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A Policy Research Partnership to Reduce Youth Substance Use

Population Exposure to State Funded Televised Anti-Tobacco Advertising in the United States - 37 States and the District of Columbia, 1999-2003

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ABSTRACT

With the development of anti-tobacco programs in all states during the 1990's, spurred by funding from the 1998 Master Settlement Agreement with the major cigarette manufacturers, most states instituted anti-tobacco media campaigns. Using media monitoring data from Nielsen Media Research for the largest 75 Designated Market Areas in the United States, this report summarizes the estimated average monthly exposure to state anti-tobacco advertising in 37 states and the District of Columbia from 1999-2003. The report uses Gross Rating Points (GRPs) for all households with televisions, and Target Rating Points (TRPs) for those aged 12 to 17 years, to estimate potential exposure to advertising. From 1999 to 2002, more states utilized televised advertising, increasing average exposure for television households from 1.30 ads per month in 1999 to 3.63 ads per month in 2002, and for adolescents aged 12-17 from 0.84 ads per month in 1999 to 1.43 ads per month in 2002. In 2003, although there was a slight increase in the number of states with paid media campaigns, average population exposure to anti-tobacco advertising campaigns declined to 3.20 ads per month among television households and 1.13 ads per month among adolescents aged 12 to 17, reflecting an overall reduction of campaign funding, which states attributed to budget crises. After 2003, additional cuts in anti-tobacco funding will more than likely further reduce the number of states with anti-tobacco media campaigns. Research indicates that televised anti-tobacco advertising can reduce smoking among adults and youth. The short term savings gained from such reductions in televised anti-tobacco advertising campaigns may likely produce longer-term costs from smoking related disease.

INTRODUCTION

There is evidence that state and nationally sponsored anti-tobacco media campaigns can reduce adult and youth smoking (1,2,3,4). California launched its anti-tobacco media campaign in 1989, followed by Massachusetts in 1993. By 2002, in the wake of the 1998 Master Settlement Agreement (MSA), 35 states had anti-tobacco programs. Starting in 2002, however, state legislators began to severely cut funding for comprehensive state tobacco control programs with paid media campaigns (5). There is concern that these cutbacks might reduce population awareness of anti-tobacco campaigns and increase youth smoking susceptibility (6).

As part of a larger research study linking commercially available media monitoring exposure estimates to variations in youth smoking behavior, we sought to describe the average exposure of US youth and adults to state-funded anti-tobacco campaigns during the period 1999 to 2003. In doing so, we made use of a unique archival dataset that enables quantification of average exposure to advertising in different communities across the United States.

METHODS

Raw ad-level exposure measures (using ratings points) were obtained from Nielsen Media Research, for anti-tobacco advertising appearing on network and cable television across the 75 largest media markets in the US. The 75 markets accounted for 78% of American

viewing households (7). The 75 markets for which ratings were obtained represent a total of 37 states as well as the District of Columbia (16 states had multiple markets). When multiple markets existed within a state, the ratings for those markets were averaged to produce state ratings data. Ratings provide an estimate of the percentage of households with televisions watching a program or advertisement in a media market over a specified time interval. It is customary for the advertising industry to sum rating points for a program over a specified time interval. The resulting sums are called Gross Ratings Points (GRPs) or Target Rating Points (TRPs).

GRPs provide estimates of audience size for all television households in general, while TRPs provide estimates for targeted populations, such as adolescents aged 12-17, within the household. GRPs and TRPs are often expressed in exposures where 100 GRPs is equal to an average of one exposure. Thus, if an ad receives 500 GRPs in one month, then an average viewer in that market saw that ad five times in a month. Because ratings are averages across the population, any given individual may have been exposed to the ad more or less than five times during the month (8). In this study, ad-level rating points were aggregated for state anti-tobacco campaigns to form mean monthly exposure measures for both total households (GRPs) and adolescents aged 12-17 (TRPs).

