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Perspective

Have Tobacco 21 Laws Come of Age?

Stephanie R. Morain, Ph.D., Jonathan P. Winickoff, M.D., M.P.H., and Michelle M. Mello, J.D., Ph.D.
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On January 20, 2016, New Jersey Governor Chris Christie vetoed a bill passed with strong bipartisan support by his state legislature that would have raised New Jersey's minimum age of sale for tobacco products to 21. The veto is a setback in an otherwise accelerating movement toward dissemination of "Tobacco 21" laws as a new tool for reducing young people's access to cigarettes and e-cigarettes. In 2013, only 8 U.S. localities had adopted Tobacco 21 laws. By March 2016, at least 125 localities and the state of Hawaii had done so, and California was on the cusp of following suit. In September 2015, the first federal Tobacco 21 legislation was introduced (Tobacco to 21 Act, S. 2100).

Are Tobacco 21 laws ready to go to scale, as these legislative developments suggest? We believe they are. In the past 2 years, research has generated new evidence that these laws are effective, enjoy very high levels of public support, and have minimal economic impact in the short term.

In 2012, when momentum for Tobacco 21 laws began to build, the arguments supporting their plausibility as a mechanism for deterring smoking initiation and reducing tobacco consumption among young people were strong. The vast majority of smokers begin smoking during adolescence, a period when the brain has heightened susceptibility to nicotine addiction. Nearly everyone who buys cigarettes for minors in the United States is under 21 years of age; raising the sale age prevents high school students from buying tobacco products for their peers.1 Raising the age to 21 also facilitates enforcement of sale restrictions, because many states use a different color or format for driver's licenses for under-21s.

Today, new evidence greatly buttresses the case for Tobacco 21 laws. A multivariate analysis of the effects of the law adopted in Needham, Massachusetts, using pooled cross-sectional data, revealed a 47% reduction in the smoking rate among high school students, along with a reported decline in area retail tobacco purchases.2 These decreases were significantly greater than those in 16 comparison communities without Tobacco 21 laws. A 2015 report by an Institute of Medicine (IOM) committee provided evidence from two different simulation models that increasing the minimum age to 21 would lead to a 12% reduction in smoking prevalence (see graph from IOM report). In terms of smoking initiation by young people, the IOM estimated a "large" (20.8–30.0%) effect among teens 15 to 17 years of age, with effects in the 12.5-to-18.0% range among other adolescents.

The health effects of such decreases are dramatic. If implemented now, the IOM report

estimated, a nationwide Tobacco 21 rule would result in 249,000 fewer premature deaths, 45,000 fewer deaths from lung cancer, and 4.2 million fewer lost life-years among Americans born between 2010 and 2019.[2] The health benefits would multiply as this cohort reached childbearing age: by 2100, the IOM projected 286,000 fewer preterm births among mothers 15 to 49 years of age, 438,000 fewer low-birth-weight babies, and 4000 fewer cases of sudden infant death syndrome. Although further evidence from jurisdictions where Tobacco 21 laws have been implemented is certainly desirable, the IOM found the evidentiary base sufficient to conclude that wider adoption of Tobacco 21 laws would prevent smoking initiation and save lives.

In addition, new survey evidence reveals strong public support for the Tobacco 21 approach. Two national public opinion studies published in 2015 found that 70 to 75% of Americans — including a majority of current smokers — support raising the minimum purchase age to 21.[3,4]

In July 2015, we surveyed a nationally representative sample of 1125 U.S. adults (≥18 years of age) regarding their attitudes toward various public health laws. The survey was conducted online, using a standing, probability-based panel of civilian, noninstitutionalized adults, and had a completion rate of 61.4%. We found that three in four Americans support the adoption of a federal Tobacco 21 law (see table).

Majority support extends across all major sociodemographic groups, including 68.3% support among young adults 18 to 24 years of age. Chi-square analyses revealed no significant differences according to sex, income or educational level, or race or ethnic background. Support is high even among current smokers (66.5%) and former smokers (73.0%).

Past health policy debates have underscored the importance of considering differences in support according to political party affiliation. Our results show that a federal Tobacco 21 law enjoys support across the political spectrum, including about 76% of respondents identifying as Republican and nearly 80% of Democrats. It may also be reassuring for policymakers to know that support among our respondents for a Tobacco 21 law equals or exceeds support for other widely adopted tobacco-control laws such as smoking bans in restaurants and bars. In other words, legislators of both red and blue stripes should feel comfortable supporting these laws without fear of voter backlash.

