

reflected the sum of individual ratings on nine items: minimum age, packaging, clerk intervention, photo identification, vending machines, free distribution, graduated penalties, random inspections, and statewide enforcement. A state that met the target for all nine items would receive a summary score of 36 points (39 points if the target was exceeded on three items).¹

Table 1 shows the summary scores by state and year. Summary scores ranged from a low of 0 points in 1993 to a high of 30 points in 1998 and 1999. Average summary scores ranged from 8.35 points in 1993 to 15.59 points in 1999. Separate, reduced scores are also listed (in parentheses) for states that enacted state based preemption measures. These states are highlighted in light of the significant public health policy arguments against preemptive state tobacco control laws.² (Data for table 1 have been revised and reformatted from Alciati and colleagues¹ to present primarily the summary scores without the preemption penalty to enable comparability with the clean indoor air scores presented in Chriqui and colleagues³).

While average scores rose from 1993 to 1999, the peak average score of 15.59 points in 1999 is still relatively low. State legislative activity that accounted for the increases that occurred in the late 1990s focused principally on new measures related to vending machines, clerk intervention, random inspections, and statewide enforcement. Restrictions on minors' access to tobacco products from vending machines and self service displays (that is, without clerk intervention) were covered under the 1996 FDA rule and literature on these topics is now in the mainstream.⁷⁻⁹ Not surprisingly, a number of youth access enforcement provisions enacted by states appear to be framed to facilitate compliance with the Synar implementation regulations.^{2,9}

State measures on preemption doubled from 10 state laws in 1993 to 20 state laws in 1996; however, the trend showing enactment of a high volume of new preemption provisions did not continue into the late 1990s. Nevertheless, as of 1999, 22 states included some preemption measure, thereby continuing the overall trend in many of these states in which preemption has locked in relatively weak state youth access laws.

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References

¹ Alciati MH, Frosh M, Green SB, et al. State laws on youth access to tobacco in the United

States: measuring their extensiveness with a new rating system. *Tobacco Control* 1998;7:345-52.

- 2 **Public Law 102-321.** ADAMHA Reorganization Act. 102nd Congress, 2nd session, S 1306, 1992 (June 3); 45 CFR 96, 61. *Federal Register* 1996;January 19:1492-509.
- 3 **Food and Drug Administration.** Regulations restricting the sale and distribution of cigarettes and smokeless tobacco to protect children and adolescents. Final rule. *Federal Register*. 1996;61:44369-5318. [Note: The US Supreme Court invalidated this Rule in *Food and Drug Administration v. Brown & Williamson Tobacco Corp.* US 98-1152 (21 March 2000).]
- 4 **Wakefield, MA, Chaloupka, FJ.** Improving the measurement and use of tobacco control "inputs". *Tobacco Control* 1998;7:333-5.
- 5 **Chriqui JF, Frosh M, Brownson RC, et al.** Application of a rating system to state clean indoor air laws (USA). *Tobacco Control* 2002;11:26-34.
- 6 **Siegel M, Carol J, Jordan J, et al.** Preemption in tobacco control. *JAMA* 1997;278:858-63.
- 7 **US Department of Health and Human Services.** *Preventing tobacco use among young people. A report of the Surgeon General, 1994.* Atlanta, Georgia: Public Health Service, Centers for Disease Control and Prevention, Office on Smoking and Health, 1994. (US Government Printing Office Publication No S/N 017-001-00491-0.)
- 8 **Institute of Medicine.** *Growing up tobacco free: preventing nicotine addiction in children and youths.* Lynch BS, Bonnie RJ, eds. Washington DC: National Academy Press, 1994.
- 9 **US Department of Health and Human Services.** *Synar regulation implementation. Report to Congress on FFY 1997 state compliance.* Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, 1998. (US Department of Health and Human Services Publication No. (SMA) 98-3185).

Blocking access to online tobacco sales sites

Recent research expresses concern about adolescents attempting to buy cigarettes on the internet.¹ Since the Master Settlement Agreement restrictions on the tobacco industry do not apply to the internet, the internet is an open channel for pro-tobacco images and promotions. According to Forrester Research, sales will approach \$5 billion by 2003, potentially causing states to lose \$1.3 billion dollars in tax revenues.² Frequent exposure to icons and symbols increases liking, and can make unhealthy activities appear "normative". Craving or possessing tobacco promotional materials is related to positive attitudes toward tobacco and to susceptibility.^{3,4} The images of pro-tobacco sites can make tobacco use appear glamorous, as tobacco websites portray smokers as young, thin, and attractive, and often feed into young girls' insecurities.⁵⁻⁷

