

RESEARCH PAPER

The federal initiative to halt the sale of tobacco to children—the Synar Amendment, 1992–2000: lessons learned

J R DiFranza, G F Dussault

Tobacco Control 2005;14:93–98. doi: 10.1136/tc.2004.009373

See end of article for authors' affiliations

Correspondence to: Joseph R DiFranza, MD, Department of Family Medicine and Community Health, 55 Lake Avenue, University of Massachusetts Medical School, Worcester, Massachusetts 01655, USA; difranzj@ummc.org

Received 20 July 2004
Accepted 6 January 2005

Background: The Synar Amendment was enacted by the US Congress in 1992 to require states and territories to establish and enforce laws prohibiting the sale of tobacco to minors.

Objective: To describe state and federal efforts to comply with the Synar mandate.

Methods: State and federal actions were examined for the eight years following enactment.

Data sources: Federal documents from 1992–2003, annual block grant applications from 59 states and territories describing activities during federal fiscal years 1995–2000.

Measures: Whether applicants made a good faith effort to comply by enacting a law, enforcing it with inspections and penalties, conducting a valid survey and meeting violation rate targets set by the Department of Health and Human Services (DHHS).

Results: Between 1996 and 2000, 26 states had made a good faith effort to comply with Synar every year. In 2000, 57 jurisdictions (excluding Maryland and Montana) had established laws without loopholes, 57 conducted a valid survey, and 54 actively enforced their laws. By 2002, violation rates had dropped substantially everywhere but Alaska and a few small territories. No state reached the violation rate goal of 20% without penalising violators.

Conclusions: The Synar Amendment has resulted in the universal adoption of laws prohibiting tobacco sales to minors and almost universal enforcement of those laws, resulting in dramatically reduced violation rates. Implementation was slowed significantly by a lack of good faith effort in many states and by DHHS's decision not to require states to enforce their laws by penalising lawbreakers.

In July 1992, the US Congress enacted the Synar Amendment making block grants to states from the Substance Abuse and Mental Health Services Administration (SAMHSA) under the Department of Health and Human Services (DHHS) contingent upon states enacting and enforcing a prohibition on the sale of tobacco to minors.¹ At that time, state enforcement of such laws was non-existent and 76% of test purchases by minors resulted in sales.² Congress allowed states until 1994 to enact a law and enforce it "in a manner that can reasonably be expected to reduce the extent to which tobacco products are available to individuals under the age of 18".¹ To this end, states are required to conduct "random, unannounced inspections to ensure compliance with the law".¹ Congress required DHHS to reduce block grant funding to non-compliant states by 10% for 1994, 20% for 1995, 30% for 1996, and 40% for all subsequent years.¹ Since 1999, Congress has provided an alternative penalty mechanism by which a state can avoid the 40% reduction in its block grant if the state stipulates that it will spend its own funds to improve compliance with the law. The amount they must commit to this effort is "equal to 1 percent of such State's substance abuse block grant allocation for each percentage point by which the State misses the retailer compliance rate goal...".³

Final regulations defining what was required in terms of enforcement were not released until 19 January 1996, three and a half years after Synar was enacted.⁴ The regulations provided a performance standard rather than specifying particular enforcement activities. Beginning in 1996, states were required to conduct statewide annual scientific surveys using underage decoys to determine the rate at which merchants violated the law. DHHS set a goal of reducing violation rates to 20%.⁴ Four states had achieved this goal by 1996. The remaining states were assigned individualised

declining interim annual targets allowing up to seven years to reach 20%.

Synar requires states to enforce a state law. In February, 1997 the Food and Drug Administration (FDA) enacted federal regulations prohibiting the sale of tobacco to minors.⁵ In 1998, FDA enforcement began through federal contracts with law enforcement agencies in cooperating states.⁶ In 1999, the first author reported that SAMHSA had not faulted 18 states and territories that had failed to produce evidence of penalising merchants who made illegal sales.⁷ In response to a request from Representative Henry Waxman, the General Accounting Office (GAO) investigated and confirmed that this was the case.⁸ SAMHSA officials told the GAO "that ensuring state enforcement of youth tobacco access laws has not been their primary focus because they were relying on FDA's enforcement activities, which included assessing monetary penalties against retailers".⁸

