

### COMPREHENSIVE SUBSTANCE ABUSE PREVENTION PROGRAM EVALUATION

**2012 ANNUAL REPORT** 

IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION UNIVERSITY OF IOWA, IOWA CITY, IOWA 52242-5000

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### **ANNUAL REPORT**

### JULY 1, 2011 - JUNE 30, 2012

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### EXECUTIVE SUMMARY

The Comprehensive Substance Abuse Prevention Project provides primary alcohol, tobacco, and other drug (ATOD) prevention services to all counties in Iowa. Eighteen providers covering twenty-three service areas implemented a variety of evidence-based prevention programming for the project year that ran from July 1, 2011 to June 30, 2012. Agencies submitted 5,822 total matched pre-test and post-test surveys for analysis. This yielded sufficient numbers of matched surveys to report data for seven prevention programs: All Stars; Brain Power; LifeSkills Training; Project ALERT; Project Towards No Tobacco Use; Too Good for Drugs; and Diversion. There were not sufficient numbers of participants in any high school program to provide data by program, but high school outcomes are included in the substance use data provided below for the project overall. Diversion data are presented separately, as those programs serve an indicated population of youth who have already experienced legal consequences from their substance use.

Participants included in this evaluation ranged in age from 8 to 19; the median age (at post-test) was 12. The grade of participants ranged from 4<sup>th</sup> to 12<sup>th</sup> grade, and some participants were post-high school. Over half (57.9%) of the participants were 7<sup>th</sup> and 8<sup>th</sup> grade students. Males comprised 51.4% of respondents. Eighty-two (81.8%) percent of respondents were White, 3.6% were African American, 2.6% were Asian, and 8.9% were more than one race. Participants of other racial groups comprised less than 3% of the total. Nine percent (9.2%) of participants age 14 and older tended to have higher attrition rates than those students younger than 14 years, and participants in the 6t<sup>h</sup> and 7<sup>th</sup> grades. Students of all racial groups other than Asian were more likely to attrite than White students. And, participants believing that alcohol or marijuana use posed no or slight risk had higher attrition rates than those substances posed moderate or great risk of harm.

The evaluation of the Comprehensive Prevention project answers the following questions:

• Has alcohol/tobacco/marijuana usage changed in the target population?

There were no statistically significant changes from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use for the primary prevention programs (those other than Diversion programs). However, this means that for all of those programs, there was no evidence of increased use as would be expected due to maturation. There was a statistically significant decrease in the use of alcohol for Diversion program participants.

The table on the following page presents data on the percentage of middle and high school youth reporting past 30-day use of alcohol, binge drinking (5 or more drinks in a row), cigarettes, and marijuana at the pre-test and the amount and direction of change at post-test for participants in all programs combined, excluding Diversion programs. Iowa Youth Survey data also are provided. The change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test.

			Alcohol		Binge Drinking		Cigarettes		Marijuana	
Group	N	Median Age	Pre- Test %	Change	Pre- Test %	Change	Pre- Test %	Change	Pre- Test %	Change
Iowa Youth Survey <sup>1</sup>	50,210 <sup>2</sup>	13 <sup>3</sup>	_	+5.60	Ι	+4.40%	-	+4.00	Ι	+2.40
Comprehensive Prevention	3,350	13	8.84	-0.54	1.49	+0.12	1.76	+0.30	1.19	+0.03
<sup>1</sup> IYS entries reflect the estimated yearly average change in 30-day use between participating lowa students in grades 6 and 11. Data were from the 2010 lowa Youth Survey, State of lowa report. <sup>2</sup> The total number of 6 <sup>th</sup> graders completing the 2010 lowa Youth Survey was 26,856, and the total number of 11 <sup>th</sup> graders was 23,657. <sup>3</sup> The median age of 6 <sup>th</sup> graders completing the 2010 lowa Youth Survey was 11 years, and the median age of 11th graders was 16.										

• Has the percentage of the target population who indicate desirable attitudes (i.e., that it is wrong to use substances) at baseline (pre-test) maintained or increased after the intervention (post-test)?

Attitude responses are coded on a Likert scale from 0="not wrong at all" to 3="very wrong." Maintaining a response from pre-test to post-test that use is "wrong" or "very wrong," or moving up the scale towards "very wrong" from any point on the scale is considered a positive outcome. Ninety-one percent (91.0%) or more of participants in elementary school program groups had positive outcomes for attitude toward substance use. In eight of the nine middle school program groups, eighty percent (79.7%) or more of participants had positive outcomes for attitude toward substance use. Project Towards No Tobacco Use showed positive outcomes for alcohol use for seventy-three percent (73.3%) of participants. For Diversion programs, sixty-two (62.2%) or more of participants showed positive outcomes moved up the scale (further toward "very wrong") for alcohol use, twenty-nine percent moved up the scale for cigarette use, and twenty-two percent moved up the scale for marijuana use.

• Has perception of risk of harm from alcohol/tobacco/marijuana use maintained a positive response or increased from pre-test to post-test?

Perception of risk responses are coded on a Likert scale from 0="no risk" to 3="great risk." Maintaining a response from pre-test to post-test that use poses "moderate risk" or "great risk," or moving up the scale towards "great risk" from any point on the scale is considered a positive outcome. For elementary school programs, all but one program group had eighty-two percent (81.8%) or more of participants show positive outcomes for perceived risk of harm from alcohol and cigarette use. Seventy-seven percent (76.5%) of Project Towards No Tobacco Use participants showed positive outcomes for perceived risk of harm from marijuana use. For middle school program groups, eight of the nine had seventy-seven percent (77.2%) or more of participants show positive outcomes for perceived risk of harm from the use of alcohol, cigarettes, and marijuana. Seventy percent (69.9%) of Project Towards No Tobacco Use participants showed positive outcomes for perceived risk of harm from the use of alcohol, cigarettes, and marijuana. Seventy percent (69.9%) of Project Towards No Tobacco Use participants showed positive outcomes for perceived risk of harm from the use of alcohol, cigarettes, and marijuana. Seventy percent (69.9%) of Project Towards No Tobacco Use participants showed positive outcomes for perceived risk of harm from the use of alcohol, cigarettes, and marijuana.

For Diversion programs, sixty-six percent (65.9%) or more of participants showed positive outcomes for perceived risk of harm from substance use. It is noteworthy that thirty percent of Diversion participants moved up the scale (further toward "great risk") for alcohol use, twenty-two percent moved up the scale for cigarette use, and thirty-two percent moved up the scale for marijuana use.

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### INTRODUCTION

The Comprehensive Substance Abuse Prevention Project provides primary alcohol, tobacco, and other drug (ATOD) prevention services to all counties in Iowa. The project is funded through a Substance Abuse Prevention and Treatment (SAPT) Block Grant from the federal Substance Abuse and Mental Health Services Administration (SAMHSA). The Iowa Department of Public Health (IDPH) administers the prevention portion of the Block Grant funds through a competitive process to provide funding for each county in the state. Eighteen providers covering twenty-three service areas were awarded contracts to implement a variety of evidence-based prevention programming for the funding cycle that runs from July 1, 2010 to June 30, 2014.

The Iowa Consortium for Substance Abuse Research and Evaluation ("Consortium") was awarded a contract to evaluate the project and to provide training and technical assistance to the providers on data collection and data entry. The evaluation of the Comprehensive Substance Abuse Prevention Project ("Comprehensive Project") discussed in this report covers the second year of the funding period mentioned above and includes only recurring educational programs for youth. Other services provided under the Comprehensive Prevention Project were monitored outside of this evaluation.

#### Methodology

The evaluation involves a matched pre-post design whereby a survey is administered to the target population at the beginning and at the conclusion of the prevention program. The survey is also administered at the end of each year for programs spanning multiple years. Post-test survey data from the previous program year is typically used as a baseline for reporting current-year outcomes for multi-year programs. Because the survey instruments were revised again this year, participants in the second or third year of some multi-year programs also took a pre-test this year. Therefore, the time from baseline to post-test for second or third year of multi-year programs varies greatly. The revised survey instruments appear in Appendix A.

Agencies submitted 5,405 pre-tests, 5,707 first-year post-tests, 1,426 second-year post-tests, and 277 third-year post-tests during State Fiscal Year 2012 (July 1, 2011 – June 30, 2012). This yielded 5,822 total matched surveys; 4,573 of these were for participants in single-year programs and those in the first year of multi-year programs; 1137 were from participants in the second year of multi-year programs, and 112 were from participants in the third year of multi-year programs. Matched data include participants completing the Comprehensive and Younger Youth survey instruments.

The matched data sets are used to answer the following evaluation questions:

- Has alcohol/tobacco/marijuana use changed in the target population?
- Has the percentage of the target population who indicate at baseline (pre-test) that substance use by someone their age is wrong or very wrong remained the same (maintained) or increased after the intervention (post-test)?
- Has perceived risk of harm from alcohol/tobacco/marijuana use maintained a
  positive response (belief that using poses a moderate or great risk of harm) or
  increased from pre-test to post-test?

#### **Participant Profile**

Demographic data provided here include participants in all programs who completed the Comprehensive or Younger Youth survey instrument. There are some instances where individual responses on demographic data varied from pre-test to post-test. Some differences are naturally occurring, such as participants' age or grade increasing by one year. In those cases, post-test responses were used, as those data most closely represent the matched group included in this report. In addition, there were numerous mismatches in individual participant responses from pre-test to post-test for gender, race, and ethnicity on both surveys. Upon investigation, agency and Consortium staff discovered that the majority of these discrepancies were due to participants giving different responses and not due to data entry error. Therefore, evaluation staff created a standard rule for addressing discrepancies in demographic data, which was to use the responses on the post-tests.

The median age (at post-test) of participants included in this evaluation is 12. Over half (58.3%) of the participants are 7<sup>th</sup> and 8<sup>th</sup> grade students. Males comprise 51.4% of respondents, and 9.2% of all respondents are Hispanic or Latino. Participant racial groups are delineated below:

81.8% White

- 3.6% Black/African American
- 2.6% Asian
- 0.6% American Indian/Alaska Native
- 0.2% Native Hawaiian/Other Pacific Islander
- 2.8% Some Other Race
- 8.4% More than one race

A list of the Institute of Medicine (IOM) population categories served by this project appears in Appendix B.

