects with low nicotine tolerance scores and who are still at low risk for purported illness. Since the actual reduction in these illnesses is likely to be small, one would have to question the effectiveness of this dubious program. And what happens to those who fail this behavior control program?

The anti-tobacco program forces a choice between 2 paths, both with negative consequences. It simply produces conflict and imposes more stress on those at greatest risk. This unproductive stress increases illness. No study to date has evaluated the extent of this unintended effect of the anti-tobacco program. A thorough analysis of this effect needs to be completed, especially among stress-sensitive pregnant women[5,6] and those who are or have been exposed to high levels of trauma and stress in the military.[7] The projected 50% success rate of the program[2] will only cause increased social isolation in these at-risk populations. Much more effective cessation methods need to be offered, long before more money is spent on programs that appear to continue and institutionalize the dysfunctional relationships that many people who smoke were exposed to in their youth. ■

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References

1. Koop CE, Richmond J, Steinfeld J. America's choice: reducing tobacco addiction and disease. *Am J Public Health.* 2004;94:174–176.

2. Fiore MC, Croyle RT, Curry SJ, et al. Preventing 3 million premature deaths and helping 5 million smokers quit: a National Action Plan for Tobacco Cessation. *Am J Public Health.* 2004;94:205–210.

3. National Action Plan for Tobacco Cessation. Available at: http://www.ctri.wisc.edu/home/NatActionPlan%200204.pdf (PDF file). Accessed March 20, 2004.

4. Anda RF, Croft JB, Felitti VJ, et al. Adverse childhood experiences and smoking during adolescence and adulthood. *JAMA.* 1999;282:1652–1658.

5. Relier JP. Influence of maternal stress on fetal behavior and brain development. *Biol Neonate.* 2001;79:168–171.

6. Myers RE. Production of fetal asphyxia by maternal psychological stress. *Pavlov J Biol Sci.* 1977;12:51–62.

7. Hourani LL, Yuan H, Bray RM, Vincus AA. Psychosocial correlates of nicotine dependence among men and women in the U.S. naval services. *Addict Behav.* 1999;24:521–536.