

# Guam Substance Abuse Epidemiological Profile

Profile: High-Risk Out-Of-School Youth



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# Acknowledgements



## ACKNOWLEDGEMENTS

This profile resulted from the collaborative efforts of the various agencies and institutions that comprise the Guam State Epidemiological Outcomes Workgroup (SEOW). The data contained in this profile were contributed by the members of the SEOW from primary sources within each institution.

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# Introduction

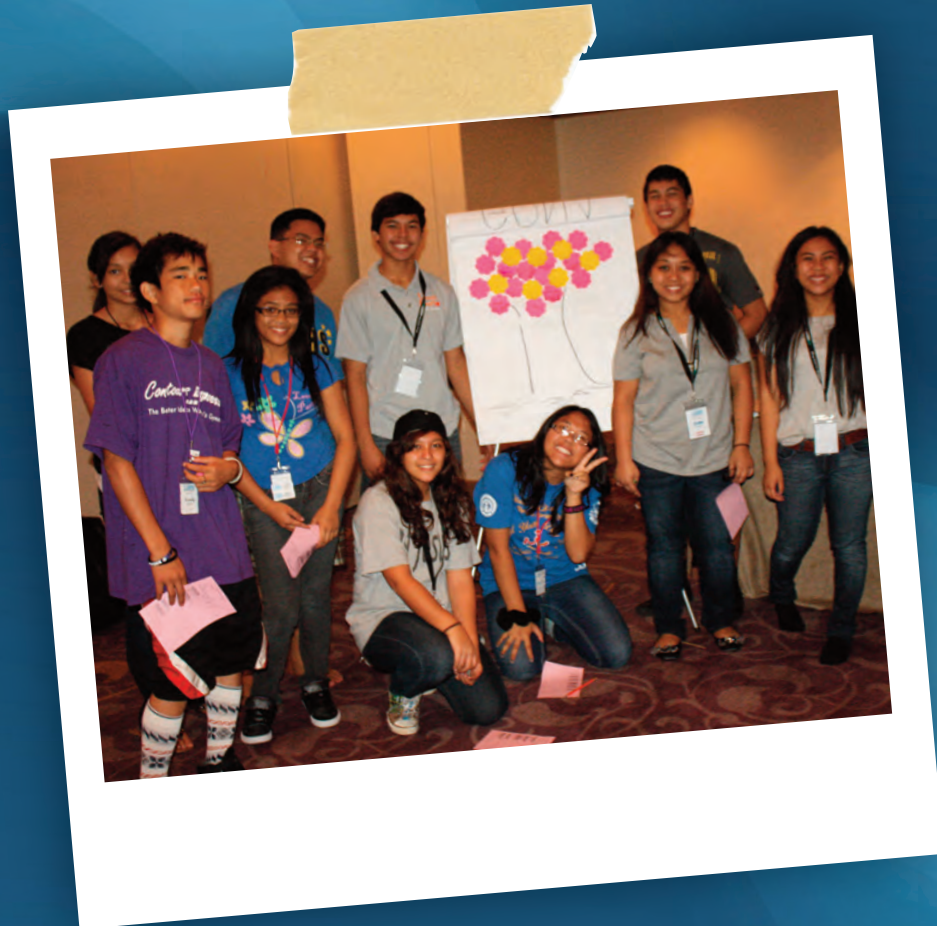


As part of its funding, the Guam State Epidemiological Outcomes Workgroup (SEOW) is charged with developing state and community epidemiological profiles of key substance use and mental health indicators. This report presents a comprehensive data review by the SEOW for Guam's selected community: **high-risk out-of-school youth**. It includes data on alcohol, tobacco, illicit drug use, prescription drug abuse, and related risk and protective factors.

This Community Profile is the first of its kind produced by the Guam SEOW. Its primary purpose is to serve as a reference document for the SEOW itself and other prevention stakeholders to understand the available data at the community level regarding alcohol, tobacco, illicit drugs, prescription drugs, and mental health issues. The data from this report will be used to create more user-friendly and approachable documents to inform policy makers, legislators, and the public regarding the available community level information about prevention in mental health and substance abuse prevention for high-risk out-of-school youth.

The SEOW will use data from this report in further deliverables specified in the grant. These other deliverables include: a portfolio of data briefs and a database that will allow the tracking and reporting of the identified key indicators.

# Methodology



In seeking to meet the Community Profile deliverable under the SEOW sub-grant with Synectics, Inc., the Guam SEOW deliberated on what constitutes a valid “community” for an island with a small population (2010 census: 159,359 people). Aggregate substance abuse and mental health data is available from island-wide surveillance systems, but specific data for each of Guam’s 19 villages is scarce, and the sample sizes are often too small for statistical relevance. In addition, prevention interventions are also most often implemented island-wide, making village-specific tracking less meaningful.

To determine which “community” should be the focus for its Community Profile, the SEOW conducted a data mapping exercise to identify the population subgroups excluded by existing surveillance systems. These population subgroups were then assessed based on a set of criteria to determine which one should be prioritized as a data target. The criteria were weighted and included the following, in descending order of importance:

- Size of the population sub-group
- Ease of access to members of the sub-group
- Relative risk of substance abuse and/or mental health problems within the population sub-group
- Availability of existing surveillance systems to create a substance abuse/mental health data profile of the population sub-group

Youth not captured by the regular YRBSS include:

- Private school students – in both faith-based and secular private schools
- Students in military schools
- Out-of-school youth in the juvenile justice system – likely at highest risk of substance abuse and mental health problems
- Other out-of-school youth – reasons for not being in school may include debilitating illness, recent immigration in to Guam, homelessness and vagrancy; however the SEOW members believe the size of this group to be very small

The Guam SEOW concluded that **high-risk out-of-school youth** would be the best choice for the Community Profile. While this sub-group may not be as large as some of the other population sub-groups not covered under existing youth surveillance systems, it represents the group at highest risk for substance abuse and mental health problems. Majority of its highest risk members are clients of the Department of Youth Affairs (DYA) or Sanctuary, Inc., longstanding members of the Guam PEACE Advisory Council and SEOW. Finally, under a data working agreement instituted by the SEOW and these two organizations, selected questions from the Youth Risk Behavior Surveillance System (YRBS) are included in the screening intake of all youth upon entry into either organization. Therefore, it is possible to compare data across selected substance abuse indicators with the in-school population that is covered by the standard Youth Risk Behavior Survey (YRBS) surveys.

This Community Profile focuses on youth in DYA and Sanctuary, Inc., who are considered high-risk out-of-school youth. Data from DYA and Sanctuary, Inc. clients are available annually from 2008. However, YRBS data from students in the public school system (henceforth referred to as “in-school youth”) are available for 2011 only (the 2009 was invalidated due to methodological issues.) This profile presents the trend data for DYA/Sanctuary Inc. youth from 2008 to 2011, but only compares 2011 data comparable to that of the 2011 survey results of in-school youth.



At present, the following data are available on alcohol, tobacco and other drugs (ATOD) consumption and selected risk and protective factors.

**Table 1. Indicators for ATOD consumption and risk and protective factors**

<b>ALCOHOL</b>		
	Consumption	Consequences
Indicators	Lifetime use of alcohol Alcohol use in the past 30 days  Binge drinking in the past 30 days Riding in a car with drinking driver in the past 30 days  Drinking and driving in the past 30 days	Age at first alcoholic drink (Individual) Perception of harm of binge drinking (Individual) Disapproval of peer alcohol use (Peer) Having talked with a parent about the dangers of alcohol use (Family) Likelihood to work for an employer that conducts random drug and alcohol testing (Individual)
<b>TOBACCO</b>		
	Consumption	Consequences
Indicators	Lifetime smoking  Smoking in the past 30 days  Number of cigarettes smoked per day in the past 30 days  Ever daily smoking Use of smokeless tobacco in the past 30 days	Age when smoked a whole cigarette for the first time (Individual) Perceived peer approval of tobacco use (Peer) Quit attempt in the past 12 months (Individual) Disapproval of peer smoking (Peer) Access to cigarettes (Community) Perception of harm of smoking (Individual) Having talked with a parent about the dangers of smoking (Family)
<b>OTHER DRUGS</b>		
	Consumption	Consequences
Indicators	Lifetime use of marijuana 30-day marijuana use  Lifetime use of cocaine  30-day use of cocaine  Lifetime use of inhalants  30-day use of inhalants   Lifetime use of amphetamines Lifetime use of "ecstasy" Lifetime use of steroids without a doctor's prescription	Age at first use of marijuana (Individual) % Youth offered drugs on school property in the past 12 months (School) Disapproval of marijuana use by peers (Peer) Perception of harm of marijuana (Individual) Having talked with a parent about the dangers of drug use (Family) Likelihood to work for an employer that conducts random drug and alcohol testing (Individual)

# Demographic Profile



# DEMOGRAPHIC PROFILE

The Department of Youth Affairs (DYA) oversees the care out-of-school youth in the juvenile justice system. DYA provides care, treatment, and rehabilitation services to youth adjudicated by the courts of Guam. Status offenders (non-criminal offenders) are placed in a non-secure correctional facility referred to as Cottage Homes. Non-status offenders (criminal offenders) are placed in a secure correctional facility referred to as the Youth Correctional Facility. The DYA offers a full range of prevention, treatment, rehabilitation and aftercare services.

Sanctuary, Inc. is a private non-profit community-based organization that serves the needs of runaway, homeless and otherwise disadvantaged youth on Guam. Sanctuary provides emergency shelter and transitional living program, residential treatment, prevention and diversion services. Referrals are received from Child Protective Services, the Department of Youth Affairs and Juvenile Drug Court.

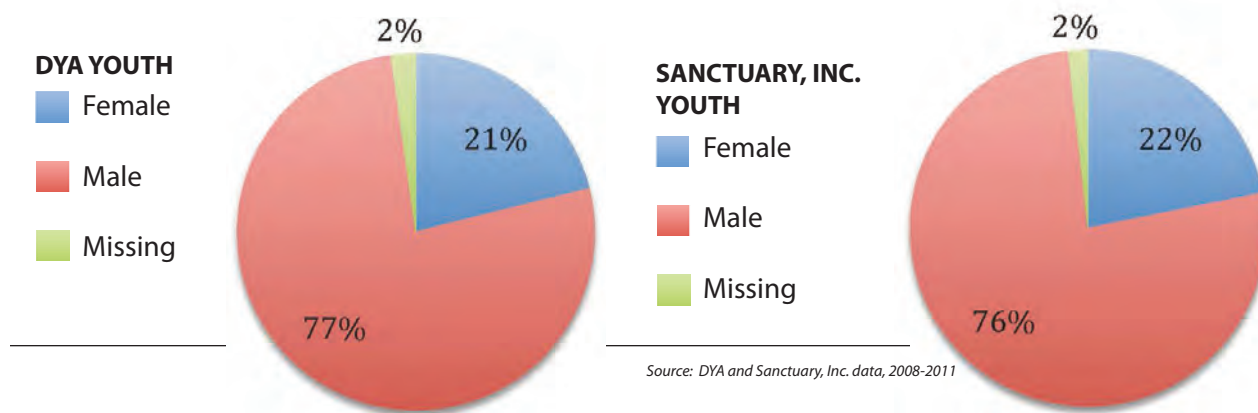
Since 2008, both DYA and Sanctuary, Inc. have included a subset of questions from the YRBSS in their screening intake. Data from these questions forms the core of this profile. From 2008 to 2011, DYA surveyed a total of 1,840 youth while Sanctuary surveyed 339 youth. Over three-fourths of the survey participants were male (Figure 1). Nearly half were Chamorro, and another one-fourth were of other Micronesian ethnicity (Figure 2). About 60% were aged 14 to 16 years (Figure 3). Table 2 compares the sex, age and ethnicity of DYA and Sanctuary Inc. youth with the general population.

**Table 2. Comparison of demographic characteristics of youth at DYA, Sanctuary, Inc. and in the general population of Guam**

Characteristic	DYA	Sanctuary, Inc.	General Population
% Male	77%	76%	59%
% Chamorro	48%	50%	37%
% Other Micronesian	31%	25%	7.6%
% Filipino	8%	7%	26%
% Other Asian	4%	3%	9%
% White	3%	3%	6.7%
% Black	1%	3%	1%

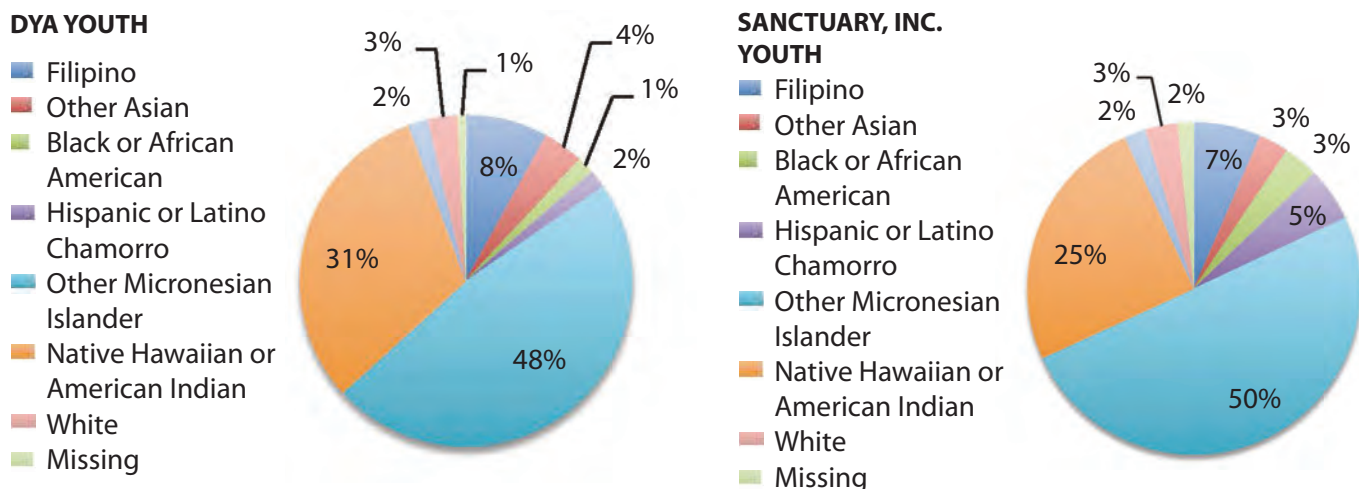
Sources: DYA and Sanctuary, Inc. data, 2008-2011; 2010 population projections from 2005 Guam Statistical Yearbook

**Figure 1. DYA and Sanctuary, Inc. youth by sex, 2008-2011**



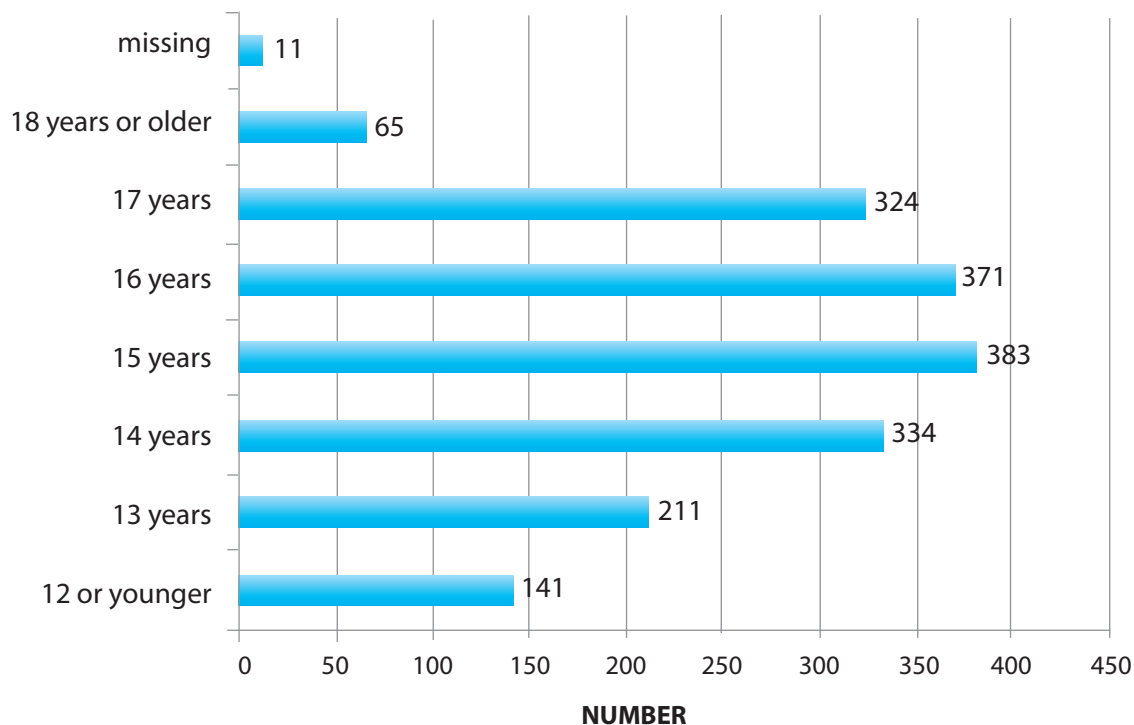
Source: DYA and Sanctuary, Inc. data, 2008-2011

