Youth Development
Annual Outcome Evaluation Report
August 1, 2015- June 30, 2016

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Citation of references related to this report is appreciated. Suggested citation:

Project Overview

The Iowa Department of Public Health (IDPH) provides funding for prevention services through the project known as Youth Development. The purpose of the Youth Development (YD) project is to provide evidence-based substance use prevention programming for youth ages 5 through 18 that includes in- and out-of-school opportunities for youth development, character development, and youth leadership. Seven substance abuse prevention organizations participate in this project: Area Substance Abuse Council; Henry County Extension; Garner-Hayfield-Ventura Community School District; Mason City Youth Task Force; Substance Abuse Treatment Unit of Central Iowa; Center for Alcohol and Drug Services; and United Action for Youth. A full listing of organizations and programs can be found in the Appendix A. The Iowa Consortium for Substance Abuse Research and Evaluation (Consortium) conducts the evaluation of the Youth Development project for the Iowa Department of Public Health.

Evaluation Design

The evaluation employs a matched pre-post design, whereby a survey is administered at the beginning of the program (pre-test), then again at the end of the program (post-test). Agency staff collect these data and enter them into an online system called Qualtrics. The Consortium then downloads the data for analyses and reporting. This report provides data for State Fiscal Year 2016 (FY16) and includes participants involved in the program between August 2015 and June 2016.

A total of 935 pre-tests were collected for the Youth Development project in State Fiscal Year 2016, this includes the Strategic Prevention Framework Groups (SPF). Matching pre-tests and post-tests resulted in 843 survey matches for analysis. Of those, 755 matches were for participants in single-year programs or in the first year of multi-year programs; 88 were for participants in the second year of multi-year program.

The pre-post data were used to help answer the following evaluation questions:

- Has alcohol/cigarette/marijuana usage changed in the target population?
- Has the percentage of the target population who indicate positive attitudes at baseline (pre-test) maintained or increased after the intervention (post-test)?
- Has perceived risk of harm from alcohol/cigarette/marijuana use maintained a positive response or increased from pre-test to post-test?
OUTCOMES

Demographics

The median age of Youth Development project participants at post-test was 13 years of age. The majority of the participants (80.2%) were in fifth, sixth, or seventh grade. The sex of participants was split almost equally (49.8% male, 50.2% female), and 8.5% of participants were Hispanic or Latino. Participant racial groups are delineated below:

- 78.8% White
- 2.4% Asian
- 4.5% Black/African American
- 1.1% American Indian/Alaska Native
- 2.7% Some other race
- 8.0% More than one race

Changes from Pre-test to Post-test

The table and figures on pages 8 through 16 detail data pertaining to past 30-day use, attitudes toward use, and perceptions of risk of harm from use of alcohol, cigarettes, and marijuana. Results are provided for the project (all Youth Development participants together) and for the following individual programs implemented in the project: LifeSkills Training, Project ALERT, Too Good for Drugs, Positive Action, Strategic Prevention Framework Groups, and All Stars. The LifeSkills Training data include participants in curriculum years one and two of the program.

The evaluators performed an attrition analysis to identify potential differences between participants who terminated their involvement in the program by not completing a post-test, compared to those who remained in the program and completed a post-test in FY16. Nearly one-fourth (22.5%) of Youth Development program participants who completed a pre-test did not complete a post-test. The analysis suggests that there are no significant racial/ethnic, gender, age or grade differences between participants who completed a post-test and those who did not.

Iowa Youth Survey (IYS) data are provided as a reference point for interpreting the substance use outcome data in this report. The Iowa Youth Survey is a biennial census assessment of Iowa students’ attitudes and behaviors, including attitudes toward substance use and actual use of substances. Students in grades 6, 8, and 11 complete the IYS. The 2014 IYS data included provide an estimate of the change one might expect to see each year in Iowa’s general youth population due to maturation. Thus, IYS data serve as a general point of reference when examining Youth Development program outcomes. It is important to note that youth who participated in Youth Development programming may also have completed the IYS.