In 1999, it was noted that while states were "awash in tobacco settlement dollars... roughly half of all states had never expended a penny to enforce their law despite their repeated certifications that they were effectively doing so".⁷ When states reported their 1999 violation rates, it was clear that a substantial and growing number of states were failing to meet their performance standards, as will be detailed below. Four months later, on 1 February 2000, SAMHSA spared several states from penalties by allowing them to retrospectively renegotiate relaxed targets for 1999 and future years.⁹ On 21 March 2000, the Supreme Court terminated the FDA's jurisdiction over tobacco, thus ending FDA enforcement and leaving states to their own devices.¹⁰

Abbreviations: DHHS, Department of Health and Human Services; FDA, Food and Drug Administration; GAO, General Accounting Office; SAMHSA, Substance Abuse and Mental Health Services Administration

This report provides a longitudinal analysis of the first nine years under Synar (1992–2000) to identify factors that have contributed to its successes and failures. Of particular interest was the impact of DHHS' decision not to require states to enforce their laws by penalising lawbreakers.

METHODS

We conducted a five year audit of over 15 000 pages of state and federal documents concerning the Synar Amendment.^{7–12} Unreferenced statements of fact presented in this paper represent the products of this audit. The term "state" includes the District of Columbia and eight US territories (American Samoa, Federated States of Micronesia, Guam, Republic of the Marshall Islands, Northern Mariana Islands, Palau, Puerto Rico, and the US Virgin Islands). All states file an annual block grant application.¹³ These applications include: (1) a description of the state law and any changes that were made; (2) a listing of state enforcement activities; (3) a description of the survey design, protocol, and results; and (4) additional efforts made by the state to reduce youth access. Copies of state block grant applications describing activities from 1995 to 30 September 2000 were obtained from SAMHSA through a series of federal Freedom of Information requests. Additionally, copies of any court documents, notes from site visits, internal correspondence at SAMHSA, audit sheets, and correspondence between each state and SAMHSA were obtained, including letters, email, fax, and notes of phone calls. These materials number from a few dozen to 300–400 pages per year for individual states. State names will be used to indicate that the source material for a particular reference is from these unpublished materials. When state reports were sketchy, additional information about enforcement efforts was obtained by contacting voluntary agencies and state, county, and local officials. Information on federal activities was obtained from SAMHSA publications, through correspondence, and by attending several of the annual national Synar conferences hosted by DHHS.¹⁴ The authors audited all materials.

For each year, we judged a state to have made a *good faith effort* if it met the following four criteria as outlined in the Synar Amendment and supporting regulations.

- **Laws**—States must have "in effect a law providing that it is unlawful for any manufacturer, retailer, or distributor of tobacco products to sell or distribute any such product to any individual under the age of 18".¹ Although note was made of loopholes that allowed such sales without penalty, such loopholes were not counted against a good faith effort because a penalty is not required by Synar.
- **Compliance surveys**—States had to complete an annual randomised, statewide compliance survey that was free of obvious bias in the manner in which outlets were selected for testing.^{15–17} Although SAMHSA's standard requires a confidence interval for the survey not to exceed three percentage points, the authors did not penalise a good faith effort if the confidence interval was within five percentage points.
- **Enforcement**—States are required to "annually conduct random, unannounced inspections to ensure compliance with the law".¹ While inspections provide information about compliance with the law, they do not "ensure" compliance unless they are linked to punishment for non-compliance. To be credited with a good faith effort, states had to conduct test purchases and penalise at least one lawbreaker during the year. Although Synar requires states to enforce a state law, states were given credit for enforcement whether violators were prosecuted under municipal, county, state, or federal laws.

- **Violation targets**—States had to achieve a violation rate within three percentage points of their original or renegotiated target as required by SAMHSA.

In addition to these criteria, we determined whether states: (1) committed resources to enforcement; (2) were found in non-compliance by SAMHSA; (3) renegotiated their target goals; and (4) had been penalised by SAMHSA. This report represents a summary and analysis of the historical record based upon available documentation. No statistical analysis was performed on state compliance data.

RESULTS

Despite speculation that states would forgo block grant funding instead of complying with Synar, none have done so. Table 1 shows which states made a consistent good faith effort by consistently meeting each of the four criteria.

Laws

In 1986, excluding US territories, 12 states (Colorado, Georgia, Kentucky, Louisiana, Missouri, Montana, New Hampshire, New Mexico, South Dakota, Virginia, Wisconsin and Wyoming) had no law prohibiting the sale of tobacco to minors, and 13 others allowed sales to minors under 18.¹⁸ Our audit revealed that by 1996 all states and territories had outlawed sales to minors under 18 (table 2). However, three had loopholes. Until 2000, vending machine operators in Maryland were granted immunity. In Montana, storeowners enjoy immunity from penalties until their fifth offence. In the Northern Marianas Islands, until a model law was adopted in March 1999, successful prosecution was a practical impossibility because minors could buy tobacco if it was not for them.

