

Collaborative Research and Action to Control the Geographic Placement of Outdoor Advertising of Alcohol and Tobacco Products in Chicago

DIANA P. HACKBARTH, RN, PhD^a

DANIEL SCHNOPP-WYATT, MA^b

DAVID KATZ^c

JANET WILLIAMS, MA^d

BARBARA SILVESTRI, MA^e

REV. MICHAEL PFLEGER^f

SYNOPSIS

Community activists in Chicago believed their neighborhoods were being targeted by alcohol and tobacco outdoor advertisers, despite the Outdoor Advertising Association of America's voluntary code of principles, which claims to restrict the placement of ads for age-restricted products and prevent billboard saturation of urban neighborhoods. A research and action plan resulted from a 10-year collaborative partnership among Loyola University Chicago, the American Lung Association of Metropolitan Chicago (ALAMC), and community activists from a predominately African American church, St. Sabina Parish. In 1997 Loyola University and ALAMC researchers conducted a cross-sectional prevalence survey of alcohol and tobacco outdoor advertising. Computer mapping was used to locate all 4,247 licensed billboards in Chicago that were within 500- and 1,000-foot radiuses of schools, parks, and playlots. A 50% sample of billboards was visually surveyed and coded for advertising content. The percentage of alcohol and tobacco billboards within the 500- and 1,000-foot zones ranged from 0% to 54%. African American and Hispanic neighborhoods were disproportionately targeted for outdoor advertising of alcohol and tobacco. Data were used to convince the Chicago City Council to pass one of the nation's toughest anti-alcohol and tobacco billboard ordinances, based on zoning rather than advertising content. The ordinance was challenged in court by advertisers. Recent Supreme Court rulings made enactment of local billboard ordinances problematic. Nevertheless, the research, which resulted in specific legislative action, demonstrated the importance of linkages among academic, practice, and grassroots community groups in working together to diminish one of the social causes of health disparities.

^aMarcella Niehoff School of Nursing, Loyola University Chicago, Chicago, IL

^bPikeville College, Pikeville, KY

^cLoyola University Chicago, Chicago, IL

^dCook County Department of Public Health, Oak Park, IL

^eAmerican Lung Association of Metropolitan Chicago, Chicago, IL

^fSaint Sabina Parish, Chicago, IL

Address correspondence to: Diana P. Hackbarth, RN, PhD, Health Promotion, Primary Care, Health Systems and Dietetics, Marcella Niehoff School of Nursing, Loyola Univ. Chicago, 6525 N. Sheridan Rd., Chicago, IL 60626; tel. 773-508-2894; fax 773-508-3241; e-mail <dhackba@luc.edu>.

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Alcohol and tobacco are among the most heavily advertised products. The six major tobacco companies spend \$6 billion annually on advertising and promotion in the United States.¹ Measured media is almost \$800 million a year for beer, \$321 million for liquor, and \$120 million for wine. These figures include only magazine, newspaper, broadcast, and outdoor alcohol advertising. Sponsorships and promotions would likely increase these numbers.²

During the 1990s, tobacco and alcohol companies ranked among the top five advertisers in magazines and newspapers; cigarettes were the most heavily advertised product in outdoor media.³ In the mid-1990s, six of the top 10 outdoor advertisers were tobacco companies.³ Expenditures on outdoor advertising of tobacco products totaled \$655 million in 1996, about one-tenth of all outdoor advertising nationwide.³

Currently, three of the top 10 outdoor advertisers are tobacco or liquor conglomerates, but the percentage of billboard expenditures for tobacco has dropped dramatically as a result of the multistate tobacco settlement agreement, which curtailed most outdoor advertising of tobacco. Between 1995 and 1999, liquor and wine outdoor advertising expenditures increased, while outdoor expenditures for beer fell.^{1,4}

