Surveillance & Evaluation Webinar Series Presents:

TOBACCO 21 (T21) EVALUATION GUIDANCE

Tuesday, July 14, 2020

The findings and conclusions in this presentation are those of the author and do not necessarily represent those of the Centers for Disease Control and Prevention.

TOBACCO 21 (T21) EVALUATION GUIDANCE

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Tobacco 21 (T21) Evaluation Guidance

PRESENTED BY MONICA CORNELIUS, PHD MPH
EPIDEMIOLOGY BRANCH
JULY 14, 2020

DISCLAIMER

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• Background
• About the guide
• Evaluation steps
• Example data sources

BACKGROUND

- Nearly all tobacco product use begins in youth
- T21 laws increase the minimum legal sales age (MLSA) of tobacco purchase to 21 years
- A 2015 Institute of Medicine report projected that raising the MLSA for tobacco purchase to 21 years nationwide would result in:
  - 12% reduction in tobacco use and 10% reduction in smoking-related death
  - 25% reduction in smoking initiation for current 15-17 year-olds
  - Prevention of 223,000 premature deaths among people born between 2000 and 2019
- National T21 law enacted December 20, 2019, covering all US jurisdictions without exemption
- Prior to the national T21 law, 19 states and over 540 localities had enacted T21 laws.
ABOUT THE GUIDE

• Support and provide guidance on evaluation of all T21 laws

• Primary audience: planners, program managers, and evaluators of state tobacco control programs

• Follows CDC Framework for Program Evaluation

CONTENTS

• Guidance across the steps of the CDC Evaluation Framework

• Generic logic model

• Ideas for process and outcome evaluation

• Example evaluation questions

• Methodology considerations
## STEP 1: ENGAGING T21 STAKEHOLDERS

<table>
<thead>
<tr>
<th>Stakeholder Category</th>
<th>Examples of Stakeholders</th>
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<tbody>
<tr>
<td><strong>Policy Experts</strong></td>
<td>• Legislators and staff</td>
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<td>• Tobacco prevention and control program staff</td>
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<td></td>
<td>• Nonprofit organizations</td>
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<td>• Enforcement agencies</td>
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<tr>
<td><strong>Subject Matter Experts</strong></td>
<td>• Department of health and tobacco prevention and control program staff; SAMSHA-funded (Synar compliance) staff</td>
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<td>• Legal support partners</td>
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<tr>
<td></td>
<td>• Nonprofit organizations</td>
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<td>• Substance abuse agencies, local arms of state alcohol and tobacco agency</td>
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<td></td>
<td>• University partners</td>
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<td>• National networks</td>
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<thead>
<tr>
<th>Stakeholder Category</th>
<th>Examples of Stakeholders</th>
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<tbody>
<tr>
<td><strong>Evaluation Experts</strong></td>
<td>• Contract evaluation research partners</td>
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<td>• Agency evaluation staff</td>
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<tr>
<td><strong>Implementers</strong></td>
<td>• Inspection or enforcement agency staff, enforcement workgroups</td>
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<td>• Local advocates, coalition members</td>
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<td>• Tribal stakeholders</td>
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<td>• Business associations</td>
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STEP 2: DESCRIBING THE T21 POLICY

- Clear understanding of the policy is needed
- Important components:
  - Policy definitions
  - Enforcement authority specifications
  - Penalty schedule
  - Dates for when the policy is effective and active enforcement begins
- Understanding the policy and intended and unintended effects enables the ability to display theorized pathways of change in a logic model.

Generic Logic Model

INPUTS
- Model T21 Policy
- Funding
- Partnerships
- Research
- Surveillance & monitoring systems
- Cessation resources
- Evaluation staff time and effort

ACTIVITIES
- Policy development process
- Stakeholder policy components
- Develop media campaign
- Develop and distribute communications materials
- Develop and distribute signage
- Stake enforcement personnel

OUTPUTS
- Ads placed
- Earned media
- Press releases
- Communication materials developed
- Education sessions held
- Signage distributed
- Inspections protocol
- Compliance checks conducted

SHORT-TERM OUTCOMES
- Increased awareness and understanding of T21 policy (general public, retailers)
- Increased social norms around underage tobacco use
- Increased compliance with T21 policy

INTERMEDIATE OUTCOMES
- Increased enforcement activity related to T21
- Decreased availability of tobacco products to individuals <21
- Decrease sales of tobacco products

LONG-TERM OUTCOMES
- Increased support for T21 Policy
- Increased negative social norms around underage tobacco use
- Reduced tobacco use prevalence among individuals under 21 years
- Reduced tobacco-related morbidity and mortality

UNINTENDED CONSEQUENCES
- Increased illicit sales (e.g., adults purchasing for minors outside the store)
- Decreased anti-tobacco advertising (e.g., decreased awareness of T21 policy)
- Reduced opportunities for implementation

ENVIRONMENTAL CONTEXT: Rates of tobacco use, state/local tobacco control funding, existing state/local tobacco policy landscape, tobacco and e-cigarette industry spending neighborhood demographics, retail density, proximity to exempted areas (e.g., tribal, military) or borders with non-covered areas (e.g., localities, states)
**Content evaluation**

- In-depth look at the policy’s strengths and weaknesses when compared with a model policy
- Is there retailer support for the policy components? Is there opposition?
- How did local education efforts affect policy adoption at the local level?
- Did economic considerations or interests strengthen or weaken the policy?