Although Synar prompted much legislative activity, few states adopted model laws (for example, Northern Marianas Islands, Vermont). Far more laws made enforcement and prosecution more difficult and less effective (for example, Delaware, Idaho, Kansas, Maryland, Missouri, Montana, Puerto Rico, Wisconsin, West Virginia, Wyoming). Examples of features that make enforcement more difficult include: (1) stripping local officials of the authority to enforce the law; (2) providing no penalty for a first offence; (3) exempting vending machine operators or store owners from prosecution; (4) requiring a court order to use youths on compliance checks (Tennessee); (5) allowing only certain officials to prosecute cases; (6) pre-empting local laws; and (7) proscribing how and how often compliance checks can be conducted. In almost every state, a model law would make enforcement more efficient and effective.

Compliance surveys

Baseline surveys were completed in 1996 by 58 of the 59 states. The Marshall Islands failed to conduct an unbiased survey for five consecutive years. DHHS provided extensive assistance to help states improve the quality of their surveys. Despite quarterly contractual agreements not to alter their survey designs, many states did just that. Each year, from one to five states have failed to conduct a valid survey (table 2).

Compliance check protocols used by some states may have biased the survey results in favour of lower violation rates by eliminating youths who are or appear older (Nevada); by using only inexperienced youths (South Carolina); by having youths ask for change for vending machines (Arkansas, Michigan, West Virginia); or by counting all requests for proof of age as a refused sale (Idaho, Micronesia, Virginia).¹¹

The youth's age is the most important independent variable determining violation rates.¹⁹ For example, in New Jersey's 2000 survey, the violation rate was 12% for 14–15 year olds and 32% for 16–17 year olds. American Samoa used

Table 1 State efforts to enact and enforce a youth access law and their violation rates as measured by annual statewide surveys, 1996–2000

	Good faith effort*					Violation rate†				
	1996	1997	1998	1999	2000	1996	1997	1998	1999	2000
Alabama	Yes	Yes	Yes	Yes	Yes	35	23	16	17	20
Alaska	No	Yes	Yes	No	No	34	29	25	34	36
Arizona	Yes	Yes	Yes	Yes	Yes	56	12	20	23	13
Arkansas	No	No	Yes	Yes	Yes		22	22	11	22
California	Yes	Yes	Yes	Yes	Yes	29	22	13	17	13
Colorado	Yes	Yes	Yes	Yes	Yes	42	19	28	16	6
Connecticut	Yes	Yes	Yes	Yes	No	70	61	35	17	18
Delaware	No	No	No	Yes	Yes	29		33	34	18
District of Columbia	No	No	No	Yes	Yes	46	40	47	26	25
Florida	Yes	Yes	Yes	Yes	Yes	7	7	8	8	8
Georgia	Yes	Yes	Yes	Yes	Yes	48	21	13	25	20
Hawaii	No	Yes	Yes	Yes	Yes	45	23	15	11	7
Idaho	Yes	No	Yes	Yes	Yes	56		27	14	19
Illinois	Yes	Yes	Yes	Yes	Yes	44	26	13	12	15
Indiana	Yes	No	Yes	Yes	Yes	40	24	27	28	22
Iowa	Yes	Yes	No	No	Yes	40	25	36	33	29
Kansas	Yes	Yes	Yes	Yes	Yes	63	47	35	29	23
Kentucky	No	Yes	Yes	Yes	Yes	59	24	14	20	13
Louisiana	Yes	Yes	Yes	Yes	Yes	73	39	20	7	7
Maine	Yes	Yes	Yes	Yes	Yes	17	13	4	8	9
Maryland	No	No	No	No	Yes	54	36	35	33	25
Massachusetts	Yes	Yes	Yes	Yes	Yes	36	17	19	14	18
Michigan	Yes	Yes	Yes	Yes	No	41	20	26	24	27
Minnesota	Yes	Yes	No	No	Yes	30	27	32	28	19
Mississippi	No	Yes	Yes	No	Yes	40	31	33	29	12
Missouri	No	Yes	No	No	Yes	40	30	35	27	15
Montana	No	No	No	Yes	Yes	45	39	34	25	22
Nebraska	Yes	Yes	Yes	No	Yes	39	23	24	23	15
Nevada	Yes	Yes	Yes	Yes	Yes	31	20	17	23	23
New Hampshire	Yes	Yes	Yes	Yes	Yes	16	12	8	8	10
New Jersey	Yes	Yes	Yes	Yes	Yes	44	27	27	23	25
New Mexico	Yes	Yes	Yes	Yes	Yes	30	23	14	19	12
New York	Yes	Yes	Yes	Yes	Yes	38	23	20	19	16
North Carolina	Yes	No	Yes	Yes	Yes	50	45	25	25	20
North Dakota	Yes	Yes	Yes	Yes	Yes		31	32	19	12
Ohio	Yes	Yes	Yes	Yes	Yes	39	23	23	21	21
Oklahoma	Yes	Yes	Yes	Yes	Yes	48	32	25	20	19
Oregon	Yes	Yes	No	Yes	Yes	39	24	29	18	23
Pennsylvania	Yes	Yes	Yes	No	Yes	56	30	32	41	27
Rhode Island	Yes	No	No	No	No	30		30	27	
South Carolina	Yes	Yes	Yes	Yes	Yes	36	23	25	20	19
South Dakota	Yes	Yes	Yes	Yes	Yes	31	13	18	9	8
Tennessee	No	Yes	Yes	No	Yes	63	38	24	31	25
Texas	Yes	Yes	Yes	Yes	Yes	56	24	13	15	13
Utah	Yes	Yes	Yes	Yes	Yes	35	28	19	16	19
Vermont	Yes	Yes	Yes	Yes	Yes	28	8	7	20	15
Virginia	No	Yes	Yes	Yes	Yes	46	32	20	23	23
Washington	Yes	Yes	Yes	Yes	Yes	20	6	15	13	14
West Virginia	Yes	Yes	Yes	No	Yes	37	25	25	34	21
Wisconsin	Yes	Yes	Yes	Yes	No	48	22	28	22	25
Wyoming	No	No	No	No	Yes	42	29	46	56	9
American Samoa	Yes	Yes	Yes	Yes	Yes	47	35	10	10	8
Guam	No	No	No	No	No	60		46	37	42
Marshall Islands‡	No	No	No	No	No			99	90	75
Micronesia	No	No	No	No	No	58	31	36	21	22
Northern Marianas	No	No	No	Yes	Yes	95	83	42	27	25
Palau	No	Yes	Yes	No	No	90	56	47	36	36
Puerto Rico	No	No	Yes	Yes	Yes	91	92	37	27	27
Virgin Islands	Yes	Yes	No	No	Yes	35	5	32	43	15

