



Age Restrictions for Tobacco Product Purchase

Executive Summary

As of 2019, tobacco purchases for those under 21 years of age are outlawed nationwide per a federal requirement. While research is ongoing on the effects of this order, early data suggests that these laws have resulted in modest declines in tobacco purchases by minors, and these declines are more pronounced when supported with local legislation. As of October 2021, 30 states, the District of Columbia, and 27 independent jurisdictions within Missouri raised the age of legal tobacco sales and associated enforcement provisions to 21 years old. At publication, no state law in Missouri restricts tobacco purchase to 21 years and older. At least five bills ([HB 2463](#), [HB 2786](#), [HB 2883](#), [HB 2903](#), [SB 1158](#)) were introduced in the 2022 Missouri regular legislative session to raise the legal age to sell tobacco or vaping products from 18 to 21 years of age.

Highlights

- Nearly 11,000 Missourians die every year from tobacco-related diseases, and roughly \$3 billion yearly is spent on smoking-related illness, and another \$3 billion on smoking-related losses in productivity in Missouri.
- Nearly 1 in 11 Missouri high schoolers smoke cigarettes and 1 in 5 use e-cigarettes, which is estimated to result in the premature death of 128,000 children in the state.
- State laws prohibiting the purchase of tobacco and vape products before the age of 21 have resulted in 2.5 to 3.9 percentage point declines in smoking among 18–20 year olds, as well as 2.8 percentage point drops in 16–17 year olds.
- While a majority of adults support laws that restrict tobacco to those aged 21 years and older, many younger adults (particularly below age 30) perceive e-cigarettes to be less harmful than cigarettes.

Limitations

- With the recency of the federal requirement for tobacco sales to age 21 and over, research on the magnitude of the positive impact on health and effects of the policy is lacking.
- Given that institutions (worksites, schools, housing, etc.) have variations of culture and acceptability in smoking behaviors, more studies on a wide range of policy options are still needed to determine the best methods at curbing youth tobacco use.

Research Background

*MOST Policy Initiative, Inc. is a nonprofit organization that provides nonpartisan information to Missouri's decisionmakers. All legislative Science Notes are written only upon request by members of the General Assembly. **This Science Note was published on 6/17/2022 by Dr. Ramon Martinez III, Health & Mental Health Policy Fellow – ramon@mostpolicyinitiative.org.***

Effects of Tobacco and Vape Use

As of 2019, nearly 1 in 5 Missouri adults smoke. Early tobacco use is a heavy predictor of future use, as roughly 98% of individuals who smoke start before the age of 26.^{1,2} The Missouri Department of Health and Senior Services reports almost 9% of high schoolers in Missouri smoke cigarettes, and the rate jumps to 20% when inclusive of e-cigarette use. Smoking cigarettes is estimated to cause 128,000 premature deaths among young smokers in the future. Nearly 11,000 Missourians die every year from tobacco-related diseases. The state spends roughly \$3 billion yearly on smoking-related illness, and another \$3 billion on smoking-related losses in productivity.^{1,2}

According to the Centers for Disease Control and Prevention (CDC), smoking can cause diseases ranging from “cancer, heart disease, stroke, lung diseases, diabetes, and chronic obstructive pulmonary disease (including emphysema and chronic bronchitis).” Smoking also increases risk for “certain eye diseases, and problems of the immune system, including rheumatoid arthritis.” Secondhand smoke causes “stroke, lung cancer, and coronary heart disease in adults, and sudden infant death syndrome, acute respiratory infections, middle ear disease, more severe asthma, respiratory symptoms, and slowed lung growth in children.”³ Further, smokeless tobacco products (like chews and dips) can cause “cancer of the mouth, esophagus and pancreas.” The products are also associated with “diseases of the mouth, and can increase risks for early delivery and stillbirth when used during pregnancy, can cause accidental nicotine poisoning in children, and may increase the risk for death from heart disease and stroke.”⁴

Vaping has become an alternative to cigarette smoking and is popular with youth smokers. According to the CDC, the health effects of vaping include developmental harm to “brain areas controlling attention, learning, mood, and impulse control.” Vapes and e-cigarettes also contain fine particles of nicotine, flavorings, and toxic heavy metals linked to lung disease and cancer. Vapes have been known to also malfunction and cause serious burns and injuries, and poisonings during accidental ingestion by children.⁵

Studies on Tobacco Use in Youth

Raising the Purchase Age and Price of Tobacco

A nationwide review of data by the CDC from 2009-2019 found that statewide laws raising the age of tobacco purchase to 21 years of age resulted in a 2.5 to 3.9 percentage point decline in smoking among 18-20 year olds. The review also showed a 2.8% drop in 16-17 year old smoking due to loss of peer social access.⁶ Another study found that e-cigarette-specific laws, without age restrictions on all tobacco, caused a 1% increase in cigarette use.⁷ Another study conducted from 2014-2017 found that general public approval for raising tobacco age was high; roughly 75% of adults overall supported laws that raised purchase age to 21 years old, and female support was nearly 80%.⁸

