

## Investing in Prevention Saves Lives and Money: Return on Investment Analyses from Community-Based Prevention

Creating a healthier California when health care and prevention funds are limited requires a good understanding of the value of our investments. Return on investment analyses (ROI) provide important information on the value of prevention strategies. State Wellness Funds frequently use ROI to help select the best package of interventions for their communities.

### Policy Strategies to Reduce Risk Factors for Disease

*Investing in low cost, high impact policy strategies prevents disease caused by smoking, unhealthy diet, or physical inactivity.*

- Taxes on unhealthy food and beverages are cost effective ways to prevent childhood obesity. When tax revenues are committed to programs to fight obesity the returns are even higher. Over 10 years, a penny per ounce sugar-sweetened beverage tax would prevent 576,000 children from becoming obese nationally and save \$31 in health care costs for every dollar spent.<sup>1,2</sup>
- Restrictions on marketing of unhealthy food and beverages to children save more in future health care costs than the cost of implementing and enforcing measures. Over 10 years they would prevent 129,000 children from becoming obese nationally and save \$33 in health care costs for every dollar invested.<sup>1,3</sup>

### High Value Place Based Strategies

*High value prevention strategies can be implemented in places where we live, work, study and play.*

- Healthier food and beverages in schools is a cost saving strategy for fighting childhood obesity. Changing policies to improve the healthfulness of food and drinks sold outside the lunchroom would prevent 345,000 children nationwide from becoming obese over 10 years and save \$4.60 in health care costs for every dollar spent.<sup>1,4</sup>
- Regulations of childcare facilities on physical activity, nutrition, and screen time are highly cost effective. Setting new standards for the 6.5 million U.S. children in childcare each year would cost less than \$2 per child and save \$52 million in healthcare costs over 10 years.<sup>5</sup>
- Exercise programs for seniors can reduce injuries from falls. Fall prevention community programs cost \$100 to \$200 per participant and save on average from \$346 to \$634 per participant in health care costs from avoided falls.<sup>6</sup>

### Healthier Built Environments

*Expanding access to healthy food, physical activity and smoke-free spaces increases quality of life and helps prevent future health care spending.*

- Investing in trails for walking and cycling, zoning changes to promote their construction, and funding programs to promote active transportation can save money. In one study the annual cost per trail user was \$235 while the per capita annual health care cost of physical inactivity was \$622.<sup>7</sup>
- Multiunit housing policies that restrict smoking to designated areas eliminate secondhand smoke and associated health problems, while preventing fires and decreasing unit turnover costs. Thirty one percent of deaths, and 15% of property damage from fires are attributable to smoking. Such policies would save California property owners over \$18 million annually.<sup>8,9</sup>

## Comprehensive Investments

Patchwork funding can lead to piecemeal practices. Comprehensive programs using multiple prevention strategies achieve synergistic effects with lower initial cost and higher ROI.

- In 2010-2012, the CDC invested \$403 million to tackle obesity, tobacco use, and second hand smoke through policy, systems and environmental changes. Twenty-eight communities, with 55 million people, including Santa Clara, Los Angeles, and San Diego, were funded. Evaluation found that, if these investments of approximately \$2.50 per capita per year are maintained through 2020, a return on investment of \$6.90 would be realized over the 11 year period.<sup>10</sup>

## About Return on Investment Analyses

ROI is a financial measure that compares the dollars invested to the benefits produced. It can take many forms. For example:

- $\text{ROI} = (\text{benefits of investment} - \text{amount invested}) / \text{amount invested}$   
When the ROI equals 0, the program pays for itself. When the ROI is greater than 0, the program is producing savings that exceed the cost of the program.

ROI is a respected measure for making the case for investing in preventive services.

- The Congressional Budget Office (CBO) uses a form of ROI to examine the impact of federal investments on the federal budget. For example, CBO analyzes whether future savings to Medicaid and Medicare will offset the new spending on a prevention service.
- The Centers for Disease Control and Prevention (CDC) assesses the cost effectiveness (a form of ROI) of new vaccines when accepting recommendations from the Advisory Committee on Immunization.
- The World Health Organization, Australia, and the United Kingdom have all invested in efforts to identify the most cost effective packages of preventive services.<sup>11,12,13</sup>

## References

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