**Figure 1. DYA and Sanctuary, Inc. youth by ethnicity, 2008-2011**



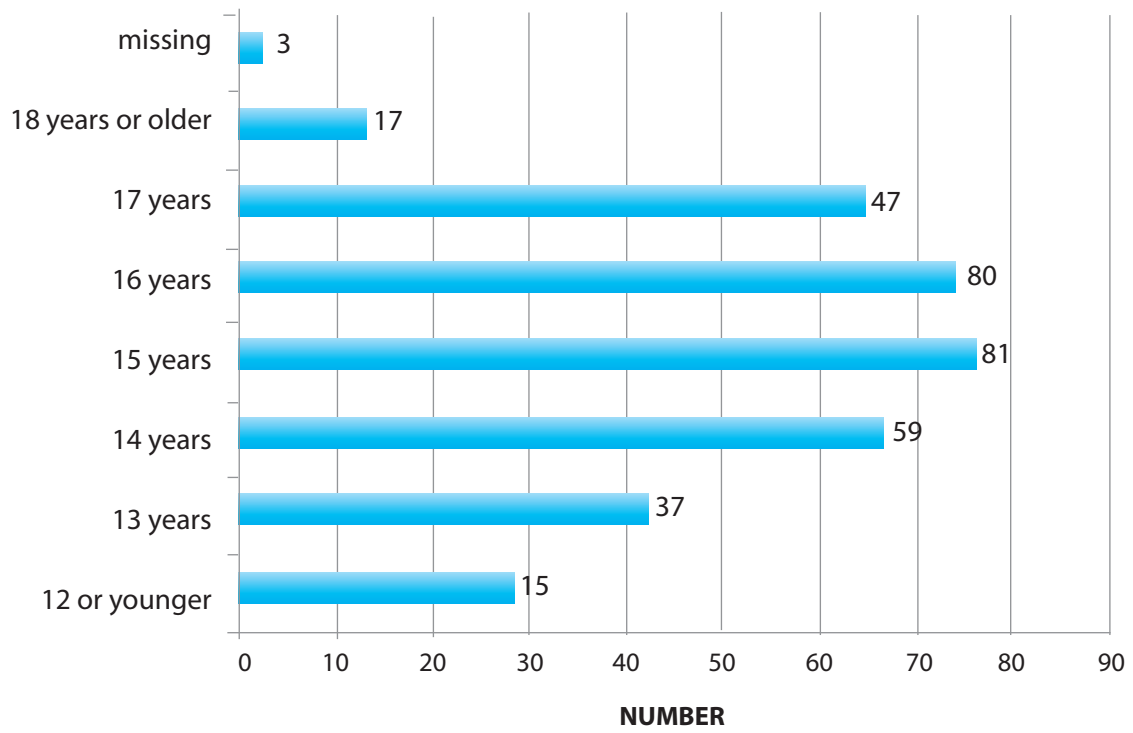
Source: DYA and Sanctuary, Inc. data, 2008-2011

**Figure 3. Age composition, DYA youth, 2008-2011**



Source: DYA data, 2008-2011

Figure 4. Age composition, Sanctuary, Inc. youth, 2008-2011



Source: Sanctuary, Inc. data, 2008-2011

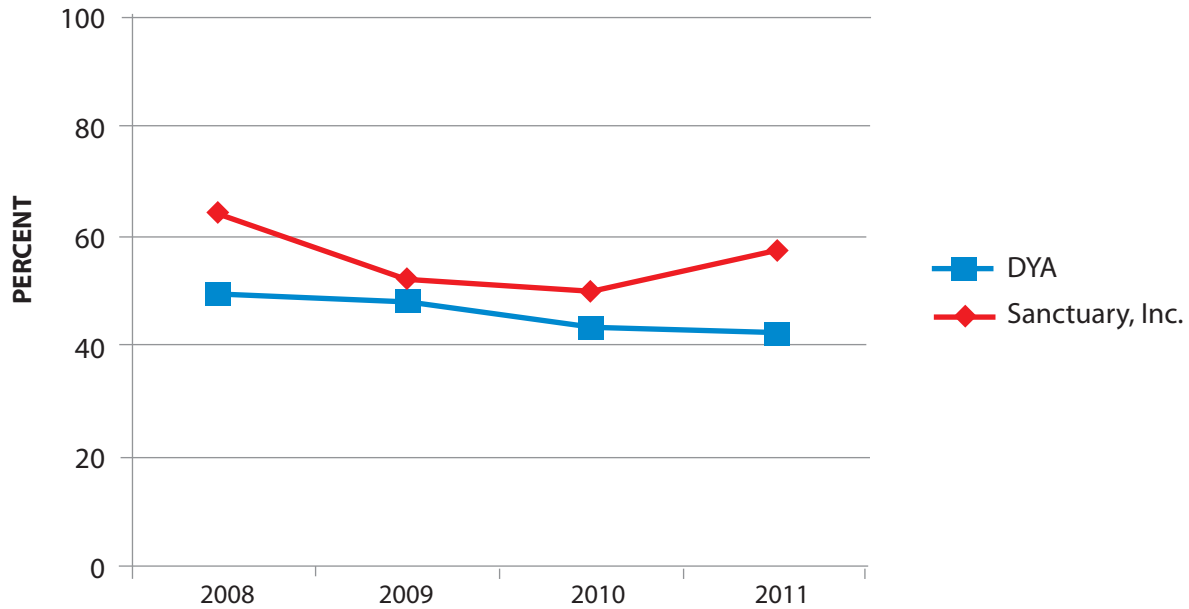
# Alcohol



## Consumption

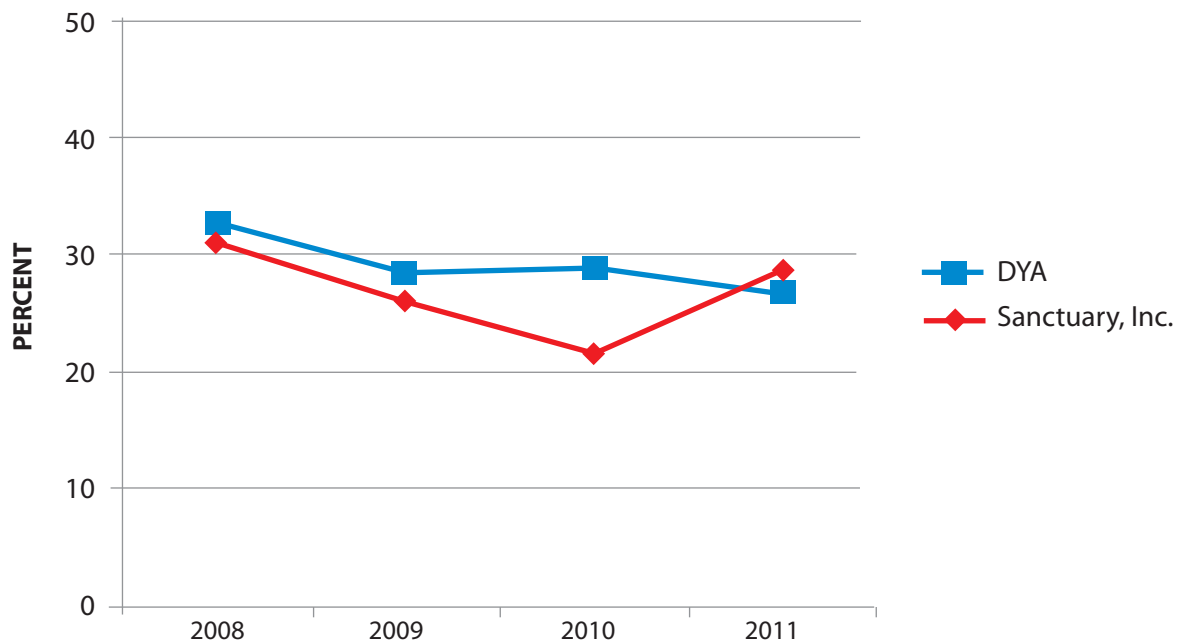
Prevalence data regarding alcohol consumption is similar for DYA and Sanctuary, Inc. youth. About half have tried drinking alcohol (Figure 5), and about 30% have consumed alcoholic beverages within the past 30 days (Figure 6). Approximately 1 in 5 have gone binge drinking (Figure 7).

**Figures 5. Lifetime alcohol consumption, DYA and Sanctuary, Inc. youth, 2008-2011**



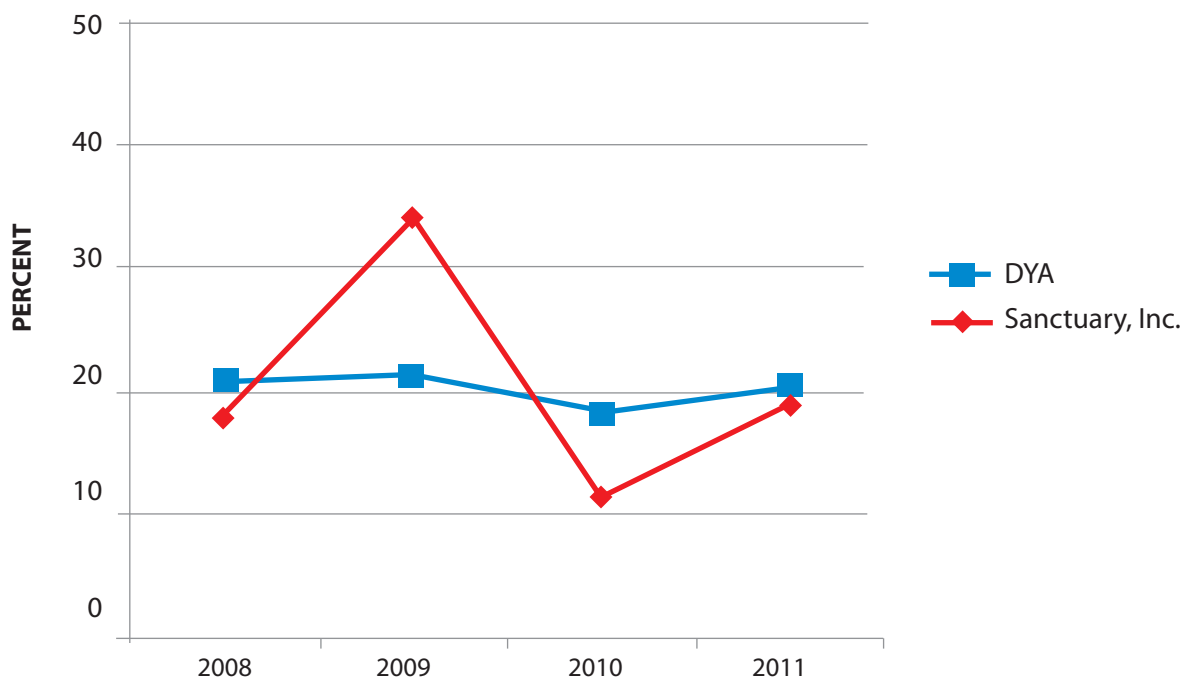
Source: DYA and Sanctuary, Inc. data, 2008-2011

**Figure 6. Past 30-day alcohol consumption, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

**Figure 7. Binge drinking, DYA and Sanctuary, Inc. youth, 2008-2011**

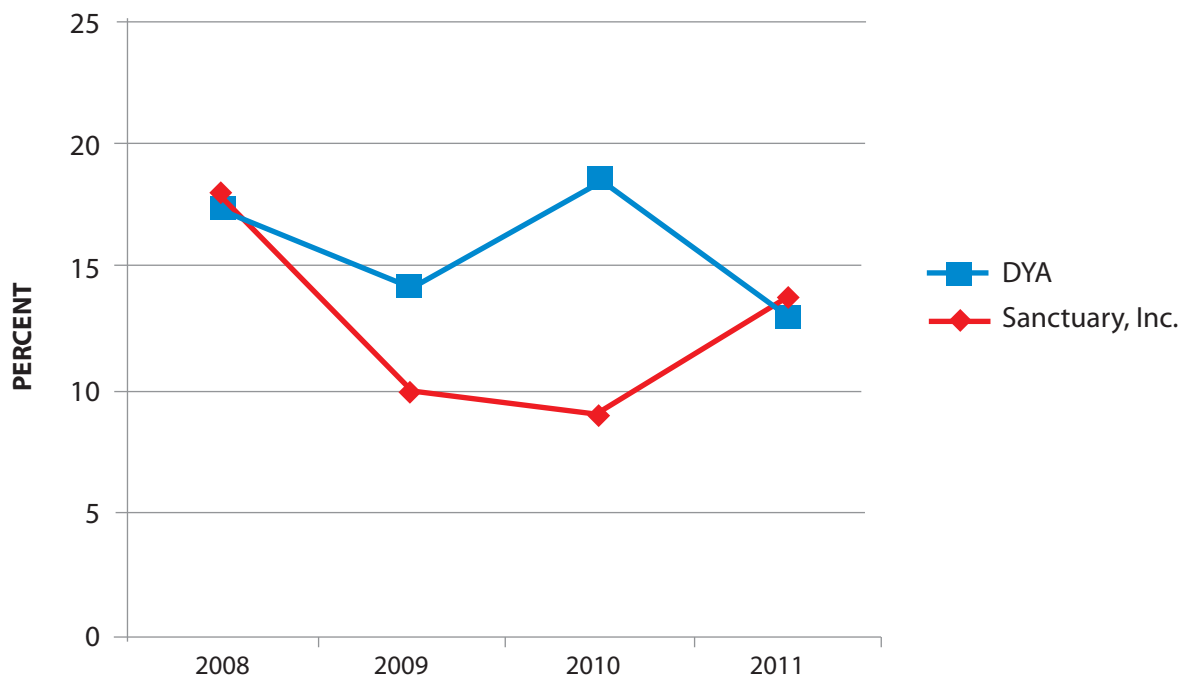


Source: DYA and Sanctuary, Inc. data, 2008-2011

**Risk and Protective Factors**

Less than 15% of DYA and Sanctuary, Inc. youth reported having consumed their first alcoholic drink before the age of 13 years (Figure 8). About 1 in 5 have ridden in a motor vehicle driven by someone who had consumed alcohol (Figure 9), and less than 10% have driven after consuming alcohol (Figure 10).