Outdoor advertising of age-restricted products raises both legal and public health concerns. Motorists and pedestrians, including nonsmokers, nondrinkers, and children, cannot avoid exposure to outdoor advertising. Historically, the billboard industry has exercised little restraint in placement of its ads. In 1991, the Outdoor Advertising Association of America (OAAA) responded to public criticism and adopted a voluntary code for advertising.⁵ That code was supposed to ensure that outdoor advertisements of products that could not legally be sold to minors be at least 500 feet from schools, playgrounds, and places of worship. Billboards near areas where children congregate were supposed to be voluntarily labeled with a placard representing the international symbol of a child, indicating that age-restricted products would not be advertised. The code was also designed to set voluntary limits on the number of billboards in a market that advertise products that cannot legally be sold to minors. It also sought to maintain diversification of customers that advertise outdoors.⁵ The alcohol industry also promulgated voluntary codes, which suggest that beer, wine, and liquor ads should not be placed where most of the audience is below the legal drinking age.⁶

These voluntary codes are often ignored, and billboards are placed for maximum visibility in designated markets. Billboard ads are created to match the demographic make-up and socioeconomic characteristics of

the market.⁷⁻⁹ Minority neighborhoods have been heavily saturated with outdoor advertising of tobacco and alcohol products.¹⁰⁻¹³ Billboards advertising age-restricted products can be found near convenience stores, shopping centers, fast food restaurants, homes, and day care centers, along major streets and expressways, on mass transit lines, and in sports stadiums—all places frequented by young people. The result of this strategy is that America's children are exposed to custom-designed outdoor advertising encouraging the use of dangerous products that they cannot legally purchase.

HEALTH DISPARITIES RELATED TO ALCOHOL AND TOBACCO USE

The links between social conditions and health disparities are a growing public health concern.¹⁴ Health problems related to alcohol and tobacco are especially pronounced among the poor and minorities living in inner-city communities targeted by alcohol and tobacco marketers. People with lower levels of education and lower socioeconomic status are more likely to smoke.¹⁵ Patterns of alcohol use also vary by gender, age, and race.

Age-adjusted death rates for heart disease and stroke are declining nationally, due partly to declines in smoking rates, changes in diet, and better control of hypertension. However, people in lower socioeconomic groups have higher mortality, morbidity, and risk factor levels for heart disease and stroke than people in higher socioeconomic groups.¹⁶ Death rates for chronic liver disease and cirrhosis are higher among Hispanic men than among white men. Relative to white rates, age-adjusted death rates for African Americans in the United States are 1.5 as high for alcohol-induced causes of death, 3.8 times as high for hypertension, 1.8 times as high for stroke, and 1.5 times as high for heart disease. The age-adjusted death rate is 53% higher for African Americans than it is for whites.¹⁷ Lung cancer, 85% of which is smoking induced, is the leading cause of cancer death for both sexes and all races, but it accounts for a higher percentage of cancer deaths among African American men than white men.¹⁸

Alcohol and tobacco use clearly contribute to observed health disparities. Reducing consumption among disadvantaged groups through community-level interventions is one way to remediate disparities.

COLLABORATIVE RESEARCH AS A BASIS FOR PUBLIC POLICY INITIATIVES

The collaborative research and action partnership between Loyola University Chicago, the American Lung

Association of Metropolitan Chicago (ALAMC), and a grassroots community group began in the early 1990s. An activist priest and parishioners at St. Sabina's church were concerned about drug and alcohol use in their community. An informal survey of the 10-block region surrounding the predominately African American church identified 118 billboards advertising alcohol and tobacco—far more than the three billboards found in a nearby white neighborhood. A comprehensive 1991 study revealed that predominately minority areas in Chicago had five times as many alcohol billboards as in white areas and three times as many tobacco billboards.¹³ Several unsuccessful attempts were made over a six-year period to pass a local ordinance controlling alcohol and tobacco billboards.

