

Arizona Criminal Justice Commission



Arizona Youth Survey 2010 Inhalant Fact Sheet

Our mission is to sustain and enhance the coordination, cohesiveness, productivity and effectiveness of the criminal justice system in Arizona

The Arizona Youth Survey (AYS)

August 2011

In the 2010 administration of the Arizona Youth Survey (AYS), information was collected from 63,784 students in 8th, 10th, and 12th grade from all 15 Arizona counties. Among the information collected in the 2010 AYS were responses to questions about lifetime substance use and past 30-day substance use.

According to the 2010 data, for 30-day use, inhalants were the sixth most prevalent drug used by junior high and high school students in Arizona, behind alcohol, marijuana, cigarettes, prescription pain relievers, and over-the-counter drugs. This research brief summarizes the results from the 2004, 2006, 2008, and 2010 surveys for youth inhalant use relative to county of residence, respondent demographics, and risk and protective factors, and outlines some of the dangers associated with inhalant use.

Table 1. Percentage of Youth Who Reported Having Used Inhalants in Their Lifetime by County

County	2004	2006	2008	2010
Apache	10.8	12.7	15.8	11.1
Cochise	14.5	16.5	12.7	15.6
Coconino	11.5	14.3	12.6	13.5
Gila	9.8	14.8	16.7	12.9
Graham	16.0	17.1	15.3	13.8
Greenlee	17.2	17.7	21.0	15.3
La Paz	14.0	12.8	10.7	13.9
Maricopa	11.0	12.2	12.1	11.7
Mohave	12.8	13.5	13.6	15.6
Navajo	12.9	13.5	11.5	10.9
Pima	11.8	12.8	11.6	12.9
Pinal	15.9	18.0	16.2	16.9
Santa Cruz	11.8	12.1	9.6	11.0
Yavapai	14.5	13.6	14.4	11.8
Yuma	9.9	12.2	13.6	13.4
Arizona	11.8	12.9	12.6	12.3

Lifetime and 30-Day Inhalant Use by Arizona Youth

In 2010, 12.3 percent of youth reported having used inhalants in their lifetime (Table 1). Lifetime inhalant use among youth in Arizona peaked in 2006 followed by a slight decrease in 2008 and again in 2010. While this overall decrease is promising, youth in 10 of Arizona's 15 counties reported higher lifetime usage rates compared to the state average. Pinal, Mohave, and Cochise counties reported the highest lifetime inhalant usage rates that were 1.4 times, 1.3 times, and 1.3 times higher than the state rate, respectively. Navajo, Santa Cruz and Apache counties had the lowest lifetime inhalant usage rates.

The 2010 AYS also revealed that 3.7 percent of Arizona students reported having used inhalants during the 30 days prior to taking the survey (Table 2). Like the lifetime data, 30-day inhalant use among Arizona youth peaked in 2006 followed by slight decreases in 2008 and 2010. In 2010, youth in six Arizona counties reported higher 30-day inhalant usage rates compared to the state rate. Greenlee, Mohave, and Cochise counties reported the highest rates of 30-day inhalant use; all three counties' youth 30-day usage rates were more than 1.5 times higher than the state rate. Youth from Navajo, Graham, La Paz, Santa Cruz and Yavapai counties reported the lowest 30-day inhalant usage rates.

Risk and Protective Factors

At the core of the Arizona Youth Survey are questions based on a risk and protective factor prevention model. This model is based on decades of research that has identified risk and protective factors for delinquency and substance use. The risk and protective factor data reveal that as risk factors accumulate in youth's lives, the percentage of youth who reported using inhalants in the past 30 days also increases. Conversely, as protective factors increase, the percentage of youth who report inhalant use decreases (Chart 1).

