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1 Stirling Y, Woolf L, North WRS, Seghatchian MJ, Meade TW. Haemostasis in normal pregnancy. *Thromb Haemost* 1984; **52:** 176–82.
2 Szekeres-Bartho J, Faust Z, Varga P, Szereday L, Kelemen K. The immunological pregnancy protective effect of progesterone is manifested via controlling cytokine production. *Am J Reprod Immunol* 1996; **35:** 348–51.
3 Bremme K. Haemostasis in normal pregnancy. In: Brenner B, Marder VJ, Conard J, eds. Women's issues in thrombosis and hemostasis. London: Martin Dunitz, 2002: 151–65.
4 Wegmann TG, Lin H, Guilbert L, Mosmann TR. Bidirectional cytokine interactions in the maternal-fetal relationship: is successful pregnancy a Th2 phenomenon? *Immunol Today* 1993; **14:** 353–56.
5 Laird SM, Tuckerman EM, Cork BA, Linjawi S, Blakemore AIF, Li TC. A review of immune cells and molecules in women with recurrent miscarriage. *Hum Reprod Update* 2003; **9:** 163–74.
6 Clifford K, Rai R, Watson H, Regan L. An informative protocol for the investigation of recurrent miscarriage: preliminary experience of 500 consecutive cases. *Hum Reprod* 1994; **9:** 1328–32.
7 Hatasaka HH. Recurrent miscarriage: epidemiologic factors, definitions, and incidence. *Clin Obstet Gynecol* 1994; **37:** 625–34.
8 Sarig G, Younis JS, Hoffman R, Lanir N, Blumenfeld Z, Brenner B. Thrombophilia is common in women with idiopathic pregnancy loss and is associated with late pregnancy wastage. *Fertil Steril* 2002; **77:** 342–47.
9 Brenner B, Hoffman R, Blumenfeld Z, Weiner Z, Younis JS. Gestational outcome in thrombophilic women with recurrent pregnancy loss treated by enoxaparin. *Thromb Haemost* 2000; **83:** 693–97.
10 Laude I, Rongieres-Bertrand C, Boyer-Neumann C, et al. Circulating procoagulant microparticles in women with unexplained pregnancy loss: a new insight. *Thromb Haemost* 2001; **85:** 18–21.
11 Rai R, Regan L, Chitolie A, Donald J, Cohen H. Placental thrombosis and second trimester miscarriage in association with activated protein C resistance. *Br J Obstet Gynaecol* 1996; **103:** 842–44.
12 Gris JC, Quere I, Monpeyroux F, et al. Case-control study of the frequency of thrombophilic disorders in couples with late foetal-loss and no thrombotic antecedent—the Nimes Obstetricians and Haematologists Study 5 (NOHA5). *Thromb Haemost* 1999; **81:** 891–99.
13 Makhseed M, Raghupathy R, Azizieh F, Farhat R, Hassan N, Bandar A. Circulating cytokines and CD30 in normal human pregnancy and recurrent spontaneous abortions. *Hum Reprod* 2000; **15:** 2011–17.
14 Marjono AB, Brown DA, Horton KE, Wallace EM, Breit SN, Manuelpillai U. Macrophage inhibitory cytokine-1 in gestational tissues and maternal serum in normal and pre-eclamptic pregnancy. *Placenta* 2003; **24:** 100–06.

## The Surgeon General's report on smoking and health 40 years later: still wandering in the desert

January 11, 2004, marks the 40th anniversary of the US Surgeon General's report on smoking and health. The unequivocal conclusion that cigarettes cause lung cancer and other diseases was to have ended a debate that had raged for decades (figure 1).[1–5]

The report's condemnation of smoking was the lead story on television and radio news. Newspapers reported the story in banner headlines as big as those for V-E Day or the H-bomb (figure 2). Until that moment, the tobacco industry had always had the last word through its ability to flood the mass media with advertising messages that glamourised the cigarette and assuaged consumer doubts about the harm smoking might cause.