*The state has a law with or without loopholes, enforced the law, conducted an unbiased survey, and met its original or revised violation rate target. States that consistently made good faith efforts are depicted in bold.

†Proportion of merchants making illegal sales in the state's survey. Missing data indicate that a valid survey was not completed.

‡Survey data are likely to be biased.

only 14 year olds to conduct their 2000 survey, while Puerto Rico used only 18 year olds. It will be harder for Puerto Rico to reach a 20% violation rate. As states are using different measuring sticks, they are being held to different standards.

Enforcement

Between 1992 and 2000, states conducting enforcement increased in number from 0 to 54 (table 2), and those funding enforcement increased from 0 to 42. When the Synar

regulations were finalised, Florida, Maine, New Hampshire, and Washington had already demonstrated that 20% violation rates could be attained within a year or two by funding a state agency enforcement programme. Few states emulated their successful peers, opting instead to rely upon educational approaches that had previously failed.²⁰ Many states took in far more revenue from underage sales than they spent on enforcement.²¹ States that enacted laws that protected lawbreaking merchants from prosecution often adopted

Table 2 The number of states and territories out of 59 that met the stated criteria for the years indicated

	1996	1997	1998	1999	2000
A law prohibiting tobacco sales to youths under 18	59	59	59	59	59
The law has no loopholes	56	56	56	57	57
Completed a valid but flawed survey	56	54	58	58	57
Completed a survey of high quality	41	44	54	54	54
Conducted compliance tests for enforcement	44	51	53	54	55
Conducted compliance tests and penalised violators	41	51	52	54	54
Failed to attain their original violation rate target	*	7	9	14	12
The number of states with violation rates under 20%	4	12	21	24	32

* There were no targets set for 1996.

tobacco industry sponsored merchant education programmes such as “We Card” and “It’s the Law” in lieu of enforcement (Missouri, Montana, Tennessee, Wyoming). Industry sponsored educational programmes have not been shown to be effective in reducing violation rates.^{19–22} Several states that relied on an educational approach reported “bounce back” in 1998 as violation rates began to rise (Colorado, District of Columbia, Iowa, Michigan, Minnesota, Missouri, Oregon, Wyoming).

