

Reducing Tobacco Use Initiation: 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 use of tobacco products less attractive to young people who have limited incomes and a variety of ways to spend their money.

Summary of Task Force Finding

The Community Preventive Services Task Force recommends interventions that increase the price of tobacco products based on strong evidence of their effectiveness in:

- Reducing tobacco use among adolescents and adults
- Reducing population consumption of tobacco products
- Increasing tobacco use cessation

Results from the Systematic Reviews

Eight studies qualified for the review of this intervention.

- Tobacco use prevalence among adolescents (13-18 years old): a median decrease of 3.7% in tobacco use for every 10% increase in product price (8 studies)
- Tobacco consumption among adolescents: a median decrease of 2.3% in tobacco consumption for every 10% increase in product price (6 studies)
- All of the included studies were conducted in the United States.
- Five studies evaluated the effect of price on tobacco use for study periods that included the 1990s, and three studies reported the effect of price on tobacco use for periods before 1990.

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 on Community Preventive Services. [Tobacco](http://www.thecommunityguide.org/tobacco/Tobacco.pdf) [www.thecommunityguide.org/tobacco/Tobacco.pdf]. In: Zaza S, Briss PA, Harris KW, eds. *The Guide to Community Preventive Services: What Works to Promote Health?* Atlanta (GA): Oxford University Press;2005:3-79 (Out of Print).

Task Force Finding

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 use of tobacco products less attractive to young people who have limited incomes and a variety of ways to spend their money.

Task Force Finding (February 1999)*

The Task Force recommends increasing the unit price for tobacco on the basis of strong evidence of effectiveness in reducing tobacco use initiation among adolescents and young adults. Raising the unit price for tobacco products (through increases in the excise tax) is effective in reducing both the number of adolescents and young adults who use tobacco products and the amount of tobacco they use. Increasing the unit price for tobacco products also reduces tobacco use among adults. The need for passage by a state legislature or a referendum can present a barrier to increasing excise taxes.

*From the following publication:

Task Force on Community Preventive Services. [Tobacco](http://www.thecommunityguide.org/tobacco/Tobacco.pdf) [www.thecommunityguide.org/tobacco/Tobacco.pdf]. In: Zaza S, Briss PA, Harris KW, eds. *The Guide to Community Preventive Services: What Works to Promote Health?* Atlanta (GA): Oxford University Press;2005:3-79 (Out of Print).

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 in reducing tobacco use by adolescents is established. Important questions remain regarding the composition and content of effective campaigns and the effectiveness in different settings and populations. Some issues raised by others overlap with questions generated as a result of this review.

- What interventions are most effective in combination with mass media campaigns? What interventions are least effective?
- What are the relative effects of these interventions on adolescent initiation, consumption, access to tobacco products, and cessation?
- What is the required intensity (frequency of spots and the broadcast exposure) of media messages for an effective campaign?
- What are the independent contributions of particular intervention features (e.g., components, content, intensity, and duration) to overall intervention effectiveness?
- What are the most effective ways to maintain reductions in youth tobacco use into young adulthood?
- Does tobacco use in adults respond to mass media campaigns that are youth-focused?

Applicability

The effectiveness of these interventions should be applicable in most settings and populations. However, there could be differences in the effectiveness of these interventions for specific subgroups of the population. The following questions remain about the applicability of these interventions in various settings and populations:

- Are there differences in the responses of adolescents to tobacco product price increases by age, race, and ethnicity?
- Are the effects of mass media campaigns on adolescents by gender, race, and ethnicity similar to or different from those observed in Florida?

Other Positive or Negative Effects

The studies in these reviews did not provide information on other positive or negative effects. Research questions pertinent to interventions to increase the price of tobacco products are presented in the Evidence Gaps for: Strategies to Increase Tobacco Use Cessation. Some issues generated by the review of mass media campaigns are the following:

- Do mass media campaigns that target children and adolescents result in increases in tobacco initiation among young adults by delaying the age of initiation?
- What are the most effective ways to maintain reductions in youth tobacco use into young adulthood?

Economic Evaluations

Available economic information was limited to a single study of mass media campaigns. Therefore, considerable research is warranted regarding the following questions:

- Are the costs and cost-effectiveness, net cost, or net benefit of mass media campaigns similar to or substantially different from those that have been previously reported?
- How do the costs per tobacco user averted compare with other tobacco prevention strategies?
- How do specific characteristics of mass media campaigns contribute to economic efficiency?
- What combinations of components in multicomponent interventions are most cost-effective?

Barriers

The strategies evaluated in this section require political action and support. Research questions generated in this review include the following:

- What characteristics are effective in successful legislative and referendum campaigns?
- How can adequate funding levels be maintained for mass media campaigns?

Methods of Intervention Research

Evaluations of mass media campaigns should provide information on the costs, scale, duration, and content of the campaign. Researchers should identify concurrent tobacco control efforts, especially excise taxes or changes in the price of tobacco products, and should attempt to control for these changes in their analyses.

Included Studies

Centers for Disease Control and Prevention. Response to increases in cigarette prices by race/ethnicity, income, and age groups—United States, 1976–1993. *MMWR* 1998;47:605–9.

Chaloupka FJ, Pacula RL. Sex and race differences in young people's responsiveness to price and tobacco control policies. *Tob Control* 1999;8:373–7.

Chaloupka FJ, Wechsler H. Price, tobacco control policies and smoking among young adults. *J Health Econ* 1997;16:359–73.

Gruber J. Youth smoking in the US: prices and policies. Available at: <http://papers.nber.org/papers/W7506>. Accessed December 20, 2000.

Lewit EM, Coate D, Grossman M. The effects of government regulation on teenage smoking. *J Polit Econ* 1981;24:545–70.

Lewit EM, Hyland A, Kerrebrock N, Cummings KM. Price, public policy, and smoking in young people. *Tob Control* 1997;6(suppl 2):S17–24.

Ohsfeldt RL, Boyle RG, Capilouto E. Effects of tobacco excise taxes on the use of smokeless tobacco products in the USA. *Health Educ* 1997;6:525–31.

Wasserman J, Manning WG, Newhouse JP, Winkler JD. The effects of excise taxes and regulations on cigarette smoking. *J Health Econ* 1991;10:43–64.

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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