By 1997, public opinion had become increasingly critical of the tobacco industry. The Food and Drug Administration proposed restricting tobacco advertising. State attorneys general banded together to sue the tobacco industry to recoup tax dollars spent on tobacco-related diseases. A citywide coalition working against tobacco and alcohol billboards felt the time was right to push for a local billboard ordinance based on zoning, rather than advertising content. Loyola University researchers partnered with ALAMC volunteers and community members to design a research study to provide the scientific basis for the public policy initiative.

STUDY OBJECTIVE AND DESIGN

The study was designed to evaluate the effectiveness of the OAAA's "voluntary code of principles" in restricting the placement of billboard advertisements for age-restricted products. The research questions flow directly from those principles⁵ (Table 1). The study was a descriptive, cross-sectional prevalence survey of all licensed billboards in Chicago. The unit of analysis for examining billboard prevalence was the Chicago ward, the grassroots levels of local government. There are 50 wards in the city.

Zoning decisions concerning billboard licensing and geographic placement are made at the ward level. Ward boundaries are gerrymandered every 10 years to produce geographic areas that contain voting units of about 55,000 residents with a clear racial majority, ensuring that the City Council will be racially diverse.

Most wards along the Lake Michigan lakefront are racially and socioeconomically diverse, but the inner city remains segregated. Inner-city wards have high concentrations of either African American or Hispanic residents and are often economically depressed. Wards on the outer borders of the city are primarily white or mixed and are more affluent than the minority wards. Data from the 1990 Census reveal that there were 20 majority African American wards (55%–99% African American; mean 88.8%), 18 majority white wards (57%–94% white; mean 76%), 7 majority Hispanic

Table 1. Research questions emerging from code of principles of the Outdoor Advertising Association of America (OAAA)

<i>OAAA principle</i>	<i>Research question</i>
1. Establish exclusionary zones that prohibit outdoor advertising of age-restricted products within 500 feet of elementary and secondary schools, public playgrounds, and places of worship.	1. How many billboards in the city are within 500 and 1,000 feet of schools, parks, and playlots? 2. How many of the billboards within 500 and 1,000 feet of schools, parks, and playlots in sample wards advertise alcohol or tobacco?
2. Establish reasonable limits on the total number of outdoor displays in a market that carry messages about products that are illegal for sale to minors.	3. Is there a difference in the mean number of billboards in communities with different racial make-ups? 4. Are there more billboards advertising alcohol and tobacco in minority markets than in white markets, indicating racial targeting and market saturation?
3. Identify outdoor advertising displays in the exclusionary zone by attaching the international symbol of the child in a clearly visible location.	5. Are there international child symbols on billboards near schools, parks, and playlots?

wards (65%–77% Hispanic; mean 71%), and five wards with no racial majority.¹⁹ These wards will be redrawn based on data from the 2000 Census, but racial distinctions will probably remain.

The OAAA's definitions of billboards were used for the study. The OAAA recognizes three standard billboard products: bulletins, 30-sheet poster panels, and eight-sheet posters. All billboards meeting these criteria were included on the study.

A list containing the addresses of all 4,278 licensed billboards in Chicago was obtained from the Chicago Department of Buildings. A data file containing the addresses of all public and private schools, parks, and playlots was also obtained. Places of worship, addressed in the OAAA code, were not included in the study because no comprehensive list of both established and storefront churches was available. Locations of schools, parks, playlots, and billboards were geocoded using the MapInfo program.²⁰

A visual survey of billboards was conducted to obtain data on advertising content. Wards in Chicago were stratified into four groups, based on racial composition, to create a sampling frame from which to select a representative sample of wards. Twenty-five of Chicago's 50 wards were included in the sample.

Pairs of students and community volunteers collected data by driving up and down each street, observing billboards and coding products advertised. Each ward was visited only once, and data were coded as of that day (point prevalence). These procedures resulted in information on billboard advertising content for 2,421 billboards, about half of the licensed billboards in Chicago in the summer of 1997.

STUDY FINDINGS

Question 1: How many billboards in the city are within 500 and 1,000 feet of schools, parks, and playlots?