Total Television Households

For total households, mean monthly ad exposures to state anti-tobacco television advertising increased from 1.30 ads per month in 1999 to 3.63 ads per month in 2002, but decreased to 3.20 ads per month in 2003 (Table 1). In 1999, nine states had a mean

exposure of one or more ads per month. By 2002, this had increased steadily to 25 states, but in 2003, only one additional state had increased the total to 26. Arizona, California, Massachusetts and Utah were early leaders in 1999 and 2000. States with five or more mean exposures for both 2001 and 2002 included New York, Georgia, Minnesota, Wisconsin, Washington, Utah and California. Utah had the highest mean exposures in excess of 15 ads per month for these years. By 2003, Minnesota, Washington, Utah, and California continued to have 5 or more exposures per month and were joined by Indiana, Ohio, Arizona and Arkansas. Utah increased exposures to over 24 per month.

The 2002 withdrawal of funding for the Massachusetts Tobacco Control Program can be seen in Table 1 by the decline from 7.33 ads per month in 2001 to 2.25 ads in 2002. In 2003, other anti-tobacco programs with significant reductions in paid television media included the Florida Tobacco Control Program and the Oregon Tobacco Education and Prevention Program. In Florida, mean exposure decreased from 5.37 ads per month in 2002 to 1.51 ads per month in 2003. Oregon had a similar reduction in exposure from 7.10 ads per month to 2.94 ads per month in 2003.

Adolescents

For adolescents aged 12-17 years, the mean monthly ad exposures to state anti-tobacco television advertising increased from 0.84 ads per month in 1999 to 1.43 ads per month in 2002, but decreased to 1.13 ads in 2003 (Table 2). In 1999, six states had a mean exposure of one or more ads per month. Arizona, California, Massachusetts, Florida, Indiana and Utah had the most exposures in 1999 and 2000. More states utilized paid advertising in

2001 and 2002. There were 16 states with one or more mean exposures per month in 2002. States with two or more mean exposures for both 2001 and 2002 included Utah, Minnesota and Florida. Only one state, Utah, had mean exposures in excess of 5 ads per month for both years. By 2003, states with two or more exposures declined from ten in 2002 to just six. Utah increased exposure in 2003 to over ten ads per month.

Consistent with the decline in exposures for total households in Massachusetts, exposures for adolescents decreased from 1.83 ads per month in 2001 to 0.40 ads per month in 2002. In 2003, similar to the reduction in exposure for total television households, both Florida and Oregon had significant decreases in exposure for adolescents. In Florida, mean exposure decreased from 3.72 ads per month in 2002 to 1.07 ads in 2003. In Oregon, adolescent exposure decreased from 2.12 ads per month in 2002 to less than one ad in 2003.

DISCUSSION

The findings in this report indicate that from 1999-2002 the mean exposure to paid televised anti-tobacco advertising grew substantially for television households, as well as for adolescents aged 12-17. Much of this growth was possible due to increased funds for state level anti-tobacco programs provided by the 1998 MSA (9). Despite overall increases in exposure, several states still had no exposure for either television households or adolescents aged 12-17 by 2002. In 2003, mean exposure for television households and adolescents decreased. Some states have substantially cut or eliminated paid media campaigns, as evident in the 2002 decrease in exposure for Massachusetts and the 2003

decrease for both Florida and Oregon. Additional decreases in state anti-tobacco advertising exposure can be expected as more state legislatures cut funding to established anti-tobacco programs from 2003, including those in Indiana, Maryland, Minnesota, Nebraska, and New Jersey (10).