Chart 1. Relationship Between the Percentage of Youth Who Used Inhalants in the Past 30 Days and Accumulated Risk and Protective Factors

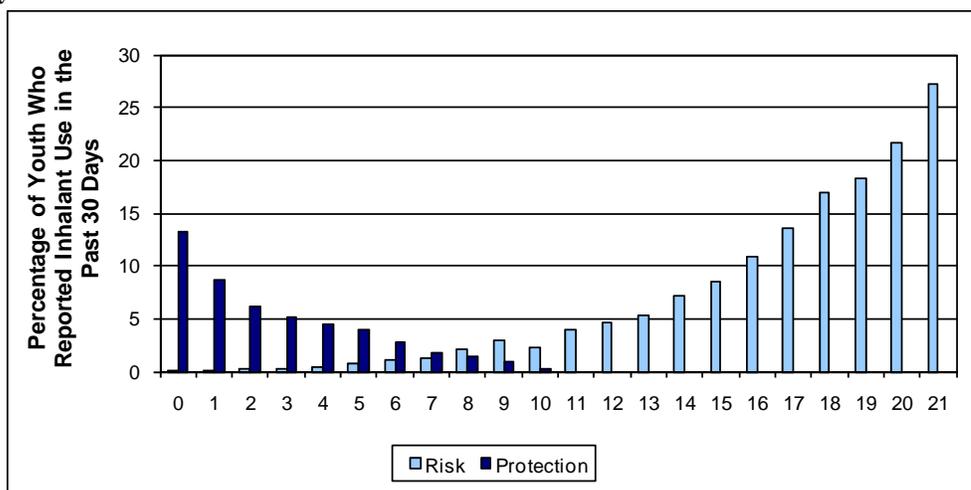


Table 2. Percentage of Youth Who Reported Having Used Inhalants in the Past 30 Days by County

County	2004	2006	2008	2010
Apache	2.8	3.3	4.1	3.7
Cochise	5.1	5.4	3.3	5.4
Coconino	2.1	3.8	2.8	4.6
Gila	3.2	4.6	6.2	3.9
Graham	4.7	4.1	5.1	3.0
Greenlee	5.7	5.4	7.0	5.6
La Paz	3.6	3.4	3.3	3.0
Maricopa	3.7	3.9	3.8	3.6
Mohave	3.7	3.6	3.5	5.4
Navajo	3.1	3.8	2.9	2.7
Pima	4.4	4.2	3.3	3.5
Pinal	4.6	6.4	5.4	4.5
Santa Cruz	4.2	4.2	3.6	3.0
Yavapai	5.3	4.4	3.6	3.0
Yuma	3.9	5.0	4.8	3.5
Arizona	3.9	4.1	3.8	3.7

Table 3. Percentage of Youth Who Reported Having Used Inhalants in the Past 30 Days by Demographic Characteristics

	2004	2006	2008	2010
Overall	3.9	4.1	3.8	3.7
Grade				
8th Grade	5.8	6.2	5.4	5.6
10th Grade	2.9	3.1	3.0	3.0
12th Grade	1.4	1.7	1.6	1.5
Gender				
Male	3.4	3.7	3.0	2.8
Female	4.4	4.5	4.6	4.6
Race				
Asian	2.8	3.2	1.8	2.9
Pacific Islander	7.9	5.4	4.4	3.4
Native American	3.4	4.7	5.0	5.2
Black	4.0	2.6	2.5	3.2
White	3.5	3.8	3.3	2.9
Multi-Racial	n/a	n/a	4.5	4.3
Ethnicity				
Hispanic	4.3	4.5	4.5	4.5
Non-Hispanic	n/a	n/a	3.4	3.2

Note: n/a indicates that the question was not asked in that particular administration of the survey.

Dangers of Inhalant Use

Raising awareness about the dangers of inhalants is important because the products are easily accessible, inexpensive, legal, and potentially lethal. Some of the slang terms for the use of inhalants are huffing, sniffing, dusting, bagging, whippets, and glading. Common items used as inhalants may include, but are not limited to: computer duster, contents of aerosol spray cans, various types of glue, gas, paint, cans of whipped cream, and nail polish remover. Inhalants.org reports that more than 1,400 everyday products can be used as inhalants for the purpose of “getting high.” A more extensive list of inhalants may be found on the Inhalants.org web site listed