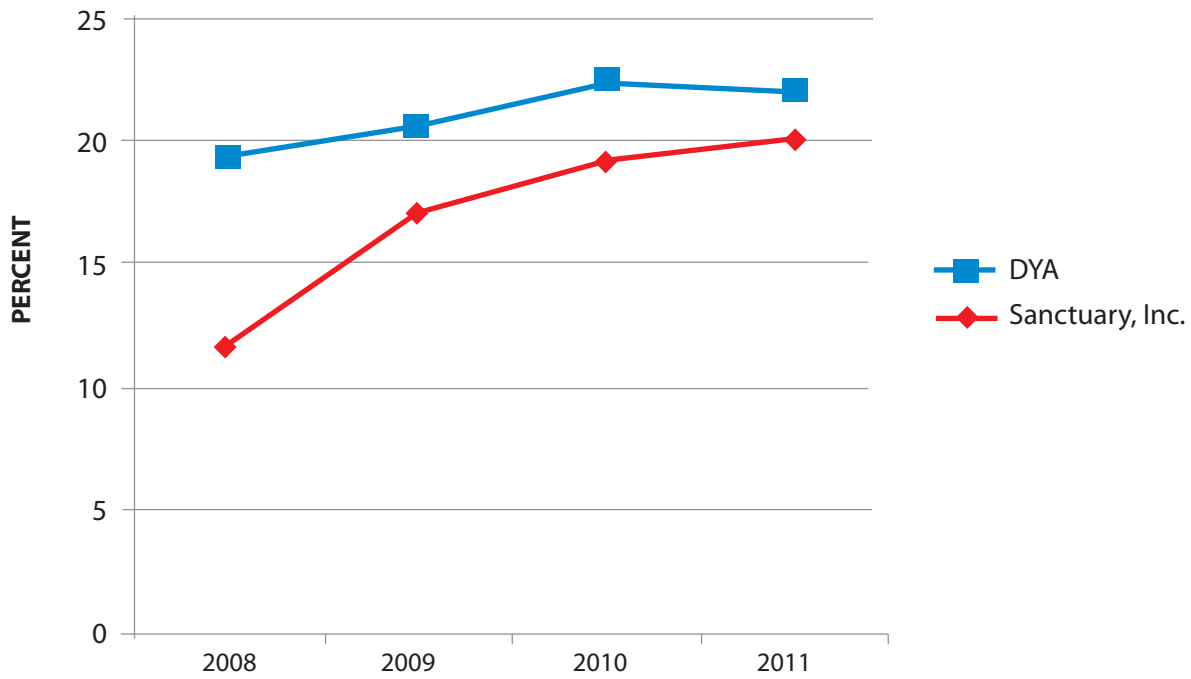
**Figure 8. Age of initiation of alcohol consumption before 13 years, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

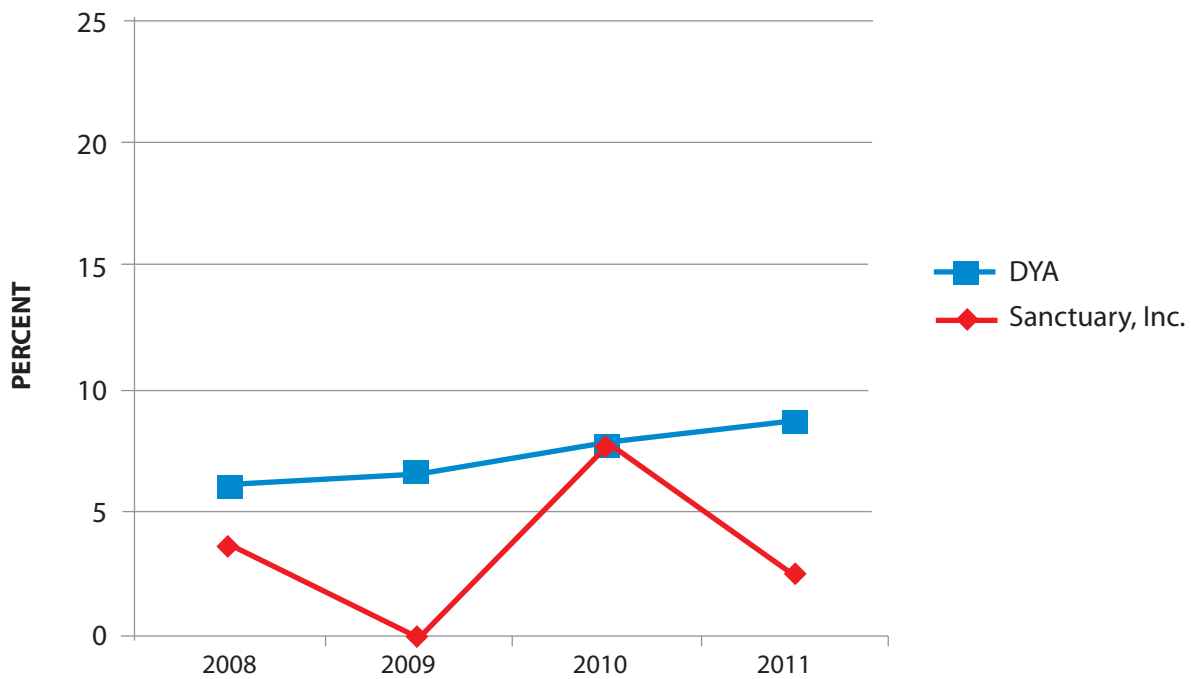


**Figure 9. Riding a motor vehicle with a driver who had been drinking alcohol, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

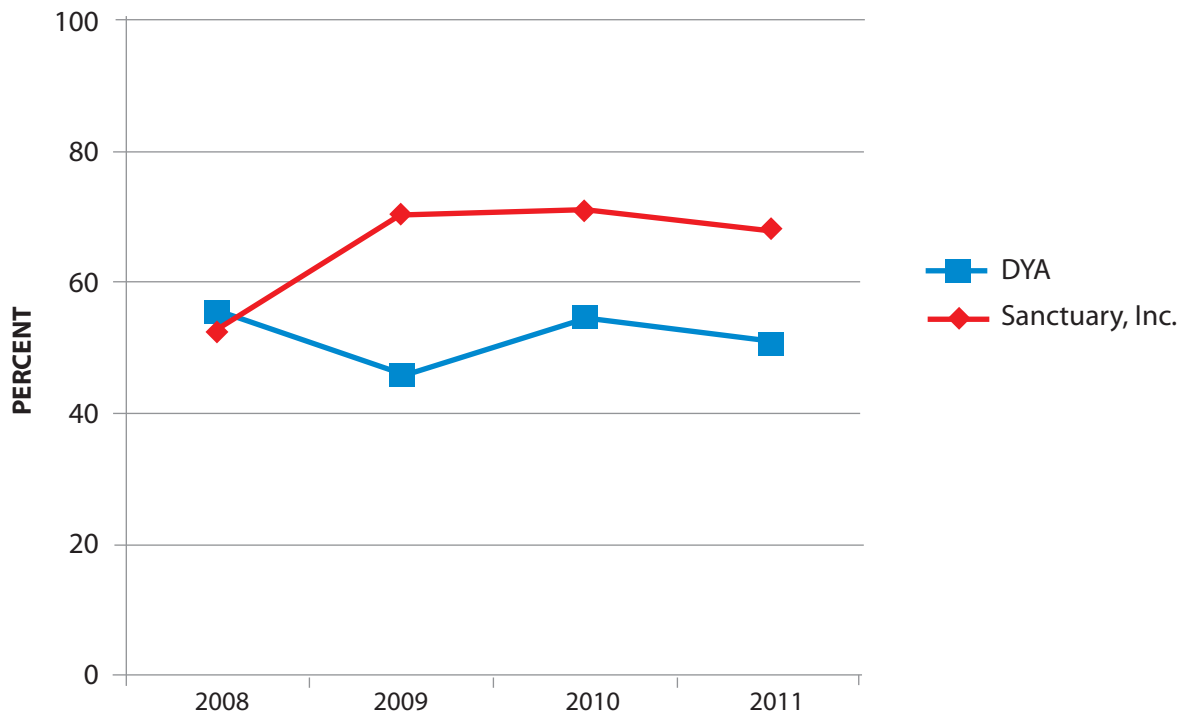
**Figure 10. Drinking and driving, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

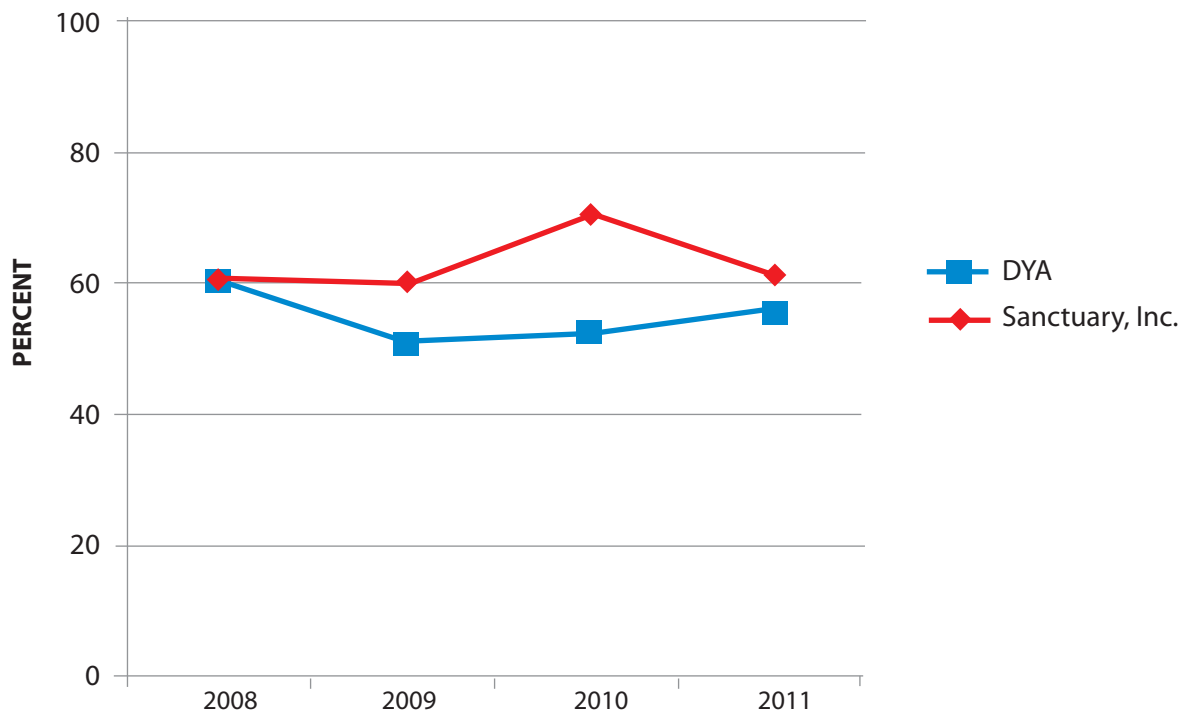
About half of DYA youth and close to 70% of Sanctuary, Inc. youth believe that people who binge drink have moderate to great risk of harming themselves (Figure 11). Close to 60% of youth in both institutions somewhat or strongly disapprove of someone their age having 1 or 2 alcoholic drinks nearly every day (Figure 12).

**Figure 11. Perceived harm of binge drinking, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

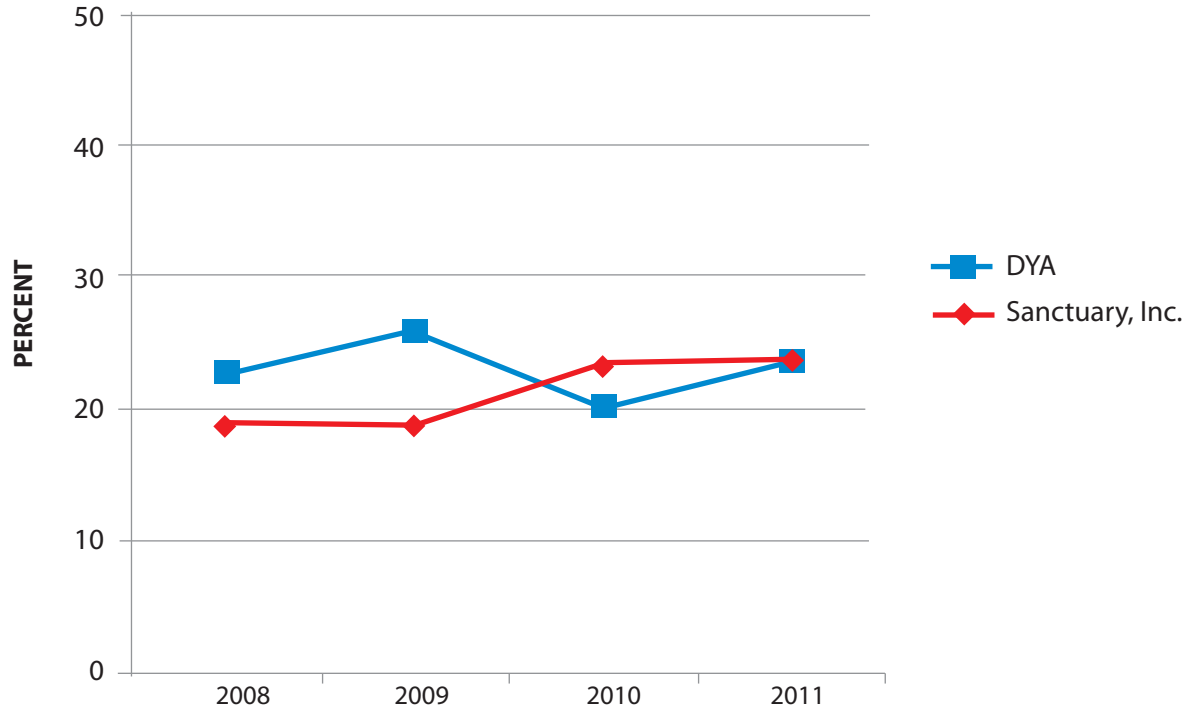
**Figure 12. Disapproval of frequent alcohol consumption of peers, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

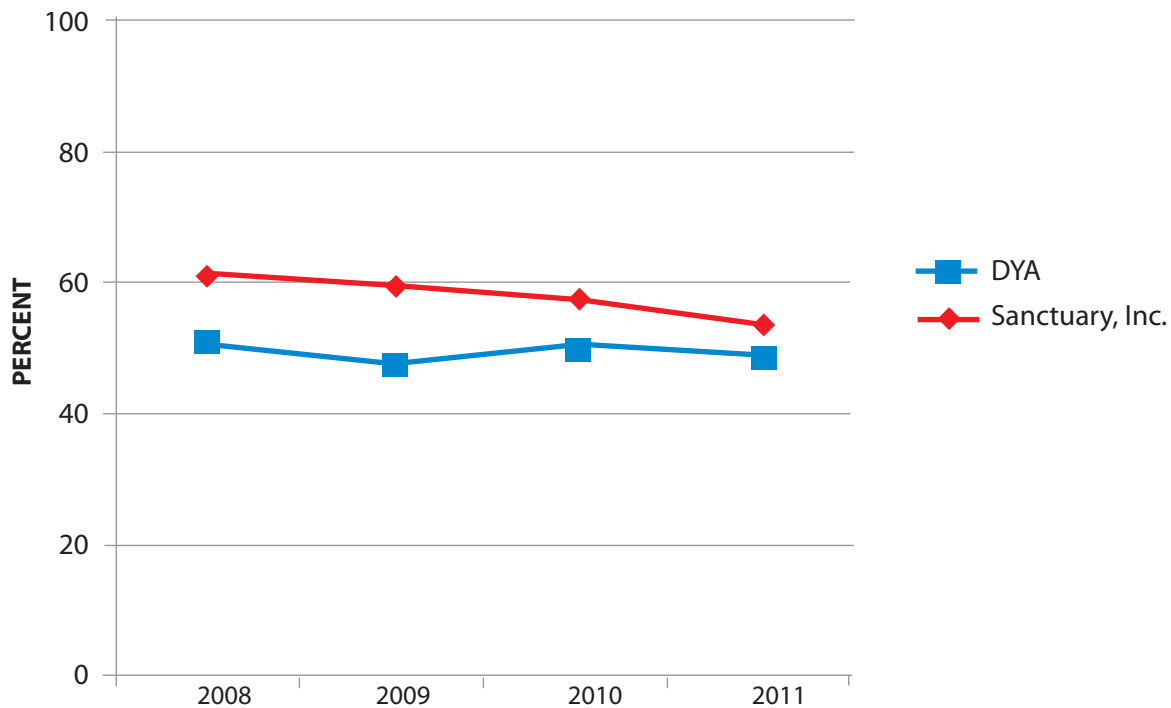
One in four youth from either institution are more likely to work for employers who perform random drug and alcohol testing on their employees (Figure 13). Slightly more than half have spoken to at least 1 parent in the past 12 months about the dangers of tobacco, alcohol and other drug abuse (Figure 14).