Although merchant education may be important to achieving very low violation rates, it appears to be inadequate as a sole strategy. Not a single one of the 59 states was able to reach the 20% violation rate goal without first instituting an enforcement strategy that included penalising lawbreakers. Thus, in retrospect, failure was inevitable for any state that did not institute enforcement. In this regard, SAMHSA’s decision (as outlined in the GAO report⁸) not to require states to actively enforce their laws proved fateful. Six years after the Congressional mandate to enforce their laws, nearly half of the states had yet to do so.⁸ SAMHSA’s decision not to enforce this mandate meant that many states took much longer to reach the 20% violation rate goal as they pursued ineffective strategies. Wyoming offers a case history; it failed to enforce its law from 1992 to 1999. After relying on the Phillip Morris sponsored “We Card” programme, in 1999, Wyoming had the highest violation rate among the 50 states (table 1). After failing to meet its violation target for two consecutive years, it committed funds for enforcement and achieved a 9% violation rate in 2000. Had SAMHSA penalised the state for failing to enforce its law in 1996, the state might have achieved this result three years sooner. This was a common scenario.

Several states instituted enforcement inspections only when the FDA offered to pay for them and prosecute the violators under federal law (for example, Tennessee). FDA funding catalysed the formation of many state enforcement programmes. Several states committed resources to continue inspections when FDA funding was halted (Colorado, Connecticut, Hawaii, Illinois, Indiana, Maine, New Mexico, Tennessee, Virginia). Some states enacted laws making enforcement unwieldy and expensive—for example, by requiring that youths who wish to participate in compliance checks obtain permission by appearing with their parents before a judge in the daytime (Tennessee), or requiring that state officials obtain permission from local officials before conducting a compliance check (South Dakota). In Connecticut, enforcement ended abruptly when the FDA pulled out in 2000 and the state lacked a workable mechanism to enforce its law eight years after Synar was enacted. Four additional states failed to enforce their laws in 2000. The Wisconsin legislature continued to pile restrictions on the conduct of inspections until every community abandoned enforcement (Wisconsin). Through 2000, Guam

and Micronesia had never enforced their laws. Palau did so only during 1998.

Violation targets

Effective enforcement rapidly reduced violation rates. By 1998, 22 states had reduced their violation rates to 20% or less. Among the remaining 37 states, 25 had failed to make a good faith effort in one or more years up to that point. Some states made no progress. Wyoming’s rate was 42% in 1996 and 56% in 1999. Alaska’s was 34% in 1996 and 36% in 2000. The failure to institute effective enforcement caught up with many states in 1999, when 14 states would have failed to reach their targets had DHHS not retroactively weakened them (table 2). Through 2000, 23 states failed to meet one or more of their original targets.

Lowering the goal posts by renegotiating targets

In 2000, four states with no funded enforcement (Maryland, Missouri, Montana, Rhode Island) were rescued from being out of compliance by SAMHSA’s decision to renegotiate targets for 1999, saving them from having to fund enforcement. At this time, 27 states had achieved the 20% goal and 32 had not. Among those 32, only 22% had made a good faith effort each year up to that point. Only 16% had funded and consistently conducted state agency enforcement; 44% had never funded enforcement, 47% had some years with no enforcement, and 59% had not involved state agencies in enforcement. Among the states that had rates of 20% or less during fiscal year 1999, 85% had funded enforcement, 85% had enforcement every year, and 78% had involved state agencies in enforcement. As renegotiation was open only to states that had not reached the goal, it largely benefited those states that had done the least to fulfil the Synar mandate.

Emblematic of Delaware’s lack of effort, in 1996 the Division of Revenue was given authority to suspend licences, but three years later (26 April 1999) the implementing regulations had not even been drafted. After failing to enforce its law in 1996, failing to complete a valid survey in 1997, failing to meet its target in 1998, and reporting an increase from 38% to 54% in violation rates for youths over age 15 in 1999, Delaware was granted four additional years to reach 20%.²³

After failing to reach its target for 1998, Missouri was penalised by DHHS and required to fund enforcement. In February 2000, SAMHSA allowed the state to avoid a second penalty by renegotiating a relaxed target for 1999. As required, the state legislature committed \$1.2 million for enforcement but sabotaged it by not allowing the money to be used to conduct compliance checks.²⁴ In May 2000, SAMHSA asked the state to explain how it would enforce the law.

Thirty states negotiated relaxed goals; of these, 12 had failed to enforce their laws. In practical terms, DHHS allowed the most dysfunctional states to set the pace of progress, as

other states were allowed the same number of years to reach the 20% goal.