#### Attrition Analysis

An attrition analysis was done that compared students who completed a pre- and a posttest survey to those who completed only a pre-test survey. Approximately 7.5% of the total number of students who completed a pre-test did not complete a post-test survey and are considered attrition cases. Participants age 14 and older dropped out of programs or failed to complete a post-test at higher rates than participants age 13 and younger. Participants in the 6<sup>th</sup> and 7<sup>th</sup> grades tended to remain in the programs or complete a post-test more than participants in the other grades. There were no differences with regard to the students' sex\*. Students who identified themselves as Latino or Hispanic were not significantly more likely to attrite than non-Latino students; however, students of all racial groups other than Asian were more likely to attrite than White students. Perception of risk of harm from substance use was also related to whether a participant remained in the program or completed a post-test. Participants believing that alcohol or marijuana use posed no or slight risk had higher attrition rates than those who believed that those substances posed moderate or great risk of harm. Therefore, the participants represented by the outcome data presented in this report differ in some ways from those who initiated the program. This selective attrition should be taken into consideration when interpreting outcomes.

(\*The term "sex" is used to designate the biological distinction, per the *Publication Manual of the American Psychological Association*, © 2010.)



### OUTCOME DATA

The outcome evaluation assessed past 30-day substance use, attitudes toward substance use, and perceived risk of harm from substance use for alcohol, cigarettes, and marijuana.

#### Past 30-Day Use

Data on past 30-day use are provided for Comprehensive Prevention project participants who completed the Comprehensive Prevention Survey for programs where 50 or more participants completed both a pre-test and a post-test. The Comprehensive Prevention Younger Youth survey does not ask about past 30-day use, therefore participants who completed that survey are not included in the past 30-day use data. Attitude and perceived risk outcomes for Younger Youth respondents are provided beginning on page 10. In addition, data for Diversion program participants are provided separately because the population served by Diversion programs is different from that of the other programs. Diversion program outcome data begin on page 38. Tables 1 through 3 and Figures 1 through 3 on pages 4 through 9 present past 30-day use data for middle school and high school youth in non-Diversion programs.

The Iowa Youth Survey (IYS) data are provided as a reference for interpreting the outcome data in this report. The lowa Youth Survey is a triennial, and recently a biennial, assessment of Iowa's school-age (grades 6, 8, and 11) students' attitudes toward substance use and actual use of substances. The IYS data reflect changes due to maturation of the youth through the different grade levels. The 2010 IYS data provided here represent an estimate of the change one might see among youth in the general population over the course of one year. Thus, this shows the estimated annual change one might expect in Iowa's general youth population versus the outcomes of youth who complete specific prevention programming under the Comprehensive Prevention project (Note: Youth who received Comprehensive programming may also have completed the IYS). The average yearly change was calculated by dividing the difference between grades by the number of years between grades. This was done using 6<sup>th</sup> and 11<sup>th</sup> grade IYS data to provide a reference for Comprehensive Prevention Project outcomes in Table 1; using 6<sup>th</sup> and 8<sup>th</sup> grade IYS data for participants in elementary and middle school programs; and using 8<sup>th</sup> and 11<sup>th</sup> grade IYS data for participants in high school programs. A single average vearly change figure is given in the tables below to simplify interpretation. True yearly change rates, however, would increase each successive year (i.e., past 30-day use between 6<sup>th</sup> and 7<sup>th</sup> grade may increase less than 4.5%, but may increase more than 4.5% between 7<sup>th</sup> and 8<sup>th</sup> grade). While the time span between pre-test and post-test for some prevention programs presented here is less than one year, the IYS average yearly change serves as a general point of reference when examining the program outcomes rather than comparing to zero, or no change.

Table 1 on page 4 presents data on the percentage of middle and high school youth reporting past 30-day use of alcohol, binge drinking (5 or more drinks in a row), cigarettes, and marijuana at the pre-test and the amount and direction of change at post-test for participants in all programs combined, excluding Diversion programs. Iowa Youth Survey data also are provided. The change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test.



Table 1. Change in Past 30-Day Use: Comprehensive Prevention Project Participants

#### Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test: **Comprehensive Prevention Project Participants**

Group	Ν	Median Age	Alcohol		Binge Drinking		Cigarettes		Marijuana	
			Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
Iowa Youth Survey <sup>1</sup>	50,210 <sup>2</sup>	13 <sup>3</sup>	_	+5.60	-	+4.40%	_	+3.00%	-	+2.40
Comprehensive Prevention	3,350	13	8.84	-0.54	1.49	+0.12	1.76	+0.30	1.19	+0.03
<sup>1</sup> IYS entries reflect the estimated yearly average change in 30-day use between participating lowa students in grades 6 and 11. Data were from the 2010 lowa Youth Survey, State of lowa report.										

<sup>2</sup> The total number of 6<sup>th</sup> graders completing the 2010 lowa Youth Survey was 26,856, and the total number of 11<sup>th</sup> graders was 23,657. <sup>3</sup> The median age of 6<sup>th</sup> graders completing the 2010 lowa Youth Survey was 11 years, and the median age of 11th graders was 16.

There was no evidence of change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use in the combined middle school and high school Comprehensive Prevention participant group. However, this also means that use of those substances showed no evidence of increasing as would be expected due to maturation.



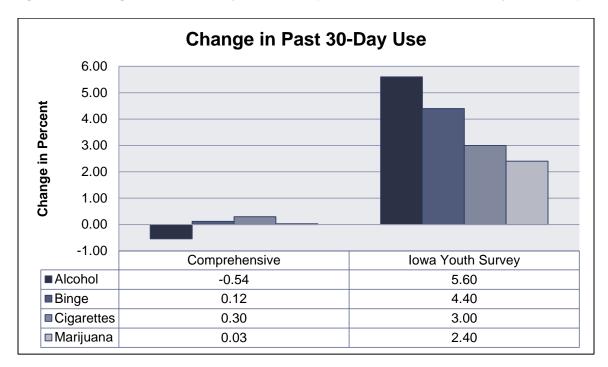


Figure 1. Change in Past 30-Day Use: Comprehensive Prevention Project Participants

The remaining tables and graphs in this report provide outcome data by specific prevention program within the Comprehensive Prevention Project. Programs are grouped according to whether the program is provided within one school year or grade (single-year programs), or spans more than one school year or grade (multi-year programs). The Consortium and IDPH re-categorized two programs this year: Brain Power and Too Good for Drugs. Those programs offer curricula for several grades, but each grade's curricula can be administered as a stand-alone program, and some Comprehensive contractors implement those programs in only one grade. Therefore, Brain Power and Too Good for Drugs are now treated as single-year rather than multi-year programs.

Tables 2 and 3 and Figures 2 and 3 on pages 6 through 9 present data on the percentage of middle school youth reporting past 30-day use of alcohol, binge drinking, tobacco, marijuana at the pre-test and the amount and direction of change at post-test. The change values presented in the tables do not necessarily indicate statistically significant differences from pre-test to post-test. Table 2 and Figure 2 present data for middle-school participants in single-year programs. Table 3 and Figure 3 present data for middle-school participants in multi-year programs. There were not sufficient numbers of matched pre- and post-test surveys for high school programs to report those programs separately (high school participant data are included in Table 1 and Figure 1, above).



Percentage of Youth Reporting Past 30-Day Use at the Pre-Test and Change at Post-Test: Middle School Youth in Single-Year Programs										
			Alcohol		Binge Drinking		Cigarettes		Marijuana	
Group	Ν	Median Age	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
lowa Youth Survey <sup>1</sup>	53,971 <sup>2</sup>	13 <sup>3</sup>	_	+4.50	_	+3.00	-	+2.00	-	+1.50
Brain Power	60	12	8.33	-5.00	0	+1.67	0	0	0	0
Project Towards No Tobacco Use	137	12	11.76	-1.47	0.74	+2.20	0	+2.21	0	+1.47
Too Good for Drugs	433	12	8.58	-2.32	0.70	-0.47	0.93	0	0.93	-0.23

Table 2. Change in Past 30-Day Use: Middle School Youth (Grades 6-8) in Single-Year Programs

<sup>1</sup> IYS entries reflect the estimated yearly average change in 30-day use between participating lowa students in grades 6 and 8. Data were from the 2010 lowa Youth Survey, State of Iowa report.

<sup>2</sup> The total number of 6<sup>th</sup> graders completing the 2010 Iowa Youth Survey was 26,856, and the total number of 8<sup>th</sup> graders was 27,115. <sup>3</sup> The median age of 6<sup>th</sup> graders completing the 2010 Iowa Youth Survey was 11 and the median age of 8<sup>th</sup> graders was 13.

There was no statistically significant change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use for the single-year programs serving middle school youth. However, this also means that use of those substances showed no evidence of increasing as would be expected due to maturation.

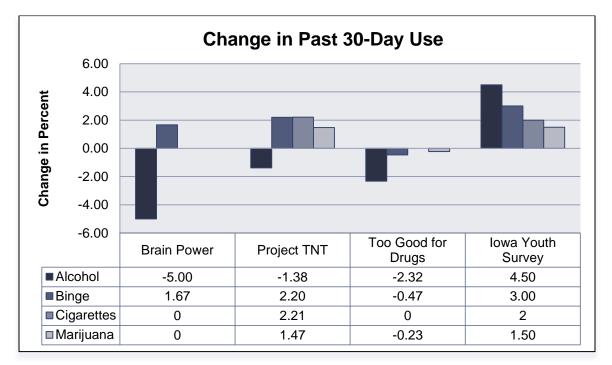


Figure 2. Change in Past 30-Day Use: Middle School Youth (Grades 6-8) in Single-Year Programs

Table 3 on page 8 presents data on the percentage of youth reporting past 30-day use of alcohol, binge drinking, tobacco, and marijuana at the pre-test and the amount and direction of change at post-test for middle-school participants in multi-year programs. The change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test. There were not sufficient numbers of matched pre- and post-test surveys for the first and third years of the All Stars program to report on those program years. Participants in the second year of Project Alert were not given a pre-test this year, and due to the change in wording of the past 30-day use questions on this year's survey, the resulting data were incompatible with those participants' baseline data from last year. Therefore, past 30-day use data are not provided for Project Alert – Year 2.