**Figure 13. Likelihood of working for employers who perform random drug and alcohol testing on employees, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

**Figure 14. Likelihood of having spoken to a parent in the past 12 months on the dangers of alcohol, tobacco and other drugs, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

### Comparison with Guam Public School Students

In 2011, the prevalence of lifetime and 30-day alcohol consumption was similar for high-risk out-of-school youth and in-school youth. In contrast, DYA and Sanctuary, Inc. youth were more likely to binge drink (Table 3).

Compared to Guam public school students, youth in DYA and Sanctuary, Inc. were less likely to have first tried alcohol before the age of 13, and to ride in a motor vehicle driven by someone who had been drinking alcohol, and more likely to have talked to a parent about the dangers of alcohol use.

**Table 3. Alcohol use, DYA and Sanctuary, Inc. youth vs. in-school youth, Guam, 2011**

	DYA (%)	Sanctuary, Inc. (%)	Guam Public School System (%)
Lifetime alcohol use	42.3	57.5	58.4
Current alcohol use	26.8	28.8	24.2
Age at first use before 13 years	13.0	13.8	18.2
Binge drinking	20.5	18.8	13.6
Riding in a motor vehicle driven by someone who had been drinking alcohol	22.1	20.0	30.2
Drinking and driving	8.6	2.5	5.8
Talked to a parent about the dangers of alcohol, tobacco and drugs	48.9	53.8	42.2

Source: DYA and Sanctuary, Inc. 2011 intake data; Guam Dept. of Education YRBSS 2011 survey results

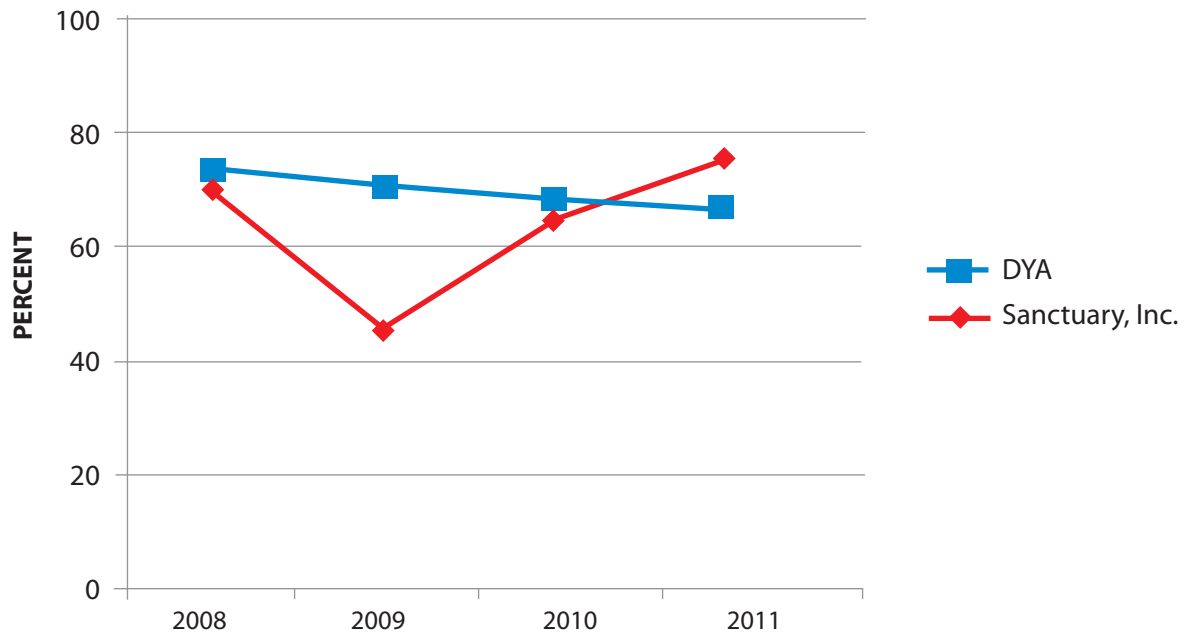
# Tobacco



Consumption

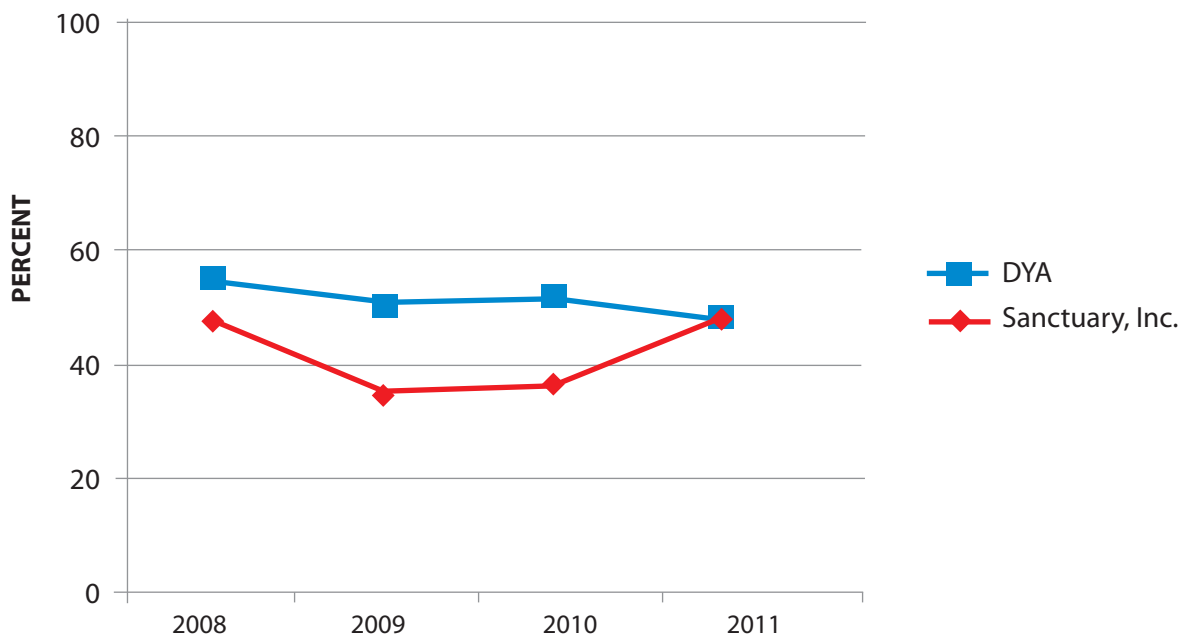
Over three-fourths of high-risk out-of-school youth have tried smoking (Figure 15), and close to half are current smokers (Figure 16).

**Figure 15. Lifetime smoking, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

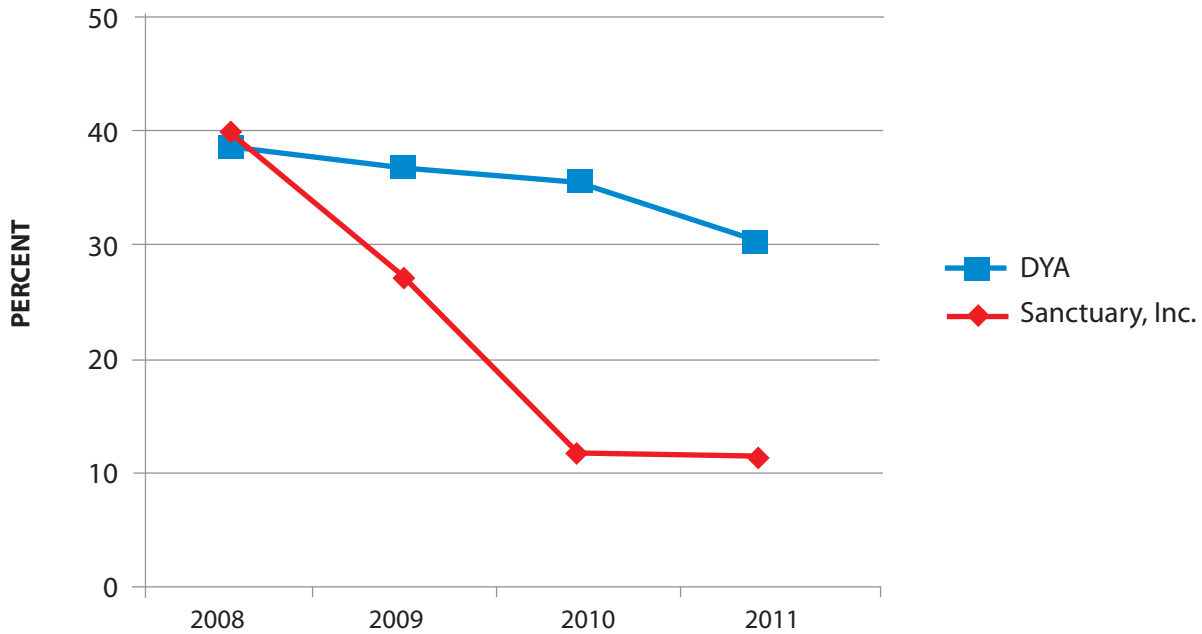
**Figure 16. Past 30-day smoking, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

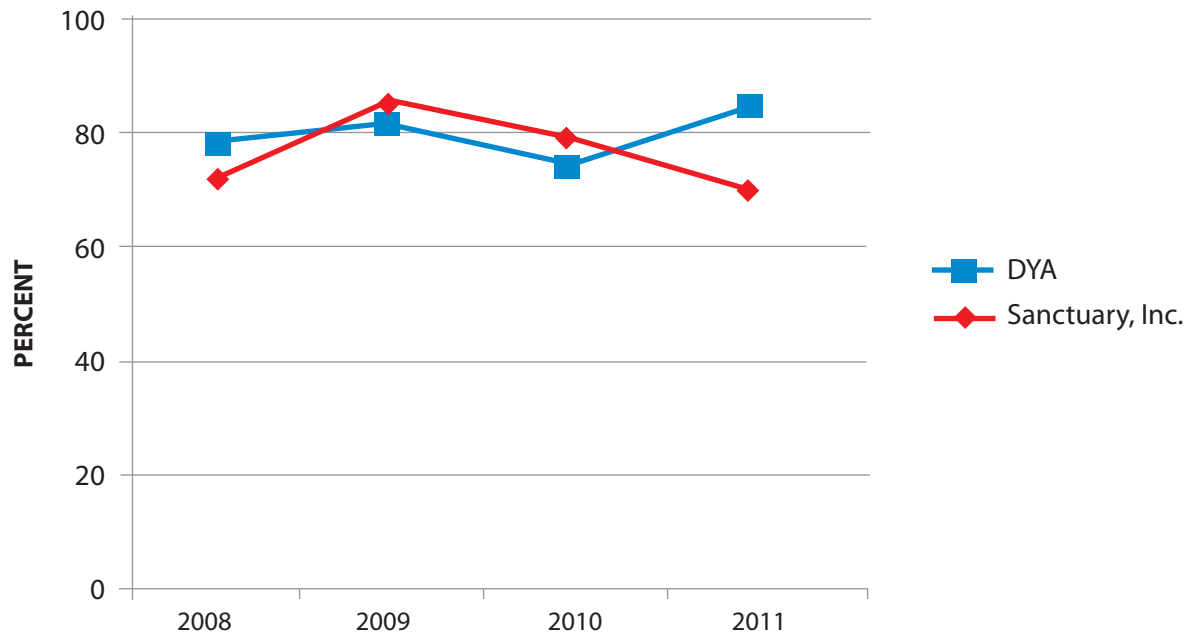
Approximately 10% of Sanctuary, Inc. youth reported daily smoking at some point in their life; the rate for DYA youth was almost three times higher (Figure 17). Majority of these young smokers reported trying to quit in the past 12 months (Figure 18).

**Figure 17. Lifetime daily smoking, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

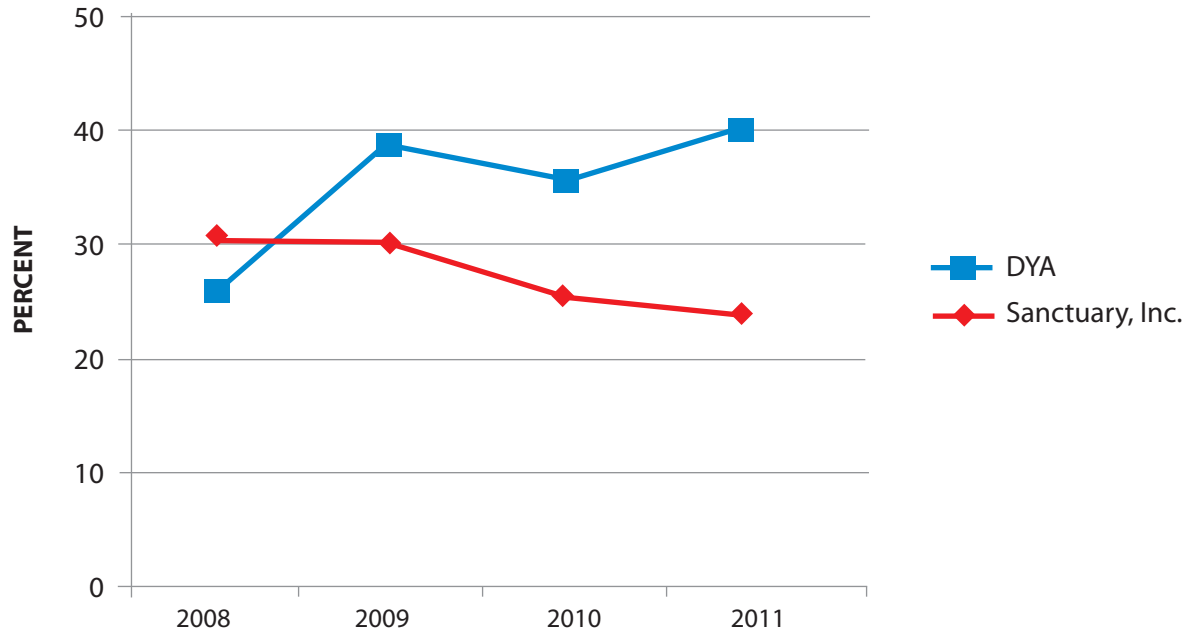
**Figure 18. Quit attempt in the past 12 months, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

About 25% of Sanctuary, Inc. youth and 40% of DYA youth reported current use of smokeless tobacco products (Figure 19).

**Figure 19. Past 30-day smokeless tobacco use, DYA and Sanctuary, Inc. youth, 2008-2011**

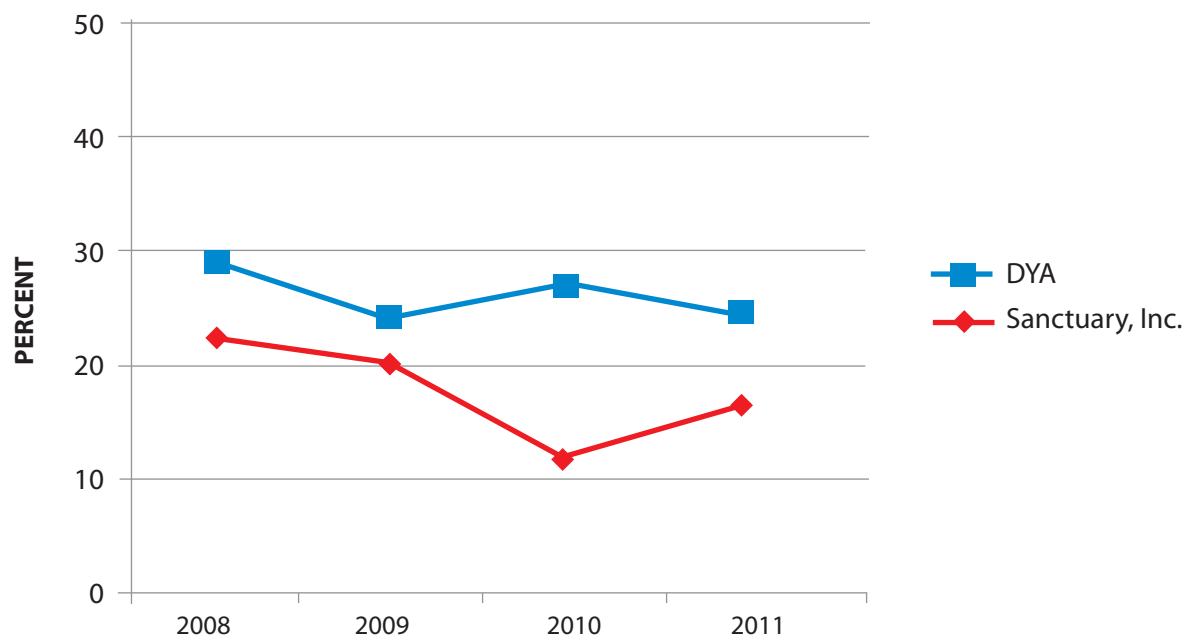


Source: DYA and Sanctuary, Inc. data, 2008-2011

**Risk and Protective Factors**

Sixteen percent of Sanctuary, Inc. youth and close to 25% of DYA youth reported smoking their first whole cigarette before the age of 13 years (Figure 20).