Past 30-Day Use

Table 1 on page 7 presents data on past 30-day use of alcohol, cigarettes, marijuana and binge drinking for all Youth Development participants and participants in each program.

A positive (+) percentage point change indicates an increase in use, whereas a negative (-) change indicates a decrease in use. However, the change values presented in the table do not
indicate statistically significant differences from pre-test to post-test. There is no statistical
evidence of change from pre-test to post-test for the substance use categories presented
(statistical tests yielded p values greater than 0.05). This is true for the Youth Development
participant group and the individual program groups. However, this also means that use of
those substances showed no evidence of increasing as would be expected due to maturation.
Table 1. Change in past 30-Day Use: Youth Development Total and Results by Program

<table>
<thead>
<tr>
<th>Program Participants</th>
<th>N</th>
<th>Median Age</th>
<th>Alcohol</th>
<th>Cigarettes</th>
<th>Marijuana</th>
<th>Binge Drinking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pre-Test %</td>
<td>Change</td>
<td>Pre-Test %</td>
<td>Change</td>
</tr>
<tr>
<td>Iowa Youth Survey^1</td>
<td>52,560^1</td>
<td>12</td>
<td>-</td>
<td>+2.00</td>
<td>-</td>
<td>+1.00</td>
</tr>
<tr>
<td>Youth Development</td>
<td>689</td>
<td>13</td>
<td>5.81</td>
<td>+1.80</td>
<td>1.53</td>
<td>+0.55</td>
</tr>
<tr>
<td>Life Skills Training</td>
<td>349</td>
<td>11</td>
<td>4.90</td>
<td>+3.17</td>
<td>0.58</td>
<td>+0.29</td>
</tr>
<tr>
<td>Positive Action</td>
<td>167</td>
<td>13</td>
<td>1.21</td>
<td>+0.61</td>
<td>1.21</td>
<td>0</td>
</tr>
<tr>
<td>Project ALERT</td>
<td>115</td>
<td>13</td>
<td>9.65</td>
<td>+1.75</td>
<td>3.51</td>
<td>+0.88</td>
</tr>
<tr>
<td>SPF Groups</td>
<td>110</td>
<td>16</td>
<td>10.91</td>
<td>-2.73</td>
<td>1.82</td>
<td>0</td>
</tr>
<tr>
<td>Too Good for Drugs</td>
<td>52</td>
<td>13</td>
<td>16.00</td>
<td>+4.00</td>
<td>6.00</td>
<td>+4.00</td>
</tr>
<tr>
<td>All Stars</td>
<td>50</td>
<td>12</td>
<td>8.51</td>
<td>-6.38</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

^1 IYS entries indicate the yearly average change in 30-day use between all Iowa students in grades 6 and 8. The median age of 6th graders completing the IYS was 11 years old; the median age of 8th graders was 13 years old. Data are from the 2014 Iowa Youth Survey, State of Iowa report (Alcohol from question B16, Binge Drinking from B17, Cigarettes from B34, and Marijuana from B40).^2^ The total number of 6th graders completing the 2014 Iowa Youth Survey was 26,117; the total number of 8th graders was 26,443.
Figure 1 provides the percentage point change in use of participants in all YD Programs.

**Figure 1. Change in Past 30-Day Use Pre- and Post-test: Youth Development Total and Results by Program**

### Attitudes Toward Substance Abuse

The figures on pages 9 and 10 show change in individual attitudes from the pre-test to the post-test for alcohol, cigarettes, and marijuana. Individual attitudes either:

1. “improved,” which means that attitudes grew more unfavorable toward use of alcohol, cigarettes, or marijuana (e.g., respondent felt alcohol use was wrong at pre-test and very wrong at post-test);
2. “maintained +,” which means that the pre- and post-test responses remained the same and were unfavorable toward alcohol, cigarettes, or marijuana use (a positive outcome);
3. “maintained –,” which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarettes, or marijuana use (a negative outcome);
4. “worsened,” meaning that attitudes grew more favorable toward alcohol, cigarettes, or marijuana use from pre-test to post-test (e.g., respondent felt marijuana use was very wrong at pre-test and a little bit wrong at post-test).