		Median Age	Alcohol		Binge Drinking		Cigarettes		Marijuana	
Group	N		Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
Iowa Youth Survey <sup>1</sup>	53,791 <sup>2</sup>	13 <sup>3</sup>	_	+4.50	_	+3.00	_	+2.00	_	+1.50
All Stars – Year 2	55	12	0	0	0	0	0	0	0	0
LifeSkills Training – Year 1	1041	12	11.49	-0.78	2.06	+0.30	2.85	-0.20	1.77	0
LifeSkills Training – Year 2	207	13	13.07	0	4.55	-2.28	3.41	-0.57	2.84	-2.27
LifeSkills Training – Year 3	67	12	5.36	-1.79	0	0	0	0	0	0
Project Alert – Year 1	1287	12	6.47	+0.63	1.09	+0.08	1.01	+0.70	0.94	+0.07

#### Table 3. Change in Past 30-Day Use: Middle School Youth (Grades 6-8) in Multi-Year Programs

Youth Survey, State of Iowa report.

<sup>2</sup> The total number of 6<sup>th</sup> graders completing the 2010 Iowa Youth Survey was 26,856, and the total number of 8<sup>th</sup> graders was 27,115. <sup>3</sup> The median age of 6<sup>th</sup> graders completing the 2010 Iowa Youth Survey was 11 and the median age of 8<sup>th</sup> graders was 13.

There was no statistically significant change from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use for the multi-year programs serving middle school youth. However, this also means that use of those substances showed no evidence of increasing as would be expected due to maturation. Figure 3 displays graphically the data provided in Table 3.

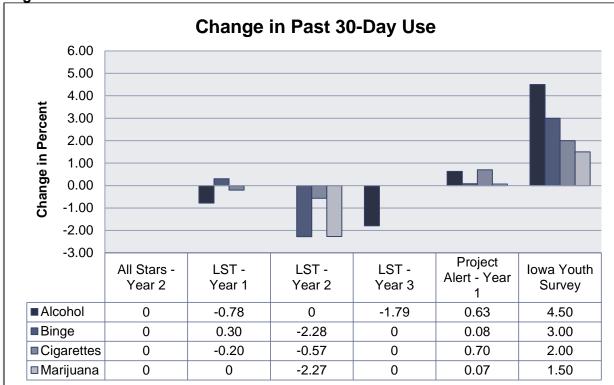


Figure 3. Change in Past 30-Day Use: Middle School Youth (Grades 6-8) in Multi-Year Programs



#### **Attitudes Toward Substance Use**

Figures 4 through 15 on pages 11 through 22 show change in individual attitudes toward substance use from the pre-test to the post-test, by program, for participants in elementary and middle school programs. The change values presented in the figures do not necessarily indicate statistically significant differences from pre-test to post-test. The number in parentheses after each program name in the figures is the number of respondents answering the question on both the pre-test and the post-test. Programs are grouped according to the school level of the participants and by program duration (single-year and multi-year programs). There were not sufficient numbers of matched pre- and post-test surveys for high school participants to report high school program outcomes, other than for Diversion programs which are presented separately later in the report.

Attitude responses are coded on a Likert scale from 0="not wrong at all" to 3="very wrong." Individual attitudes either: 1) improved, which means that attitudes moved up the scale towards "very wrong" from any point on the scale (e.g., respondent felt alcohol use was wrong at pre-test and very wrong at post-test); 2) maintained +, which means that the preand post-test responses remained the same and were unfavorable toward alcohol, cigarette, or marijuana use ("wrong" or "very wrong"); 3) maintained -, which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarette, or marijuana use ("a little wrong" or "not wrong at all"); or 4) worsened, meaning that attitudes moved down the scale away from "very wrong" from any point on the scale (e.g., respondent felt marijuana use was "wrong" at pre-test and "a little bit wrong" at post-test). Maintaining a response from pre-test to post-test that use is "wrong" or "very wrong," or moving up the scale towards "very wrong" from any point on the scale is considered a positive outcome.

#### Attitudes Toward Alcohol Use

Figure 4 on page 11 shows the direction of change in individual attitudes toward alcohol use from pre- to post-test for single-year programs that served elementary school youth. The elementary school youth group contains some 6<sup>th</sup> graders (13% of total), although all completed the Younger Youth survey. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.



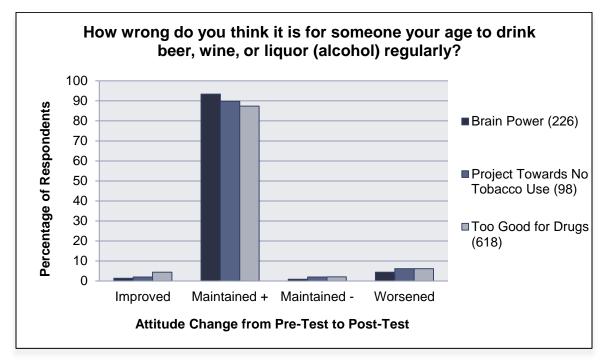


Figure 4. Change in Attitudes Toward Alcohol Use by Program: Elementary School Age Youth in Single-Year Programs

The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that alcohol use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

- Brain Power 94.69%
- Project Towards No Tobacco Use 91.84%
- Too Good for Drugs 91.75%

Figure 5 on page 12 shows the change in individual attitudes toward alcohol use from pre- to post-test for multi-year programs that served elementary school youth. These data present individual years of multi-year programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test. Again, the elementary school youth group contains some 6<sup>th</sup> graders (13% of total), although all completed the Younger Youth survey. LifeSkills Training was the only multi-year program provided in elementary schools this year.

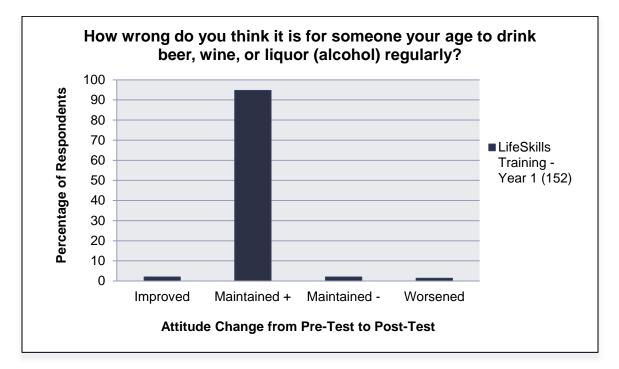
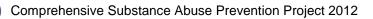


Figure 5. Change in Attitudes Toward Alcohol Use by Program: Elementary School Age Youth in Multi-Year Programs

The percentages of elementary school multi-year program participants showing positive outcomes (maintaining a response that alcohol use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

• LifeSkills Training (Year 1) – 96.71%

Figure 6 on page 13 shows the change in individual attitudes toward alcohol use from pre- to post-test for single-year programs that served middle school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.



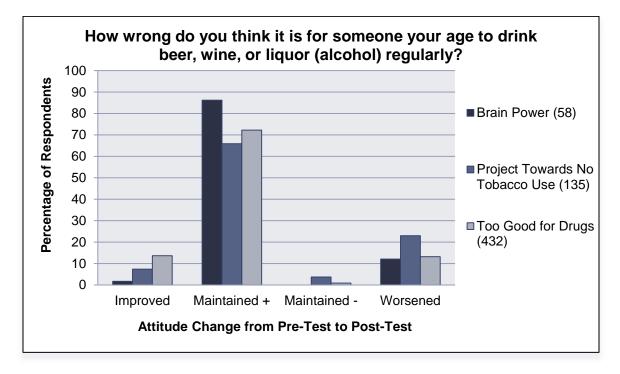


Figure 6. Change in Attitudes Toward Alcohol Use by Program: Middle School Age Youth in Single-Year Programs

The percentages of middle school single-year program participants showing positive outcomes (maintaining a response that alcohol use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

- Brain Power 87.93%
- Project Towards No Tobacco Use 73.33%
- Too Good for Drugs 85.88%

Figure 7 on page 14 shows the change in individual attitudes toward alcohol use from pre- to post-test for multi-year programs that served middle school youth. These data present individual years of multi-year programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

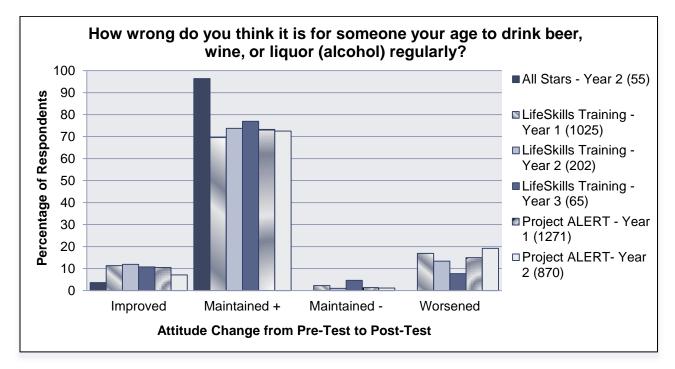


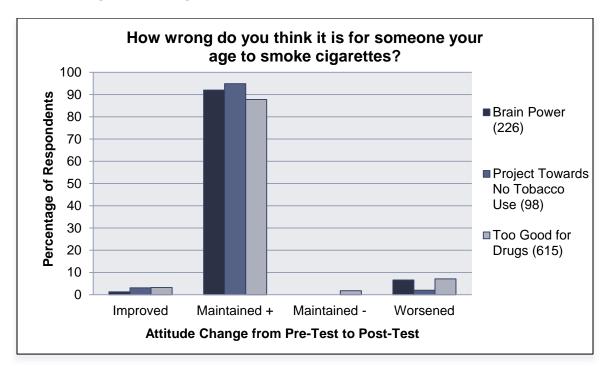
Figure 7. Change in Attitudes Toward Alcohol Use by Program: Middle School Age Youth in Multi-Year Programs

The percentages of middle school multi-year program participants showing positive outcomes (maintaining a response that alcohol use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

- All Stars (Year 2) 100%
- LifeSkills Training (Year 1) 80.88%
- LifeSkills Training (Year 2) 85.64%
- LifeSkills Training (Year 3) 87.69%
- Project ALERT (Year 1) 83.71%
- Project ALERT (Year 2) 79.66%

#### Attitudes Toward Cigarette Use

Figures 8 through 11 on pages 15 through 18 show change in individual attitudes toward daily cigarette use from the pre-test to the post-test, by program (see p. 10 for an explanation of the attitude change categories). Figure 8 shows the change in individual attitudes toward cigarette use from pre- to post-test for single-year programs which served elementary school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.