DISCUSSION

Many of the original goals of the Synar Amendment have been achieved. Every state now prohibits the sale of tobacco to minors, and with few exceptions, these laws are enforced. Excluding the territories but including the District of Columbia, all but one state had made dramatic improvements in their violation rates through 2002.²⁵ This certainly would not have occurred without federal penalties; several small territories that were granted immunity by Congress failed to implement Synar. While some states strive to drive violation rates as low as possible to maximise the public health benefit (for example, Florida, Maine, New Hampshire, and South Dakota), many others do only the minimum required to avoid a penalty (for example, Indiana, Missouri, Ohio, Pennsylvania, Tennessee, Wisconsin). If the Synar mandate disappeared, it is likely that enforcement would stop in all but a few states.

Many states were very effective in responding to the Synar mandate. They passed new laws, launched creative educational campaigns, devoted resources, and reorganised state agencies and responsibilities to implement enforcement. The FDA made an impact by setting up and funding enforcement programmes that were eventually taken over by states. SAMHSA made important contributions by providing model laws and technical support, and by hosting national and regional meetings to provide guidance and facilitate the exchange of ideas and information. Although the goals of Synar were largely achieved, there were several problems along the way. It is useful to identify the pitfalls, not to assign responsibility, but to avoid repeating them in the future.

Some states were clearly opposed to enforcing the law while others never made it a priority until forced to do so by a financial penalty. Some states were reluctant to prosecute lawbreaking retailers (Iowa, Tennessee, Wyoming). For example, Wyoming refused to conduct compliance checks, and no violator was ever penalised until 2000, eight years after Synar was adopted. In Missouri, not only did the legislature forbid enforcement money to be used on compliance checks, they provided one of the weakest penalties in the nation, a maximum \$25 fine, and made prosecution very difficult by providing that clerks could rely solely on appearance to determine a customer's age. Few states actually used on enforcement any of the windfall they received from the Master Settlement Agreement.²⁶ Many states adopted ineffective laws that were drafted by the tobacco industry.²⁷ These tactics of delay and sabotage were unintentionally rewarded when DHHS granted states many extra years to come into compliance, allowing them to put off the need to fund enforcement.

When the Synar Amendment was enacted in 1992, the USA was in the midst of an epidemic which saw teen smoking rates shoot up by 40%.²⁸ Yet Synar was implemented without urgency. Several decisions made by DHHS hindered the implementation of Synar. DHHS prohibited the use of block grant funds for enforcement. Modest funding might have allowed state health officials to implement pilot enforcement programmes and turn to state funds for expansion. DHHS' delayed release of the Synar regulations put non-compliant states at risk for an initial penalty of a 40% cut in block grant funding. Had a less severe penalty option been available to SAMHSA it may have been more inclined to punish a state's failure to enforce its law.

By redefining "enforce" to mean any activity intended to improve compliance with the law, DHHS gutted the statutory requirement that states must enforce their laws. This was ill advised, as previous attempts to maintain low violation rates

What this paper adds

Enacted in 1992, the Synar Amendment is a federal mandate requiring all states and territories to enact and enforce a law prohibiting the sale of tobacco to minors. Previous audits identified a number of problems hampering the implementation of this law.

The current paper provides a historical perspective, identifying both the successes and the pitfalls that have accompanied the implementation of the Synar Amendment.

without issuing penalties had failed.²⁰ It could be argued that existing data were limited and states should be free to experiment with alternatives. However, in the end, no state achieved the 20% goal without punishing lawbreakers. SAMHSA required enforcement only when states had failed, and sometimes, not even then (Rhode Island). DHHS's failure to emphasise enforcement was highlighted when Pennsylvania argued that its failure to enforce its law was an extraordinary circumstance that should absolve it of responsibility for missing its target. DHHS allowed states to shun enforcement while pursuing ineffective programmes sponsored by the tobacco industry (Montana, Wyoming).^{19, 22} As a result, 14 states missed their original 1999 targets. The impact of DHHS's misjudgement and the states' failure of effort were obscured by allowing 30 states to renegotiate weaker targets.

State failures might have been even more common if the FDA had not moved to improve state violation rates by enforcing the federal law. This may have bought states some time, time which they did not always use wisely. With the FDA doing enforcement, some states did not bother to establish their own enforcement programmes and failed to meet their targets when the FDA programme was halted (Alaska, Connecticut).