**Figure 20. Age of initiation of smoking before 13 years, DYA and Sanctuary, Inc. youth, 2008-2011**

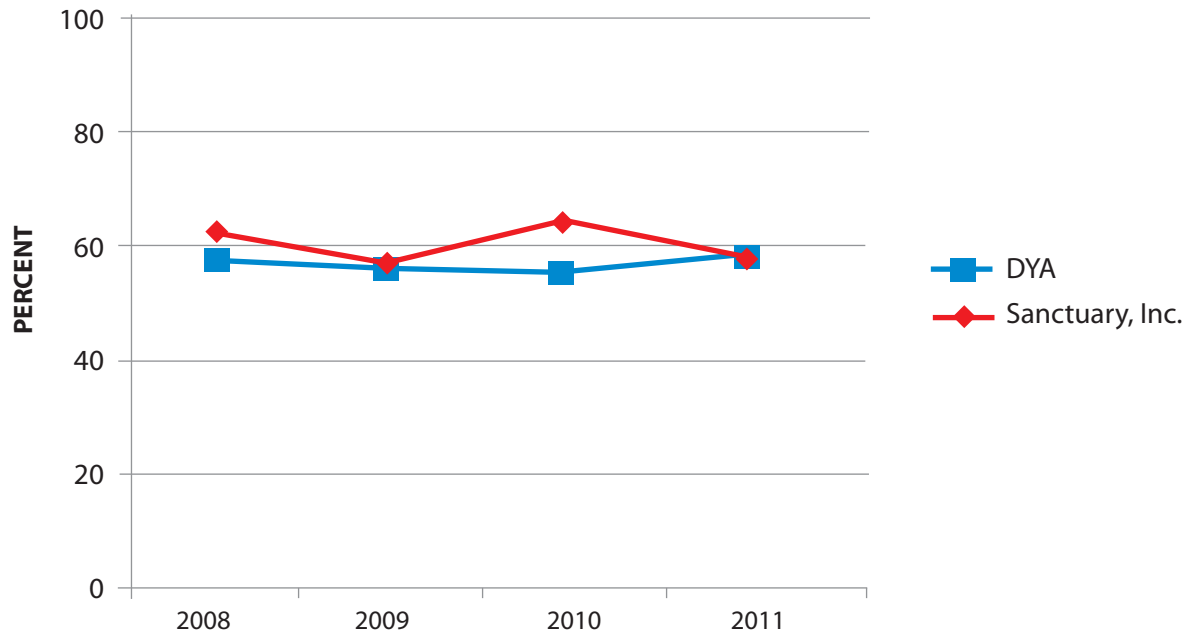


Source: DYA and Sanctuary, Inc. data, 2008-2011



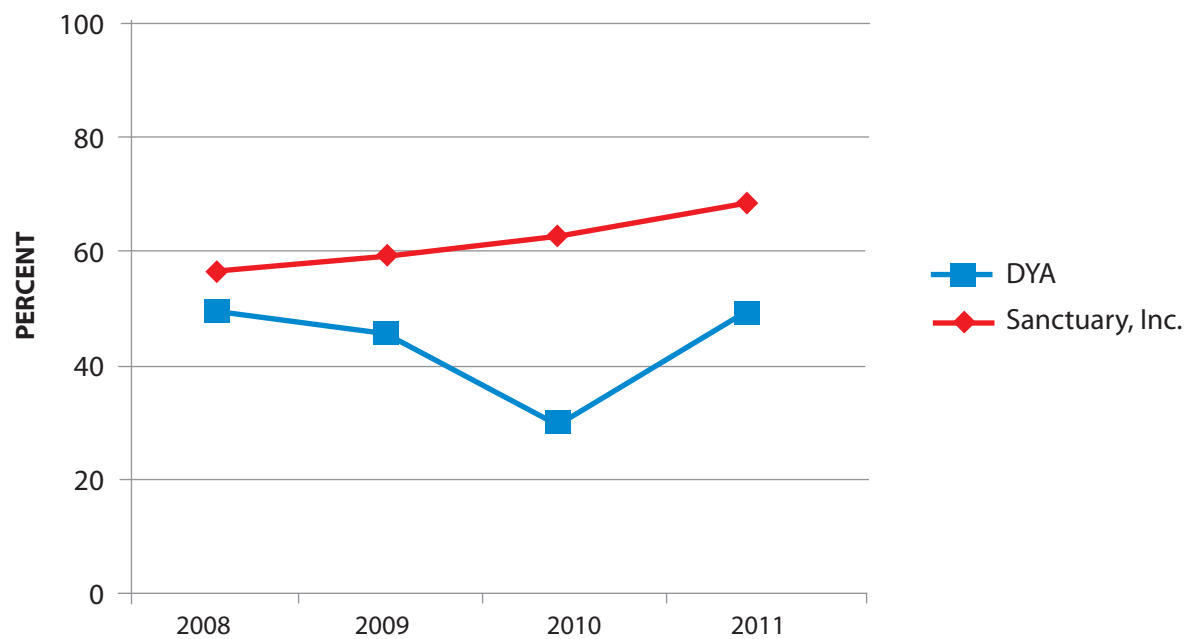
Nearly 60% of youth in both institutions believe that their peers would not approve if they smoked 1 or more packs of cigarettes a day (Figure 21). Nearly half of DYA youth and almost 70% of Sanctuary, Inc. youth believe that smoking 1 or more packs a day is harmful (Figure 22).

**Figure 21. Perception of friends' disapproval, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

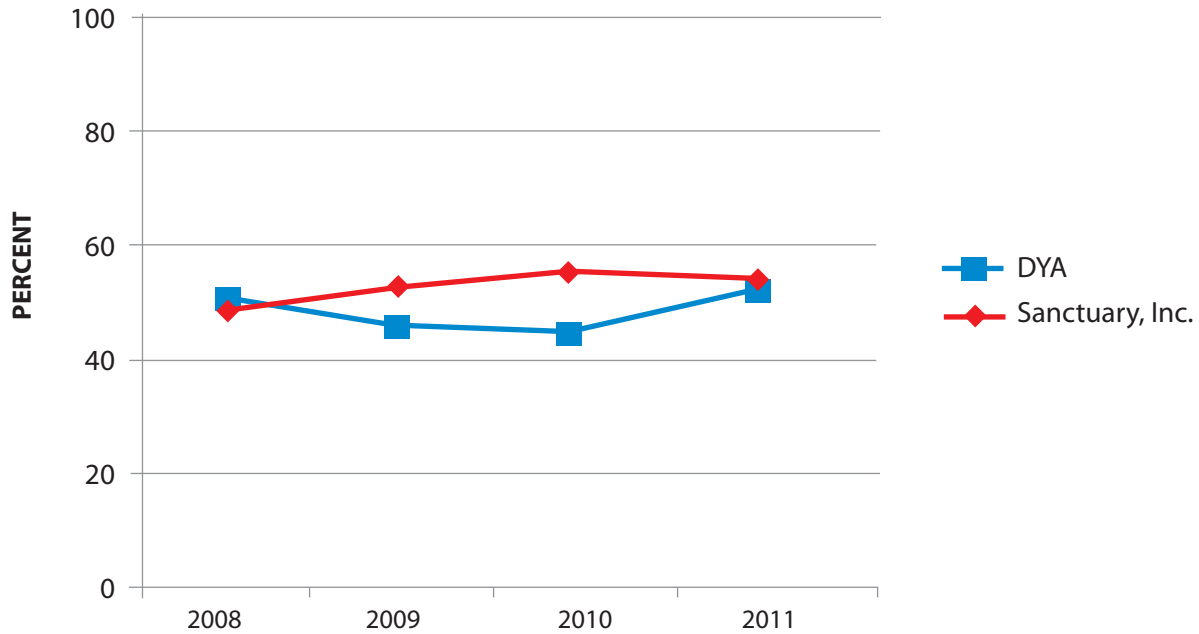
**Figure 22. Perceived harm of smoking, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

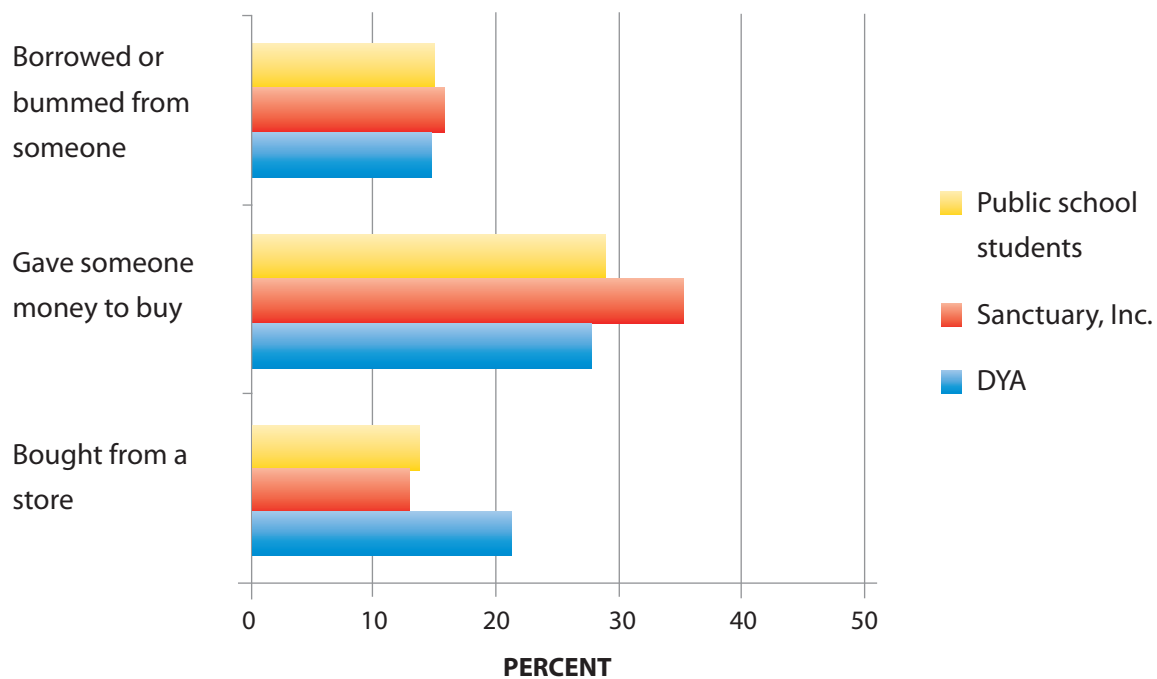
More than half of youth in both institutions disapprove of their peers smoking 1 or more packs of cigarettes daily (Figure 23). The most commonly reported sources of tobacco products are social and commercial sources, similar to those reported by public school students (Figure 24).

**Figure 23. Disapproval of daily heavy smoking of peers, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

**Figure 24. Access to cigarettes, DYA and Sanctuary, Inc. youth, and Guam public school students, 2011**



Source: DYA and Sanctuary, Inc. 2011 intake data; Guam Dept. of Education YRBSS 2011 survey results

**Comparison with Guam Public School Students**

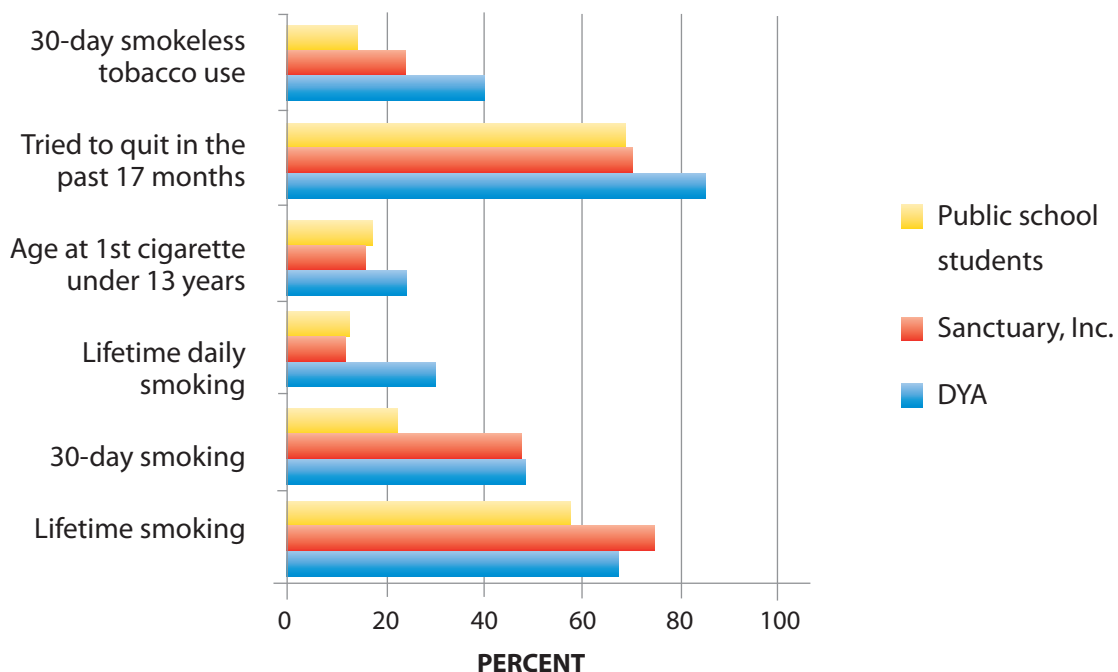
In 2011, lifetime and 30-day smoking and 30-day smokeless tobacco use were reported much more frequently by high-risk out-of-school youth than in-school youth. Lifetime daily smoking was highest among DYA youth; rates of Sanctuary, Inc. youth and public school students were similar. Likewise, a greater percentage of DYA youth reported smoking their first cigarette before 13 years as compared to Sanctuary, Inc. and public school students (Table 4 and Figure 25). Compared to Guam public school students, youth in DYA and Sanctuary, Inc. were more likely to have attempted to quit tobacco use in the past 12 months. DYA youth were more likely to report buying their cigarettes from a store; the three groups reported similar rates for acquiring cigarettes from social sources.