# Figure 8. Change in Attitudes Toward Cigarette Use by Program: Elementary School Age Youth in Single-Year Programs

The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that cigarette use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

- Brain Power 93.36%
- Project Towards No Tobacco Use 97.96%
- Too Good for Drugs 91.06%

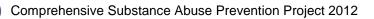
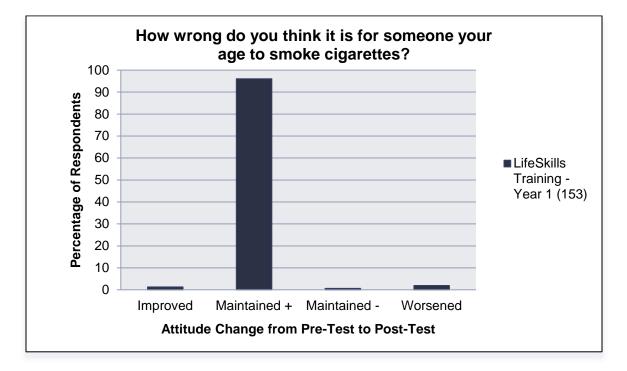


Figure 9 shows the change in individual attitudes toward cigarette use from pre- to post-test for LifeSkills Training. LifeSkills Training was the only multi-year program presented to elementary school youth this year. These data present individual years of the program and therefore are not indicative of how the complete program performs. Also, the change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test. The elementary school youth group contains some 6<sup>th</sup> graders, although all completed the Younger Youth survey.

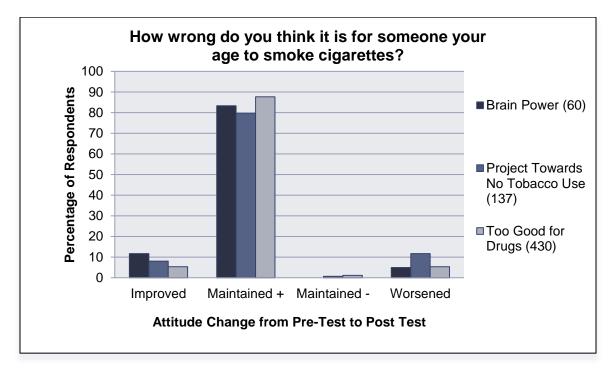


### Figure 9. Change in Attitudes Toward Cigarette Use by Program: Elementary School Youth in Multi-Year Programs

The percentages of elementary school multi-year program participants showing positive outcomes (maintaining a response that cigarette use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

• LifeSkills Training (Year 1) – 97.39%

Figure 10 shows the change in individual attitudes toward cigarette use from pre- to post-test for single-year programs that served middle school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.



# Figure 10. Change in Attitudes Toward Cigarette Use by Program: Middle School Youth in Single-Year Programs

The percentages of middle school single-year program participants showing positive outcomes (maintaining a response that cigarette use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

- Brain Power 95.00%
- Project Towards No Tobacco Use 87.59%
- Too Good for Drugs 88.84%

Figure 11 shows the change in individual attitudes toward cigarette use from pre- to post-test for multi-year programs that served middle school youth. These data present individual years of the program and therefore are not indicative of how the complete program performs. Also, the change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

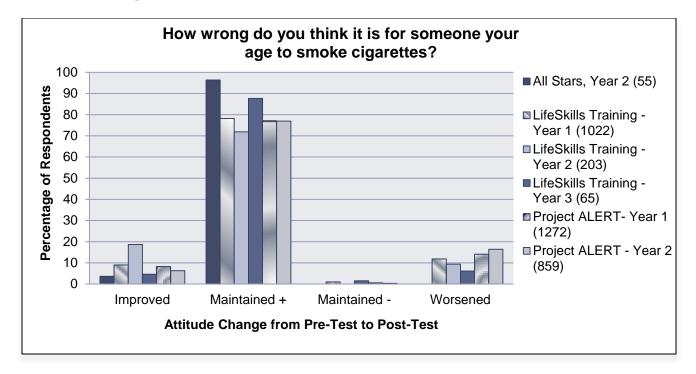


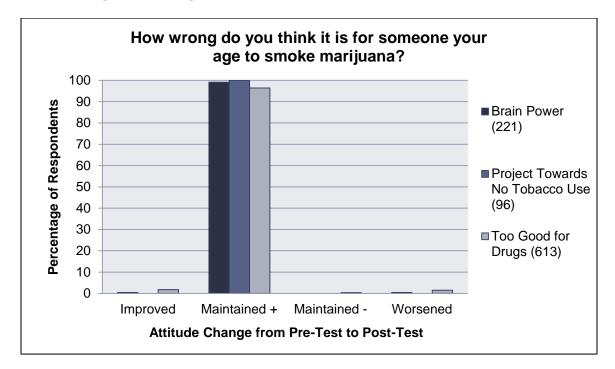
Figure 11. Change in Attitudes Toward Cigarette Use by Program: Middle School Youth in Multi-Year Programs

The percentages of middle school multi-year program participants showing positive outcomes (maintaining a response that cigarette use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

- All Stars (Year 2) 100%
- LifeSkills Training (Year 1) 87.18%
- LifeSkills Training (Year 2) 90.64%
- LifeSkills Training (Year 3) 92.31%
- Project ALERT (Year 1) 85.38%
- Project ALERT (Year 2) 83.24%

#### Attitudes Toward Marijuana Use

Figures 12 through 15 on pages 19 through 22 show change in individual attitudes toward marijuana use from the pre-test to the post-test, by program (see p. 10 for an explanation of the attitude change categories). Figure 12 shows the change in individual attitudes toward marijuana use from pre- to post-test for single-year programs which served elementary school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

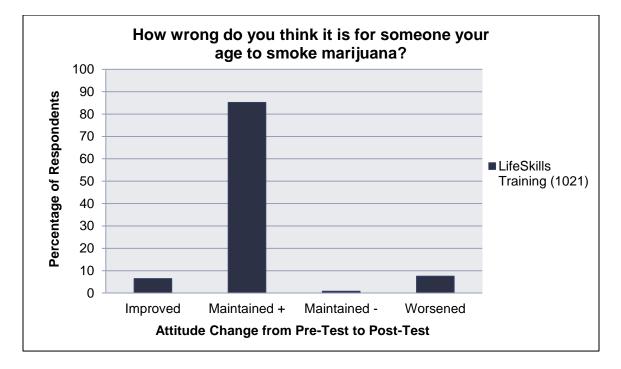


## Figure 12. Change in Attitudes Toward Marijuana Use by Program: Elementary School Youth in Single-Year Programs

The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that marijuana use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

- Brain Power 99.55%
- Project Towards No Tobacco Use 100%
- Too Good for Drugs 98.21%

Figure 13 shows the change in individual attitudes toward marijuana use from pre- to posttest for LifeSkills Training. LifeSkills Training was the only multi-year program presented to elementary school youth this year. The elementary school youth group contains some 6<sup>th</sup> graders, although all completed the Younger Youth survey. These data present individual years of the program and therefore are not indicative of how the complete program performs. Also, the change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

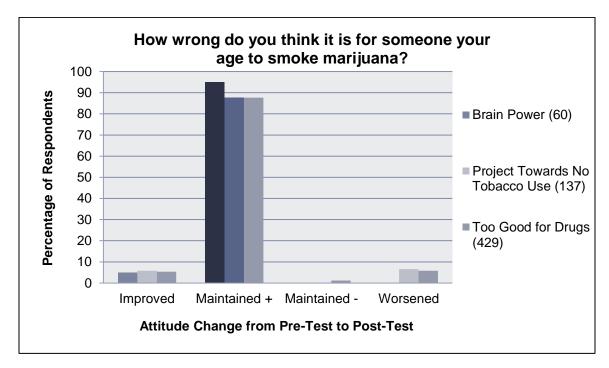


### Figure 13. Change in Attitudes Toward Marijuana Use by Program: Elementary School Youth in Multi-Year Programs

The percentages of elementary school multi-year program participants showing positive outcomes (maintaining a response that marijuana use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

• LifeSkills Training (Year 1) – 91.67%

Figure 14 shows the change in individual attitudes toward marijuana use from pre- to posttest for single-year programs that served middle school youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.



# Figure 14. Change in Attitudes Toward Marijuana Use by Program: Middle School Youth in Single-Year Programs

The percentages of middle school single-year program participants showing positive outcomes (maintaining a response that marijuana use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

- Brain Power 100.00%
- Project Towards No Tobacco Use 93.43%
- Too Good for Drugs 93.01%

Figure 15 shows the change in individual attitudes toward marijuana use from pre- to posttest for multi-year programs that served middle school youth. These data present individual years of the program and therefore are not indicative of how the complete program performs. Also, the change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

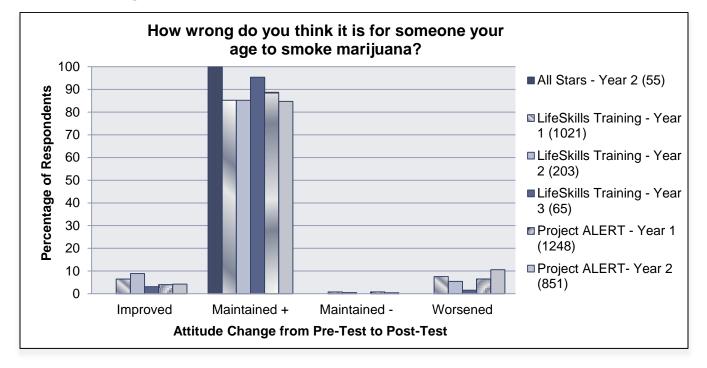
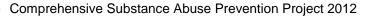


Figure 15. Change in Attitudes Toward Marijuana Use by Program: Middle School Youth in Multi-Year Programs

The percentages of middle school multi-year program participants showing positive outcomes (maintaining a response that marijuana use is "wrong" or "very wrong," or moving up the scale towards "very wrong") are as follows:

- All Stars (Year 2) 100%
- LifeSkills Training (Year 1) 91.67%
- LifeSkills Training (Year 2) 94.09%
- LifeSkills Training (Year 3) 98.46%
- Project ALERT (Year 1) 92.71%
- Project ALERT (Year 2) 88.95%



#### Summary of Positive Outcomes for Attitudes Toward Substance Use

Table 4 shows the average positive outcome (improved or maintained+) percentage for Comprehensive Prevention participants for each substance by program level group.