Although SAMHSA provided free technical assistance on all matters concerning Synar, it could have been much more directive to floundering states. DHHS communicated with the highest government officials only after a state had failed.

Data suggest that enforcement of alcohol sales laws reduces underage drinking, and the Institute of Medicine has recommended that the Synar approach be applied to alcohol.^{29, 30} Hindsight provides valuable lessons should Congress ever choose to require states to enforce alcohol sales laws.

- No state achieved a violation rate under 20% without conducting compliance tests and penalising merchants. This should be a strictly enforced requirement from the outset.
- Several states made remarkable progress after being required to fund enforcement when they missed their targets. This was an effective policy strategy.
- Under Synar, states that committed resources were treated unfairly when states that did not were granted up to six additional years to accomplish the same goal. Fairness would dictate that the same deadline should apply to all states.
- To hold all states to a uniform performance measure, the inspection protocol must be standardised.
- Many states have achieved violation rates below 10%, which suggests that the 20% violation rate goal may be too weak.
- A federal tax of one cent per pack of cigarettes could have provided generous funding for enforcement programmes in every state and territory.³¹ Federal block grant funding for enforcement would have addressed one of the states'

primary objections to Synar and could have reduced the time required to meet the Synar goals.

More research is needed to determine if the Synar Amendment has had an impact on teen smoking. Several authors assert that reducing the availability of tobacco has contributed to a reduction in youth smoking rates.^{32–38} However, others believe the evidence is lacking, and a few have even called for abandoning efforts to reduce the availability of tobacco to youths.^{39–40} Youth smoking rates have fallen 30% since the Synar regulations went into effect.²⁸ It is certainly plausible that Synar has contributed to this salubrious trend as one component of a multifaceted public health effort that has included price hikes, education, anti-tobacco media campaigns, limited restrictions on tobacco marketing, and restrictions on public smoking. It would therefore seem wise to maintain this policy while its impact is carefully evaluated.

ACKNOWLEDGEMENTS

This project was supported by a grant from the Robert Wood Johnson Foundation Substance Abuse Policy Research Program.

Authors' affiliations

J R DiFranza, G F Dussault, Department of Family Medicine and Community Health, University of Massachusetts Medical School, Worcester, Massachusetts, USA