There are several limitations regarding this analysis. First, Nielsen Media Research does not track spot cable television where advertisers can target audiences in specific markets on cable networks. Because of this, exposures for television households and adolescents aged 12-17 are likely understated. Second, ratings measure the availability of an audience and do not guarantee actual viewing, nor are they measures of advertising recall. However, previous research with American teens has found a dose-response relationship between 12-17 year old TRPs and recall of anti-tobacco advertising (4). Third, the data presented per state represent average viewing within defined media markets. Only 16 of 38 states had multiple markets. Mean exposure for the state population outside of designated media markets is not captured. This limitation is minor due to the interest of state media planners to achieve similar exposures across all markets within a state. Fourth, as DMAs are defined by major metropolitan areas, there are times when DMA-specific exposure crosses state lines (for example, the Chicago DMA reaches into Indiana). Approximately 40 DMAs cross at least one state line. The primary focus of this paper is to provide an overview of the levels of state activity for anti-tobacco media campaigns. Thus, we assigned each DMA exposure level to the state in which the major metropolitan area is primarily located, and have not attempted to disaggregate exposure between states when such crossover occurs.

The leading preventable cause of death in the United States is tobacco use (11). Research indicates that televised anti-tobacco advertising can reduce smoking for both adults and youth (1,2,3,4). Thus, public health advocates should urge policy makers to consider the ramifications of both not having televised antismoking advertising, as well as cutting or reducing funding entirely for existing campaigns. The short term savings gained from such reductions in televised anti-tobacco advertising campaigns may likely produce longer term costs from smoking related disease.

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Table 1. Ranked States for Mean Monthly Ad Exposures to State Anti-tobacco Television Advertising (GRPs)

	1999		2000		2001		2002		2003	
Rank	**State**	**Mean**	**State**	**Mean**	**State**	**Mean**	**State**	**Mean**	**State**	**Mean**
1	AZ	14.75	UT	6.67	UT	19.32	UT	15.22	UT	24.03
2	CA	5.87	AZ	6.38	NY	10.96	GA	7.66	WA	10.10
3	MA	5.81	MA	6.00	MN	8.45	NY	7.46	MN	7.67
4	FL	4.04	OR	4.38	WI	7.68	OR	7.10	IN	7.64
5	IN	3.20	CA	3.97	MA	7.33	OH	7.01	CA	6.25
6	OR	2.51	IN	2.57	WA	7.31	IN	6.83	OH	6.09
7	OK	1.67	FL	2.37	CA	5.95	CA	6.58	AZ	5.98
8	HI	1.28	MN	2.00	NM	5.82	WI	5.75	AR	5.52
9	UT	1.09	WA	1.60	AZ	5.60	WA	5.66	WI	4.99
10	MI	0.68	HI	1.50	GA	5.07	FL	5.37	NY	4.81
11	NM	0.42	NY	1.33	OR	4.40	MN	5.35	HI	4.46
12	NY	0.19	MI	0.83	IA	3.97	HI	5.22	NM	4.29
13	MO	0.15	KS	0.69	FL	3.96	NE	4.84	NE	3.68
14	WI	0.13	TX	0.51	NE	3.60	AZ	4.78	CO	3.15
15	GA	0.13	IA	0.41	HI	2.84	MD	4.69	OR	2.94
16	IA	0.10	WI	0.07	OK	2.75	PA	3.82	VA	2.88
17	WA	0.09	MO	0.02	IN	1.65	VA	3.28	WV	2.69
18	AR	0.09	NC	0.01	CT	1.00	AL	2.91	GA	2.67
19	IL	0.07	IL	0.01	AL	0.57	CO	2.52	OK	2.20
20	KS	0.07	NE	0.01	CO	0.51	MA	2.25	IA	2.18
21	NV	0.05	OH	0.01	TX	0.50	DC	1.96	PA	2.17
22	TN	0.05	TN	0.01	MI	0.45	IL	1.84	CT	2.15
23	CO	0.04	CT	0.01	MO	0.40	IA	1.41	DC	2.01
24	TX	0.04	OK	0.00	PA	0.32	WV	1.15	MA	1.87
25	NC	0.04	NV	0.00	MD	0.25	MI	1.00	FL	1.51
26	OH	0.04	VA	0.00	DC	0.14	OK	0.94	MI	1.31
27	VA	0.04	KY	0.00	OH	0.08	TX	0.61	AL	0.70
28	LA	0.03	NM	0.00	VA	0.04	NV	0.43	TX	0.53
29	CT	0.03	AR	0.00	SC	0.01	NM	0.40	NV	0.52
30	MN	0.03	GA	0.00	KY	0.01	MO	0.21	TN	0.22
31	KY	0.03	LA	0.00	WV	0.01	NC	0.09	IL	0.06
32	PA	0.02	CO	0.00	NC	0.00	KS	0.09	MO	0.06
33	MD	0.02	PA	0.00	TN	0.00	TN	0.01	KS	0.05
34	NE	0.02	SC	0.00	AR	0.00	KY	0.01	NC	0.04
35	SC	0.01	WV	0.00	IL	0.00	SC	0.00	KY	0.04
36	WV	0.01	DC	0.00	KS	0.00	AR	0.00	MD	0.01
37	DC	0.01	AL	0.00	LA	0.00	CT	0.00	LA	0.00
38	AL	0.00	MD	0.00	NV	0.00	LA	0.00	SC	0.00
Mean		*1.30*		*1.14*		*3.03*		*3.63*		*3.20*