Desired outcomes for these questions are improvement in (“improved”) or positive maintenance (“maintained +”) of attitudes toward substance use. The positive attitude outcome percentages provided below each figure represent participants in the “improved” and “maintained +” categories for that program group. The number of matched pre- and post-tests containing a question response is shown in parentheses at the bottom of the data table following each substance.
Overall, Youth Development project participants who completed the YD Survey showed positive attitude outcomes: Alcohol – 84.6%; Cigarettes – 88.2%; and Marijuana – 89.7%.

Overall, LifeSkills Training participants who completed the YD Survey showed positive attitude outcomes: Alcohol – 83.8%; Cigarettes – 87.0%; and Marijuana – 90.1%.
Figure 4. Change in Attitudes Toward Substance Use: Positive Action

Overall, Positive Action participants who completed the YD Survey showed positive attitude outcomes: Alcohol – 83.1%; Cigarettes – 88.0%; and Marijuana – 87.1%.

Figure 5. Change in Attitudes Toward Substance Use: Project ALERT

In summary, Project ALERT participants who completed the YD Survey showed positive attitude outcomes: Alcohol – 86.1%; Cigarettes – 92.2%; and Marijuana – 93.0%.
Overall, Strategic Prevention Framework Group participants who completed the YD Survey showed positive attitude outcomes: Alcohol – 85.5%; Cigarettes – 90.9%; and Marijuana – 90.0%.

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1 Students participating in Strategic Prevention Framework Groups may also be participating in other Youth Development programs.
Overall, Too Good for Drugs participants who completed the YD Survey showed positive attitude outcomes: Alcohol – 82.6%; Cigarettes – 80.4%; and Marijuana – 71.9%.

Overall, All Stars participants who completed the YD Survey showed positive attitude outcomes: Alcohol – 93.8%; Cigarettes – 95.8%; and Marijuana – 100%.
Perceived Risk of Harm from Substance Use

The following figures show change from pre- to post-test in individuals’ perceptions of risk of harm from use of alcohol, cigarettes, and marijuana. Perceptions of risk either:

1) “increased,” which means that their reported perceived risk regarding alcohol, cigarettes, or marijuana use increased from pre-test to post-test (e.g., respondent felt alcohol use was a moderate risk at pre-test and a great risk at post-test);

2) “maintained +,” which means that the pre- and post-test responses remained the same and were unfavorable toward alcohol, cigarettes, or marijuana use (a positive outcome);

3) “maintained -,” which means that the pre- and post-test responses remained the same and were favorable toward alcohol, cigarettes, or marijuana use (a negative outcome);

4) “decreased,” meaning that their reported perception of risk of harm decreased from pre-test to post-test (e.g., respondent reported that marijuana use posed a moderate risk of harm at pre-test and no risk at post-test).

Desired outcomes for these questions are an increase in or positive maintenance (“maintained +”) of change in perceived risk. In Figures 9 through 15, a positive outcome is the percent increased plus the percent maintained +.

Figures 9 through 15 show data for all Youth Development project participants: LifeSkills Training participants, All Stars participants, and Project ALERT participants, respectively. For the positive attitude outcome percentages provided below, each figure represents participants in the “improved” and “maintained +” categories for that program group. The number of matched pre- and post-tests containing a response to the question is shown at the bottom of the data table following each substance.