# Table 4. Positive Outcome Percentages for Attitudes Toward Substance Use by SchoolGroup

Average Positive Outcome Percentages for Attitudes Toward Substance Use										
School Age Group Alcohol Cigarettes Marijua										
Elementary School Youth in Single Year Programs	92.76	94.12	99.25							
Elementary School Youth in Multi- Year Programs	96.71	97.39	91.67							
Middle School Age Youth in Single Year Programs	82.38	90.48	95.48							
Middle School Age Youth in Multi- Year Programs	86.26	89.79	94.31							



#### Perceived Risk of Harm from Substance Use

Figures 16 through 27 on pages 25 through 36 show change from pre- to post-test in individuals' perceptions of risk of harm from substance use, by program, for participants in elementary and middle school programs. The change values presented in the figures do not necessarily indicate statistically significant differences from pre-test to post-test. The number in parentheses after each program in the figures is the number of respondents answering the question on the pre-test and the post-test. Programs are grouped according to the school level of the participants and by program duration (single-year and multi-year programs). There were not sufficient numbers of matched pre- and post-test surveys for high school participants to report high school program outcomes.

Perceived risk responses are coded on a Likert scale from 0="no risk" to 3="great risk." Individual perceptions of risk either: 1) improved, which means that their reported perception of risk of harm from using alcohol, cigarettes, or marijuana moved up the scale from pre-test to post-test towards "great risk," from any point on the scale (e.g., respondent felt alcohol use posed "no risk" at pre-test and "moderate risk" at post-test); 2) maintained +, which means that the pre- and post-test responses remained the same and were unfavorable toward alcohol, cigarette, or marijuana use (that use posed "moderate risk" or "great risk"); 3) maintained –, which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarette, or marijuana use (that use posed "slight risk" or "no risk"); or 4) worsened, meaning that their reported perception of risk of harm moved down the scale from pre-test to post-test away from "great risk," from any point on the scale (e.g., respondent reported that marijuana use posed "moderate risk" of harm at pre-test and "no risk" at post-test). Maintaining a response from pre-test to post-test that use poses "moderate risk" or "great risk," or moving up the scale towards "great risk" from any point on the scale is considered a positive outcome.

#### Perceived Risk of Harm from Alcohol Use

Figure 16 on page 25 shows the change in individuals' perception of risk of harm from alcohol use from pre- to post-test for single-year programs serving elementary school age youth. The elementary school youth group contains some 6<sup>th</sup> graders, although all completed the Younger Youth survey. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.



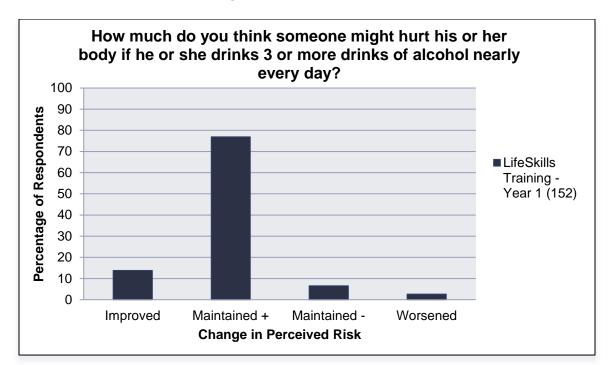
Figure 16. Change in Perceived Risk of Harm from Alcohol Use by Program: Elementary School Youth in Single-Year Programs



The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that alcohol use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

- Brain Power 81.78%
- Project Towards No Tobacco Use 76.53%
- Too Good for Drugs 87.62%

Figure 17 shows the change in individuals' perception of risk of harm from alcohol use from pre- to post-test for LifeSkills Training. LifeSkills Training was the only multi-year program provided in elementary schools this year. These data present individual years of the program and therefore are not indicative of how the complete program performs. Also, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test. The elementary school youth group contains some 6<sup>th</sup> graders, although all completed the Younger Youth survey.

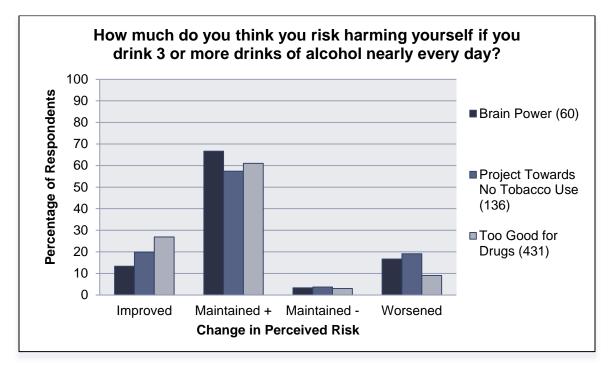


### Figure 17. Change in Perceived Risk of Harm from Alcohol Use by Program: Elementary School Youth in Multi-Year Programs

The percentages of elementary school multi-year program participants showing positive outcomes (maintaining a response that alcohol use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

• LifeSkills Training (Year 1) – 90.79%

Figure 18 shows the change in individuals' perception of risk of harm from alcohol use from pre- to post-test for single-year programs serving middle school age youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.



# Figure 18. Change in Perceived Risk of Harm from Alcohol Use by Program: Middle School Age Youth in Single-Year Programs

The percentages of middle school single-year program participants showing positive outcomes (maintaining a response that alcohol use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

- Brain Power 80.00%
- Project Towards No Tobacco Use 77.21%
- Too Good for Drugs 87.94%

Figure 19 shows the change in individuals' perception of risk of harm from alcohol use from pre- to post-test for multi-year programs serving middle school age youth. These data present individual years of the programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test.

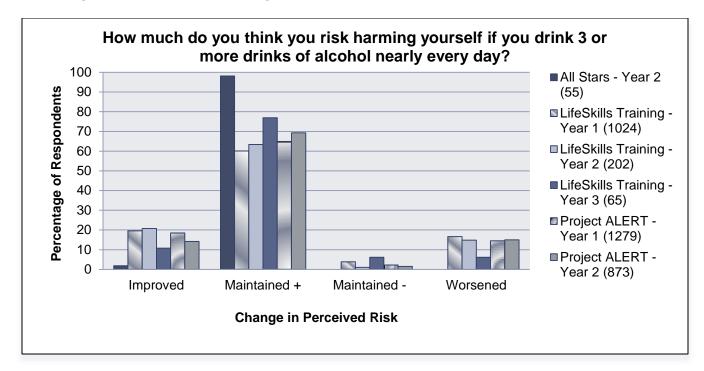
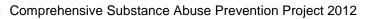


Figure 19. Change in Perceived Risk of Harm from Alcohol Use by Program: Middle School Age Youth in Multi-Year Programs

The percentages of middle school multi-year program participants showing positive outcomes (maintaining a response that alcohol use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

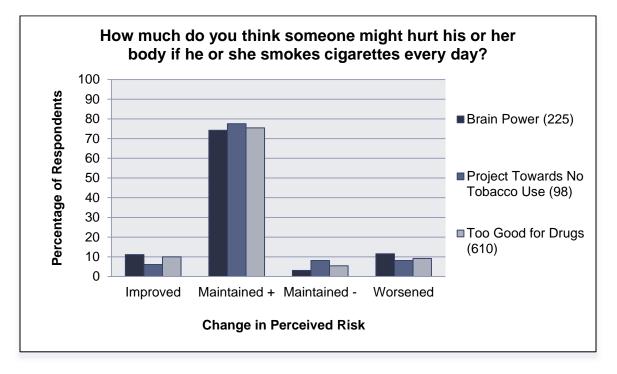
- All Stars (Year 2) 100%
- LifeSkills Training (Year 1) 79.59%
- LifeSkills Training (Year 2) 84.16%
- LifeSkills Training (Year 3) 87.69%
- Project ALERT (Year 1) 83.35%
- Project ALERT (Year 2) 83.51%



### Perceived Risk of Harm from Cigarette Use

Figure 20 shows the change in individuals' perception of risk of harm from cigarette use from pre- to post-test for single-year programs serving elementary school age youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test. The elementary school youth group contains some 6<sup>th</sup> graders, although all completed the Younger Youth survey.





The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that cigarette use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

- Brain Power 85.33%
- Project Towards No Tobacco Use 83.67%
- Too Good for Drugs 85.41%

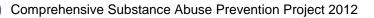
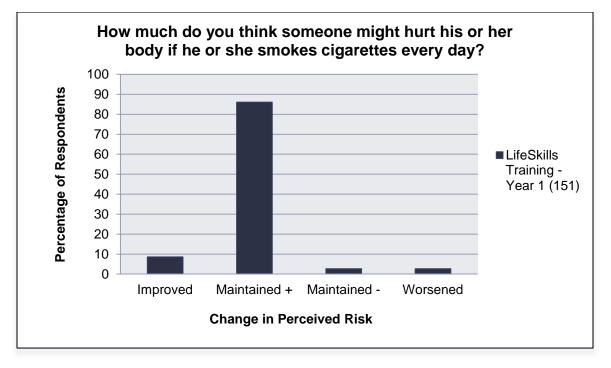


Figure 21 shows the change in individuals' perception of risk of harm from cigarette use from pre- to post-test for LifeSkills Training. LifeSkills Training was the only multi-year program provided in elementary schools this year. These data present individual years of the program and therefore are not indicative of how the complete program performs. Also, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test. The elementary school youth group contains some 6<sup>th</sup> graders, although all completed the Younger Youth survey.

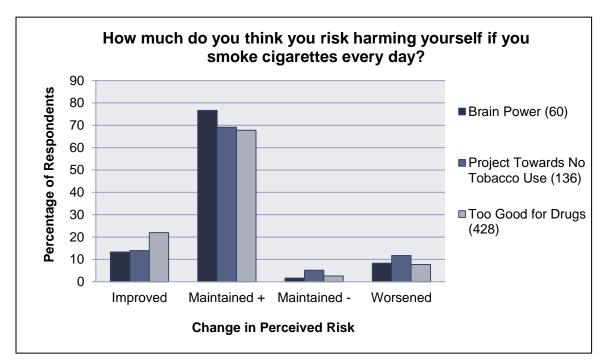




The percentages of elementary school multi-year program participants showing positive outcomes (maintaining a response that cigarette use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

• LifeSkills Training (Year 1) – 94.70%

Figure 22 shows the change in individuals' perception of risk of harm from cigarette use from pre- to post-test for single-year programs serving middle school age youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.