**Table 4. Tobacco use, DYA and Sanctuary, Inc. youth vs. in-school youth, Guam, 2011**

	DYA (%)	Sanctuary, Inc. (%)	Guam Public School System (%)
Lifetime smoking	67.5	75	57.8
Current smoking	48.3	47.5	21.9
Lifetime daily smoking	30.1	11.25	12.6
Current smokeless tobacco use	39.8	23.8	14
Age at first cigarette before 13 years	24.5	16.2	17.1
Quit attempt in the past 12 months	84.8	70	68.7
Bought cigarettes from a store	21	12.2	13
Gave someone money to buy cigarettes	27.8	34.1	28.5
Bummed or borrowed cigarettes from someone else	13.9	14.6	14.3

Source: DYA and Sanctuary, Inc. 2011 intake data; Guam Dept. of Education YRBSS 2011 survey results

**Figure 25. Comparison of tobacco consumption indicators, DYA and Sanctuary, Inc. youth vs. in-school youth, Guam, 2011**



Source: DYA and Sanctuary, Inc. 2011 intake data; Guam Dept. of Education YRBSS 2011 survey results

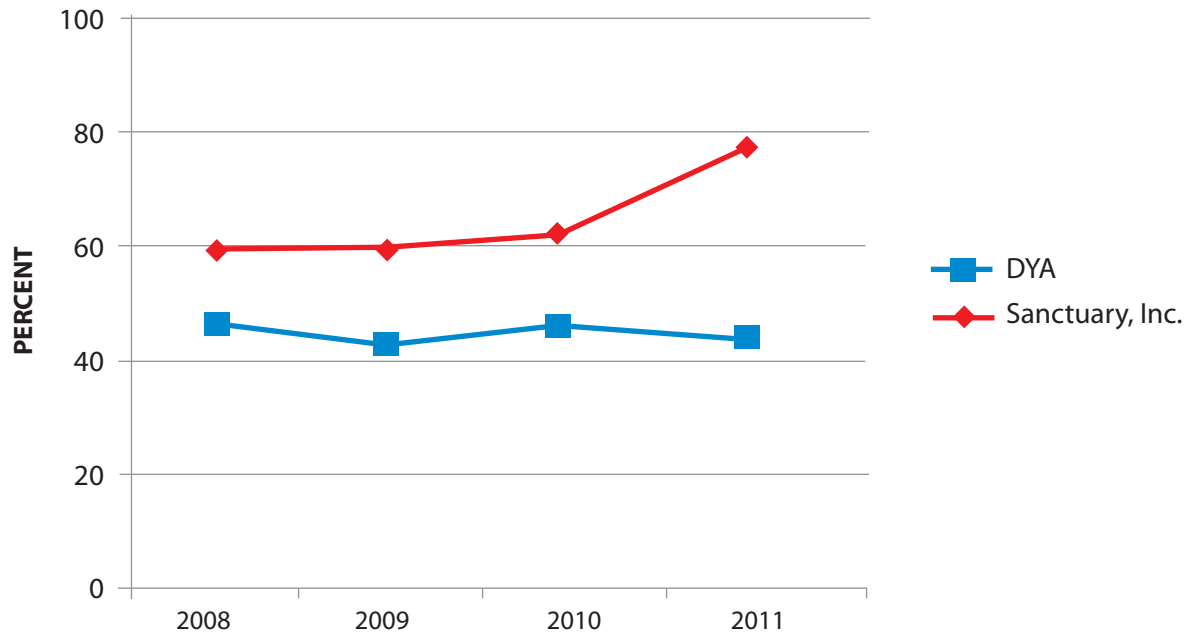
# Illicit Drug Use



Consumption

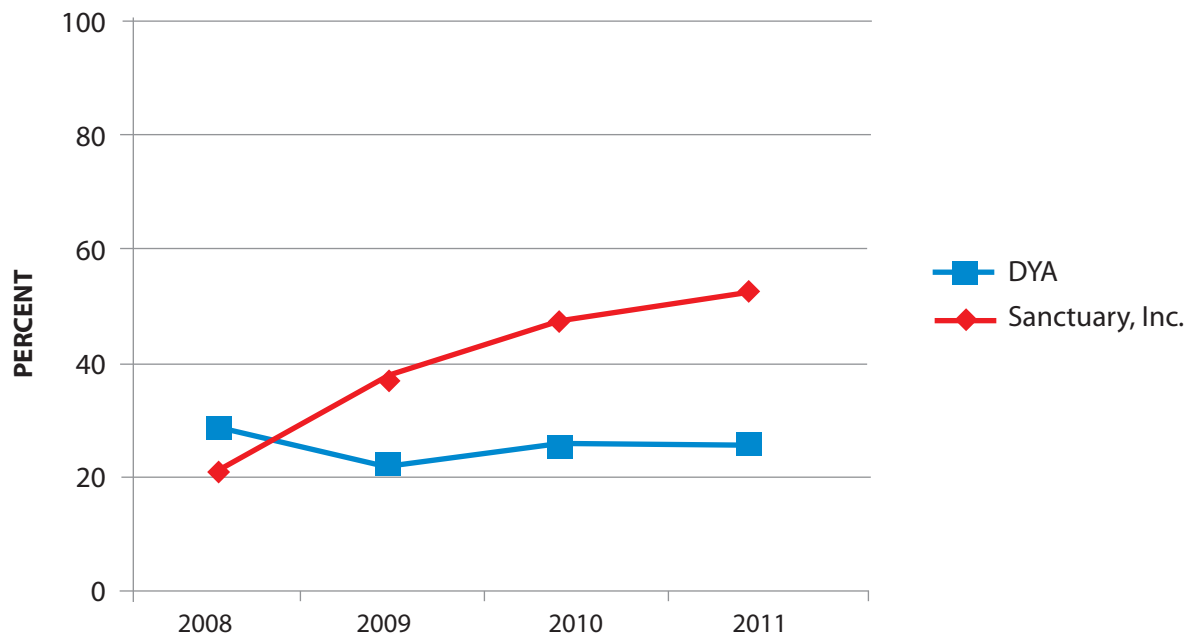
Nearly 80% of Sanctuary, Inc. youth and almost 45% of DYA youth report having tried marijuana at least once in their lifetime (Figure 26). Over half of Sanctuary youth and one-fourth of DYA youth reported using marijuana in the past 30 days (Figure 27).

**Figure 26. Lifetime marijuana use, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

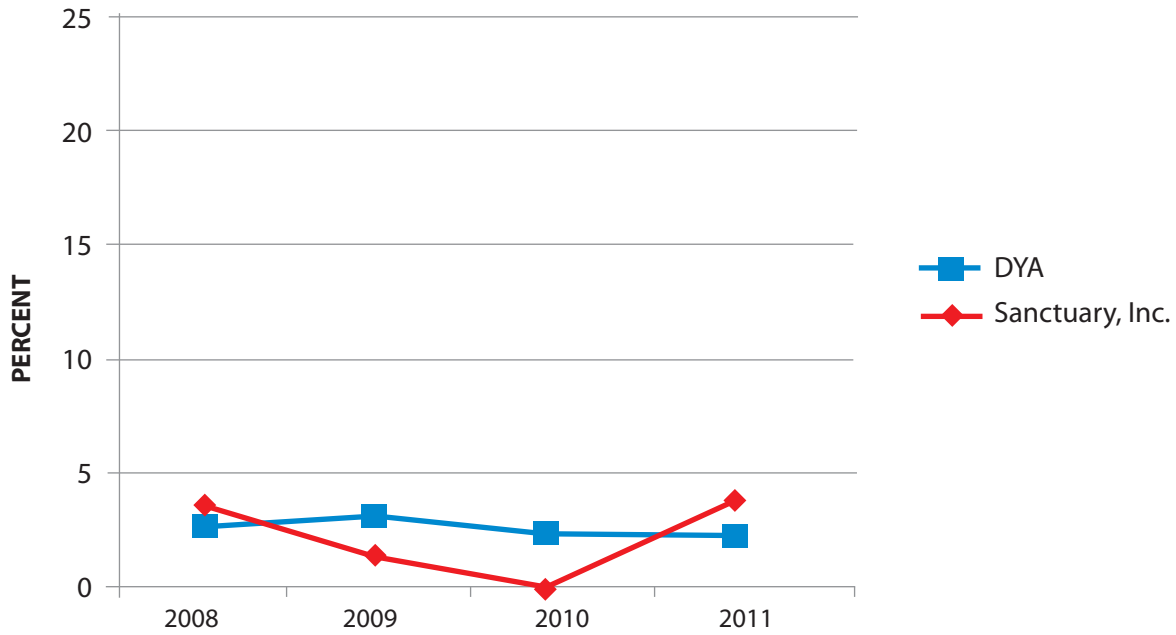
**Figure 27. 30-day marijuana use, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

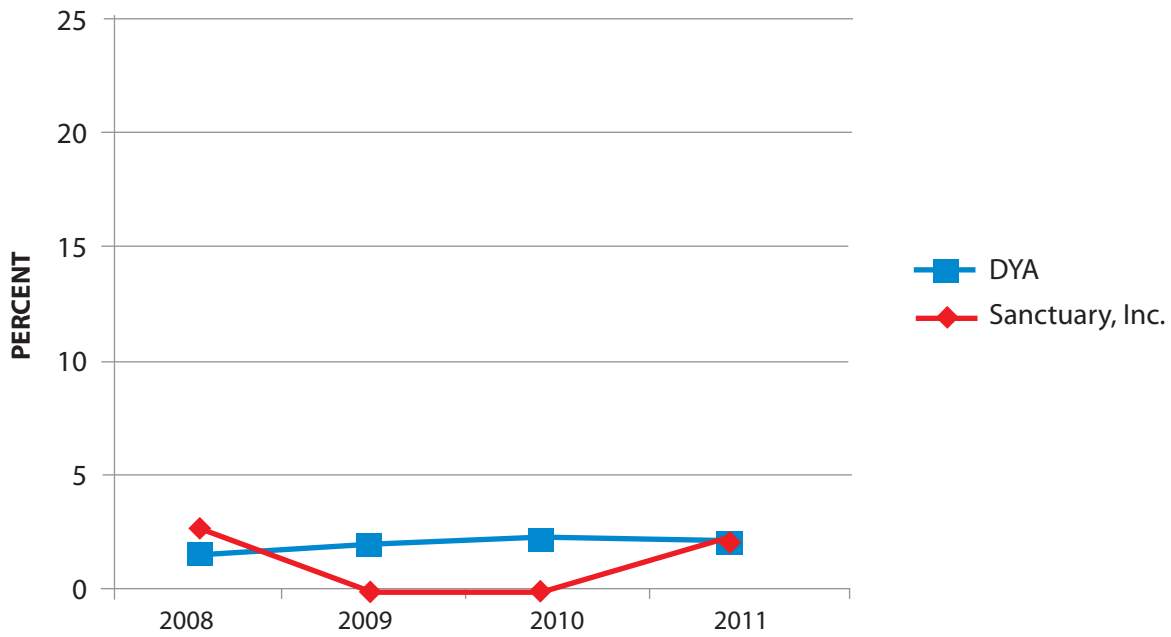
Cocaine use, both lifetime and in the past 30 days, was below 5% for DYA and Sanctuary, Inc. youth (Figures 28 and 29).

**Figure 28. Lifetime cocaine use, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

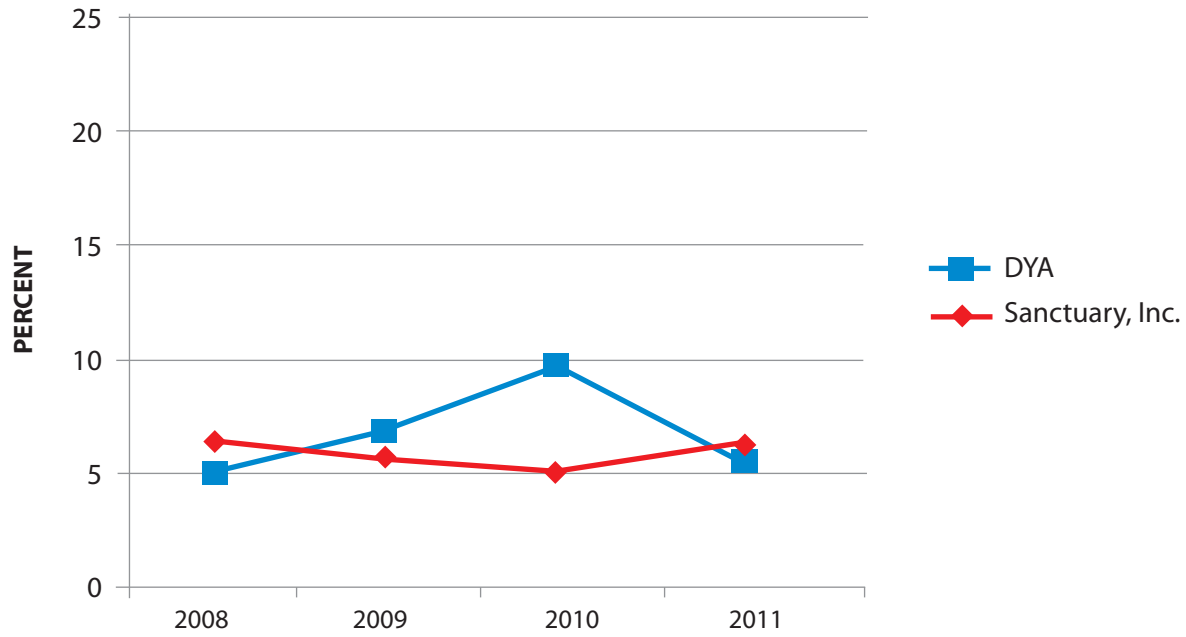
**Figure 29. 30-day cocaine use, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

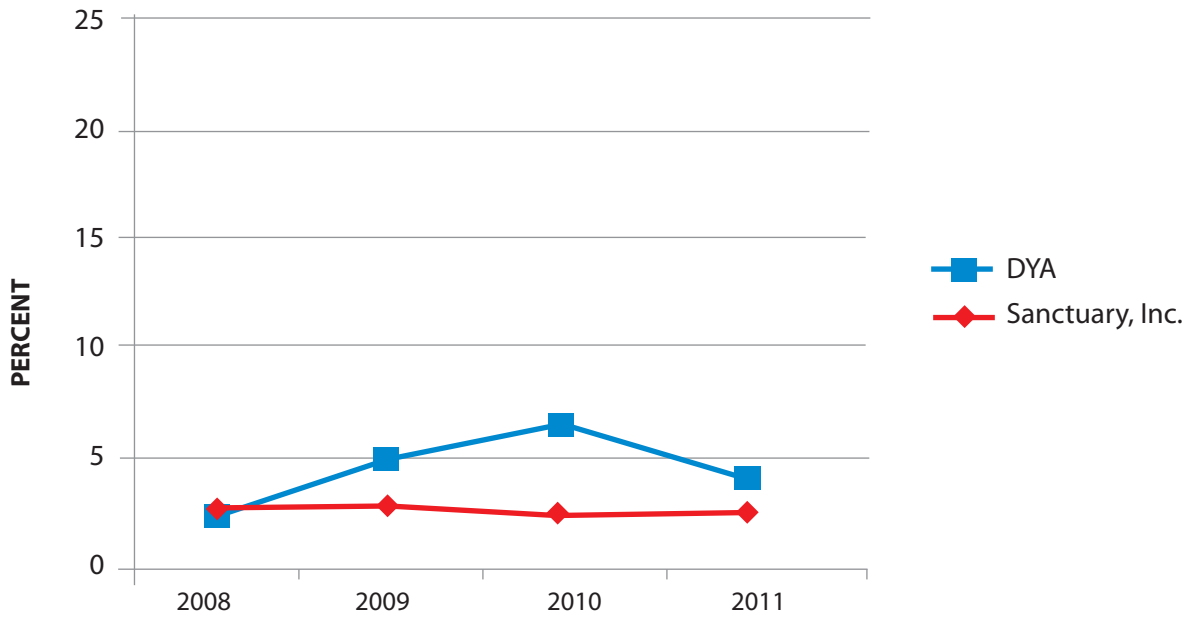
Lifetime inhalant use was below 10% for out-of-school youth in both institutions (Figure 30) and past 30-day use was below 5% (Figure 31).