There were 4,278 licensed billboards in Chicago. The number per ward ranged from 13 to 213, with a mean

of 85.6. Computer mapping showed that 845 billboards were within 500 feet and 2,167 billboards within 1,000 feet of schools, parks, and playlots (Table 2). About 20% of all billboards in the city would be off limits to tobacco and alcohol advertising if advertisers followed the 500-foot OAAA code. Fifty-one percent of billboards would be off limits to ads for age-restricted products if a 1,000-foot exclusionary zone was adopted.

Question 2: How many of the billboards within 500 and 1,000 feet of schools, parks, and playlots in sample wards advertise alcohol or tobacco?

Data from the sample of 25 wards that were visually surveyed were used to identify the number and percentage of billboards that advertised alcohol or tobacco. A total of 2,421 billboards were included in the sample.

In sample wards, 246 billboards (9.8% of the total) advertised alcohol. The number of alcohol billboards per ward ranged from zero to 19, with a mean of 9.8. The percentage of billboards per ward that advertised alcohol ranged from 0% to 18%, with an average of 9.2%.

The number and percent of billboards advertising alcohol that were located within 500 feet of schools and parks was calculated. In African American majority wards, 15.0% of alcohol billboards were within the 500-foot zone; 13.7% in Hispanic majority wards; 3.3% in no ethnic majority wards; and 6.6% in the white majority wards (Table 3). When a 1,000-foot zone was calculated, 49% of all billboards advertising alcohol were within the zone.

Four hundred and four billboards in the sample wards advertised tobacco (16.6%). The number of tobacco billboards per ward ranged from zero to 35, with a mean of 16.2. The percentage of all billboards per ward that advertised tobacco ranged from 0% to 57%, with an average of 20%.

The number and percent of billboards advertising tobacco that were located within 500 feet of schools and parks was calculated. In African American majority

Table 2. Billboards within 500- and 1,000-foot zones around schools, parks, and playlots, and total billboards, in all 50 Chicago wards (N = 4,278 billboards)

Item	0–500 feet	0–1,000 feet	Total billboards
Total number of billboards	845	2,167	4,278
Percentage of total billboards	19.75	50.65	100.00
Number of billboards per ward	1–59	6–115	13–213
Mean number of billboards per ward	16.9	43.3	85.6
Standard deviation	13.11	27.94	38.49

Table 3. Alcohol and tobacco billboards within 500-foot zone around schools, parks, and playlots in 25 sample wards (n = 2,421 billboards)

Ward number	Alcohol		Tobacco	
	Number of alcohol billboards in ward	Percent of alcohol billboards in 500-foot OAAA zone	Number of tobacco billboards in ward	Percent of tobacco billboards in 500-foot OAAA zone
<i>African American majority wards (n = 11)</i>				
4	5	10	10	23
6	13	34	31	41
7	10	15	23	65
9	14	20	35	45
16	19	18	33	27
17	16	18	14	12
20	18	8	25	15
21	16	13	16	13
24	15	5	33	19
28	15	8	25	18
37	13	16	25	44
Total	154	—	270	—
Mean	14	15	24.5	29.3
<i>Hispanic majority wards (n = 6)</i>				
12	14	13	22	20
22	16	44	18	75
25	14	8	23	14
26	6	4	19	17
31	11	6	8	3
35	10	7	9	18
Total	71	—	99	—
Mean	11.8	13.7	16.5	24.5
<i>No ethnic majority wards (n = 3)</i>				
46	0	0	2	6
48	1	5	4	18
49	1	5	4	18
Total	2	—	10	—
Mean	0.7	3.3	3.3	14
<i>White majority wards (n = 5)</i>				
32	12	19	9	10
38	2	0	7	13
43	1	0	0	0
44	4	14	4	7
50	0	0	5	13
Total	19	—	25	—
Mean	3.8	6.6	5	8.6
Total billboards advertising alcohol or tobacco		246		404
Mean number of alcohol/tobacco billboards per ward		9.8		16.2
Mean percent of alcohol/tobacco billboards in OAAA 500-foot zone		11.6		22.2

wards, 29.3% of tobacco billboards were within the 500-foot zone; 24.5% in the Hispanic majority wards; 14% in the no ethnic majority wards, and 8.6% in the white majority wards (Table 3). When a 1,000-foot zone was calculated, 54% of billboards advertising tobacco were within the zone.