Competing interest: none

REFERENCES

- State law regarding sale of tobacco products to individuals under age of 18. 106 STAT. 394, Public Law 102-321, July 10, 1992, Sec 1926. 42 USC 300x-26.
- Radecki TE, Zdunich CD. Tobacco sales to minors in 97 US and Canadian communities. *Tobacco Control* 1993;2:300–5.
- Congressional Record. 17 November 1999, p H12390, H12415.
- Department of Health and Human Services. 45 CFR Part 96 Tobacco regulation for substance abuse prevention and treatment block grants; final rule. *Federal Register* 19 January, 1996:1492–509.
- Department of Health and Human Services. Food and Drug Administration. 21 CFR Part 801, 803, 804, 807, 820 and 897. Regulations restricting the sale and distribution of cigarettes and smokeless tobacco to protect children and adolescents; final rule. *Federal Register*, 28 August 1996: 44396–45318, RIN 0910-AA48.
- Clark PI, Natanblut SL, Schmitt CL, et al. Factors associated with tobacco sale to minors. Lessons learned from the FDA compliance checks. *JAMA* 2000;284:729–34.
- DiFranza JR. Are the federal and state governments complying with the Synar amendment? *Arch Pediatr Adolesc Med* 1999;153:1089–97.
- United States General Accounting Office. Report to the Ranking Minority Member, Committee on Government Reform, House of Representatives. November 2001; 1–29; Washington, DC. GAO-02-74.
- Chavez, Nelba. Administrator, Substance Abuse and Mental Health Services Administration. Letter to state officials. 1 February, 2000.
- Food and Drug Administration, et al. v. Brown & Williamson Tobacco Corporation, et al., 529 U.S. 120 (2000).
- DiFranza JR. State and Federal compliance with the Synar Amendment: federal fiscal year 1997. *Arch Pediatr Adolesc Med* 2000;154:936–42.
- DiFranza JR. State and Federal compliance with the Synar Amendment: federal fiscal year 1998. *Arch Pediatr Adolesc Med* 2001;155:572–8.
- US Department of Health and Human Services. FY 1997 Substance abuse block grant application funding agreements/certifications as required by the Public Health Service Act. Form 3, Office of Management and Budget No. 0930–0080.
- US Department of Health and Human Services. Synar regulation implementation FY 97 state compliance. Report to Congress. 1998. DHHS Pub. No. (SMA) 98–3186, Rockville, Maryland.
- Center for Substance Abuse Prevention. Synar Regulation: Tobacco outlet inspection – guidance. Third Draft. USDHHS, PHS, SAMHSA, 20 September, 1996:i–76.
- Williams RL, Hersey JC, Mowery PF, et al. Design of inspection surveys for vendor compliance with restrictions on tobacco sales to minors. *Batelle*. Atlanta, Georgia, 24 April, 1994:i–71.
- Center for Substance Abuse Prevention. Synar Regulation: sample design guidance. Rockville, Maryland: US Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, 1996:i–54.
- DiFranza JR, Norwood BD, Garner DW, et al. Legislative efforts to protect children from tobacco. *JAMA* 1987;257:3387–9.
- DiFranza JR, Savageau JA, Aisquith BF. Youth access to tobacco: the effects of age, gender, vending machine locks and the “It’s the Law” programs. *Am J Public Health* 1996;86:221–4.
- Altman DG, Rasenick-Douss L, Foster V, et al. Sustained effects of an educational program to reduce sales of cigarettes to minors. *Am J Public Health* 1991;81:891–3.
- DiFranza JR, Librett JJ. State and Federal revenues from tobacco consumed by minors. *Am J Public Health* 1999;89:1106–8.
- DiFranza JR, Brown LJ. The tobacco institute’s “It’s the Law” campaign: has it halted illegal sales of tobacco to children? *Am J Public Health* 1992;82:1271–3.
- Wilson, Lee A. Senior Public Health Advisor, Center for Substance Abuse Prevention. Letter to Renata Henry, 16 March, 2000.
- Couty, Michael. Missouri Department of Mental Health. Letter to Lee Wilson, Center for Substance Abuse Prevention, 6 April, 2000.
- SAMHSA. http://samhsa.gov/tobacco/synartable_print.htm.
- Meier B. 46 states accept \$206 billion settlement with cigarette makers. *New York Times*, 21 November, 1998:1.
- DiFranza JR, Godshall WT. Tobacco industry efforts hindering enforcement of the ban on tobacco sales to minors. Actions speak louder than words. *Tobacco Control* 1996;5:127–31.
- Johnston LD, O’Malley PM, Bachman JG. Monitoring the Future National survey results on drug use, 1975–2002. Volume 1: Secondary school students. (NIH Publication No.03-5375). Bethesda, Maryland: National Institute on Drug Abuse, 2003.
- Barry R, Edwards E, Pelletier A, et al. Enhanced enforcement of laws to prevent alcohol sales to underage persons – New Hampshire, 1999–2004. *MMWR Morb Mortal Wkly Rep* 2004;53:452–4.
- Institute of Medicine. *Reducing underage drinking: a collective responsibility*. Washington, DC: Institute of Medicine, 2003.
- DiFranza JR, Peck RM, Radecki T, et al. What is the potential cost-effectiveness of enforcing a prohibition on the sale of tobacco to minors? *Prev Med* 2001;32:168–74.
- DiFranza JR. Restricted access to tobacco reduces smoking rates among youth. In: Frank Columbus, ed. *Focus on smoking and health research*. Hauppauge, New York: Nova Science.
- Dent C, Biglan A. Relation between access to tobacco and adolescent smoking. *Tobacco Control* 2004;13:334–8.
- Forster JL, Murray DM, Wolfson M, et al. The effects of community policies to reduce youth access to tobacco. *Am J Public Health* 1998;88:1193–8.
- Jason LA, Ji PY, Anes MD, et al. Active enforcement of cigarette control laws in the prevention of cigarette sales to minors. *JAMA* 1991;266:3159–61.
- Jason LA, Berk M, Schnopp-Wyatt DL, et al. Effects of enforcement of youth access laws on smoking prevalence. *Am J Com Psychology* 1999;27:143–60.
- Pokorny SB, Jason LA, Schoeny ME. Effects of retail tobacco availability on initiation and continued cigarette smoking. *J Clin Child Adolesc Psychol* 2003;32:193–204.
- Tutt D, Bauer L, Edwards C, et al. Reducing adolescent smoking rates. Maintaining high retail compliance results in substantial improvements. *Health Promotion Journal of Australia* 2000;10:20–4.
- Stead LF, Lancaster T. A systematic review of interventions for preventing tobacco sales to minors. *Tobacco Control* 2000;9:169–76.
- Ling PM, Landman A, Glantz SA. It is time to abandon youth access tobacco programmes. *Tobacco Control* 2002;11:3–6.