**Figure 30. Lifetime inhalant use, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

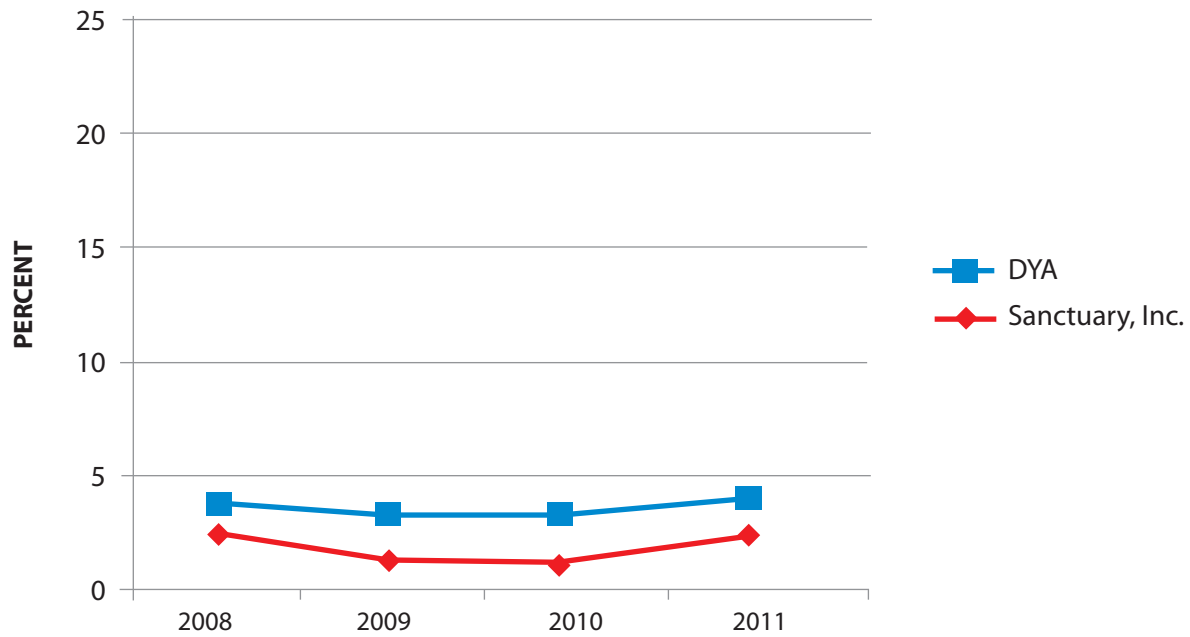
**Figure 31. 30-day inhalant use, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

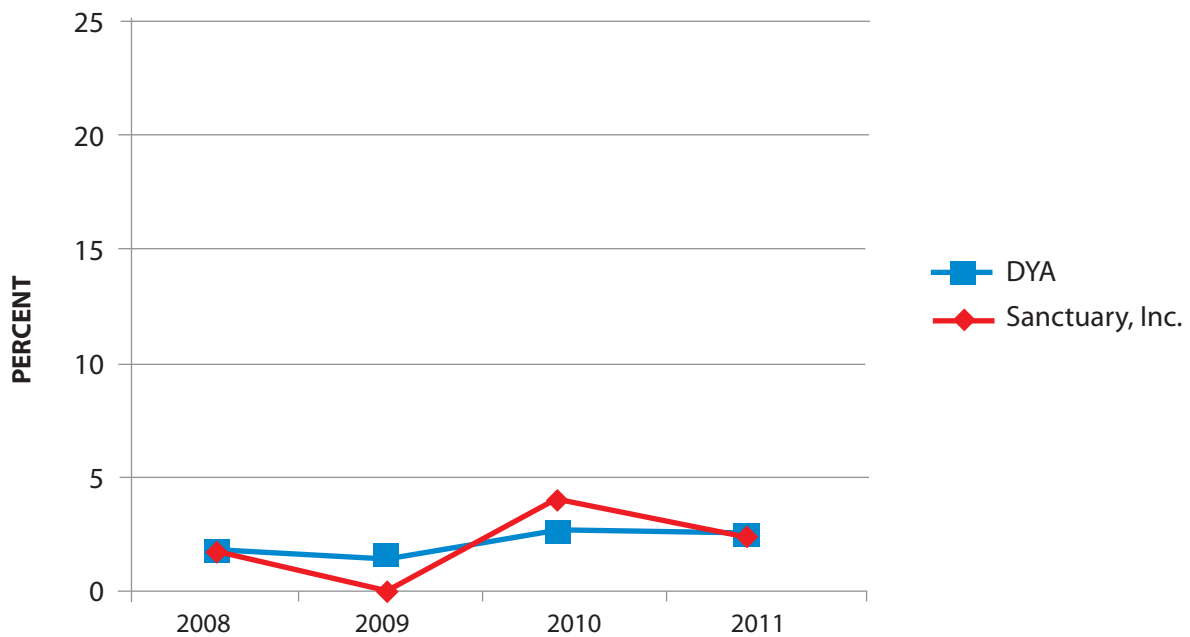
Lifetime use of other illegal drugs, such as amphetamines and “ecstasy” (MDMA) remained below 5% for youth in both institutions (Figures 32 and 33).

**Figure 32. Lifetime amphetamine use, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

**Figure 33. Lifetime “ecstasy” use, DYA and Sanctuary, Inc. youth, 2008-2011**

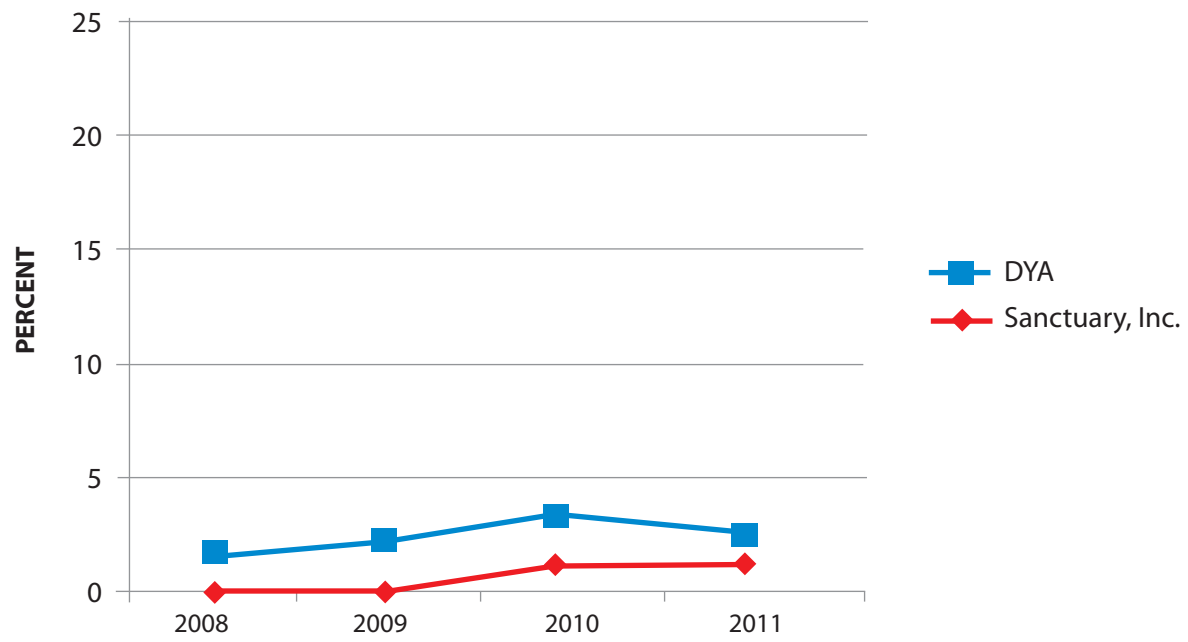


Source: DYA and Sanctuary, Inc. data, 2008-2011



The use of steroid pills without a doctor's prescription was below 3% for both groups of out-of-school youth (Figure 34).

**Figure 34. Lifetime steroid use without a doctor's prescription, DYA and Sanctuary, Inc. youth, 2008-2011**

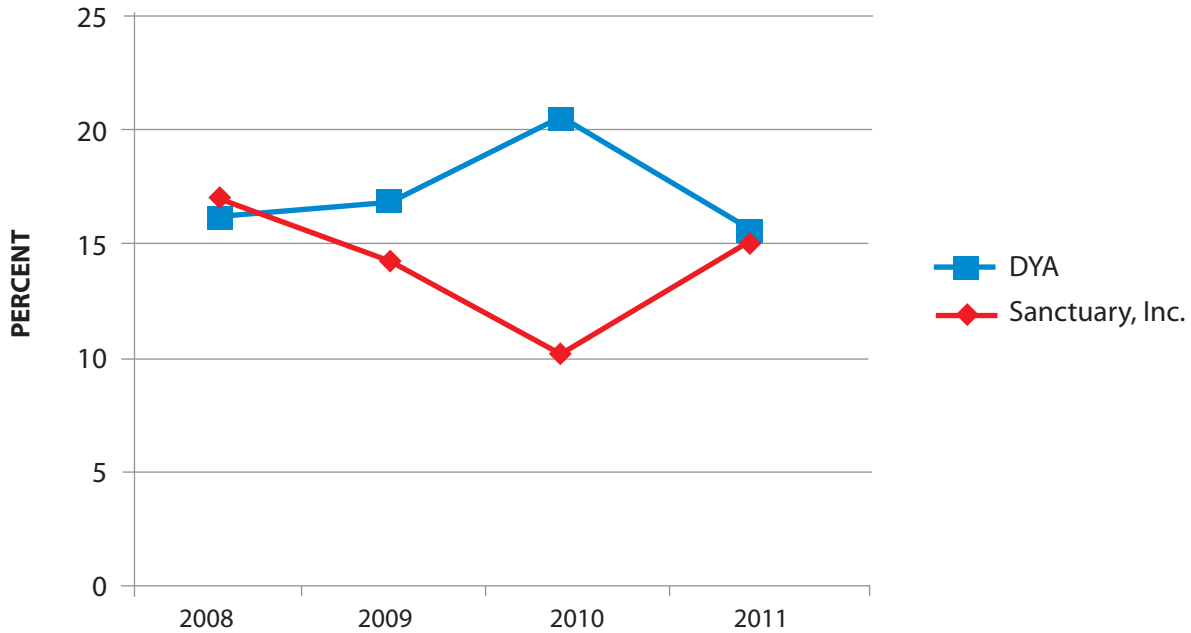


Source: DYA and Sanctuary, Inc. data, 2008-2011

**Risk and Protective Factors**

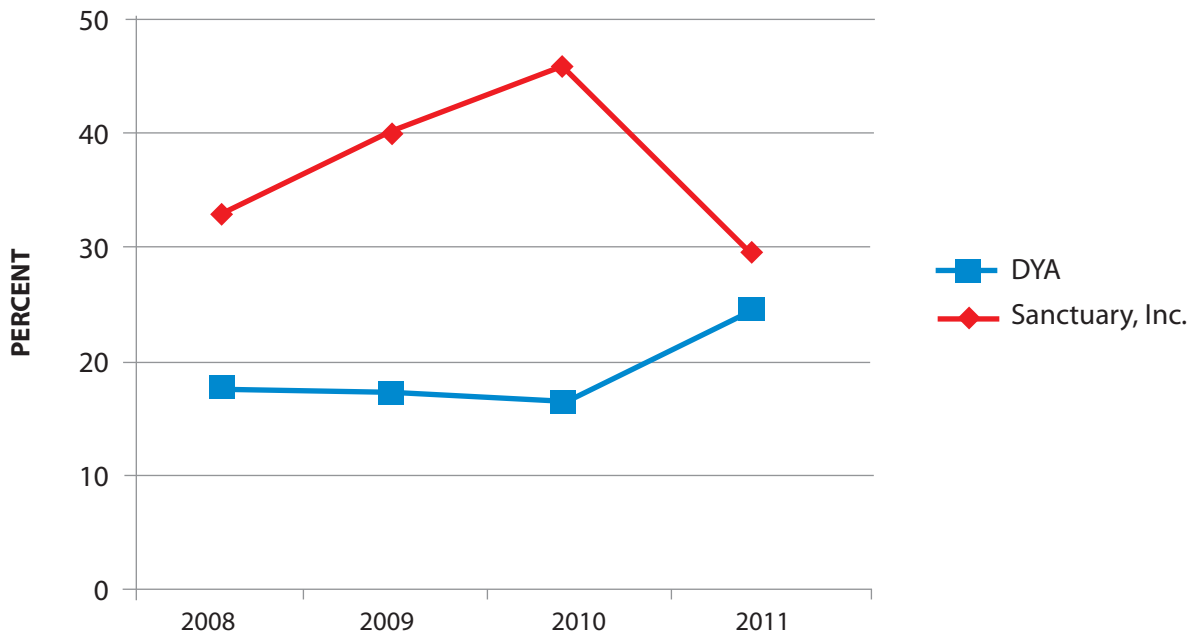
About 15% of both DYA and Sanctuary, Inc. youth reported using marijuana for the first time below 13 years of age (Figure 35). A larger proportion of Sanctuary, Inc. youth were offered, given or sold drugs on school property than DYA youth (Figure 36).

**Figure 35. Age at first use of marijuana, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

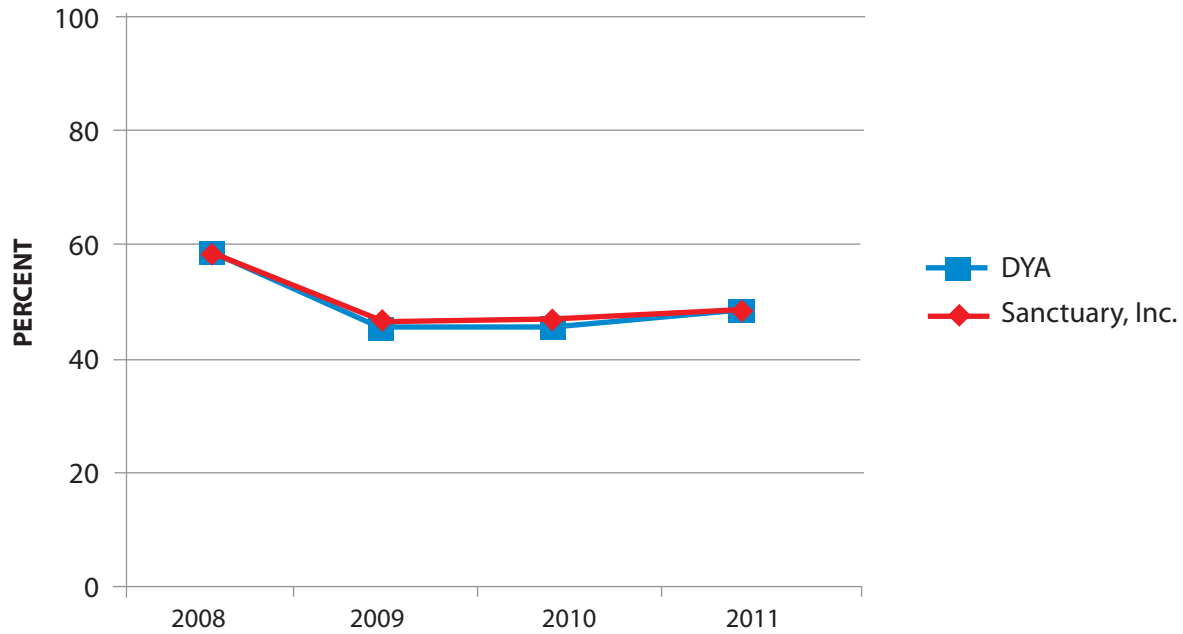
**Figure 36. Sold or offered drugs on school property, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

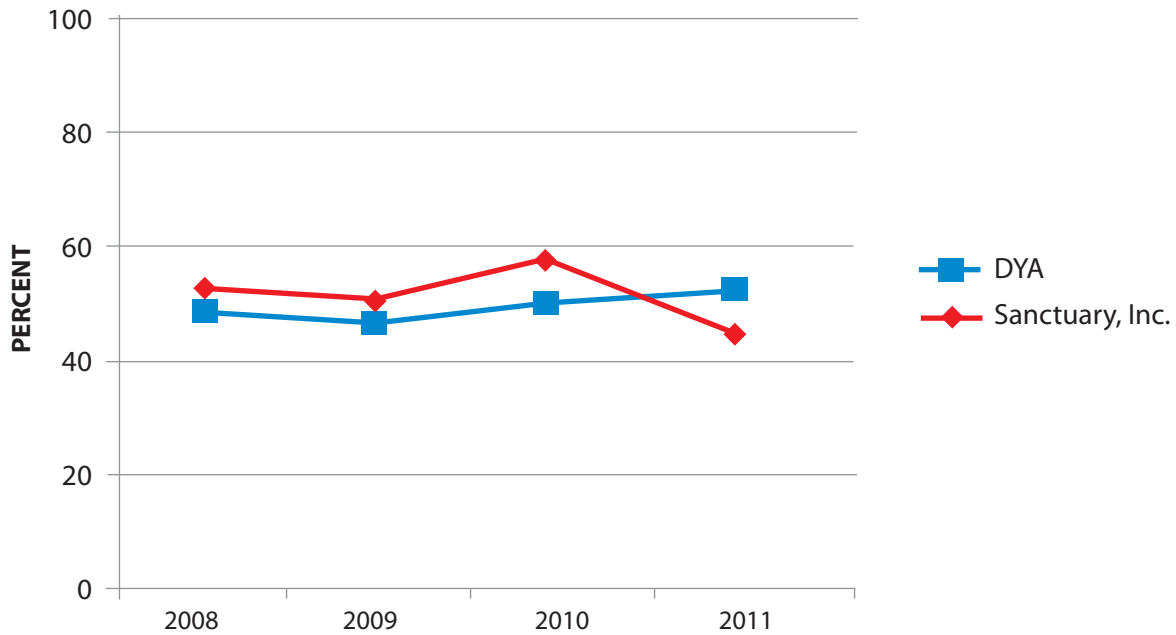
The percentage of out-of-school youth reporting they would moderately or strongly disapprove of peers trying marijuana once or twice, and using marijuana at least once a month or more was remarkably similar. For both groups, about half reported significant disapproval of marijuana experimentation and monthly use by their peers (Figures 37 and 38).

