

## Project STAR

### Program description:

Also known as the Midwestern Prevention Project, Project STAR is a multi-component prevention program with the goal of reducing adolescent tobacco, alcohol, and marijuana use. The program consists of a 6th- and 7th-grade intervention supported by parent, community, and mass media components addressing the multiple influences of substance use.

Typical age of primary program participant: 13

Typical age of secondary program participant: N/A

### Meta-Analysis of Program Effects

Outcomes Measured	Primary or Secondary Participant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
						First time ES is estimated			Second time ES is estimated		
			ES	SE	p-value	ES	SE	Age	ES	SE	Age
Age of initiation (cannabis)	P	2	0.35	0.05	0.00	0.15	0.05	15	0.15	0.05	25
Regular smoking	P	2	-0.26	0.03	0.00	-0.11	0.03	15	-0.11	0.03	25
Age of initiation (alcohol)	P	2	0.14	0.04	0.00	0.06	0.04	15	0.06	0.04	25

### Benefit-Cost Summary

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2.	Program Benefits					Costs	Summary Statistics			
	Parti-cipants	Tax-payers	Other	Other Indirect	Total Benefits		Benefit to Cost Ratio	Return on Investment	Benefits Minus Costs	Probability of a positive net present value
	\$85	\$151	\$136	\$210	\$582	-\$489	\$1.19	n/e	\$93	71%

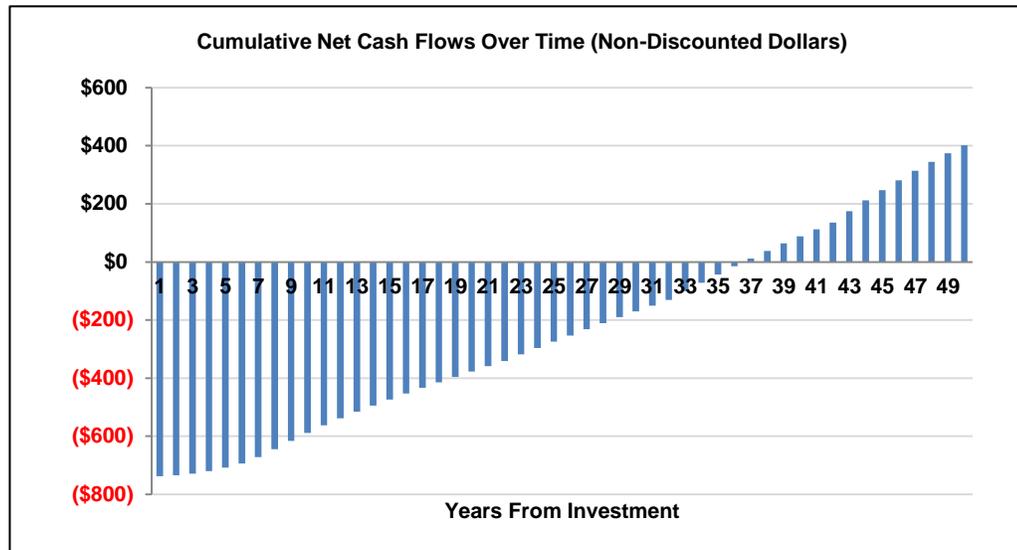
### Detailed Monetary Benefit Estimates

Source of Benefits	Benefits to:					Total Benefits
	Parti-cipants	Tax-payers	Other	Other In-direct		
Earnings via regular smoking	\$38	\$14	\$2	\$140	\$193	
Health care costs for regular smoking	\$47	\$137	\$134	\$70	\$388	

### Detailed Cost Estimates

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2.	Program Costs			Comparison Costs			Summary Statistics	
	Annual Cost	Program Duration	Year Dollars	Annual Cost	Program Duration	Year Dollars	Present Value of Net Program Costs (in 2011 dollars)	Uncertainty (+ or - %)
	\$400	1	2002	\$0	1	2002	\$479	10%

Source: Miller, T.R., and Hendrie, D. (2005). "How should governments spend the drug prevention dollar: A buyer's guide." In: Stockwell, T., Gruenewald, P., Toumbourou, J., and Loxley, W., eds. *Preventing harmful substance use: The evidence base for policy and practice*. Chichester, England: John Wiley & Sons. pp. 415–431.



### Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	0.5
2- Well-implemented comparison group design, often with many statistical controls.	0.5
3- Well-done observational study with many statistical controls (e.g., instrumental variables).	0.75
4- Random assignment, with some implementation issues.	0.75
5- Well-done random assignment study.	1.00
Program developer = researcher	0.5
Unusual (not "real-world") setting	0.5
Weak measurement used	0.5

### Studies Used in the Meta-Analysis

Chou, C. P., Montgomery, S., Pentz, M. A., Rohrbach, L. A., Johnson, C. A., Flay, B. R., & MacKinnon, D. P. (1998). Effects of a community-based prevention program on decreasing drug use in high-risk adolescents. *American Journal of Public Health, 88*(6), 944-948.

National Institute on Drug Abuse. (1997). *Drug abuse prevention for the general population* (NIH Publication No. 97-4113). Rockville, MD: Author.

Pentz, M. A., Dwyer, J. H., MacKinnon, D. P., Flay, B. R., Hansen, W. B., Wang, E. Y., Johnson, C. A. (1989). A multicommunity trial for primary prevention of adolescent drug abuse: Effects on drug use prevalence. *JAMA, 261*(22), 3259-3266.