

Select Problem Indicators by Age

An analysis of problem indicators by age is meant to describe the age groups that are experiencing the most substance abuse-related problems and age groups that might benefit the most from interventions.

Age breakdowns are provided for problem indicators that affect large numbers of people and for which age data are available.

The data presented in this section point to the age group that experiences a particular problem but do not describe when the antecedents to problem behaviors first appear or the age at which the presence of the antecedents is most critical in forming the problem behavior. The type of intervention will vary depending on how these age data are used. Interventions that seek to prevent the occurrence of a problem behavior might target individuals who are younger than those age groups already experiencing a high rate of the problem behavior. An intervention could also target an age group with high rates of the problem behavior with the intention of reaching individuals in the group who have not yet engaged in the problem behavior. If the intervention seeks to prevent a reoccurrence of the problem behavior, age groups already experiencing high rates of the problem behavior could be targeted.

Depending upon the objective of intervention funding, data on the age of people affected by the various consequence and consumption indicators consistently suggest three age groups. For most indicators, rates of consumption or consequences peaked among 18 to 25 year olds. Moreover, for some indicators, rates among age groups bracketing the 18 to 25 year olds (i.e., the age group preceding and the age group following the 18 – 25 year old category) were also relatively high and might be considered as part of the target range for intervention. For example, while youth under the age of 18 do not present with the highest rates of the problems analyzed, because interventions are designed to prevent the onset of consumption or problem behaviors, this age group should be the target of prevention efforts.

Consumption by Age.

Tables 4.79 through 4.81 present substance use consumption data from the *National Survey on Drug Use and Health* by age group. Tables 4.82 through 4.85 present substance use consumption data from the *Arizona Youth Survey* by 8th, 10th, and 12th grade levels.

When examining the absolute number of individuals reporting past-month substance use, it appears that individuals aged 26 and older experienced the highest substance abuse. However, when looking at the percentage of individuals within each age category reporting substance use, a consistently higher percentage of individuals between the ages of 18 and 25 reported alcohol or illicit drug dependence or abuse. In addition, this 18 – 25 age group also reported the highest percentage of individuals needing, but not receiving, treatment for alcohol and illicit drug use and the highest percentage of individuals who reported smoking cigarettes.

Table 4.79. Number of Individuals Reporting Past Month Substance Use by Substance and Age Group, Arizona, 2004 – 2005

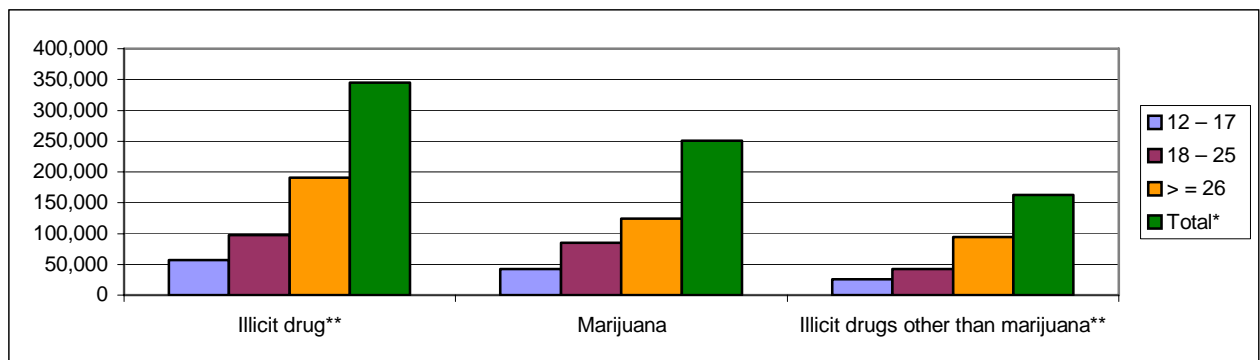
	12 – 17	18 – 25	≥ 26	Total*
Illicit drug**	57,000	97,000	191,000	345,000
Marijuana	42,000	85,000	124,000	251,000
Illicit Drugs other than Marijuana**	26,000	43,000	94,000	163,000

* Total 12 or older

** Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit drugs other than marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Source: *National Survey on Drug Use and Health, 2004 and 2005*. Substance Abuse and Mental Health Services Administration, Department of Health and Human Services.

Figure 4.37. Number of Individuals Reporting Past Month Substance Use by Substance and Age Group, Arizona, 2004 – 2005.



* Total 12 or older

** Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit drugs other than marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Source: *National Survey on Drug Use and Health, 2004 and 2005*. Substance Abuse and Mental Health Services Administration, Department of Health and Human Services.