The major political barrier to scaling up the Tobacco 21 effort may be interest-group opposition. Media reports suggest, for example, that resistance from tobacco manufacturers, e-cigarette companies, and retailers' associations influenced Governor Christie's veto decision. Industry opposition undoubtedly emanates primarily from concerns about reduced sales revenue. Objections from a coalition of tobacco retailers and manufacturers, following a well-rehearsed playbook, emphasize the sanctity of personal liberty and warn that further access restrictions will harm small businesses.

But near-term economic harms are overstated. Estimates suggest that raising the tobacco-purchasing age to 21 would result in a 2-to-3% annual decrease in total tobacco sales.[5] Over the longer term, the revenue loss from decreased smoking prevalence will be substantial. But allowing future generations to become addicted to nicotine in order to preserve tobacco revenue fails the red-face test as an argument against Tobacco 21, just as it failed in debates over other laws restricting youth access to tobacco.

Support for a Federal Tobacco 21 Law among U.S. Adults, 2015.*				
Group	Definitely Support	Probably Support	Probably Oppose	Definitely Oppose
		%		
Overall	48.6	26.6	12.9	11.9
Political party				
Democrat	55.8	23.9	11.9	8.4
Republican	50.3	25.4	12.3	12.0
Independent	41.0	30.3	13.8	14.9
Smoking status				
Never	51.9	26.8	9.8	11.6
Former	47.8	25.2	15.5	11.6
Current	36.3	30.2	21.8	11.7
Age				
18–24 yr	38.8	29.5	16.1	15.6
25–44 yr	44.5	28.2	13.2	14.1
45–64 yr	51.9	25.0	12.9	10.1
≥65 yr	56.3	24.7	10.1	8.9
Sex				
Male	44.1	29.8	12.2	13.9
Female	52.8	23.6	13.6	10.0
Race or ethnic background				
White	49.0	25.8	12.1	13.1
Black	49.0	26.2	13.5	11.4
Hispanic	52.2	25.5	14.3	8.0
Other	37.8	36.5	15.7	10.1
Annual income				
<$50,000	44.7	27.3	12.8	15.2
$50,000–$99,000	50.7	27.8	11.5	10.1
≥$100,000	51.8	24.2	14.7	9.3

* Data are from the authors' survey of a nationally representative panel of 1125 U.S. adults, fielded July 7–18, 2015. Race or ethnic background was self-reported. Question text: "Would you support the U.S. Congress establishing 21 as the minimum legal age to purchase cigarettes?" The table presents weighted proportions accounting for the probability of selection into the survey sample. The Stanford University School of Medicine Institutional Review Board declared this study exempt.

Among the interest groups best placed to counteract industry opposition are medical and health professional organizations. The American Medical Association, the American

Academy of Pediatrics, the American Academy of Family Physicians, and the American Public Health Association all publicly support Tobacco 21 laws. Active engagement by these and other organizations is critical to ensuring that the policy frame for these laws remains focused on the health benefits, despite efforts to recast the laws as anti–small-business measures. Health professionals can also reinforce the message that Tobacco 21 is a pediatric intervention. The IOM concluded that although Tobacco 21 laws, on their face, affect young adults 18 to 20 years of age, the greatest beneficiaries are children 15 to 17 years of age.2

Legal barriers to scaling up Tobacco 21 exist, but they are surmountable. National adoption requires an act of Congress, because the Family Smoking Prevention and Tobacco Control Act of 2009 prohibits the Food and Drug Administration from raising the minimum age by using administrative regulations. Nationwide adoption is desirable because the broader the scope of the rule, the greater its health effects will be — and a federal law would eliminate the potential for adolescents to "jurisdiction hop" to obtain tobacco products. More widespread adoption by states is a next-best alternative. Further dissemination at the local level will continue but is hampered in 19 states by laws preempting any local law that is more stringent than the state law.

Local and state efforts have succeeded in extending Tobacco 21 protections to more than 16 million Americans. We believe the time has come to expand this effective, broadly supported approach to a much greater share of the population.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

SOURCE INFORMATION

From the Center for Medical Ethics and Health Policy, Baylor College of Medicine, Houston (S.R.M.); the Department of Pediatrics, Harvard Medical School, Boston (J.P.W.); the American Academy of Pediatrics Julius B. Richmond Center of Excellence, Elk Grove Village, IL (J.P.W.); and Stanford Law School and the Department of Health Research and Policy, Stanford University School of Medicine, Stanford, CA (M.M.M.).

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