Take on Tobacco, Missouri!

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Reducing the use of Tobacco Products in Missouri

Tobacco products, including cigarettes and cigars, are harmful to those who use them and to those around them. Smoking also results in negative economic consequences. Can policies play a role in the fight against smoking?

Introduction

The negative health consequences of smoking have been known for quite some time. In an early, historic cohort study published in 1978 that followed British doctors for two decades, researchers found that between one half and one third of all deaths in smokers could be attributed to smoking (1). Further, this research clearly established the link between smoking and lung cancer, and more specifically, showed a strong relationship between duration of smoking and lung cancer (1). According to the American Cancer Society, lung cancer is the leading cause of cancer deaths in the US, projected to account for over 162,000 deaths in 2006. Over time, numerous other studies have found relationships between cigarette smoking and health. Data from the Cancer Prevention Studies I and II sponsored by the American Cancer Society (2, 3, 4, 5) show that smoking is the greatest preventable cause of morbidity and mortality in developed nations. Reports by the US Surgeon General document the relationship between smoking and a variety of poor health outcomes, including various cancers, chronic lung disease, coronary heart disease and other cardiovascular diseases, and sudden infant death syndrome (6).

Health consequences of secondhand smoke among non-smokers have also been well documented. Environmental tobacco smoke contributes to non-malignant lung disease (7) as well as lung cancer in non-smokers (8, 9). Research shows that in Missouri, smoking poses substantial health and economic costs. Missouri had $1.67 billion in smoking related health expenditures in 1988), and lost productivity costs attributable to smoking reached $2.4 billion in 2003 (10).

Recommendations

Changes in youth purchasing enforcement policies and increases in tobacco unit price are important steps in decreasing the health and economic burden of smoking.

- Multiple level interventions targeting changes in policy and the environment have a greater likelihood of success.
- States should implement and enforce strict policies limiting youth access to tobacco products in order to reduce initiation and increase cessation among youths. Stronger local laws should be combined with policies targeting merchant education and enforcement.
- The product excise tax for tobacco products should be increased through state level legislation.
- Revenue from excise tax increases can be utilized for comprehensive programs targeting tobacco use prevention and control.

The Challenge

Young people are more easily influenced by peers and the media, making them vulnerable to advertising and marketing campaigns for cigarettes. The critical challenge is to keep adolescents from starting smoking in the first place, and to find ways to help them stop smoking if they've already started.

Recent Research and Findings

- States with more comprehensive tobacco control policies have significantly lower smoking rates among young people (11).
- Seven studies out of eight reviewed showed that increased cost of tobacco products results in decreased numbers of people who use tobacco products and decreased amount of tobacco consumed (12).
- Median estimates are that an increase of 10% in tobacco product cost would result in a decrease of 3.7% in the number of adolescents using tobacco and a decrease of 4.1% decrease in population use overall (12).

References

1. Doll R, Peto R. Mortality in relation to smoking: 20 years' observations on male British doctors. Br Med J. 1976 Dec 25;2(6051):1525-36.
2. Garfinkel L. Selection, follow-up, and analysis in the American Cancer Society prospective studies. Natl. Cancer Inst. Monogr., *67:* 49-52, 1985.
3. Stellman S. D., Garfinkel L. Smoking habits and tar levels in a new American Cancer Society prospective study of 1.2 million men and women. J. Natl. Cancer Inst., *76:* 1057-1063, 1986.
4. Garfinkel L., Stellman S. D. Smoking and lung cancer in women: findings in a prospective study. Cancer Res., *48:* 6951-6955, 1988.
5. Thun, M. J., Day-Lally, C., Myers, D. G., Calle, E. E., Flanders, W. D., and Heath, C. W. Trends in tobacco smoking and mortality from cigarette use in Cancer Prevention Studies II (1959–1965) and II (1982–1988). *In:* National Cancer Institute, Smoking and Tobacco Control, Monograph 8: Changes in Cigarette Related Disease Risks and Their Implication for Prevention and Control. NIH Publ. No. 97-4213, 113-304. Washington, DC: National Institutes of Health, 1997.
6. U.S. Department of Health and Human Services. *The Health Consequences of Smoking: A Report of the Surgeon General.* U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004
7. 7. Attributable risk of lung cancer in lifetime nonsmokers and long-term ex-smokers (Missouri, United States). Cancer Causes Control. 1995 May;6(3):209-16
8. Brownson RC, Alavanja MC, Hock ET, Loy TS. Passive smoking and lung cancer in nonsmoking women. Am J Public Health. 1992 Nov;82(11):1525-30.
9. Stayner L, Bena J, Sasco AJ, Smith R, Steenland K, Kreuzer M, Straif K. Lung cancer risk and workplace exposure to environmental tobacco smoke. Am J Public Health. 2007 Mar;97(3):545-51. Epub 2007 Jan 31.
10. Missouri Department of Health and Senior Services, Smoking-Attributable Mortality, Morbidity and Economic Costs (SAMMEC) in Missouri, unpublished data. July, 2005.
11. Luke DA, Stamatakis KA, Brownson RC. State youth-access tobacco control policies and youth smoking behavior in the United States. Am J Prev Med. 2000 Oct;19(3):180-7.
12. CDC. Strategies for reducing exposure to environmental tobacco smoke, increasing tobacco-use cessation, and reducing initiation in communities and health-care systems. A report on recommendations of the Task Force on Community Preventive Services. MMWR 1999;48(No. RR-8):1--15

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