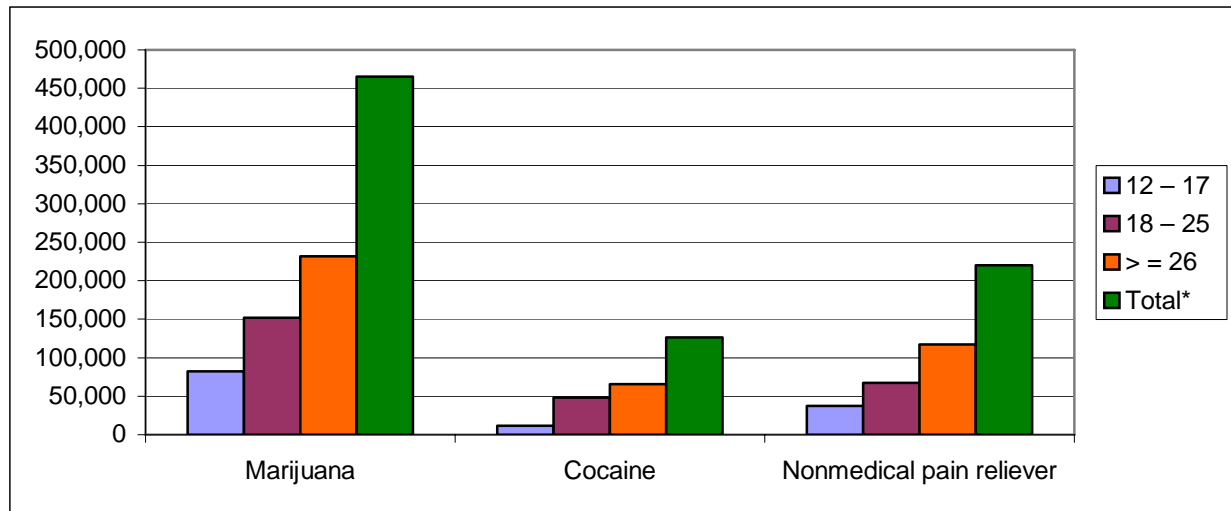
Table 4.80. Number of Individuals Reporting Past Year Substance Use by Substance and Age Group, Arizona, 2004 – 2005

	12 – 17	18 – 25	≥ 26	Total*
Marijuana	82,000	152,000	232,000	465,000
Cocaine	12,000	48,000	66,000	126,000
Nonmedical Pain Reliever	37,000	67,000	117,000	220,000

* Total 12 or older

Source: *National Survey on Drug Use and Health, 2004 and 2005*. Substance Abuse and Mental Health Services Administration, Department of Health and Human Services.

Figure 4.38. Number of Individuals Reporting Past Year Substance Use by Substance and Age Group, Arizona, 2004 – 2005.



* Total 12 or older

Source: *National Survey on Drug Use and Health, 2004 and 2005*. Substance Abuse and Mental Health Services Administration, Department of Health and Human Services.

Individuals who were 26 or older were less than half as likely as those aged 18 – 25 to indicate they had a variety of alcohol and drug-related problems: alcohol or illicit drug dependence or abuse; alcohol dependence or abuse; illicit drug dependence or abuse; needing, but not receiving, treatment for alcohol or illicit drug use; illicit drug use; or binge alcohol use.

In addition, this age group (18 – 25) also reported the highest percentage of individuals needing, but not receiving, treatment for alcohol and illicit drug use and the highest percentage of individuals who reported smoking cigarettes. This indicates that the time when an individual is between 18 and 25 years old is especially problematic. 12 to 17 year olds have lower percentages of individuals reporting substance use, which highlights the need for prevention efforts to be targeted at the years that precede this especially troublesome phase or during these years for those who have not yet engaged in these risky behaviors.

The Substance Abuse and Mental Health Services Administration (SAMHSA)—that provided the data displayed in Figure 4.39—defines binge drinking as the consumption of five or more drinks on the same occasion on at least one day within the last 30 days. Further, SAMHSA defines alcohol dependence based on criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition* (DSM-IV) (American Psychiatric Association [APA], 1994) based on questions related to health and emotional problems associated with alcohol use; attempts to cut down on use; and tolerance, withdrawal, and other symptoms associated with the consumption of alcohol. It is important to gauge the proportion of the population that is dependent upon alcohol as dependence is more indicative of a severe substance problem than alcohol abuse. In addition, we know that those that become dependent upon or abuse alcohol were more likely to have begun drinking before the age of 15 (Grant B.F. & Dawson, D.A., 1997). Finally, SAMHSA indicates that an individual who is needing, but not receiving, treatment for alcohol use meets the criteria for abuse of or dependence on alcohol according to the DSM-IV, but has not received specialty treatment for alcohol abuse/dependence in the past year.