Raising the excise tax of tobacco can also have a positive correlation in lowering the ease of access to tobacco for youth. For example, a review from the U.S. Bureau of Labor Statistics found that over the period from 1990–2017, \$3–4 increases in per pack prices for cigarettes resulted in nearly two-third reductions in smoking among twelfth-grade students.⁹ Currently, Missouri has one of the lowest taxes of cigarettes in the nation, at an estimated 0.17¢/pack.²

Youth Perceptions of Tobacco Use

One nationwide study of students in grades 6-12 found that 64% of children surveyed perceived harm from tobacco use to be dose-dependent, with less harm from infrequent use. Further, roughly 1/3 of children found use of e-cigarettes (or vapes) to be less harmful, and consequently between 2011 and 2012 regular use of e-cigarettes amongst youth doubled from 1 to 2%.¹⁰

Further, a 2019 study from the Kaiser Family Foundation found that while 49% of adults over the age of 30 supported bans on all e-cigarettes, more than 62% of adults under the age of 30 were against bans on e-cigarettes, including 24% of those young adults who actively use e-cigarettes.¹¹

Institutional Policies for the 18-20 Age Group

Colleges can play a large part in mitigating youth use of tobacco before age 21. One study found that smoking prevalence amongst college students in smoke-free residences was lower than in unrestricted housing, but these results were largely dependent on the self-sorting of students who already had a smoking history.¹² A 2015 study found that 59% of college students and 68% of college faculty supported smoke-free campus policies resulting in nearly a quarter of all colleges banning smoking on campuses, and a reduction of student smokers from 9.5% to 7.0% over 3 years.¹³ Longitudinal studies have also shown that smoke-free college campuses can sustain drops in youth smoking, as well as change the perceptions of college students to negative for peer smoking and increase favorability toward regulating tobacco sales.¹⁴ Communities and worksites who also have smoke-free policies have been shown drops in regular smoking (roughly 6% over a 30 year period).¹⁵ However, the variety of policies and their potential effects on curbing tobacco use in youth warrant further studies for efficacy.

Federal and State Legislation for Raising the Legal Age for Tobacco Sale

Introduced in the 2022 Missouri Legislative session, at least five bills ([HB 2463](#), [HB 2786](#), [HB 2883](#), [HB 2903](#), [SB 1158](#)) were introduced to raise the legal age to sell tobacco or vaping products from 18 to 21 years of age.

A related bill ([HB 1468](#)) was also introduced that modifies the current education standards of the federal [Drug-Free Schools and Communities Act of 1989](#) in Missouri to include vaping products in any curricular lessons about the effects of tobacco use in schools. Further, a bill ([HB 2467](#)) was introduced to allow localities to raise the tax levied on consumers for tobacco products.

Local jurisdictions have attempted to strengthen federal enforcement with legislation at both the state and county levels. As of October 2021, 30 states (including AR, IA, IL, KY, OK, TN), the District of Columbia, and 27 independent jurisdictions within Missouri raised the age of legal tobacco sales and associated enforcement provisions to 21 years of age (**Figure 1**).¹⁶

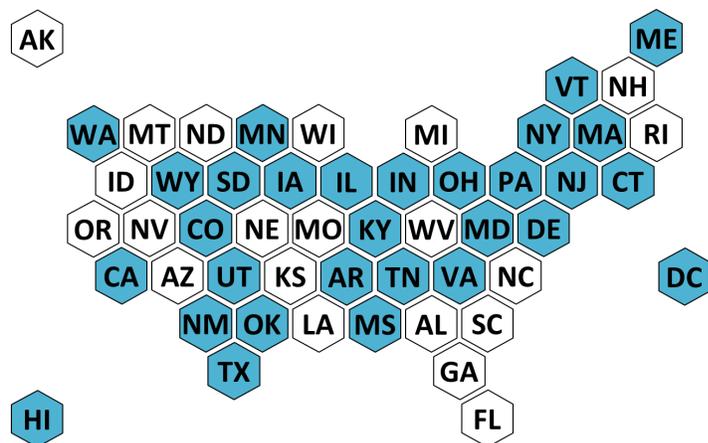


Figure 1: Map of States That Have Restricted Tobacco Sales to 21 Years and Over. States in blue are those that have passed “Tobacco 21” laws in lieu of or as a result of the federal mandate. Data and map compiled from the National Conference of State Legislatures.¹⁶

At the federal level, the federal Food, Drug, and Cosmetic Act was modified in 2019 to include a “[Tobacco 21](#)” initiative, which requires retailers to

check identification and only sell to consumers above the age of 21. However, the FDA is still in the process of ramping up both inspection and enforcement measures, and penalties for retailers not in compliance. While studies on the effect of the federal mandate are still ongoing, an early study indicated that access to tobacco for minors (6-12th grade) decreased from 67% to 58%, and effects are more profound if local state laws also restrict and enforce tobacco age restrictions.¹⁷ Additional actions may include: a comprehensive definition for what products have tobacco, laws on age appearance for purchase, local tobacco retail licenses for sale, a graduated monetary penalty structure, tobacco retail license suspensions or revocations for repeated violations, and mandatory number of inspections on retailers.¹⁸

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