Notes: GRP ratings data reported for top 75 Designated Market Areas (DMAs); states not covered in the top 75 DMAs not included in rankings (AK, DE, ID, ME, MS, MT, NH, NJ, ND, RI, SD, VT, WY). For states with multiple DMAs, the mean for each market was averaged.

Table 2. Ranked States for Mean Monthly Ad Exposures to State Anti-tobacco Television Advertising (TRPs)

	1999		2000		2001		2002		2003	
Rank	**State**	**Mean**	**State**	**Mean**	**State**	**Mean**	**State**	**Mean**	**State**	**Mean**
1	AZ	10.25	AZ	4.36	UT	8.73	UT	6.98	UT	10.01
2	FL	4.88	UT	3.48	MN	4.62	FL	3.72	WA	3.12
3	IN	2.70	FL	2.87	FL	4.19	OH	3.17	OH	2.99
4	MA	2.55	MA	2.11	AZ	3.76	MN	2.99	MN	2.70
5	CA	1.79	MN	1.91	NY	3.19	IN	2.79	IN	2.70
6	OR	1.00	IN	1.74	WA	3.16	VA	2.66	VA	2.31
7	HI	0.54	OR	1.20	WI	2.83	DC	2.44	DC	1.93
8	MI	0.51	CA	1.15	NE	2.19	GA	2.41	AR	1.67
9	OK	0.43	WA	1.09	IA	2.10	HI	2.37	AZ	1.42
10	UT	0.39	TX	0.55	MA	1.83	OR	2.12	WI	1.32
11	WI	0.13	NY	0.42	CA	1.57	NY	1.95	CA	1.32
12	NM	0.10	MI	0.38	HI	1.51	WI	1.94	NY	1.27
13	GA	0.07	HI	0.37	IN	1.33	NE	1.93	CO	1.11
14	MO	0.06	IA	0.29	NM	1.31	MD	1.66	FL	1.07
15	KS	0.06	KS	0.24	GA	1.31	WA	1.54	WV	1.00
16	NY	0.06	WI	0.03	OK	0.99	CA	1.51	IA	0.96
17	IL	0.05	MO	0.01	OR	0.81	IA	0.98	HI	0.91
18	NC	0.04	TN	0.01	TX	0.55	AZ	0.94	NE	0.81
19	VA	0.04	NE	0.01	MO	0.43	CO	0.81	GA	0.65
20	WA	0.04	IL	0.01	CT	0.37	AL	0.78	NM	0.60
21	OH	0.04	VA	0.01	CO	0.22	PA	0.71	OR	0.59
22	TN	0.03	OH	0.00	MD	0.21	IL	0.69	CT	0.58
23	TX	0.03	NV	0.00	AL	0.13	TX	0.58	OK	0.57
24	MD	0.03	NC	0.00	MI	0.11	MA	0.40	TX	0.49
25	CO	0.03	KY	0.00	PA	0.11	OK	0.38	PA	0.47
26	IA	0.03	OK	0.00	VA	0.04	WV	0.31	MA	0.30
27	PA	0.03	CT	0.00	OH	0.02	MI	0.24	MI	0.25
28	KY	0.03	AR	0.00	DC	0.01	MO	0.22	AL	0.09
29	AR	0.03	LA	0.00	SC	0.01	KS	0.08	TN	0.09
30	SC	0.03	CO	0.00	WV	0.00	NM	0.06	NV	0.07
31	MN	0.02	PA	0.00	KY	0.00	NV	0.04	IL	0.07
32	NV	0.02	WV	0.00	NC	0.00	NC	0.02	MO	0.04
33	CT	0.02	SC	0.00	AR	0.00	TN	0.00	KS	0.04
34	LA	0.02	NM	0.00	IL	0.00	AR	0.00	KY	0.01
35	NE	0.02	AL	0.00	KS	0.00	CT	0.00	NC	0.01
36	WV	0.01	DC	0.00	LA	0.00	KY	0.00	MD	0.00
37	DC	0.01	GA	0.00	NV	0.00	LA	0.00	LA	0.00
38	AL	0.00	MD	0.00	TN	0.00	SC	0.00	SC	0.00
Mean		*0.84*		*0.65*		*1.32*		*1.43*		*1.13*