Table 4.81. Selected Indicators of Drug Use and Alcohol or Illicit Drug Dependence or Abuse, Estimated Percentages, by Age Group, Arizona, 2004 – 2005

	12-17	18-25	26+
Alcohol or Illicit Drug Dependence or Abuse*	10.51	20.95	8.36
Alcohol Dependence or Abuse*	7.08	17.77	7.69
Alcohol Dependence*	2.68	8.24	3.57
Illicit Drug Dependence or Abuse*	6.64	7.46	1.47
Illicit Drug Dependence*	3.69	5.07	0.99
Needing, but not Receiving, treatment for Alcohol Use*	6.83	17.76	7.17
Needing, but not Receiving, Treatment for Illicit Drug Use*	6.30	6.95	1.37
Illicit Drug Use**	11.16	15.14	5.37
Alcohol Use**	18.01	61.27	59.73
Binge Alcohol Use**+	11.54	44.03	22.31
Cigarette Use**	11.07	35.21	22.14

Note. Percentages in bold indicate the age group reporting the highest percentage of substance use, dependence or abuse and treatment need.

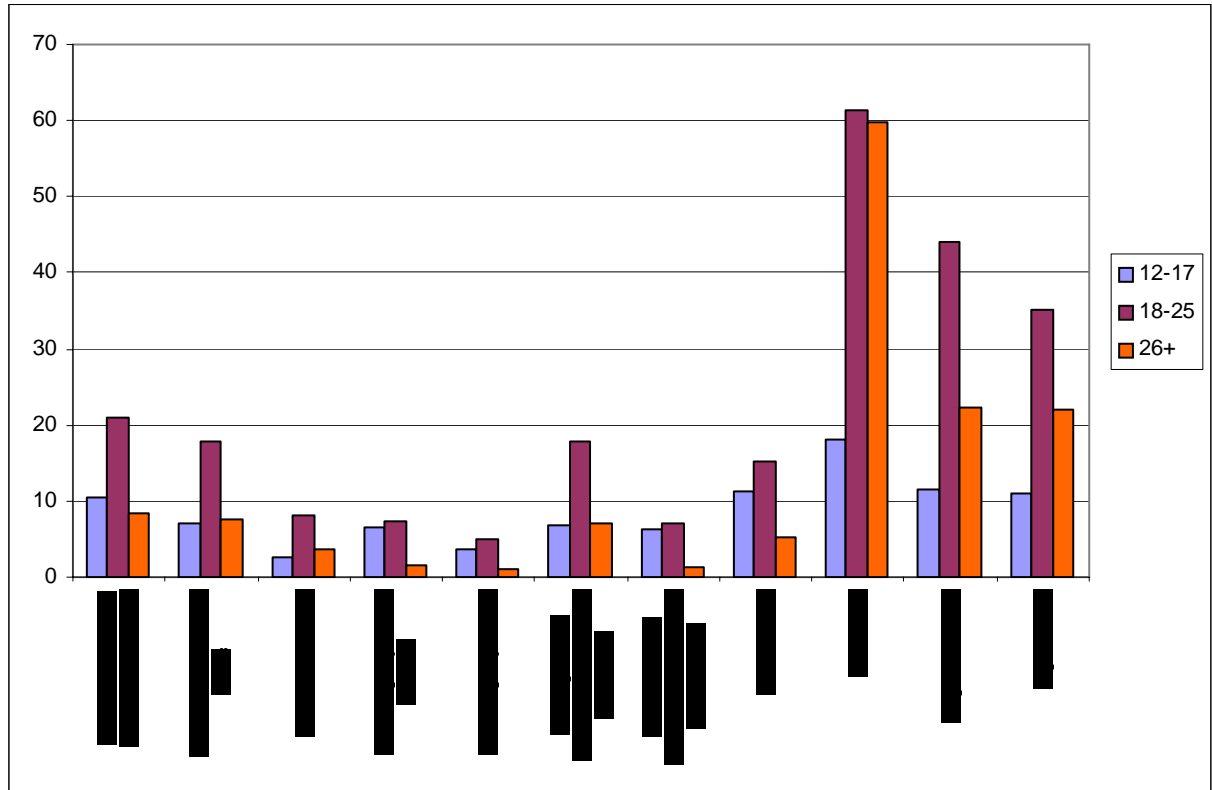
* Past year dependence/abuse/treatment need

** Past month use

+ Binge alcohol use is defined as consuming 5 or more alcoholic drinks on the same occasion on at least 1 day within the last 30 days.