# Figure 22. Change in Perceived Risk of Harm from Cigarette Use by Program: Middle School Youth in Single-Year Programs

The percentages of middle school single-year program participants showing positive outcomes (maintaining a response that cigarette use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

- Brain Power 90%
- Project Towards No Tobacco Use 83.09%
- Too Good for Drugs 89.72%

Figure 23 shows the change in individuals' perception of risk of harm from cigarette use from pre- to post-test for multi-year programs serving middle school age youth. These data present individual years of the programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test.

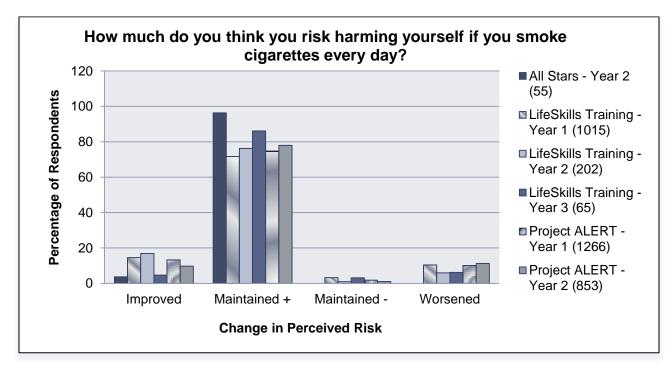
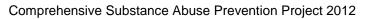


Figure 23. Change in Perceived Risk of Harm from Cigarette Use by Program: Middle School Youth in Multi-Year Programs

The percentages of middle school multi-year program participants showing positive outcomes (maintaining a response that cigarette use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

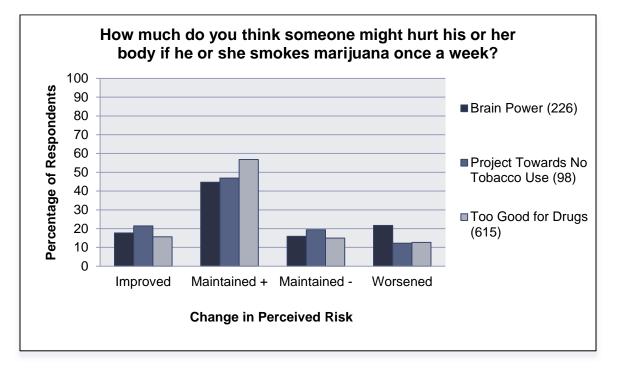
- All Stars (Year 2) 100%
- LifeSkills Training (Year 1) 86.31%
- LifeSkills Training (Year 2) 93.07%
- LifeSkills Training (Year 3) 90.77%
- Project ALERT (Year 1) 88.07%
- Project ALERT (Year 2) 87.69%



### Perceived Risk of Harm from Marijuana Use

Figure 24 shows the change in individuals' perception of risk of harm from marijuana use from pre- to post-test for single-year programs serving elementary school age youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test. The elementary school youth group contains some 6<sup>th</sup> graders, although all completed the Younger Youth survey.



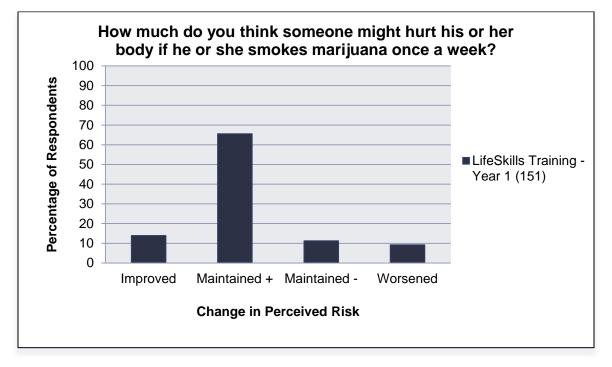


The percentages of elementary school single-year program participants showing positive outcomes (maintaining a response that marijuana use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

- Brain Power 62.39%
- Project Towards No Tobacco Use 68.37%
- Too Good for Drugs 72.36%

Figure 25 shows the change in individuals' perceptions of risk of harm from marijuana use from pre- to post-test for LifeSkills Training. LifeSkills Training was the only multi-year program provided in elementary schools this year. These data present individual years of the programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test. The elementary school youth group contains some 6<sup>th</sup> graders, although all completed the Younger Youth survey.



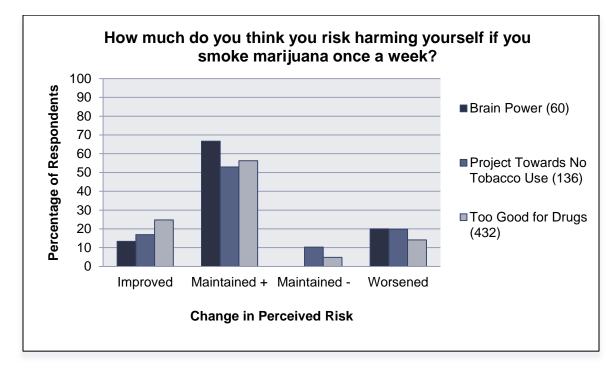


The percentages of elementary school multi-year program participants showing positive outcomes (maintaining a response that marijuana use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

• LifeSkills Training (Year 1) – 79.47%

Figure 26 shows the change in individuals' perceptions of risk of harm from marijuana use from pre- to post-test for single-year programs serving middle school age youth. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

## Figure 26. Change in Perceived Risk of Harm from Marijuana Use by Program: Middle School Youth in Single-Year Programs



The percentages of middle school single-year program participants showing positive outcomes (maintaining a response that marijuana use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

- Brain Power 80%
- Project Towards No Tobacco Use 69.85%
- Too Good for Drugs 81.02%

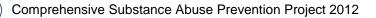


Figure 27 shows the change in individuals' perception of risk of harm from marijuana use from pre- to post-test for multi-year programs serving middle school age youth. These data present individual years of the programs and therefore are not indicative of how the complete programs perform. Also, the change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test.

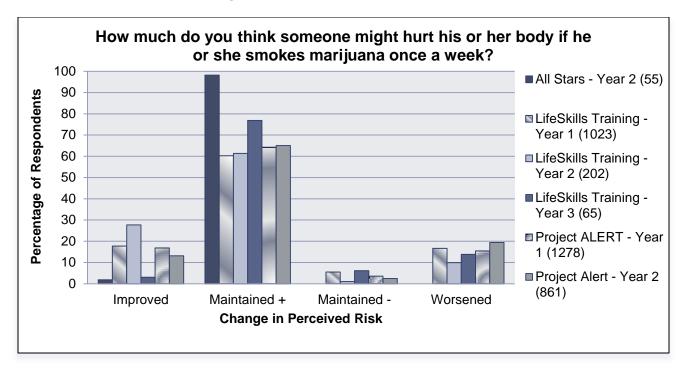
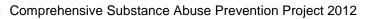


Figure 27. Change in Perceived Risk of Harm from Marijuana Use by Program: Middle School Youth in Multi-Year Programs

The percentages of middle school multi-year program participants showing positive outcomes (maintaining a response that marijuana use poses "moderate risk" or "great risk," or moving up the scale towards "great risk") are as follows:

- All Stars (Year 2) 100%
- LifeSkills Training (Year 1) 77.91%
- LifeSkills Training (Year 2) 89.11%
- LifeSkills Training (Year 3) 80%
- Project ALERT (Year 1) 81.06%
- Project ALERT (Year 2) 78.16%



### Summary of Positive Outcomes for Perceived Risk of Harm from Substance Use

Table 5 shows the average positive outcome (improved or maintained+) percentage for Comprehensive Prevention participants for each substance by program level group.

Table 5.	Positive Outcome Percentages for Perceived Risk of Harm from Substance Use
by Scho	ol Age Group

Average Positive Outcome Percentages for Perception of Risk of Harm from Substance Use				
School Age Group	Alcohol	Cigarettes	Marijuana	
Elementary School Youth in Single Year Programs	81.98	84.80	67.71	
Elementary School Youth in Multi- Year Programs	90.79	94.70	79.47	
Middle School Age Youth in Single Year Programs	81.72	87.60	76.96	
Middle School Age Youth in Multi- Year Programs	86.38	90.99	84.37	

### **Diversion Program Outcomes**

Diversion programs are prevention programs for indicated populations of youth who have already experienced legal or other consequences from their substance use. Hence, Diversion program data are presented separately from the primary prevention programs. Diversion programs also tend to be shorter in duration than other prevention programs, and usually span fewer than 30 days. The Comprehensive Prevention survey instrument now accounts for such short programs by asking at the post-test if participants have used in the past 30 days or since the beginning of the prevention program, whichever is the shorter timeframe. Therefore, pre-test data presented below on substance use reflect use reported in the 30 days prior to starting the program and completing the pre-test, and post-test data reflect the timeframe from the start of the program or completion of the pre-test to the end of the program or completion of the post-test. Four-hundred sixteen Diversion program participants was 17, and the median grade was 11th.

Table 6 on page 38 presents data on the percentage of Diversion program participants reporting use of alcohol, binge drinking (5 or more drinks in a row), cigarettes, and marijuana at the pre-test and the amount and direction of change at post-test. Iowa Youth Survey data also are provided. The change values presented in the table do not necessarily indicate statistically significant differences from pre-test to post-test.



Table 6. Change in Substance Use: Diversion Program Participants

		Madlan	Alco	ohol	Binge D	Drinking	Cigar	rettes	Marij	uana
Group	Ν	Median Age	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change	Pre-Test %	Change
Iowa Youth Survey <sup>1</sup>	50,771 <sup>2</sup>	14 <sup>3</sup>	_	+6.30	-	+5.30%	-	+3.70%	-	+3.00
Diversion	416	17	59.76	-7.71	33.98	-2.41	36.14	-1.44	19.28	-1.45

The decrease in alcohol use from pre-test to post-test for Diversion program participants is a statistically significant change (McNemar ChiSquare, p=0.0014). There was no statistically significant change from pre-test to post-test for binge drinking, cigarette, and marijuana use. However, this also means that use of those substances also showed no evidence of increasing.

