Increasing Tobacco Use Cessation: Increasing the Unit Price of Tobacco Products (1999 Archived Review)

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Review Summary

Intervention Definition
These interventions increase the unit price for tobacco products through municipal, state, or federal legislation that raises the excise tax on these products. Such increases make the continued use of tobacco products less attractive to users, and in several states, they have provided revenue for comprehensive tobacco use prevention and control programs.

Summary of Task Force Finding
The Community Preventive Services Task Force recommends interventions that include increasing the unit price for tobacco products based on strong evidence of their effectiveness in:

- Reducing population consumption of tobacco products
- Reducing tobacco use initiation
- Increasing tobacco cessation

Results from the Systematic Reviews
Seventeen studies qualified for the review of this intervention.

- For interventions that included at least a provider reminder system and a provider education program:
  - The most common measurement described was the effect of every 1% increase in tobacco product price on the percentage change in consumption (price elasticity of demand).
  - Findings from ten aggregated studies suggested that a 10% increase in product price would result in a 4.1% decrease in consumption.
- Overall, the included studies pointed to a reduction in tobacco use when all factors were taken into account by increasing the unit price of tobacco products.
- The included studies reflected evaluations of the effect of increased tobacco price on tobacco use in the states of California, Oregon, Massachusetts, other western states in addition to national-level evaluations and examples from other countries including Canada, the UK, Austria, Finland, Switzerland and New Zealand.

These findings were based on a systematic review of all available studies, conducted on behalf of the Task Force by a team of specialists in systematic review methods, and in research, practice and policy related to tobacco use and secondhand smoke exposure.

Publications

Task Force Finding

Intervention Definition
Interventions to increase the unit price for tobacco products include legislation at the state or national level to raise the product excise tax. Although other factors also affect tobacco product pricing, excise tax increases historically have resulted in equivalent or larger increases in tobacco product price.

Task Force Finding (February 1999)*
Interventions to increase the price of tobacco products are strongly recommends by the Task Force based on strong evidence of effectiveness in reducing tobacco use prevalence in study populations of adolescents and young adults. A detailed description of the evidence is provided in Hopkins et al. In addition, increasing the price for tobacco products is also effective in (1) reducing population consumption of tobacco products, and (2) increasing tobacco use cessation.

*From the following publication:

Supporting Materials

Evidence Gaps

What are Evidence Gaps?
Each Community Preventive Services Task Force (Task Force) review identifies critical evidence gaps—areas where information is lacking. Evidence gaps can exist whether or not a recommendation is made. In cases when the Task Force finds insufficient evidence to determine whether an intervention strategy works, evidence gaps encourage researchers and program evaluators to conduct more effectiveness studies. When the Task Force recommends an intervention, evidence gaps highlight missing information that would help users determine if the intervention could meet their particular needs. For example, evidence may be needed to determine where the intervention will work, with which populations, how much it will cost to implement, whether it will provide adequate return on investment, or how users should structure or deliver the intervention to ensure effectiveness. Finally, evidence may be missing for outcomes different from those on which the Task Force recommendation is based.

Identified Evidence Gaps

Effectiveness
The effectiveness of increasing the unit price for tobacco products and mass media campaigns (when implemented with other interventions) is established. However, research issues regarding the effectiveness of these interventions remain.

- What intervention components contribute most to effectiveness of multicomponent interventions? What components contribute the least?
- What are the minimum and optimal requirements for the duration and intensity of mass media campaigns?
- What are the most effective combinations of messages for mass media campaigns?
- Do tobacco users respond differently to changes in product price that result from excise tax increases than to industry-induced increases?
- How long do the effects of a single excise tax increase last? Because the effectiveness of mass media cessation series and smoking cessation contests has not been established, basic research questions remain.

Because the effectiveness of mass media cessation series and smoking cessation contests has not been established, basic research questions remain.

- Are these interventions effective in increasing tobacco use cessation in the population?
- Do recruited tobacco users exposed to these interventions quit at a greater rate than recruited tobacco users not exposed to these interventions?
- What are the rates of participation in these interventions?

Applicability
The effectiveness of increasing the unit price and of mass media campaigns in reducing tobacco use in the population is established. However, identifying differences in the effectiveness of each intervention for specific subgroups of the population remains important.
- Do significant differences exist regarding the effectiveness of these interventions, based on the level of scale (i.e., national, state, local) at which they are delivered?
- What are the effects of mass media campaigns among populations that differ by race and ethnicity?

**Other Positive or Negative Effects**

Several potential negative effects of tobacco product price increases were reviewed in this evaluation. Although further research on the potential negative effects is warranted, evaluating the effect of potential positive effects of reductions in tobacco use should also be investigated to provide a complete picture of the effects of increases in state and federal excise taxes.

- What are the effects of these interventions on reducing smoking-related fires? What are the effects on secondhand smoke exposure?
- What proportion of smokers substitute tobacco products, modify their smoking habits, or both in response to an increase in the price of tobacco products? How much of the potential health benefit of a price increase is reduced by these behaviors? How can these potential problems be reduced?
- Do mass media campaigns that focus on tobacco have additional effects on other drug use?

**Economic Evaluations**

The available economic information on mass media campaigns was limited. Considerable research is, therefore, warranted regarding the following questions:

- What are the costs of mass media campaigns, especially campaigns that achieve an effective intensity over an extended duration?
- How do the costs per additional quitter compare with other interventions intended to reduce tobacco use?
- What is the cost-benefit, cost-utility, or cost per illness averted of these interventions?

**Barriers**

Implementation of these interventions requires political action and support. Research issues generated in this review include the following:

- What components of successful legislative and referendum campaigns are most effective? What components are least effective?
- What information is most important in gaining public support for these interventions? In gaining legislative support?

What are the most effective ways to maintain adequate funding levels for mass media campaigns?

**Included Studies**

The 17 qualifying studies include consolidated evaluations of the effect of tobacco product price on tobacco use in the states of:

**California**


**Massachusetts**


**Oregon**


**11 western states**


**National evaluations in the 1990s**


**National evaluations in the 1980s**


**National evaluations conducted in the 1970s**


**Canada**


**United Kingdom**


**Austria**


**Finland**


**Switzerland**

(Two reports count as a stand-alone study)


New Zealand

Disclaimer
The findings and conclusions on this page are those of the Community Preventive Services Task Force and do not necessarily represent those of CDC. Task Force evidence-based recommendations are not mandates for compliance or spending. Instead, they provide information and options for decision makers and stakeholders to consider when determining which programs, services, and policies best meet the needs, preferences, available resources, and constraints of their constituents.

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