Tobacco use remains a major public health concern in Michigan, causing over 16,000 deaths each year. Compared to the national average, 20% more Michigan 12th graders have smoked a cigarette, smoked a cigar, used smokeless tobacco or vaped an e-cigarette in the last month. Of young people who smoke, 2 in 3 long-term users will die early of smoking-related causes.

While youth tobacco use rates have steadily declined for two decades, in 2018, e-cigarette use among young people rose so precipitously that the Surgeon General declared that vaping had become an epidemic among the nation’s youth. Nationally, 85% of daily smokers begin smoking daily before the age of 21.

In an effort to reduce tobacco use and prevent its detrimental health effects, T21 policies aim to limit youth access to tobacco products (including cigarettes, e-cigarettes and other tobacco products) by restricting sales to people aged 21 or over. More than 400 cities and counties and 7 states have adopted T21 policies.

In spite of the proliferation of T21 laws, there is little evidence around:

1. The potential public health impact of T21
2. The projected revenue effects of T21
3. Early challenges to T21 implementation
4. Youth’s views of T21

A team of researchers conducted a comprehensive policy analysis on the potential effects of T21 in Michigan. Project components included: policy effect simulation analyses, case studies of 4 Ohio communities that have implemented T21 and a national text message survey of people aged 14–24, in partnership with MyVoice. The research team is based at the University of Michigan and is affiliated with the School of Public Health and the Institute for Healthcare Policy & Innovation.
**TAKEAWAYS FROM OUR RESEARCH AND POLICY CONSIDERATIONS**

1. **Health and revenue implications for Michigan**
   Our research estimated the effects on the health and tax revenue collected in the state of Michigan if a statewide T21 policy was passed into law. The model examined how smoking habits would change over the next 80 years if T21 reduced smoking initiation by 10%, a figure supported by a 2015 Institute of Medicine report.3

   **RESEARCH FINDINGS**
   - If T21 is enacted in 2019, by 2025 we predict 11,000 fewer young Michiganders will start smoking.
   - By 2100, we estimate T21 would avert 17,000 smoking-related deaths and 198,000 fewer people will have started smoking.
   - Through 2050, we estimate a T21 policy would decrease cigarette tax revenues by approximately $41 million per year in Michigan (4.7% of cigarette tax revenue, 0.2% of total state tax revenue).

   **POLICY CONSIDERATIONS**
   - Passing T21 is predicted to save lives in the state of Michigan.
   - To avoid tax revenue losses Michigan could adjust its tobacco tax rate in line with inflation (a 25% increase), resulting in a surplus.

2. **Views of young people**
   A national survey of nearly 800 people ages 14–24 was conducted in September 2018 via text message, with an over-sample of Michiganders. Our team evaluated the responses to understand attitudes towards tobacco use and opinions about T21.

   **RESEARCH FINDINGS**
   - 59.1% of respondents support the adoption of a T21 policy compared to 28.5% against.
   - In Michigan, a similar majority of young people support a T21 policy.
   - Reasons for supporting T21:
     - 3 in 5 were concerned about tobacco’s health effects.
     - 2 in 5 thought people their age were not responsible enough to buy tobacco.

   **POLICY CONSIDERATIONS**
   - Young people will be directly affected by the policy change and should be included in the T21 policy discussion.

Among those who oppose T21, 2 in 3 thought people their age were responsible enough to buy tobacco and 1 in 2 pointed to civic values and individual rights to underline their stance.
Lessons from case studies in Ohio

Ohio provides useful lessons on T21 implementation in a comparable population to Michigan. Case studies, anchored by 23 stakeholder interviews with key stakeholders in the T21 policy process, were conducted in four Ohio cities (Columbus, Cleveland, Dublin and Euclid). Interviewees were asked about the process of creating, passing, implementing and enforcing T21 in their city. An additional review of local survey data, laws and policy materials was conducted to further understand the local context.

To improve effectiveness, T21 policies should require comprehensive civil enforcement (business fines and licensure loss for repeat offenders instead of misdemeanors against clerks) and licensure, such as in Columbus’s model.

Columbus has set the best practice standard, utilizing civil enforcement (over criminal enforcement) and setting up a retailer licensing system.

Columbus paired T21 passage with:

- The creation of a tobacco retailer license
- A budget dedicated to enforcement of the policy
- Policy evaluation
- Delegation of enforcement authority to the Public Health Department

The case studies revealed concerns around potential policing consequences of T21 policies. If a policy is enforced unfairly, there is a risk of exacerbating health disparities through penalizing marginalized communities more strictly.

T21 policies should make it clear who has authority over retailer compliance, law enforcement, and policy evaluation. Insufficient attention to these elements can lead to ineffective policy implementation.

T21 enforcement and compliance efforts should focus on retailers rather than on individuals.
Our research indicates that T21 policies can deliver health benefits in Michigan, if the policy is effectively implemented. Structuring policy adoption and implementation in a way that will be successful should be prioritized, as was seen through our case studies in Ohio.