**Figure 37. Disapproval of trying marijuana once or twice by peers, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

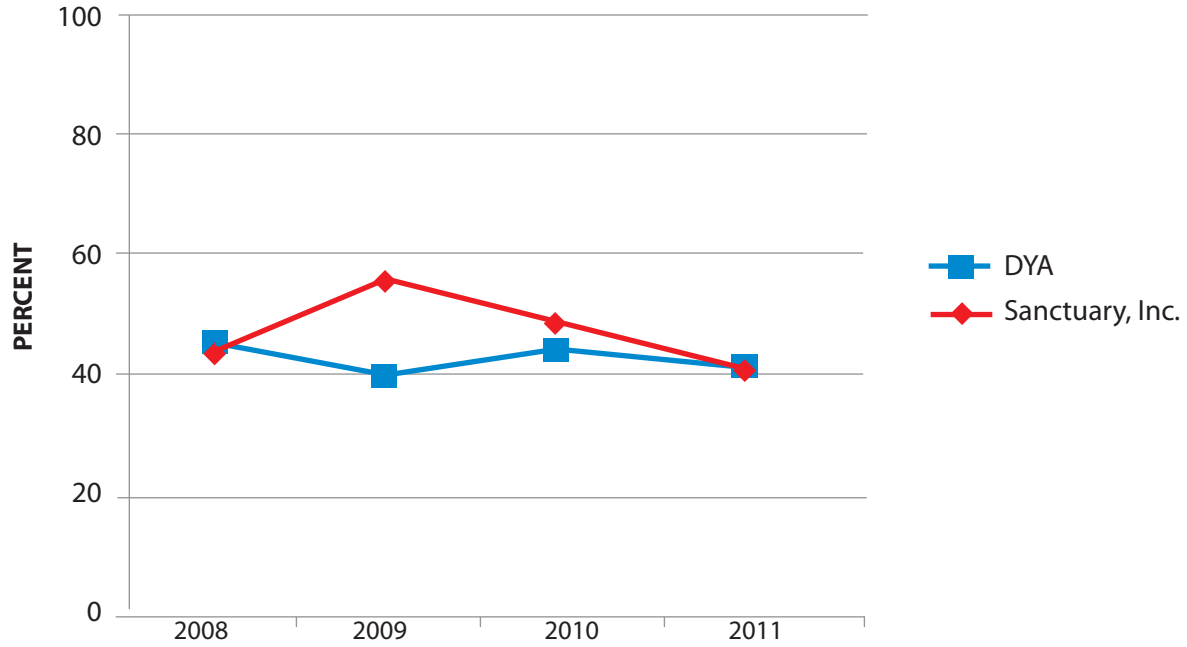
**Figure 38. Disapproval of monthly marijuana use by peers, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

The perception of harm from weekly use of marijuana was likewise similar across both groups of out-of-school youth, with about 40% reporting they believe persons using marijuana once or twice weekly have moderate to great risk of harming themselves (Figure 39).

**Figure 39. Perceived harm from using marijuana once or twice a week, DYA and Sanctuary, Inc. youth, 2008-2011**



Source: DYA and Sanctuary, Inc. data, 2008-2011

**Comparison with Guam Public School Students**

Compared to in-school youth:

- Sanctuary, Inc. youth are more likely to have used marijuana and to report marijuana use in the past 30 days;
- DYA youth report a similar rate for lifetime marijuana use and a lower rate for past 30 day use;
- DYA and Sanctuary, Inc. youth are less likely to report using steroid medication without a doctor’s prescription;
- Out-of-school youth have similar percentages reporting the start of marijuana use before 13 years; and,
- Out-of-school youth are less likely to report being offered or sold drugs on school property.

**Table 5. Other drug use, DYA and Sanctuary, Inc. youth vs. in-school youth, Guam, 2011**

	DYA (%)	Sanctuary, Inc. (%)	Guam Public School System (%)
Ever marijuana use	44.4	77.8	48.8
30-day marijuana use	25.7	52.5	32.0
Ever used steroids without a doctor’s prescription	2.5	1.5	3.4
Age at 1st marijuana use	15.7	15.0	14.4
Sold or offered drugs on school property	24.4	30.0	39.0

*Source: DYA and Sanctuary, Inc. 2011 intake data; Guam Dept. of Education YRBSS 2011 survey results*

# Comparative Summary Sheet

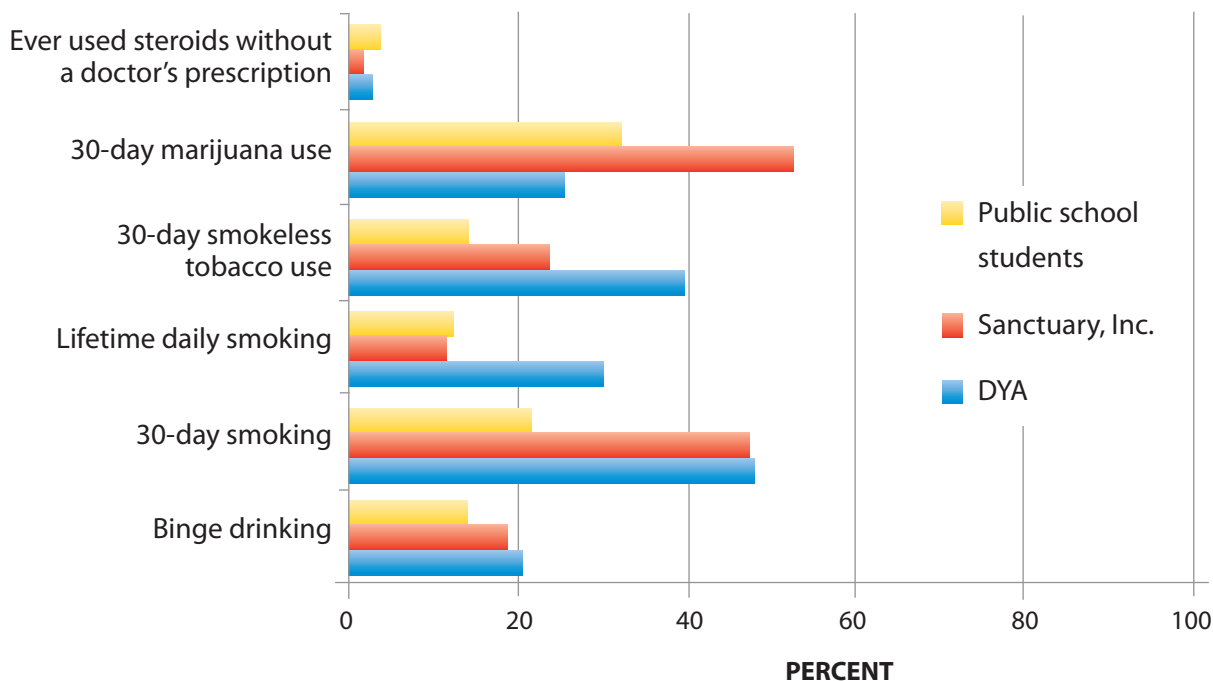


## Consumption

In summary, compared to in-school youth within the Guam public school system, out-of-school youth in DYA and Sanctuary, Inc.:

- Have higher rates of current (past 30 days) smoking;
- Have higher rates of current (past 30 days) smokeless tobacco use;
- Have higher rates of binge drinking;
- Have lower rates of prescription drug abuse (steroids); and,
- Sanctuary, Inc. youth have higher rates of current (past 30 days) marijuana use

**Figure 40. Alcohol, tobacco and illicit drug use, DYA and Sanctuary, Inc. youth vs. in-school youth, Guam, 2011**



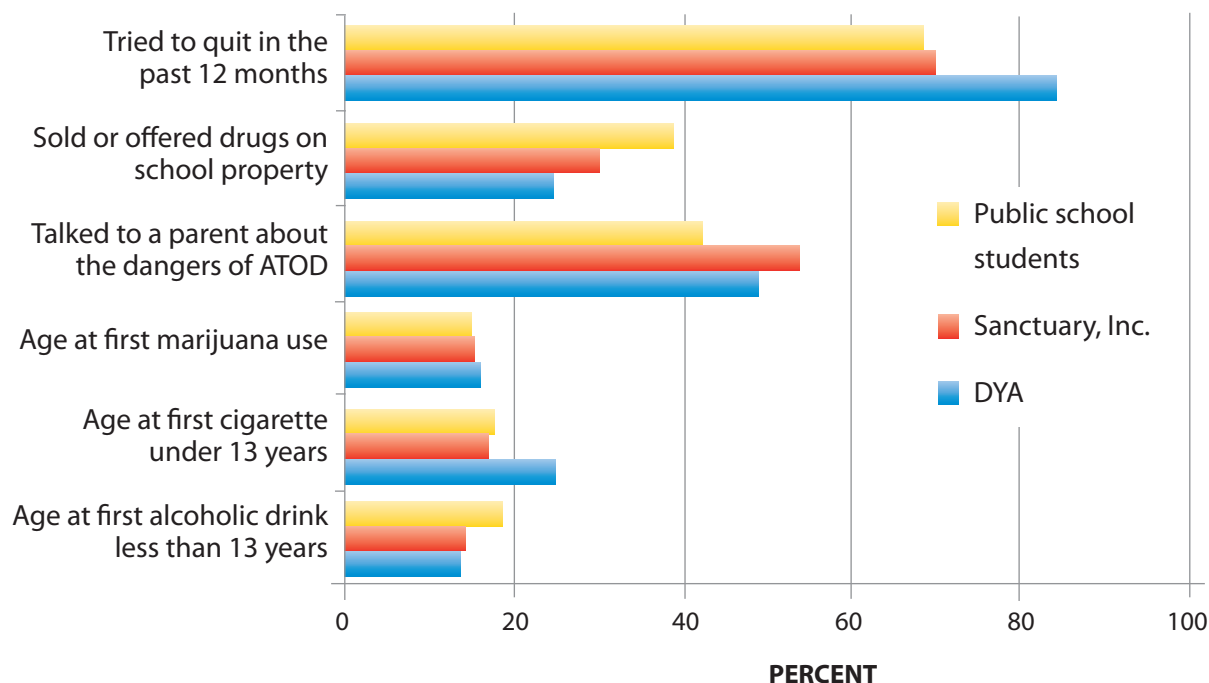
Source: DYA and Sanctuary, Inc. 2011 intake data; Guam Dept. of Education YRBSS 2011 survey results

## Risk and Protective Factors

With regards to risk and protective factors:

- DYA youth are more likely to have tried quitting tobacco use in the past 12 months than in-school youth;
- Out-of-school youth from both institutions are less likely to have been offered or sold drugs on school property;
- Out-of-school youth are more likely to have spoken to a parent about the dangers of alcohol, tobacco and other drugs;
- There is no visible difference in age at onset of marijuana use before 13 years;
- DYA youth are more likely than in-school and Sanctuary, Inc. youth to start smoking before 13 years; and,
- In-school youth are more likely to have their first alcoholic drink before the age of 13 years.

**Figure 41. Selected risk factor indicators, DYA and Sanctuary, Inc. youth vs. in-school youth, Guam, 2011**



Source: DYA and Sanctuary, Inc. 2011 intake data; Guam Dept. of Education YRBSS 2011 survey results



# Discussions and Recommendations



This Community Profile represents the first attempt to characterize a population subgroup that is not captured by the largest youth-oriented surveillance system in Guam – the Youth Risk Behavior Surveillance System (YRBSS). Members of the Guam SEOW underwent a data mapping and prioritization process and identified out-of-school youth involved in the juvenile justice system as a high risk “community” that would benefit from data profiling. Partial data is available because a previous institutional agreement between the SEOW and the Department of Youth Affairs (DYA) and Sanctuary, Inc., - the two institutions in Guam that oversee the care of youth in the juvenile justice system – incorporated selected questions on substance abuse consumption, and risk and protective factors, into the screening intake for all youth entering these institutions.

This Community Profile revealed that tobacco and alcohol-related risk behaviors for substance abuse have a higher prevalence among the out-of-school youth, and marijuana use is higher among Sanctuary, Inc. youth. DYA youth reported a higher percentage of lifetime daily smoking (a measure of tobacco dependence) and a greater percentage of youth attempting to quit tobacco use in the past year. These findings indicate the need for targeted substance abuse treatment services and, in particular, intensive tobacco cessation services. These services would likely be best administered on-site.

Out-of-school youth in these two institutions are less likely to have been offered or sold drugs on school property and more likely to have spoken to a parent about the dangers of alcohol, tobacco and other drugs. While these findings may appear paradoxical at first, it is likely that the youth in these institutions have not been in school for some time, and therefore are less likely to be on school property at all. Also, if substance abuse was the original reason for entering the juvenile justice system, it is logical for parents of these out-of-school youth to have spent more time talking to their children about their substance abuse problems. Thus, these findings are not inconsistent given the nature of the community of interest.

### **Data limitations and issues**

The use of standard questions from the YRBSS permits the comparison of this “community” with the results of the regular YRBSS conducted on public school students. However, the available data for DYA and Sanctuary, Inc. youth are incomplete, and do not cover all possible indicators for consumption and risk and protective factors. Some of the questions relating to risk and protective factors in the DYA and Sanctuary, Inc. questionnaires are taken from the National Survey on Drug Use and Health (NSDUH) and do not have equivalents in the YRBSS questionnaire administered among public school students. Also, at this time, no mental health indicators from the YRBSS are included in the screening questionnaire. In the future, the SEOW plans to address the inclusion of mental health questions and the addition of more relevant questions relating to risk and protective factors into the screening questionnaire.

Entry into the juvenile justice system involves one or more of the indicators for substance abuse consequences (e.g. DUI, drunkenness, property crime, etc.). Thus we did not include consequence data in this profile to avoid the selection bias.

Another issue relates to sample sizes. Sanctuary, Inc. tends to oversee a much smaller number of youth clients than DYA, and their overall sample size for the screening questionnaire is quite small. Therefore, care is required when interpreting year-to-year changes in Sanctuary, Inc. data.

Finally, the screening questionnaire is administered to all youth entering DYA or Sanctuary, Inc. Recidivism occurs, yet the questionnaires at this time do not distinguish between initial entry and re-entry into the institution within the same year. Thus, it is possible that some respondents have completed the questionnaire multiple times within one year. The SEOW intends to revisit this issue with the DYA and Sanctuary, Inc. data managers.

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