Efficacy of Comprehensive Tobacco Control Programs: California and Massachusetts

Two States (California and Massachusetts) that have been funding comprehensive tobacco prevention and control programs using State tobacco excise taxes provide evidence of the efficacy of such large-scale and sustained efforts. First, increasing excise taxes on cigarettes reduces tobacco consumption rates. But more importantly, when the excise taxes support effective community, media, and school programs to prevent tobacco use, decreases in per capita consumption will continue even if the industry lowers tobacco prices to pre-excise tax values.[1] The tobacco industry itself has concluded that "the California campaign, and those like it, represents a very real threat to the industry in the intermediate term..."[2] and "the environment for the sale and use of tobacco products in California continues to deteriorate. And because California serves as a bellwether State, tobacco-related steps taken there often find their way into other States."[3]

Excise Tax History and Program Funding

The excise tax rate on cigarettes in California rose from $0.10 to $0.35 on January 1, 1989, when Proposition 99 was implemented. On January 1, 1994, the tax increased to $0.37, where it remained until a $0.50 excise tax increase approved by voters in November 1998 took effect. Funding for tobacco control efforts began during Fiscal Year 1989 (July 1989–June 1990). California's FY 1997 budget for tobacco control activities funded by the Department of Health Services and the Department of Education was $110 million ($3.40 per capita). In Massachusetts, the excise tax on cigarettes rose from $0.26 to $0.51 on January 1, 1993, with the passage of Question 1. This tax was fully absorbed by the industry through wholesale price reductions.[1] However, in October 1996, the cigarette tax increased to $0.76 per pack (with comparable increases on smokeless tobacco products), which it remains today. Funding for tobacco control efforts began in FY 1994. Massachusetts' FY 1996 budget for tobacco control activities funded by the Department of Public Health and the Department of Education was $65 million ($10.60 per capita).

Per Capita Consumption

California Before the implementation of the program funded in FY 1989 by Proposition 99, per capita cigarette consumption was declining in California at rates approximately equal to those in the rest of the country (from 1983–1989, 0.4 packs/person decline per year in California and 0.36 packs/person decline in the rest of the United States).[4] From 1989 to 1993, the decline increased to 0.64 packs/person/year in California and 0.42 packs/person/year in the rest of the United States.[4] An econometric analysis further estimated the impact of the 1989 tax increase and the early effects of the State's media campaign from 1990 to 1992. Of the 1,051 million packs of reduction in sales between 1990 and 1992, an estimated 232 million (22%) were attributed to the media campaign and 819 million (78%) to the tax increase.[5] Until early 1992, the media program was the only part of the tobacco control program that was fully implemented. Between 1993 and 1996, per capita consumption declined 0.17 packs/person per year in California but only 0.04 packs/person per year in the rest of the country.[4] Results reported in 1996[1] confirmed the greater decline in California even though the California cigarette excise tax has changed only slightly since 1989 and program funding has recently been decreased. Between 1993 and 1996, expenditures for tobacco control declined by more than 50%. The tobacco industry's spending for advertising and promotions exceeded the State's tobacco control expenditures by a ratio of about 5 to 1 from 1989 to 1993; that ratio had increased to nearly 10 to 1 by 1996.[4,6]

Massachusetts Early results from Massachusetts also are positive. Before the implementation of tobacco control programs funded in 1993 by Question 1, per capita cigarette consumption was declining in Massachusetts at rates approximately equal to those in the rest of the country (6.4% in Massachusetts and 5.8% in the States other than California).[1] Between 1992 and 1997, per capita consumption declined by 31% (from 117 packs/adult to 81 packs/adult) in Massachusetts, while the decline in the remaining 48 States was only 8%.[7] Between 1993 and 1996, per capita consumption declined more consistently in Massachusetts than in California.[1] Although program funding declined about 15% in Massachusetts from FY 1995 to FY 1997,[7] this decline was less than that in California. The impact of the October 1996 excise tax increase on consumption patterns in Massachusetts is still being analyzed.

Smoking Prevalence Among Adults

California Between 1989 and 1995, cigarette smoking prevalence rates among adults declined in California almost twice as rapidly as in the rest of the country (from 26.7% in 1988 to 16.7% in 1995 in California and from 30.2% in 1988 to 24.7% in 1995 in the rest of the country).[1,6] However, the rate of decline in smoking prevalence in California slowed from 1995 to 1997, following a significant decline in tobacco control program spending, from almost $100 million in 1989–1990 to $53 million in FY 1994.[4,6]

Massachusetts Adult smoking prevalence rates in Massachusetts have continued to decline, from 23.5% (average of 1990–1992, before the tobacco control program started) to 20.6% in 1997.[1,7] In the rest of the country (excluding California), adult prevalence rates declined from 24.1% in 1990–1992 to 23.4% in 1993–1995.

Smoking and Smokeless Tobacco Prevalence Among Young People

A multivariate analysis of data from the school-based Monitoring the Future Study of 8th, 10th, and 12th-grade students showed that the nationwide increase in youth smoking rates from 1992 to 1994 was slowed significantly in both California and Massachusetts ($p<.001$, controlling for price, smoking policies, and other nonprogram effects) as a result of the combined effect of a tax increase and a strong tobacco control program.[8]

California Between 1991 and 1996, rates of smoking during the past 30 days among California 8th and 10th grade students in the Monitoring the Future Study increased, but the increase in California was less dramatic than in other States. Among 8th-graders in California, rates of smoking during the past month varied from 12% to 14% between 1993 and 1997, while steadily increasing from 17% to 22% in the rest of the country. Similarly, among 10th-graders, past-month smoking rates were about 18%–19% between 1992 and 1997 in California while increasing from 22% to 32% in the rest of the country.[9] Data from the telephone-based California Youth Tobacco Survey indicate that rates of smoking during the past 30 days among 12–17-year-olds increased from approximately 9% in the early 1990s to 11.9% in 1995. These rates declined to 10.9% in 1997, while rates increased in the rest of the country.[6]

Massachusetts The prevalence of smoking among Massachusetts high school students (9th–12th-graders) declined in the Massachusetts Youth Risk Behavior Survey (YRBS) from 35.7% in 1995 to 34.4% in 1997, while increasing from 34.4% to 36.4% nationwide during the same time period.[11] Between 1993 and 1996, rates of smoking during the past 30 days among 8th-graders in Massachusetts declined from 26.5% to 26.0% while increasing from 16.7% to 21.0% nationwide. Among 10th and 12th-grade students in Massachusetts, prevalence increased at rates similar to those in the rest of the country.[10] Between 1993 and 1996, lifetime use of smokeless tobacco among 9th–12th-graders decreased from 25% to 20%, and current use decreased from 9% to 6%.[10] In the Massachusetts YRBS, smokeless tobacco use among 9th–12th-graders decreased from 8.4% in 1995 to 6.0% in 1997; among males, the decline was from 15.1% to 10.3%.

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