



Appendix E

STATE TOBACCO PREVENTION AND CESSATION PROGRAMS SAVE MONEY

It is well established that comprehensive statewide tobacco-prevention and cessation programs prompt sharp reductions in smoking levels among both adults and kids by both increasing the numbers who quit or cutback and reducing the numbers who start or relapse.⁷ As shown by the experience of those states that already have comprehensive tobacco-prevention programs, these smoking reductions save thousands of people from suffering from the wide range of smoking-caused illnesses and other health problems. Recent research indicates that tobacco prevention and cessation programs not only reduce smoking and save lives, but also save money by reducing tobacco-related health care costs.

Cost Savings From Established State Tobacco Prevention and Cessation Programs

- A recent study in the *American Journal of Public Health* found that for every dollar spent by Washington State's tobacco prevention and control program between 2000 and 2009, more than five dollars were saved by reducing hospitalizations for heart disease, stroke, respiratory disease and cancer caused by tobacco use.¹ Over the 10-year period, the program prevented nearly 36,000 hospitalizations, saving \$1.5 billion compared to \$260 million spent on the program. The 5-to-1 return on investment is conservative because the cost savings only reflect the savings from prevented hospitalizations. The researchers indicate that the total cost savings could more than double if factors like physician visits, pharmaceutical costs and rehabilitation costs were included.
- A study of California's tobacco prevention program found that for every dollar the state spent on its tobacco control program from 1989 to 2004, the state received as much as fifty dollars in health care cost savings in the form of sharp reductions to total healthcare costs in the state.² Earlier research from California suggests that California's tobacco-control program secured substantial savings over the first seven years of its operation just from reducing smoking-affected births and smoking-caused heart attacks and strokes. Taken together, these savings more than covered the entire cost of the state's program over that time period and produced even larger savings in the following years. For every single dollar the state had been spending on the California program, it was reducing statewide healthcare costs by more than \$3.60.³
- A study of Arizona's tobacco prevention program found that the cumulative effect of the program was a savings of \$2.3 billion between 1996 and 2004, which amounted to about ten times the cost of the program over the same time period.⁴
- A report on the early investments in Massachusetts' comprehensive tobacco prevention program found that during its early years, the state's program was reducing statewide healthcare costs by \$85 million per year – which means the state was annually reducing smoking-caused health care costs by at least two dollars for every single dollar it invested in its comprehensive tobacco-prevention efforts.⁵
- An August 2008 Australian study found that for every dollar spent on a strong tobacco control program (consisting primarily of aggressive anti-smoking television ads along with telephone quitlines and other support services to help smokers quit), the program reduced future healthcare costs by \$70 over the lifetimes of the persons the program prompted to quit. This savings estimate was based on the study's finding that for every 10,000 smokers who quit because of the tobacco control program, more than 500 were saved from lung cancer, more than 600 escaped having heart attacks, at least 130 avoid suffering from a stroke, and more than 1700 were prevented from suffering from chronic obstructive pulmonary disease (COPD).⁶

⁷ For extensive examples of real-world adult and youth smoking declines in states that have already initiated statewide tobacco-prevention programs, see TFK Factsheet, *Comprehensive Statewide Tobacco Prevention Programs Effectively Reduce Tobacco Use*, <http://www.tobaccofreekids.org/research/factsheets/pdf/0045.pdf>, and other related Factsheets at http://www.tobaccofreekids.org/facts_issues/fact_sheets/policies/prevention_us_state/save_lives_money/.

These studies confirm that the cost-saving benefits from sustained investments in effective tobacco control programs quickly grow over time to dwarf the state expenditures, producing massive gains for the state not only in terms of both improved public health and increased worker productivity but in reduced government, business, and household costs.

State Tobacco-Prevention Efforts and State Medicaid Program Savings

Providing comprehensive tobacco cessation benefits for Medicaid beneficiaries has also proven to be a cost-effective investment. A study published recently in *PLoS One* shows that Massachusetts saved more than \$3 for every \$1 it spent on services to help beneficiaries in the state's Medicaid program quit smoking. The new study, which examined the cost implications from reducing hospital admissions for heart attacks and coronary heart disease, concluded that every \$1 that Massachusetts invested in the program yielded \$3.12 in savings for cardiovascular-related hospital admissions alone. The study estimates that the reductions in cardiovascular-related hospitalizations translated into net annual savings of about \$14.7 million for the state Medicaid program. These are conservative savings as they do not include long-term savings, savings that may occur outside the Medicaid program, or savings beyond hospital admissions.⁷