The War on Smoking had begun; the tobacco industry made a pre-emptive strike by funnelling a total of

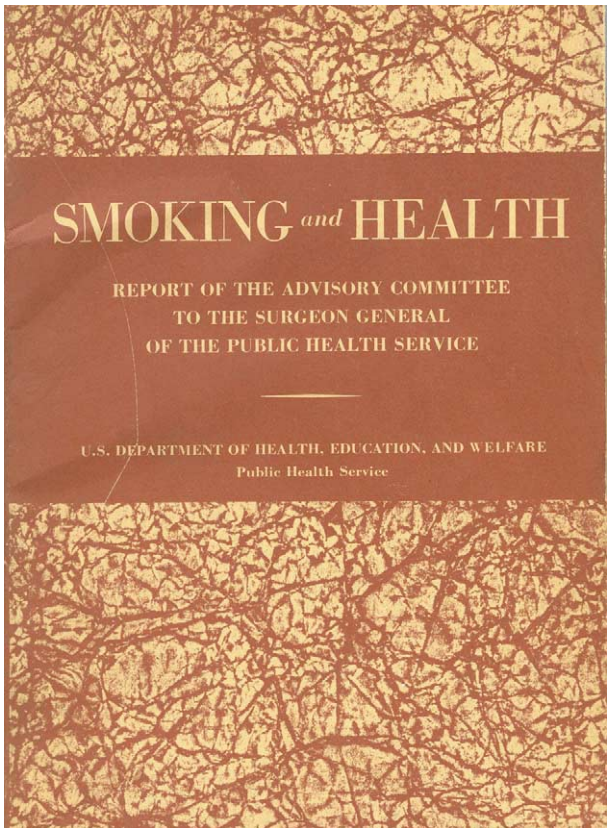


Figure 1: **Cover of Surgeon General's report on smoking and health**

US$18 million over 14 years to the American Medical Association (the only major health organisation to withhold its endorsement of the report) in a research programme to "identify and remove" any possible harmful components of cigarette smoke.[6]

The tobacco industry has remained in the driver's seat throughout the four decades since the Surgeon General's report. 7 years elapsed before Congress banned cigarette advertisements from the airwaves in 1971, and then only at the request of the tobacco companies who had seen sales flatten as the result of the first wave of antismoking commercials by the American Cancer Society between 1967 and 1970.[7] Cigarette brand logos soon reappeared on television more ubiquitously and more cost-effectively than ever by means of broadcasts of motor racing and other newly tobacco-sponsored sporting events. Cigarette advertising remained on billboards until 1998; art museums, performing arts troupes, and charitable organisations from food banks to domestic violence shelters still continue today to line up for handouts at tobacco company doorways.

Not until more than two decades after the report, and only after the publication of the first large studies implicating passive smoking as a cause of lung cancer in non-smokers,[8–11] were the first laws with any teeth on clean indoor air passed by a handful of US cities. Airline flight-attendants, the personification of canaries in the mine, struggled for nearly 25 years to end smoking aloft.

The inability to curb cigarette use represents the worst public-health failure in history: today, the number of US consumers who smoke is about the same as in 1964, and the cohort of users is younger than ever. Even the recent 4-year decline in smoking in adolescents has yet to offset the dramatic increase in this age group in the past decade.[11,12]

40 years after the Surgeon General's report, we are still wandering in the desert, almost as far away from the promised land as we were when we began the journey. Progress has come about so slowly because of a combination of political clout and lucrative payoffs to the very forces that should have been in the vanguard to end the tobacco pandemic. Congress (Democrat and Republican representatives alike), the mass media, medical organisations, and academia have all been chronic recipients of largesse from the tobacco industry, and have not been prepared to bite the hand that fed them.

Meanwhile the health community has carried on, bouncing from one failed multi-million dollar public-relations crusade after another (eg, Project ASSIST, Smokeless States, The Great American Smoke-out, Kick Butts Day, A Smoke-Free Generation by the Year 2000, Healthy People 2000), only to settle each time for voluntary agreements crafted by the tobacco industry.


Figure 2: **Front page of *Chicago Sun-Times*, Jan 12, 2003**
**Surgeon General's report came out on Jan 11, 2003**

The US public-health community have also put its faith in three mirages: safer cigarettes that promise to reduce death and disease, policy coalitions that propose prohibitionist legislation, and state attorneys-general who worship the golden calf of cash settlements.

Shirking its responsibility to dissuade people from smoking, the US National Cancer Institute devoted its entire budget on tobacco between 1967 and 1981 to the unsuccessful effort to discover a safer cigarette.[13,14] The same quest continues today, under the guise of "harm reduction", a concept supported by cigarette and snuff manufacturers alike by means of generous research grants to several US medical schools. At the same time, medical school curricula remain as devoid as ever of comprehensive interdisciplinary instruction and assignments to address and tackle tobacco problems.