Figure 9. Change in Perceived Risk of Harm: All Youth Development

Overall, Youth Development project participants who completed the YD Survey showed positive perceived risk outcomes: Alcohol – 79.7%; Cigarettes – 89.9%; and Marijuana – 76.5%.
Figure 10. Change in Perceived Risk of Harm: LifeSkills Training

In summary, LifeSkills Training participants who completed the YD Survey showed positive perceived risk outcomes: Alcohol – 79.4%; Cigarettes – 90.0%; and Marijuana – 77.0%.
In summary, Positive Action participants who completed the YD Survey showed positive perceived risk outcomes: Alcohol – 84.8%; Cigarettes – 89.7%; and Marijuana – 76.4%.

Figure 12. Change of Perceived Risk of Harm: Project ALERT
Overall, Project ALERT participants who completed the YD Survey showed positive perceived risk outcomes: Alcohol – 85.2%; Cigarettes – 93.0%; and Marijuana – 77.2%.

**Figure 13. Change of Perceived Risk of Harm: Strategic Prevention Framework Groups**

Overall, Strategic Prevention Framework Group participants who completed the YD Survey showed positive perceived risk outcomes: Alcohol – 91.8%; Cigarettes – 96.3%; and Marijuana – 84.6%.

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2 Students participating in Strategic Prevention Framework Groups may also be participating in other Youth Development programs.
Figure 14. Change of Perceived Risk of Harm: Too Good for Drugs

Overall, Too Good for Drugs participants who completed the YD Survey showed less than positive perceived risk outcomes towards alcohol and marijuana: Alcohol – 53.8%; Cigarettes – 78.6%; and Marijuana – 61.2%.

Figure 15. Change of Perceived Risk of Harm: All Stars

Overall, All Stars participants who completed the YD Survey showed positive perceived risk outcomes: Alcohol – 79.2%; Cigarettes – 89.4%; and Marijuana – 87.5%.
CONCLUSION

The attrition analysis suggests that there are no significant racial/ethnic, sex, age or grade differences between participants who completed a post-test and those who did not. Several agencies had issues obtaining active parental consent for their adolescents to complete a post-test, this may have had an effect on overall attrition. However, the attrition rates for these programs were relatively low, suggesting that these programs appear well tolerated by youth.

This evaluation of the Youth Development project answers the following questions:

- **Has alcohol/cigarettes/marijuana usage changed in the target population?**
  - **Answer: No**

There was no statistically significant change in past 30-day use in Youth Development participants as a whole or for the LifeSkills Training, All Stars, and Project ALERT participant groups. However, this means that use of alcohol, cigarettes, and marijuana showed no evidence of increasing as would be expected due to maturation. This suggests that there could be some benefit derived from the programs in deflecting the increases normally seen in adolescents.

- **Has the percentage of the target population who indicate positive attitudes at baseline (pre-test) maintained or increased after the intervention (post-test)?**
  - **Answer: Yes, in 71.9% of all participants.**

Table 2 below presents positive outcome percentages for attitudes toward alcohol, cigarettes, and marijuana use for all Youth Development participants and participants in LifeSkills Training, Positive Action, Project ALERT, Strategic Prevention Framework Groups, Too Good for Drugs, and All Stars programs. At least 71.9% of participants across all programs maintained or increased positive attitudes regarding substance use (i.e., that alcohol, cigarette, and marijuana use is wrong or very wrong) from pre-test to post-test. In all groups except Too Good for Drugs, the percentage of students who believe regular alcohol use is wrong is lower than the percentage of students who believe regular cigarette and marijuana use is wrong.
Table 2. Positive Outcome Percentages for Attitudes Toward Substance Use by Participant Group