Earlier studies showed that after Massachusetts implemented comprehensive coverage of tobacco cessation services for all Medicaid beneficiaries, the smoking rate among beneficiaries declined by 26 percent in the first 2.5 years.⁸ Among benefit users, there was a 46 percent decrease in hospitalizations for heart attacks and a 49 percent decrease in hospitalizations for cardiovascular disease.⁹

Even Larger Future Savings From Investments in Tobacco Prevention Programs

- The findings of a 2004 study show that if every state funded its tobacco prevention efforts at the minimum amount recommended by the U.S. Centers for Disease Control and Prevention (CDC), just the related declines in *youth* smoking would lock in future reductions in smoking-caused healthcare costs of more than \$31 billion.¹⁰ The related declines in adult smoking and in secondhand smoke exposure from the states making these CDC recommended investments in tobacco prevention would lock in tens of billions of dollars in additional smoking-caused cost savings.
- A study published in the journal *Contemporary Economic Policy* found that adequately funded state tobacco-prevention programs could save an astonishing 14 to 20 times the cost of implementing them. These programs save money by reducing tobacco-related Medicaid and other medical costs and productivity costs. Analyzing data from 1991 through 2007, the researchers found that state tobacco control programs have a "sustained and steadily increasing long-run impact" on the demand for cigarettes, which reduces disease and health-care costs.¹¹

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¹ Dille, Julia A., et al., "Program, Policy and Price Interventions for Tobacco Control: Quantifying the Return on Investment of a State Tobacco Control Program," *American Journal of Public Health*, Published online ahead of print December 15, 2011. See also, Washington State Department of Health, Tobacco Prevention and Control Program, News release, "Thousands of lives saved due to tobacco prevention and control program," November 17, 2010, http://www.doh.wa.gov/Publicat/2010_news/10-183.htm.

² Lightwood, JM et al., "Effect of the California Tobacco Control Program on Personal Health Care Expenditures," *PLOS Medicine* 5(8):1214-22, August 2008.

³ Lightwood, J & Glantz, S, "Short-term Economic and Health Benefits of Smoking Cessation: Myocardial Infarction and Stroke," *Circulation* 96:1089-1096, 1997; Lightwood, JM, et al., "Short-Term Health and Economic Benefits of Smoking Cessation: Low Birth Weight," *Pediatrics* 104(6):1312-1320, December 1999; Miller, P, et al., "Birth and First-Year Costs for Mothers and Infants Attributable to Maternal Smoking," *Nicotine & Tobacco Research* 3(1):25-35, February 2001.

⁴ Lightwood, JM et al., "Effect of the Arizona Tobacco Control Program on Cigarette Consumption and Healthcare Expenditures," *Social Science and Medicine* 72(2), January 2011.

⁵ Harris, J, "Status Report on the Massachusetts Tobacco Control Campaign, with a Preliminary Calculation of the Impact of the Campaign on Total Health Care Spending in Massachusetts," 2000.

⁶ Hurley, SF & Matthews, JP, "Cost-Effectiveness of the Australian National Tobacco Campaign," *Tobacco Control*, published online August 21, 2008.

⁷ Richard, P., et. al., "The Return on Investment of a Medicaid Tobacco Cessation Program in Massachusetts," *PLoS One*, Volume 7, Issue 1, January 6, 2012.

⁸ Land, Thomas, et al., "Medicaid Coverage for Tobacco Dependence Treatments in Massachusetts and Associated Decreases in Smoking Prevalence," *PLoS One*, Volume 5, Issue 3, March 5, 2010.

⁹ Land, Thomas, et al., "A Longitudinal Study of Medicaid Coverage for Tobacco Dependence Treatments in Massachusetts and for Associated Decreases in Hospitalizations for Cardiovascular Disease," *PLoS Medicine*, Volume 7, Issue 12, December, 2010.

¹⁰ Tauras, JA, et al., "State Tobacco Control Spending and Youth Smoking," *American Journal of Public Health* 95(2):338-44, February 2005 [with additional calculations by the primary authors based on the studies findings and methodology].

¹¹ Chattopadhyay, S. and Pieper, D., "Does Spending More on Tobacco Control Programs Make Economic Sense? An Incremental Benefit-Cost Analysis Using Panel Data," *Contemporary Economic Policy*, 2011.