Question 3: Is there a difference in the mean number of billboards in communities with different racial make-ups?

The average number of billboards varied by the percentage of minority residents. There was a mean of 110 billboards (standard deviation [SD] = 45.61) in African-American majority wards, 104 (SD = 34.87) in Hispanic majority wards, 50 (SD = 41.48) in no racial majority wards and 59 (SD = 30.59) in white majority wards. These differences are statistically significant ($F = 6.782$, $p = 0.001$).

Observed patterns in billboard placement in minority communities could not be explained by differences in density or zoning. Although the size and shape of Chicago wards varies, all wards have about the same number of residents (55,000). In addition, all wards have a complex mix of zoning, including residential, commercial, and manufacturing areas, which exist side by side. It appears that racial composition of a community was an important correlate of billboard placement.

Question 4: Are there more billboards advertising alcohol and tobacco in minority markets than in white markets, indicating racial targeting and market saturation?

The 20 minority wards had an average of 11.35 alcohol billboards, compared to 3.8 in the five white majority wards (Table 4)—an approximate 3:1 ratio. Minority wards had an average of 18.8 tobacco billboards compared to 5.2 in white wards, also an approximate 3:1 one ratio (Table 5). Ward-level Census data were analyzed using the SPSS statistical program²¹ to see if placement of billboard advertising in Chicago was correlated with particular demographic and socioeconomic characteristics of communities, which would be consistent with market segmentation principles.

Characteristics of wards associated with alcohol billboard placement were a high percentage of African American residents ($R = 0.594$; $p = 0.002$); low median family income ($R = 0.632$; $p = 0.001$); a high percentage of families living below the poverty level ($R = 0.525$; $p = 0.007$); a high percentage of adults with less than 12 years of education ($R = 0.673$; $p = 0.001$); and a high percentage of the population younger than age 18 ($R = 0.720$; $p = 0.001$). The percentage of white residents was negatively correlated with alcohol billboards ($R = 0.799$; $p = 0.001$).

Characteristics of wards associated with tobacco billboard placement were a high percentage of African

Table 4. Number of alcohol billboards in sample of 25 "white" and "minority" wards

	White majority wards n = 5	Minority wards n = 20
Total number of alcohol billboards	19	227
Lowest number of alcohol billboards per ward	0	0
Highest number of alcohol billboards per ward	12	19
Mean number of alcohol billboards per ward	3.8	11.35
Standard deviation	4.82	5.79

NOTE: Minority wards included 11 majority African American wards, six majority Hispanic wards, and three no ethnic majority wards.

Table 5. Number of tobacco billboards in sample of 25 "white" and "minority" wards

	White majority wards n = 5	Minority wards n = 20
Total number of tobacco billboards	25	377
Lowest number of tobacco billboards per ward	1	2
Highest number of tobacco billboards per ward	9	33
Mean number of tobacco billboards per ward	5.2	18.85
Standard deviation	3.30	9.73

NOTE: Minority wards included 11 majority African American wards, six majority Hispanic wards, and three no ethnic majority wards.

American residents ($R = 0.663$; $p = 0.001$); a high percentage of families living below the poverty level ($R = 0.546$; $p = 0.002$); a high percentage of adults over 25 with less than 12 years of education ($R = 0.544$; $p = 0.002$); and a high percentage of the population younger than age 18 ($R = 0.648$; $p = 0.001$). Multivariate analysis using multiple regression with backward deletion did not produce definitive models, probably because the demographic and socioeconomic variables entered into the model were highly correlated. In general, the best predictors of total billboards and number of alcohol or tobacco billboards per ward were the percentage of African Americans and the percentage of adults with less than 12 years of education living in the community. The data confirm that poor and minority communities are targeted for outdoor advertising of alcohol and tobacco.