### Attitudes Toward Substance Use

Attitude responses are coded on a Likert scale from 0="not wrong at all" to 3="very wrong." Individual attitudes either: 1) improved, which means that attitudes moved up the scale towards "very wrong" from any point on the scale (e.g., respondent felt alcohol use was wrong at pre-test and very wrong at post-test); 2) maintained +, which means that the preand post-test responses remained the same and were unfavorable toward alcohol. cigarette, or marijuana use ("wrong" or "very wrong"); 3) maintained -, which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarette, or marijuana use ("a little wrong" or "not wrong at all"); or 4) worsened, meaning that attitudes moved down the scale away from "very wrong" from any point on the scale (e.g., respondent felt marijuana use was "wrong" at pre-test and "a little bit wrong" at posttest). Maintaining a response from pre-test to post-test that use is "wrong" or "very wrong," or moving up the scale towards "very wrong" from any point on the scale is considered a positive outcome. Figure 28 presents data on the change in attitude toward alcohol, cigarette, and marijuana use from pre-test to post-test for Diversion program participants. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to post-test.

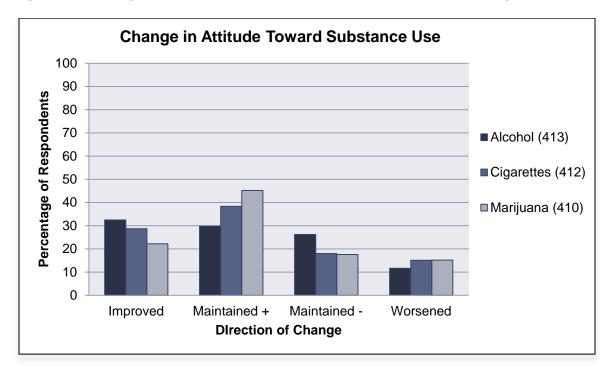


Figure 28. Change in Attitudes Toward Substance Use: Diversion Program

The percentages of Diversion program participants showing positive attitude outcomes (maintaining a response that use is "wrong" or "very wrong," or moving up the scale towards "very wrong") for each substance are as follows:

- Alcohol 62.23%
- Cigarettes 66.99%
- Marijuana 67.32%

Thirty-two percent of participants moved up the scale towards "very wrong" regarding alcohol use, twenty-nine percent moved up the scale towards "very wrong" regarding cigarette use, and twenty-two percent moved up the scale towards "very wrong" regarding marijuana use.

### Perceived Risk of Harm from Substance Use

Perceived risk responses are coded on a Likert scale from 0="no risk" to 3="great risk." Individual perceptions of risk either: 1) improved, which means that their reported perception of risk of harm from using alcohol, cigarettes, or marijuana moved up the scale from pre-test to post-test towards "great risk," from any point on the scale (e.g., respondent felt alcohol use posed "no risk" at pre-test and "moderate risk" at post-test); 2) maintained +, which means that the pre- and post-test responses remained the same and were unfavorable toward alcohol, cigarette, or marijuana use (that use posed "moderate risk" or "great risk"); 3) maintained –, which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarette, or marijuana use (that use posed "slight risk" or "no risk"); or 4) worsened, meaning that their reported perception of risk of harm moved down the scale from pre-test to post-test away from "great risk," from any point on the scale (e.g., respondent reported that marijuana use posed "moderate risk" of harm at pre-test and "no risk" at post-test). Maintaining a response from pre-test to post-test that use poses "moderate risk" or "great risk," or moving up the scale towards "great risk" from any point on the scale is considered a positive outcome. Figure 29 presents data on the change in perception of risk of harm from alcohol, cigarette, and marijuana use from pretest to post-test for Diversion program participants. The change values presented in the figure do not necessarily indicate statistically significant differences from pre-test to posttest.

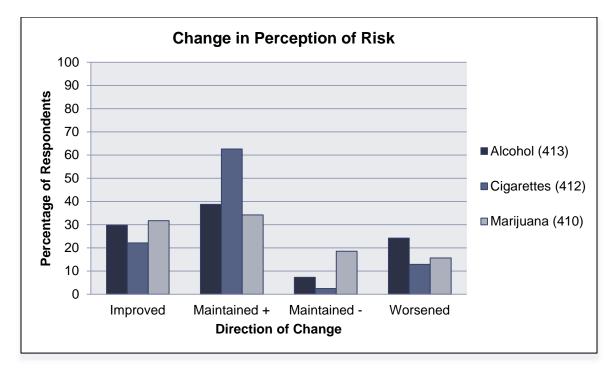


Figure 29. Change in Perceived Risk of Harm from Substance Use: Diversion Program

The percentages of Diversion program participants showing positive perceived risk outcomes (maintaining a response that use poses moderate or great risk, or moving up the scale towards "great risk") for each substance are as follows:

- Alcohol 68.52%
- Cigarettes 84.71%
- Marijuana 65.86%

Thirty percent of participants moved up the scale towards "great risk" regarding alcohol use, twenty-two percent moved up the scale towards "great risk" regarding cigarette use, and thirty-two percent moved up the scale towards "great risk" regarding marijuana use.



## CONCLUSION

This evaluation of the Comprehensive Prevention project answers the following questions:

• Has alcohol/tobacco/marijuana usage changed in the target population?

There were no statistically significant changes from pre-test to post-test for alcohol, binge drinking, cigarette, or marijuana use for the primary prevention programs (All Stars, Brain Power, LifeSkills Training, Project Alert, Project Towards No Tobacco Use, and Too Good for Drugs). However, this also means that for all of those programs, use of those substances showed no evidence of increasing as would be expected due to maturation. There was a statistically significant decrease in the use of alcohol for Diversion program participants, and no evidence of increase in use of the other substances.

• Has the percentage of the target population who indicate desirable attitudes (i.e., that it is wrong to use substances) at baseline (pre-test) maintained or increased after the intervention (post-test)?

Ninety-two percent (91.8%) or more of participants in the four elementary school program groups showed positive outcomes for attitudes toward alcohol use (maintained a response from pre-test to post-test that use is "wrong" or "very wrong," or moved up the scale towards "very wrong" from any point on the scale). In eight of the nine middle school program groups, eighty percent (79.7%) or more of participants showed positive outcomes regarding alcohol use; Project Towards No Tobacco Use showed a positive outcome percentage for alcohol use of seventy-three percent (73.3%).

Regarding attitudes toward cigarette use, ninety-one percent (91.0%) or more of participants in elementary school program groups showed positive outcomes, and eighty-three percent (83.2%) or more of participants in the middle school program groups showed positive outcomes.

In three of the four elementary school program groups, ninety-eight percent (98.2%) or more of participants showed positive outcomes for attitudes toward marijuana use; ninety-two percent (91.7%) of LifeSkills Training – Year 1 participants showed positive outcomes for attitudes toward marijuana use. In the middle school program groups, eighty-nine percent (89.0%) or more of participants showed positive outcomes for attitudes toward marijuana use.

For Diversion programs, sixty-two (62.2%) or more of participants showed positive outcomes for attitudes regarding substance use. It is noteworthy that thirty-two percent of Diversion participants moved up the scale (further toward "very wrong") for alcohol use, twenty-nine percent moved up the scale for cigarette use, and twenty-two percent moved up the scale for marijuana use.



• Has perception of risk of harm from alcohol/tobacco/marijuana use maintained a positive response or increased from pre-test to post-test?

Three of the four elementary school programs had eighty-two percent (81.8%) or more of participants show positive outcomes for perception of risk of harm from alcohol use (maintained a response from pre-test to post-test that use poses "moderate risk" or "great risk," or moved up the scale towards "great risk" from any point on the scale); Project Towards No Tobacco Use had seventy-seven percent (76.5%) of participants show positive outcomes. In the middle school program groups, seventy-seven percent (77.2%) or more of participants showed positive outcomes for perceived risk of harm from alcohol use.

Regarding perception of risk of harm from cigarette use, eighty-four percent (83.7%) or more of participants in the elementary school program groups showed positive outcomes, with ninety-five percent (94.7%) of LifeSkills Training participants showing positive outcomes. Eighty-three percent (83.1%) or more of participants in the middle school program groups showed positive outcomes for perception of risk of harm from cigarette use.

Regarding perception of risk of harm from marijuana use, sixty-two percent (62.4%) or more of participants in the elementary program groups showed positive outcomes. No elementary program groups had eighty percent or more participants show positive outcomes for perception of risk for marijuana use. In eight of the nine middle school program groups, seventy-eight (77.9%) percent or more participants showed positive outcomes; seventy percent (69.9%) of Project Towards No Tobacco Use participants showed positive outcomes.

For Diversion programs, sixty-six percent (65.9%) or more of participants showed positive outcomes for perceived risk of harm from substance use. It is noteworthy that thirty percent of Diversion participants moved up the scale (further toward "great risk") for perceived risk of harm from alcohol use, twenty-two percent moved up the scale for perceived risk of harm from cigarette use, and thirty-two percent moved up the scale for perceived risk of harm from marijuana use.