<table>
<thead>
<tr>
<th>Participant Group</th>
<th>Alcohol</th>
<th>Cigarettes</th>
<th>Marijuana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Development Participants</td>
<td>84.6%</td>
<td>88.2%</td>
<td>89.7%</td>
</tr>
<tr>
<td>LifeSkills Training Participants</td>
<td>83.8%</td>
<td>87.0%</td>
<td>90.1%</td>
</tr>
<tr>
<td>Positive Action Participants</td>
<td>83.1%</td>
<td>88.0%</td>
<td>87.1%</td>
</tr>
<tr>
<td>Project ALERT Participants</td>
<td>86.1%</td>
<td>92.2%</td>
<td>93.0%</td>
</tr>
<tr>
<td>Strategic Prevention Framework Participants</td>
<td>85.5%</td>
<td>90.9%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Too Good for Drugs Participants</td>
<td>82.6%</td>
<td>80.4%</td>
<td>71.9%</td>
</tr>
<tr>
<td>All Stars Participants</td>
<td>93.8%</td>
<td>95.8%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

- Has perceived risk of harm from alcohol/cigarettes/marijuana use maintained a positive response or increased from pre-test to post-test?
- Answer: Yes, in at least 53.8% of all participants.

Table 3 on page 18 presents positive outcome percentages for perceived risk of harm from use of alcohol, cigarettes, and marijuana for all Youth Development participants and participants in LifeSkills Training, Positive Action, Project ALERT, State Prevention Framework, Too Good for Drugs, and All Stars programs. More than 53.8% of participants in all groups maintained or increased positive responses regarding perception of risk of harm from substance use (i.e., that using alcohol, cigarettes, or marijuana posed moderate to great risk of harm). In all groups, the percentage of students believing regular cigarette use and alcohol use pose risk of harm is higher than the percentage believing marijuana use poses risk of harm. In all groups except Too Good for Drugs and All Stars students believe that marijuana use is less risky than alcohol or cigarette use. Students in all groups believe that cigarette use is more risky than alcohol or marijuana use.
Table 3. Positive Outcome Percentages for Perceived Risk of Harm from Substance Use by Participant Group

<table>
<thead>
<tr>
<th>Participant Group</th>
<th>Alcohol</th>
<th>Cigarettes</th>
<th>Marijuana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Development Participants</td>
<td>79.7%</td>
<td>89.9%</td>
<td>76.5%</td>
</tr>
<tr>
<td>LifeSkills Training Participants</td>
<td>79.4%</td>
<td>90.0%</td>
<td>77.0%</td>
</tr>
<tr>
<td>Positive Action Participants</td>
<td>84.8%</td>
<td>89.7%</td>
<td>76.4%</td>
</tr>
<tr>
<td>Project ALERT Participants</td>
<td>85.2%</td>
<td>93.0%</td>
<td>77.2%</td>
</tr>
<tr>
<td>Strategic Prevention Framework</td>
<td>91.8%</td>
<td>96.3%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Participants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too Good for Drugs Participants</td>
<td>53.8%</td>
<td>78.6%</td>
<td>61.2%</td>
</tr>
<tr>
<td>All Stars Participants</td>
<td>79.2%</td>
<td>89.4%</td>
<td>87.5%</td>
</tr>
</tbody>
</table>
### Evidence Based Programs by Organization

The following figure breaks down the Evidence Based Practice used by each organization.

<table>
<thead>
<tr>
<th>Area</th>
<th>Substance Abuse Treatment Unit of Central Iowa</th>
<th>Garner-Hayfield-Ventura Community School District</th>
<th>Mason City Youth Task Force</th>
<th>Henry County Extension</th>
<th>Center for Alcohol and Drug Services</th>
<th>United Action for Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Stars, SPF</td>
<td>LifeSkills Training, SPF</td>
<td>Project ALERT, SPF</td>
<td>Positive Action, SPF</td>
<td>LifeSkills Training, Project Alert, SPF</td>
<td>Too Good for Drugs, *SPF</td>
<td>LifeSkills Training, SPF</td>
</tr>
</tbody>
</table>

Note: SPF data for Center for Alcohol and Drug Services were not separated from the other evidence-based programs and therefore do not appear in the SPF analysis.