Question 5: Are there international child symbols on billboards near schools, parks, and playlots?

The researchers visually inspected 2,421 billboards while driving on city streets. Fewer than 10 international child symbols were visible from street level, despite the fact that more than 800 of the city's total billboards were within the 500-foot zone identified by the OAAA code. The signs that were observed were on the front side of the main post supporting the billboard. It is unknown whether other billboards had the symbol in locations known only to billboard company employees. However, the OAAA code specifies that the international symbol of the child should be in a clearly visible location.

IMPLICATIONS OF STUDY FINDINGS

The study demonstrated that the voluntary OAAA 500-foot zone around schools and playgrounds prohibiting advertising of age-restricted products is largely ignored. Billboards advertising tobacco were near schools and parks in 29.3% of majority African American wards and 24.5% of majority Hispanic wards. Alcohol billboards were similarly located in 15.0% of majority African American wards and 13.7% of majority Hispanic wards.

A clear pattern of billboard saturation of minority communities was also evident. Minority communities contained both more billboards and a higher percentage of billboards advertising alcohol and tobacco. This phenomenon cannot be explained by zoning or density, since all wards have similar zoning and population. Rather, demographic correlates of billboard placement were similar to recognized demographic correlates of poor health status: minority group membership, low levels of education, a high percentage of

families living in poverty, and many residents younger than age 18. Concerns that economically depressed minority communities are targeted with messages to smoke and drink were confirmed, as was the relationship between social conditions (billboard blight) and these demographic correlates of poor health status.

A 500-foot versus 1,000-foot exclusionary zone also raises interesting questions. A 500-foot zone is quite small and probably offers little protection, since children can easily view billboards from that distance. In fact, if the 500-foot zone had been scrupulously maintained, fewer than 10% of alcohol billboards and 20% of tobacco billboards would have been excluded. A 1,000-foot exclusionary zone, as proposed by the Food and Drug Administration and since adopted by some communities, would have displaced 49% of billboards advertising alcohol and 54% of billboards advertising tobacco.

An even larger exclusionary zone, eliminating billboards from all areas except manufacturing areas, would better meet the objective of protecting children from advertisements of products they cannot legally purchase. The study findings supported seeking relief through zoning of large areas, rather than creating a series of imaginary circles around schools, parks, and playgrounds, which would be difficult to delineate and monitor.

The international symbol of the child was virtually nowhere to be found during the visual inspection of billboards. This symbol seems to be, in fact, a symbol used more for public relations purposes than to regulate billboard messages.

Limitations of the study

The study had several limitations. The list of licensed billboards supplied by the city may have been incomplete. Unlicensed billboards, which are common in Chicago, especially in poorer neighborhoods, were not included on the list. As a result, the data presented may underestimate both the total number of billboards and the number of billboards located within 500-foot zones. Churches were also excluded, also contributing to an underestimate of the number of billboards that would fall into the OAAA 500-foot zone.

Visual coding of billboard content can lead to errors of omission, miscoding, or both. Some billboards may have been missed or counted twice, despite the use of a ward map with billboard locations marked. Coding of alcohol or tobacco content was often done quickly in a moving car or under stress in traffic.²² Each ward was visited only once, and no recount for coding accuracy was conducted. However, an earlier study by the authors used a similar coding methodology and included a 10% reliability check. That study

did not yield statistically significant differences between the original billboard coding and the 10% recount.¹³

The study extended over several months in the spring and summer of 1997. Wards were selected at random for inspection. Data reflect the advertising themes or particular outdoor advertising campaigns in place on the day the researchers were present. Advertising content could change, depending on what marketing campaigns were in progress or the season of the year. Liquor companies, for example, step up their marketing campaigns in November and December for the holiday season. Different results could have been obtained had the study been conducted during a different three-month time frame.