A number of "sting" operations highlight the fact that underaged individuals have

ready access to buying tobacco online.^{8,9} Given the inevitable use of filters for schools, libraries, and some places of employment, we believe that filtering programs should be effective in limiting access to sites they monitor, and that "stealth" blocking be avoided. The Center for Media Education (CME) tested the ability of programs to block access to 45 tobacco and alcohol sites, and concluded: "... filters do not effectively screen promotional alcohol and tobacco content."¹⁰ To test this concern and to evaluate internet monitoring access products, we reviewed 28 programs available for blocking access and selected four that included tobacco as a category for blocking: Bess/N2H2, Cyber Patrol, CYBERSitter, and iWay Patrol. Each program was tested separately. Testing occurred during the last two weeks of March of 2001, and re-tests were done 11-13 April 2001 for pages that did not load in March.

Random samples were drawn for a content analysis project that ultimately included 316 pro-tobacco websites.³ Of these, 154 sold tobacco products and were used in the present analysis. Most sold cigarettes (67 sites), or cigars (49 sites), while some sites sold multiple products as well as "other" products (pipe tobacco, snuff, chew) (38 sites).

Table 1 presents a summary of the results concerning blocking access. The only program to block more than half of the websites was Bess/N2H2, which blocked 65%. It is also alarming that the programs tested disagreed on what to block. At best, Bess/N2H2 and Cyber Patrol blocked the same 33 sites, which is a small amount of agreement.

To ameliorate this problem, we believe that subscribers should be empowered to add to the "not" lists. Lists of blocked sites should be transparent so subscribers know what is or is not accurately blocked by the filtering programs they use. Additionally, tobacco control advocates can become actively involved in this process. First, most filtering programs welcome input and allow individuals to submit websites at a location on their home page. At a higher level of involvement, tobacco control advocates can create a rating system like RACi for coding content based on different levels.* Importantly, one category could be created for tobacco (and alcohol) sponsorships that can be activated by those parents, school teachers or library officials who prefer not to have children view or download tobacco related materials (for example, highlighting tobacco sponsored NASCAR races) from the web.

*Level 1 could include sex and smoking, underaged smoking, erotic posturing, smoking, and bondage. Level 2 could include erroneous or harmful information. Level 3 could include sites that simply sell cigarettes, cigars, and so on.

Table 1 Filter performance of four software programs

Program	Number of sites visited	Number blocked sites	Percentage blocked	Number not blocked	Percentage unblocked
Bess/N2H2	140	91	65%	49	35%
Cyber Patrol	130	41	31.5%	89	68.5%
IWay Patrol	143	39	27.3%	104	72.7%
CYBERSitter	129	13	10.1%	116	89.9%
Average	135.5	46	33.9%	89.5	66.1%

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References

- 1 **Unger JB**, Rohrbach LA, Ribisl KM. Are adolescents attempting to buy cigarettes on the Internet? *Tobacco Control* 2001;**10**:360-3.
- 2 **Forrester Research**. US online tobacco sales soar to \$5 billion in 2005, states will lose \$1.4 billion of tax revenue, 30 April 2001. Accessed 30 December 2001. URL: <http://www.forrester.com/ER/Press/Release/0,1769,551,00.html>
- 3 **Feighery E**, Borzekowski DLG, Schooler C, et al. Seeing, wanting, owning: the relationship between receptivity to tobacco marketing and smoking susceptibility in young people. *Tobacco Control* 1998;**7**:123-8.
- 4 **Unger JB**, Johnson CA, Rohrbach LA. Recognition and liking of tobacco and alcohol advertisements among adolescents: relationships with susceptibility to substance use. *Prev Med* 1995;**24**:461-6.
- 5 **Hong T**, Cody MJ. Presence of pro-tobacco messages on the web. *Journal of Health Communication* (in press).
- 6 **Malone RE**, Bero LA. Cigars, youth, and the internet link. *Am J Public Health* 2000;**90**:790-2.
- 7 **Ribisl KM**, Kim AE, Williams RS. Web sites selling cigarettes: how many are there in the USA and what are their sales practices? *Tobacco Control* 2001;**10**:352-9.
- 8 **Rubin R**. Kids buying smokes online. 13 states warn sites to limit sales of bidis. *USA Today*, 22 December 1999. Accessed 1 December 2001. URL: <http://www.usatoday.com/life/cyber/tech/ctg964.htm>
- 9 **Radziejewski J**, Ortiz K. Department of consumer affairs cracks down on mail-order and internet tobacco dealers who sell cigarettes to minors. 12 April 2001. Accessed 1 September 2001. URL: <http://www.ci.nyc.ny.us/html/dcs/html/cigsminors.html>
- 10 **Center for Media Education**. Youth access to alcohol and tobacco web marketing: the filtering and rating debate. Washington DC: Center for Media Education, 1999, p 3. Accessed 1 December 2001. URL: http://www.cme.org/publications/scrnfltr/report_1104.pdf

Smoking interventions in large Polish enterprises

The results are presented of a Polish study conducted during 2000 by the National Centre for Workplace Health Promotion, The Nofer Institute of Occupational Medicine, involving 755 Polish companies and organisations which were mailed a questionnaire concerning their tobacco-free workplace policy.