below. The repeated misuse of these everyday items for the purposes of “getting high” may lead serious health consequences. Inhalants have the potential to cause vision disturbances; mood swings; hearing loss; seizures; severe damage to the kidneys, liver, or brain; and even death. Death can occur anytime a child uses inhalants, even the first time. A single use of inhalants can prevent oxygen from reaching the lungs causing suffocation or alter normal heart rhythms, causing cardiac arrest resulting in death (Volkow, 2005). The Substance Abuse and Mental Health Services Administration (SAMHSA) urges that efforts be directed toward educating parents, teachers, physicians, service providers and policy makers about the dangers of inhalant use. However, SAMHSA (2010) also warns that “all prevention efforts directed to adolescents must balance warning against the dangers of inhalant use with not inadvertently introducing adolescents to available substances that have abuse potential.”

References:

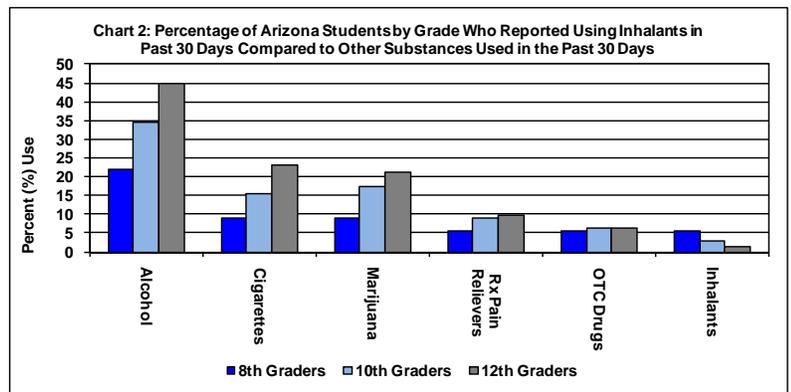
Volkow, N. (2005). *Inhalant abuse is an emerging public health problem*. National Institute on Drug Abuse. Retrieved from <http://www.drugabuse.gov/about/welcome/messageInhalants105.html>
 Substance Abuse and Mental Health Services Administration. (2010). *Adolescent inhalant use and selected respiratory conditions*. Retrieved from <http://www.oas.samhsa.gov/2k10/175/175RespiratoryCond.htm>

Resources:

For more information on products used as inhalants, the warning signs, and the dangers, please visit Inhalant.org at <http://www.inhalant.org/inhalant/> or the Mayo Clinic, *Inhalant abuse: Is your child at risk?* at <http://www.mayoclinic.com/health/inhalant-abuse/HQ00923>

30-Day Inhalant Use by Respondent Demographics

In 2010, 3.7 percent of Arizona youth reported using inhalants during the 30 days preceding the survey (Table 3). Generally speaking, the percentage of youth using substances increases with grade-level. However, usage rates for inhalants decrease with grade level, indicating that 8th graders used inhalants at a higher rate compared to their 10th and 12th grade counterparts, 1.9 times and 3.7 times higher statewide, respectively (Chart 2). Additionally, between 2008 and 2010, inhalant usage rates increased for the 8th grade population. AYS data also reveal that during the time period examined, inhalant use among males has consistently decreased from 2006 to 2010 while the percentage of females that used inhalants peaked in 2008 and remained the same in 2010. The data also show that females used inhalants at a rate 1.6 times higher than males in 2010. Inhalant use among Native American youth has consistently increased since 2004 and Native American adolescents reported the highest usage rates compared to any other racial group. Asian and Black youth also reported increased usage rates between 2008 and 2010, 61.1 percent and 28.0 percent higher in 2008 than 2010, respectively. Although Multi-Racial youth reported higher usage rates of inhalants compared to youth state-wide, this population did experience a slight decrease in reported 30-day inhalant use (a 4.4 percent decrease) between 2008 and 2010. Inhalant usage rates among Pacific Islanders have continuously decreased over time. Inhalant use for White youth peaked in 2006 followed by decreases in 2008 and 2010. In 2010, Hispanic youth reported higher inhalant use compared to Non-Hispanic youth. These data suggest that inhalant use is most prevalent among younger females, Native Americans and Hispanic youth.



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