TRANSLATING COLLABORATIVE RESEARCH INTO COMMUNITY ACTION

The survey of Chicago billboards clearly documented that “voluntary” industry codes did not protect Chicago’s children from messages encouraging them to use age-restricted products. Moreover, mandating a 500- or 1,000-foot zone around schools and parks was shown to be of little practical significance, since most alcohol and tobacco billboards would be unaffected.

Members of the citywide coalition met with aldermen, city officials, and zoning experts to craft language for an ordinance that would be easy to understand and monitor and would maximize the geographic area in which billboards advertising age-restricted products would be banned. It was decided to restrict billboards advertising age-restricted products to manufacturing zones, which represent about 20% of the city.

In the fall of 1997, the Chicago City Council held a series of hearings. Press conferences were given by residents of the St. Sabina community, Loyola University researchers, representatives from ALAMC, and aldermen who cosponsored the ordinance. Maps showing billboard placement and alcohol and tobacco advertisements in sample wards were shared with the press and aldermen. Members of the coalition offered expert testimony. The St. Sabina group took city officials and the press on neighborhood tours. Local radio and television stations carried the story.

Testimony opposing the ordinance was offered by representatives of the alcohol industry and the trade group representing advertising interests in Chicago. They argued that tobacco and alcohol are legal products that are not marketed to children and that billboards are not placed in areas where children congregate. They expressed surprise when one of the student researchers displayed pictures of an alcohol billboard adjacent to a schoolyard fence. Negotiations took place between the major stakeholders. Coalition members

were cast as the “little guys” challenging powerful special interests on behalf of the poor and minority communities.

The Chicago billboard ordinance passed in September 1997, with the mayor’s blessing. Outdoor advertising of age-restricted products was banned in all areas of the city except manufacturing zones, where few children could be expected to see the signs. The city’s ballparks were exempt. The ordinance placed about 80% of Chicago off-limits to tobacco and alcohol billboards. The ordinance allowed for existing advertising contracts to run their course. It also included a 60-day grace period between passage and implementation of the ordinance, after which offending billboards had to be removed.

The tobacco and alcohol companies used the grace period as a loophole. They renegotiated long-term contracts, some for up to 20 years, to take advantage of the 60-day grace period. A federation of outdoor advertising organizations filed a lawsuit in federal court, based on federal preemption of local tobacco advertising restrictions and commercial speech considerations.²³ Implementation was delayed pending a hearing.

Public opinion was in favor of the ordinance, and city officials were willing to risk a long and expensive federal lawsuit in its defense. In February 1998, the City Council, aware of the renegotiated contracts, amended the ordinance to require the removal of all tobacco and alcohol billboards within 120 days regardless of existing contracts. The billboard companies amended their complaint to charge unlawful impairment of existing contracts.²³

Legal battle over billboard ordinances

The legal and public policy issues surrounding outdoor advertising of age-restricted products are complex and controversial. Different federal circuit courts have rendered conflicting opinions.

Several important legal issues are involved. In general, under the Constitution’s supremacy clause, federal law takes precedence over state laws or local regulations. The Federal Cigarette Labeling and Advertisement Act has been interpreted as preventing states and local governments from placing restrictions on tobacco advertising if restrictions are based on smoking and health concerns. Thus, only the federal government can mandate warning labels on cigarette packages or tobacco billboards.