# Appendix A

# 2012 Comprehensive Prevention Survey Instruments



	Number	
$\mathbf{U}$	Number:	

<b>COMPREHENSIVE PREVENTION</b>
SURVEY

Administrative Section						
1.a. Is this a pre-test or a post-test?	Pre-test					
<ul> <li>b. What program year is this survey for? (For single-year programs, circle "1".)</li> </ul>	1 2 3 4 5					
2. What month is it?						
3. What day of the month is it?						
4. What year is it?	20					
5. What is your agency/service area?						
6. What is the prevention program?						
7. How long is this program running for this group (in weeks)?	Weeks					
8. What is this program's <u>curriculum</u> level?	Elementary Curriculum					
[Please select the school level that the curriculum being taught to this student is designed for, regardless of what grade this student is in school.]	Middle School Curriculum High School Curriculum					
9. What is the location of implementation? [Numerical Code]						
10. What IOM population category is this program group?	UniversalSelectiveIndicated					
Demographics						
11. What is your current age?	8 or       12       16         younger       13       17         9       14       18         10       15       19 or older					

ID Number:					
12. What grade are you in?	5 <sup>th</sup> 6 <sup>th</sup> 7 <sup>th</sup>	8 <sup>th</sup> 9 <sup>th</sup> 10 <sup>th</sup>	11 <sup>th</sup> 12 <sup>th</sup> Adult/Not in School		
13. Are you a male (boy) or a female (girl)?					
14. Are you Hispanic or Latino?	Yes No				
15. Which of the following best describes you? (please choose one)White Black/African American American Indian/Alaska NativeAmerican Indian/Alaska NativeAsianNative Hawaiian/Other Pacific IslanderSome other raceMore than one race					
	My Beliefs a	nd Attitudes			
How wrong do <u>you</u> think it is for someone your age to:					
16. Drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly? Very wrong Wrong A little wrong Not wrong at all					
				at all	
Very wron 17. Smoke cigarettes?	g Wrong	A little w			
Very wron 17. Smoke cigarettes? Very wron 18. Smoke marijuana?	g Wrong	A little w	rong Not wrong	at all	
Very wron 17. Smoke cigarettes? Very wron 18. Smoke marijuana? Very wrong 19. Use any illegal drug oth	g Wrong g Wrong Wrong her than alcohol, cigar	A little ward ward ward ward ward ward ward ward	rrong Not wrong rrong Not wrong ong Not wrong at	at all	
Very wron 17. Smoke cigarettes? Very wron 18. Smoke marijuana? Very wrong 19. Use any illegal drug oth Very wrong 20. Use prescription drugs th	g Wrong g Wrong Wrong her than alcohol, cigar Wrong hat were not prescribed	A little w A little w ettes, or marijua A little wro I for you, or in a w	rrong Not wrong rrong Not wrong ong Not wrong at na? ong Not wrong at	at all : all : all ?	
Very wron 17. Smoke cigarettes? Very wron 18. Smoke marijuana? Very wrong 19. Use any illegal drug oth Very wrong 20. Use prescription drugs th Very wrong 21. Use over the counter mag	g Wrong g Wrong g Wrong her than alcohol, cigar Wrong hat were not prescribed Wrong edications different from	A little w A little w ettes, or marijua A little wro for you, or in a w A little wro hom the directions	rrong Not wrong rrong Not wrong ong Not wrong at na? ong Not wrong at vay other than the directions ong Not wrong at	at all : all : all ? : all	
Very wron 17. Smoke cigarettes? Very wron 18. Smoke marijuana? Very wrong 19. Use any illegal drug oth Very wrong 20. Use prescription drugs th Very wrong 21. Use over the counter mag	g Wrong g Wrong g Wrong her than alcohol, cigar Wrong hat were not prescribed Wrong edications different fro	A little we have a litt	rrong Not wrong rrong Not wrong ong Not wrong at na? ong Not wrong at vay other than the directions ong Not wrong at ? ong Not wrong at	at all all all all all all	
Very wron 17. Smoke cigarettes? Very wrong 18. Smoke marijuana? Very wrong 19. Use any illegal drug oth Very wrong 20. Use prescription drugs th Very wrong 21. Use over the counter marine Very wrong How much do you thin	g Wrong g Wrong g Wrong her than alcohol, cigar Wrong hat were not prescribed gat were not prescribed wrong edications different fro Wrong mk you risk harm (glasses, cans or bottl	A little w A little w A little wro rettes, or marijua A little wro l for you, or in a w A little wro om the directions A little wro ing yourself (	rrong Not wrong rrong Not wrong ong Not wrong at na? ong Not wrong at vay other than the directions ong Not wrong at physically or otherwi	at all all all all all all	

ID Numbe	er:				
23. Smoke cigarettes every day? No risk Sligh	t risk Modera	te risk	_ Great risk		
24. Smoke marijuana once a week? No risk Sligh	t risk Modera	te risk	_ Great risk		
How much do you think you risk harming yourself (physically or otherwise) if you: (This section is continued from the previous page.)					
25. Use any other illegal drug (other than alc No risk Sligh					
26. Use medication prescribed for someone e		te risk	_ Great risk		
27. Use over the counter medications differen		te risk	_ Great risk		
My E	xperiences				
(For the <u>Pre</u> -Test) In the <u>past 30 days</u> , have you: (For the <u>Post</u> -Test) In the past 30 days, or since you started the program – whichever is a shorter time – have you:					
28. Had at least one drink of alcohol (glass, bottle or can of beer; glass of wine, liquor or mixed drink)?	Yes	No			
29. Had 5 or more drinks of alcohol (glasses, bottles or cans of beer; glasses of wine, liquor, mixed drinks) in a row, that is within a couple of hours?	Yes	No			
30. Smoked cigarettes?	Yes	No			
31. Smoked cigars?	Yes	No			
32. Used smokeless tobacco (chewing tobacco, snuff, plug, dipping tobacco)?	Yes	No			
33. Used marijuana (pot, grass, hash, bud, weed)?	Yes	No			
34. Taken any <u>other</u> illegal drug (like cocaine, methamphetamines, barbiturates, heroin, hallucinogens) without a doctor's prescription?	Yes	No			
35. Used prescription medications that were not prescribed for you by your doctor?	Yes	No			
36. Used over the counter medications different from the directions?	Yes	No			

ID Numbe	er:			
During the past 12 months, have you:				
37. Talked with at least one of your parents about the dangers of tobacco, alcohol, or drug use? By parents, we mean your biological parents, adoptive parents, stepparents, or adult guardians, whether or not they live with you.	Yes	No		

### Thank you for your participation!

ID	Number

### COMPREHENSIVE PREVENTION SURVEY INSTRUMENT FOR YOUNGER YOUTH (4<sup>TH</sup> – 5<sup>TH</sup> GRADES)

Administrative Section (for facilitators to complete)				
1.a. Is this a pre-test or a post-test?	Pre-test			
<ul> <li>b. What program year is this survey for? (For single-year programs, circle "1". For multi-year programs, circle the year of the program.)</li> </ul>	1 2 3 4 5			
2. What month is it?				
3. What day of the month is it?				
4. What year is it?	20			
5. What is your agency/service area?				
6. What is the prevention program?				
7. How long is this program running for this group (in weeks)?	Weeks			
8. What is this program's <u>curriculum</u> level?	Elementary Curriculum			
[Please select the school level that the curriculum being taught to this student is designed for, regardless of what grade this student is in school.]	Middle School Curriculum High School Curriculum			
9. What is the location of implementation? [Numerical Code]				
10. What population category is this program group?	UniversalSelectiveIndicated			
	emographics or student to complete)			
11. How old are you?	8 or younger       11         9       12         10       13			
12. What grade are you in?	4 <sup>th</sup> grade 6 <sup>th</sup> grade			
13. Are you a male (boy) or a female (girl	)? Male (Boy) Female (Girl)			

#### ID Number \_\_\_\_

\_\_\_\_

14. Are you Hispanic or Latino?	Yes No
15. Which of the following best describes you? (please choose one)	White         Black/African American         American Indian/Alaska Native         Asian         Native Hawaiian/Other Pacific Islander         Some other race         More than one race

#### My Beliefs and Attitudes (for student to complete)

How wrong do <u>you</u> think it is for someone your age to:	(Please circle the answer you want to give.)		
16. Drink beer, wine or liquor (alcohol) regularly?	Very Wrong	A Little Wrong	Not Wrong at All
17. Smoke cigarettes?	Very Wrong	A Little Wrong	Not Wrong at All
18. Smoke marijuana?	Very Wrong	A Little Wrong	Not Wrong at All
19. Use any illegal drug other than alcohol, cigarettes, or marijuana?	Very Wrong	A Little Wrong	Not Wrong at All

### How much do you think someone might hurt his or her body if he or she: (Please circle the answer you want to give.)

20. Drinks 3 or more drinks (glasses of wine, liquor or mixed drinks, cans or bottles of None A Little Bit A Lot beer) of alcohol nearly every day? 21. Smokes cigarettes every day? None A Little Bit A Lot 22. Smokes marijuana once a week? None A Little Bit A Lot 23. Uses any other illegal drug (other than alcohol, cigarettes, or marijuana) once a None A Little Bit A Lot week?

#### My Experiences (for student to complete)

24. During the past 12 months, have you talked with at least one of your parents about the dangers of tobacco, alcohol, or drug use? By parents, we mean your biological parents, adoptive parents, stepparents, or adult guardians, whether or not they live with you. (Please circle the answer you want to give.)

No

### Thank you for your participation!

Iowa Consortium for Substance Abuse Research and Evaluation

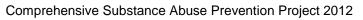
# Appendix B

Institute of Medicine Categories of Populations Served by Agency and Program



### Institute of Medicine Population Categories by Agency and Program

AGENCY	PROGRAM	POPULATION SERVED (IOM CATEGORY)	
ADDS	LifeSkills Training	Universal-Direct	
ADDS	Project ALERT	Universal-Direct	
ASAC Area 6	LifeSkills Training	Selective	
	Prime for Life	Indicated and Universal	
	Project Towards No Drug Abuse	Universal-Direct	
CADS	Too Good For Drugs	Universal-Direct	
	Diversion	Indicated	
CFR	Project ALERT	Universal-Direct	
	Too Good for Drugs	Universal-Direct	
Compass Pointe	Diversion (Juvenile Alcohol & Drug Education)	Indicated	
EFR Area 13	FR Area 13 LifeSkills Training		
	Too Good for Drugs	Universal-Direct	
EFR Area 16	Project Towards No Tobacco Use	Universal-Direct	
	Too Good for Drugs		
EFR Area 20	LifeSkills Training	Universal-Direct	
	Too Good for Drugs		
Helping Services	Project Towards No Tobacco Use	Universal-Direct	
MECCA Services	LifeSkills Training	Universal-Direct	
New Opportunities	LifeSkills Training	Universal-Direct	
Pathways	Diversion (Prime for Life)	Indicated	
Prairie Ridge Addiction Treatment Services	Diversion (Prime for Life)	Indicated	
SASCC	All Stars	Universal-Direct	
SATUCI	Juvenile Education Groups	Indicated	
SIEDA	Brain Power Project Towards No Tobacco Use	Universal-Direct	
Trinity Muscatine	LifeSkills Training	Universal-Direct	
	Project ALERT		
-	Project Towards No Drug Abuse	Indicated	
VSS Area 1	Project ALERT	Universal-Direct	
YSS Area 1	Too Good For Drugs		
YSS Area 2	Project ALERT	Universal-Direct	



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