

keepin' it REAL

Benefit-cost estimates updated August 2014. Literature review updated June 2014.

Program Description: Keepin' it REAL is a universal school-based substance use prevention program designed in multicultural settings for middle school students. The curriculum is taught by classroom teachers in 45-minute sessions once a week for 10 weeks. Classroom sessions include group discussions, role plays, games, and 5 videos produced by youth designed to teach students drug resistance skills. Our review of the program is limited to the curriculum as implemented by the original developers and does not reflect the alternative implementation model used by D.A.R.E. America.

Benefit-Cost Summary			
Program benefits		Summary statistics	
Participants	\$513	Benefit to cost ratio	\$16.98
Taxpayers	\$244	Benefits minus costs	\$765
Other (1)	\$65	Probability of a positive net present value	73 %
Other (2)	(\$9)		
Total	\$813		
Costs	(\$48)		
Benefits minus cost	\$765		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2013). The economic discount rates and other relevant parameters are described in our [technical manual](#).

Detailed Monetary Benefit Estimates					
Source of benefits	Benefits to				
	Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Crime	\$0	\$14	\$46	\$7	\$67
Labor market earnings (alcohol abuse/dependence)	\$504	\$215	\$0	\$0	\$719
Health care (alcohol abuse/dependence)	\$8	\$15	\$17	\$8	\$48
Property loss (alcohol abuse/dependence)	\$1	\$0	\$2	\$0	\$3
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$24)	(\$24)
Totals	\$513	\$244	\$65	(\$9)	\$813

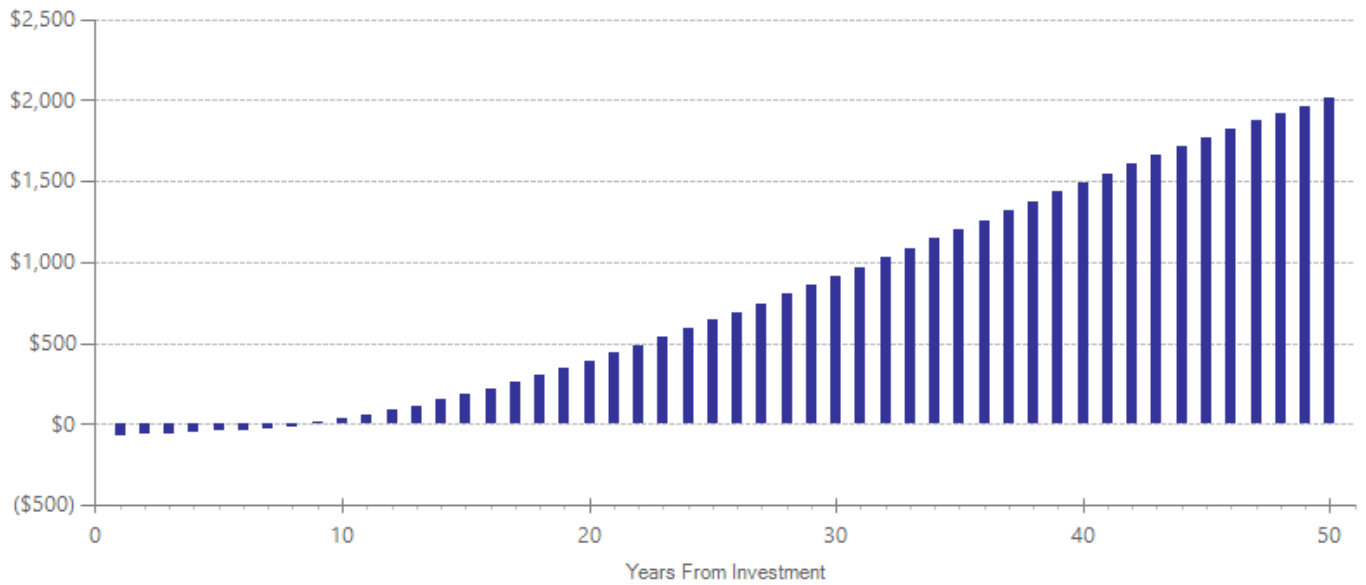
We created the two "other" categories to report results that do not fit neatly in the "participant" or "taxpayer" perspectives. In the "Other (1)" category we include the benefits of reductions in crime victimization and the economic spillover benefits of improvement in human capital outcomes. In the "Other (2)" category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Cost Estimates					
	Annual cost	Program duration	Year dollars	Summary statistics	
				Program costs	\$48
Comparison costs	\$0	1	2014	Uncertainty (+ or - %)	10 %

Cost data come from developer website (<http://www.kir.psu.edu/curriculum/order.shtml>) and personal communication with developer.

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 our [technical manual](#).

Cumulative Net Cash Flows Over Time (Non-Discounted Dollars)



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Unadjusted effect size (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
Smoking before end of middle school	Primary	2	-0.113	0.083	0.171	-0.037	0.083	15	-0.037	0.083	18
Alcohol use before end of middle school	Primary	2	-0.150	0.083	0.072	-0.050	0.083	15	-0.050	0.083	18
Cannabis use before end of middle school	Primary	1	-0.141	0.127	0.269	-0.046	0.127	15	-0.046	0.127	18

Citations Used in the Meta-Analysis

- Hecht, M.L., Marsiglia, F.F., Elek, E., Wagstaff, D.A., Kulis, S., Dustman, P., & Miller-Day, M. (2003). Culturally grounded substance use prevention: an evaluation of the keepin' it R.E.A.L. curriculum. *Prevention Science: the Official Journal of the Society for Prevention Research*, 4(4), 233-48.
- Marsiglia, F.F., Booth, J. M., Ayers, S.L., Nuñez-Gutierrez, B.L., Kulis, S., & Hoffman, S. (2013). Short-term effects on substance use of the keepin' it REAL pilot prevention program: Linguistically adapted for youth in Jalisco, Mexico. *Prevention Science*.

Resource: 2014 Youth Marijuana Use Prevention: A Review of Thirteen Programs. Benefit-Cost & Meta-Analysis Results. Washington State Institute for Public Policy.