**Implementation evaluation**

- Explores activities involved in communicating about the policy, policy monitoring, and policy enforcement.
- Were education efforts effective at increasing awareness of the policy?
- Are there geographic pockets of retailers who are non-compliant?
- Were the right stakeholders involved in the implementation?
**STEP 3: FOCUSING THE T21 EVALUATION - TYPES OF EVALUATIONS AND RELEVANT QUESTIONS**

**Impact evaluation**
- Examines the policy’s impact on the intended short-, intermediate- and long-term outcomes, as laid out in the policy logic model.
- Did negative social norms about underage tobacco use change?
- Has retailer non-compliance changed over time as enforcement activities have continued?
- Has reported retail access changed for youth under 18?
- Have reported usual sources for tobacco changed for youth under 18?

### EXAMPLES OF T21 EVALUATION QUESTIONS, DESIGNS AND MEANINGFUL INDICATORS

<table>
<thead>
<tr>
<th>Evaluation Type</th>
<th>Evaluation Question</th>
<th>Evaluation Design</th>
<th>Meaningful Indicator</th>
<th>Example Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Does the state/local policy apply to more products than the federal law?</td>
<td>Qualitative (analysis of policy language)</td>
<td>Presence of definitions</td>
<td>Legal Documents</td>
</tr>
<tr>
<td>Implementation</td>
<td>What efforts were made to address or alleviate concerns about the policy? Were efforts well received?</td>
<td>Quantitative (analysis of opinion poll/survey data)</td>
<td>Public awareness of outreach; percent of public who felt concerns were addressed</td>
<td>Opinion poll data</td>
</tr>
<tr>
<td>Impact Evaluation</td>
<td>Has noncompliance changed over time as enforcement activities have continued?</td>
<td>Quantitative summary analysis (post-intervention)</td>
<td>Number of T21 violations by geographic area, store type</td>
<td>Enforcement data</td>
</tr>
</tbody>
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POTENTIAL AREAS FOR T21 EVALUATION

• Public Support
• Retailer Implementation
• Compliance
• Behavior of Underage Youth and Young Adults
  • Reduced proportions of youth reporting purchase of tobacco products from retailers
  • Decreased initiation of tobacco product use
  • Reduced prevalence of tobacco product use
• Economic Impact

STEPS 4: GATHERING CREDIBLE EVIDENCE - EXAMPLE METHODS

Compliance checks
- Uses underage decoys to assess whether retailers are selling to underage youth
- May occur at both federal and state levels

Baseline data collection
- Necessary when using pre-post study designs to assess T21 policies
- Existing data sources can be used

Comparative assessments
- Can assess how contextual factors and variation in enforcement and compliance can affect policy outcomes and impact
**STEPS 5: JUSTIFYING CONCLUSIONS - CONSIDERATIONS**

- **Environmental context**
  - Strategies independent of T21 policies

- **Logistical considerations**
  - Rapid nature in which the national T21 law was passed presents challenges for having baseline data

- **Social considerations**
  - Jurisdictional variation in social norms

- **Political considerations**
  - Jurisdictional variation in political opinion

**STEP 6: APPLYING POLICY EVALUATION RESULTS**

<table>
<thead>
<tr>
<th>Evaluation Findings</th>
<th>Type of Information to be Disseminated</th>
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<tbody>
<tr>
<td>Content/Implementation evaluation results</td>
<td>Potential enforcement gaps to inform policy/enforcement modifications</td>
</tr>
<tr>
<td>Impact evaluation results</td>
<td>Policy outcomes and the effect on the population, including intended and unintended effects</td>
</tr>
<tr>
<td>Lessons Learned</td>
<td>Recommendations for future T21 and other retail policy implementation and evaluation</td>
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Acknowledgments

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  - California Department of Public Health
  - Hawaii State Department of Health
  - New York City Department of Health and Mental Hygiene
  - Maine Department of Health and Human Services
- RTI International

Resource Reference

Available at:
https://www.cdc.gov/tobacco/stateandcommunity/tobacco_control_programs/surveillance_evaluation/tobacco-21-policy-evaluation/index.html