According to the findings of the study, the most common tobacco control activity in the workplace is a smoking ban. In most (63.2%) of the companies smoking was banned throughout, except for designated smoking areas. In 20.7% of workplaces smoking was not allowed during official meetings or in other special circumstances or places. Only 13.8% of all organisations responding to the

Table 1 Activities aimed at encouraging and supporting employees to quit smoking

Activity	Percentage of organisations active
Promoting publications (leaflets, posters, etc) on smoking and health	38.6
Carrying out punitive disciplinary measures in case of breaches of the policy	17.2
Popularising countrywide and international campaigns such as "Quit and Win" or "Quit smoking with us"	15.7
Promoting guidebooks on how to quit with useful practical hints	15.2
Organising workshops on smoking and health	13.3
Providing employees with medical counselling on individual basis	10.6
Hiring non-smoking employees	5.9
Providing regular bonuses for non-smokers	1.4
Providing one off bonuses or prizes for employees who decide to quit	1.0
Providing psychological therapy and support groups for smokers trying to quit	0.8
Involving families in the quitting process	0.8
Co-financing nicotine replacement therapy for the employees	0.3
Other	2.5

questionnaire applied a total ban on smoking. In contrast 2.3% of the firms had not introduced any ban. There was no relation between the size, ownership or economic situation of the company and its tobacco policy.

Among 737 of the organisations which had smoking bans, 41.3% instituted severe disciplinary measures on those employees who failed to comply with the ban, 41.7% instituted some disciplinary measures, 14% applied none, and 3% of the companies offered different solutions.

The most important issue for those companies where smoking is allowed in designated areas is the way smoking rooms have been adapted. Problems arise in regard to the well-being of non-smokers. For their sake, a designated smoking room has to be a separate, closed, and properly ventilated area so that the tobacco smoke is isolated. Unfortunately, only a quarter of companies provided smokers with such smoking rooms. Around 35% of the firms allowed smoking in designated areas, and 60% in places that are not isolated from the rest of the building (halls, social facilities or elsewhere). Thus, the employers' obligation to isolate tobacco smoke has not been fulfilled.

More than half of the companies imposed bans without consulting the staff in any way, a quarter instituted the bans after previously discussing the matter with employees' organisations, and in one fifth the staff were allowed to discuss the proposal before any decision was taken.

According to the survey there are several possible activities aimed at encouraging and supporting employees to quit. The most popular measures in Polish companies are presented in table 1.

According to research findings, all kinds of educational activities have proven to be very popular. The employers, however, would rather resort to disciplinary measures than more positive means of encouragement, such as prizes or financial bonuses. Large successful companies are more likely to provide their staff with counselling or group therapy; smaller private enterprises would rather punish those smokers who breach the smoking ban, while public organisations usually distribute educational literature and participate in popular quit campaigns. Some companies on the one hand introduce various bans and regulations, while on the other they neither

support their employees nor provide them with proper designated smoking rooms, etc.

Smoking bans are not the sole solution to the problem. The economic losses that companies suffer as a result of absenteeism, smoking breaks, and lower productivity are still not fully recognised by managers. The problem arises when health professionals are requested to show hard evidence concerning cost effectiveness of such interventions, as little reliable and comprehensive research has been carried out in this area. Only when the stakeholders find health promotion programmes in general and tobacco control in particular to be beneficial will they approve them. For comprehensive programmes to be truly effective, smoking bans and regulations must be supported with counselling and other measures to help smokers adjust to their changed circumstances in the workplace.

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BOOK REVIEW

Combating teen smoking: research and policy strategies

By P D Jacobson, P M Lantz, K E Warner, et al.
The University of Michigan Press, 2001.

Why do teenagers smoke?

Not many years ago former US Surgeon General C Everett Koop was participating in a press conference at the Capitol Building in Washington DC. A reporter asked him directly, "why do teenagers smoke?" His answer, in essence, was "... we have no idea, really. It's different for each child. But we need to know and we need to fund research to accomplish it."

A team of researchers and staff from the School of Public Health, University of Michigan and associated organisations have taken