The mirage of an advertising ban has revealed itself time and time again. Such static-minded regulation seems to stimulate the creative juices of cigarette marketeers, who have continuously and ingeniously redefined the very nature of advertising and promotion. Most embarrassing of all, it is now the tobacco industry that spends more money than all government or health organisations together on television advertisements urging teenagers not to smoke and informing viewers that there is no safe cigarette. The main response by the Coalition for Tobacco-Free Kids, the Washington, DC, lobbyists, is to step up its call for the regulation of nicotine and tobacco products by the US Food and Drug Administration.

Building of coalitions, a concept promulgated since the 1980s, has proven to be another mirage. In coalitions, health and civic organisations join hands, the more the merrier, only to be held back by the weakest links. The bulk of their effort goes to raising funds.

Indeed, the flow of Big Money from Big Tobacco—hundreds of millions of dollars handed over to the states under the Master Settlement Agreement negotiated by the tobacco companies with the attorneys-general—has fooled antismoking groups into thinking they would at long last buy the best minds in the advertising game for major campaigns in the mass media. It did not happen. The sad state of affairs is reflected in the recent paid advertisements by the American Legacy Foundation, established with over a billion dollars in settlement money to fund the overdue national campaign against smoking, which consisted of full pages in the *Wall Street Journal* pleading for donations.

Still missing is a Moses to lead us out of the desert. The one hope is that leadership will emerge from the grassroots, which, after all, was the wellspring of the success of the antismoking movement: legislation on clean indoor air. Independent activists with scant resources, such as John Banzhaf's Action on Smoking and Health, GASP (Group Against Smoking Pollution), and ANR (Americans for Nonsmokers' Rights), led the way, while the American Cancer Society and other large organisations followed.

We challenge the antitobacco movement to rediscover its origins by fanning the flames of grassroots activism, and getting back to the trenches by building broad public constituencies instead of elitist academic oligarchies. Would that today's generation of tobacco controllers might end the self-interested preoccupation with money and grantsmanship, downplay the obsession with tobacco industry documents and injustice collecting, and face up to the loophole-laden reality of prohibitionistic regulatory schemes.

Rather than training more nicotine addictionologists and epidemiologists, we need to cultivate more creative strategists and steadfast troublemakers. In other words, we need less research and more action. Above all, we need less reliance on Big Government, which has failed the test of courage time and time again.

Our hope is that new and imaginative leadership will arise to establish and stick to realistic goals and priorities, to divide up the responsibilities for achieving them, and to be held accountable for their success or failure. Without such maturation, the antismoking movement will continue to point madly to the Surgeon General's report while still wandering in the desert.

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1 Levin MI. Etiology of lung cancer: present status. *New York State J Med* 1954; **54:** 769–77.
2 Joint Report of Study Group on Smoking and Health. *Science* 1957; **125:** 1129–33.
3 Burney LE. Smoking and lung cancer: a statement of the Public Health Service. *JAMA* 1959; **171:** 1829–37.
4 Editorial. Smoking and lung cancer. *JAMA* 1959; **171:** 2104.
5 Schuman LM. The origins of the Report of the Advisory Committee on Smoking and Health to the Surgeon General. *J Public Health Policy* 1981; **2:** 19–27.
6 AMA's response to the smoking problem. *JAMA* 1964; **187:** 27.
7 Warner KE. The effects of the anti-smoking campaign on cigarette consumption. *Am J Public Health* 1977; **67:** 645–50.
8 Trichopoulos D, Kalakandidi A, Sparros L, MacMahon B. Lung cancer and passive smoking. *Int J Cancer* 1981; **27:** 1–4.
9 Hirayama T. Nonsmoking wives of heavy smokers have a higher risk of lung cancer: a study from Japan. *BMJ* 1981; **282:** 183–85.
10 Correa P, Pickle LW, Fonham E, Lin Y, Haenszel W. Passive smoking and lung cancer. *Lancet* 1983; **2:** 595–97.
11 Cigarette smoking among adults—United States, 2001. *MMWR Morb Mortal Wkly Rep* 2003; **52:** 953–56.
12 Percentage of high school students who reported current cigarette smoking—United States, 1991-2001. *MMWR Morb Mortal Wkly Rep* 2002; **51:** 409–12
13 Blum A. Butting in where it counts. *Hosp Phys* 1980; **16:** 22–35.
14 Miller GH. The "less hazardous"cigarette: a deadly delusion. *New York State J Med* 1985; **85:** 313–17.