A second legal issue is the First Amendment right to free speech, which also protects commercial speech, albeit with fewer protections. The First Amendment does not protect commercial speech about unlawful activities nor does it protect misleading speech. When government regulates commercial speech, it must meet

certain requirements established in *Central Hudson Gas and Electric v. Public Service Commission of New York* (1980).²⁴ These requirements are that a legitimate government interest be directly and materially advanced by the restrictions and that the restrictions be no more extensive than necessary to serve those interests.²⁴ These principles were explicated in *Liquormart, Inc. v. Rhode Island* (1996)²⁵ and *Penn Advertising v. City of Baltimore* (1996).²⁶⁻²⁹

In July 1998, a judge in the Chicago case ruled in favor of advertisers, based on his interpretation of federal preemption. In his written opinion, the judge explained that although the stated purpose of the Chicago ordinance was to restrict advertising that encouraged minors to engage in illegal activities (tobacco and alcohol consumption), protecting health was the underlying intent of the ordinance.²³ The judge found that the alcohol provisions were not severable from the tobacco provisions and stopped the city from enforcing the entire ordinance. Meanwhile, the billboard companies dropped the tobacco challenge from their complaint in the wake of the multistate tobacco settlement.

The City of Chicago appealed the judge's ruling, and the Seventh Circuit Court of Appeals in Chicago ruled that federal law did not preempt the Chicago regulations. The court did not review the commercial speech issue, which was sent back to district court.²³ Implementation was again delayed.

During this period, other cities and states, including New York and Massachusetts, enacted billboard bans based on advertising content and geographic placement. These laws were also challenged by tobacco and alcohol interests. The U.S. Supreme Court declined to review the rulings of the appeals court in the Chicago and New York cases, but it did agree to review the Massachusetts case.

In Chicago, coalition activities continued while the ordinance was on hold awaiting a ruling in federal court. Action was taken to remove alcohol and tobacco advertisements from buses, trains, and transit shelters. In addition, an ordinance was passed banning the sale of Bidis, an imported flavored cigarette favored by young smokers.

Supreme Court rules on tobacco billboard restrictions

In June 2001, the U.S. Supreme Court ruled on the State of Massachusetts' regulation of outdoor and point-of-sale tobacco advertising in *Lorillard Tobacco Co. v. Reilly*.³⁰ Those regulations included a ban on outdoor advertising of tobacco within 1,000 feet of schools and playgrounds, restrictions on in-store tobacco advertise-

ment, and a ban on self-service displays of tobacco products. In a complex 5-4 decision, the Supreme Court acknowledged that the government's interest in preventing underage tobacco use is substantial. However, the Court struck down the 1,000-foot tobacco billboard ban, stating that the outdoor advertising restrictions were too broad and not narrowly tailored, as required by an earlier court ruling (*Central Hudson Gas and Electric v. Public Service Commission of New York*).²⁴ The court let stand restrictions on self-service tobacco displays.³⁰

Future actions

*Lorillard Tobacco Co. v. Reilly*³⁰ dealt only with tobacco advertising, but it will affect many state and local laws governing outdoor advertising of all types of age-restricted products, including alcohol. Federal law preempts state and local laws, and many local laws may be invalidated or withdrawn in the wake of *Lorillard Tobacco Co. v. Reilly*. Although most tobacco billboards have been removed as a result of the multistate tobacco settlement, alcohol billboards remain prevalent and largely unregulated. Until the Supreme Court overturns its ruling, Congress removes federal preemption contained in the Cigarette Labeling and Advertising Act, or more creative legal theories can be fashioned by health advocates, laws restricting advertising of age-restricted products such as tobacco and alcohol will be difficult to enact.

However, community-level interventions can be implemented to reduce tobacco and alcohol use and abuse. These interventions could include comprehensive school-, community-, and media-based prevention programs; smoking and alcohol cessation and treatment programs; increases in the price of tobacco and alcohol through excise taxes; reduced accessibility to age-restricted products by enforcement of youth access laws; and counteradvertising.³¹⁻³³ Limiting outdoor alcohol advertising will have to be accomplished through continual monitoring of billboard placement and public pressure to stop billboard saturation of poor and minority communities.

Community-level interventions, especially those that involve taxation, legislation, and regulation, cannot be achieved by any one group acting alone. Partnerships that link academia, community groups, the media, policymakers, and public health practitioners and have broad public support are more likely to achieve desired policy goals of reducing health disparities.

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