Notes: TRP ratings data reported for the top 75 Designated Market Areas (DMAs); states not covered in the top 75 DMAs not included in rankings (AK, DE, ID, ME, MS, MT, NH, NJ, ND, RI, SD, VT, WY). For states with multiple DMAs, the mean for each market was averaged.

Appendix. Top 75 Designated Market Areas (DMAs) by State

State	Market Name
AL	Birmingham
AR	Little Rock
AZ	Phoenix
CA	Fresno-Visalia
	Los Angeles
	San Diego
	San Francisco-Oakland
	Sacramento-Stockton
CO	Denver, CO
CT	Hartford-New Haven
DC	Washington
FL	Jacksonville
	Miami-Fort Lauderdale
	Mobile, AL - Pensacola
	Orlando-Daytona-Melbourne
	Tampa-St.Petersburg-Sarasota
	West Palm Beach-Fort Pierce
GA	Atlanta
HI	Honolulu
IA	Des Moines
IL	Chicago
IN	Indianapolis
KS	Wichita-Hutchinson
KY	Lexington
	Louisville
LA	New Orleans
MA	Boston
	Providence, RI - Bedford
MD	Baltimore
MI	Detroit
	Flint-Saginaw-Bay City
	Grand Rapids-Kalamazoo-Battle Creek
MN	Minneapolis-St. Paul
MO	Kansas City
	St. Louis
NC	Charlotte
	Greensboro-High Point
	Raleigh-Durham
NE	Omaha, NE
NM	Albuquerque-Sante Fe
NV	Las Vegas

State	Market Name
NY	Albany-Schenectady-Troy
	Buffalo
	New York
	Rochester
	Syracuse
OH	Cleveland
	Cincinnati
	Columbus
	Dayton
	Toledo
OK	Oklahoma City
	Tulsa
OR	Portland
PA	Harrisburg-Lancaster
	Philadelphia
	Pittsburgh
	Wilkes Barre-Scranton
SC	Greenville-Spartanburg
TN	Knoxville
	Memphis
	Nashville
TX	Austin
	Dallas-Fort Worth
	Houston
	San Antonio
UT	Salt Lake City
VA	Norfolk-Portsmouth-Newport News
	Roanoke-Lynchburg
	Richmond-Petersburg
WA	Spokane
	Seattle-Tacoma
WI	Green Bay-Appleton
	Milwaukee
WV	Charleston-Huntington

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