Source: *State Estimates of Substance Use from the 2004 – 2005 National Surveys on Drug Use and Health*. Substance Abuse and Mental Health Services Administration, Department of Health and Human Services.

Figure 4.39. Selected Indicators of Drug Use and Alcohol or Illicit Drug Dependence or Abuse, Estimated Percentages, by Age Group, Arizona, 2004 – 2005.



Past year dependence/abuse/treatment need

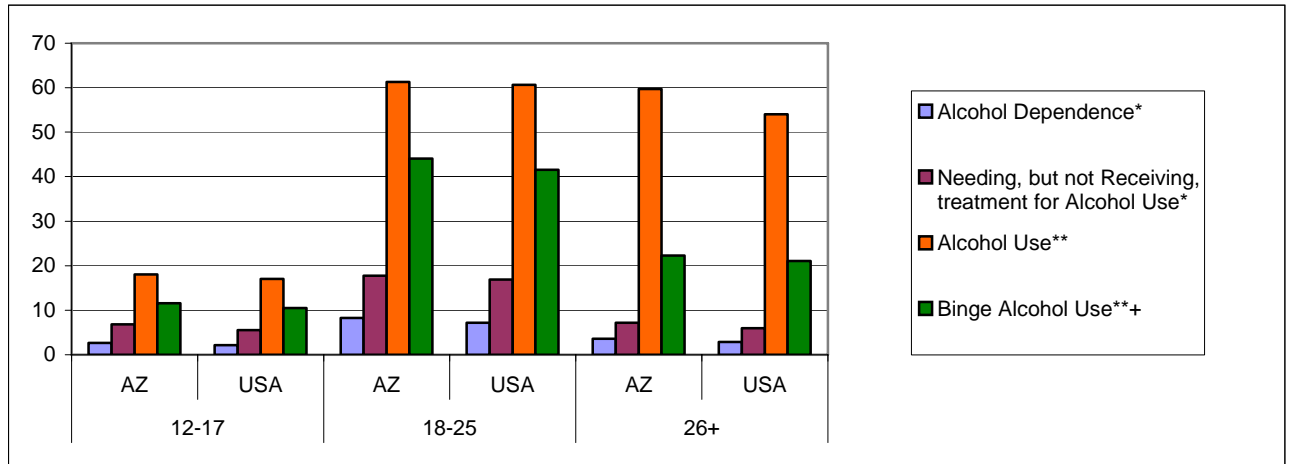
Past month use

Binge alcohol use is defined as consuming 5 or more alcoholic drinks on the same occasion on at least 1 day within the last 30 days.

Source: *State Estimates of Substance Use from the 2004 – 2005 National Surveys on Drug Use and Health*. Substance Abuse and Mental Health Services Administration, Department of Health and Human Services.

Figure 4.40 compares Arizonans to the percentage of individuals in the nation estimated to drink alcohol, engage in binge drinking, be dependent upon alcohol or need, but not receive, treatment for alcohol use by age group. These data indicate that binge alcohol use and alcohol use should be of greater concern than alcohol dependence or needing, but not receiving, treatment for alcohol use. Further, Figure 4.40 indicates that while slightly higher percentages of Arizonans report alcohol use and binge alcohol use than do respondents across the nation, Arizona mirrors national alcohol use trends.

Figure 4.40. Comparison of Percentage of Arizonans to the Nation on Several Indicators of Alcohol Use and Consequences, 2004 – 2005.



* Past year dependence/treatment need

** Past month use

+ Binge alcohol use is defined as consuming five or more alcoholic drinks on the same occasion on at least 1 day within the last 30 days.

Source: *Changes in Prevalence Rates of Drug Use between 2002 – 2003 and 2004 – 2005 among States*. Substance Abuse and Mental Health Services Administration, Department of Health and Human Services.

While merely a proxy for age, grade can also be used as a way to group youth into general age categories.

Finding: As might be expected, 12th graders had the highest percentage of students reporting past 30-day substance use for most indicators. However, 8th graders had the highest percentage of students reporting inhalant use, possibly due to its relatively easy access in comparison to other substances at this young age.

Finding: Almost one in four 8th graders reported being able to secure and consume alcohol. This figure almost doubles by the end of high school, when almost 1 in 2 12th graders report consuming alcohol in the 30 days preceding the survey.

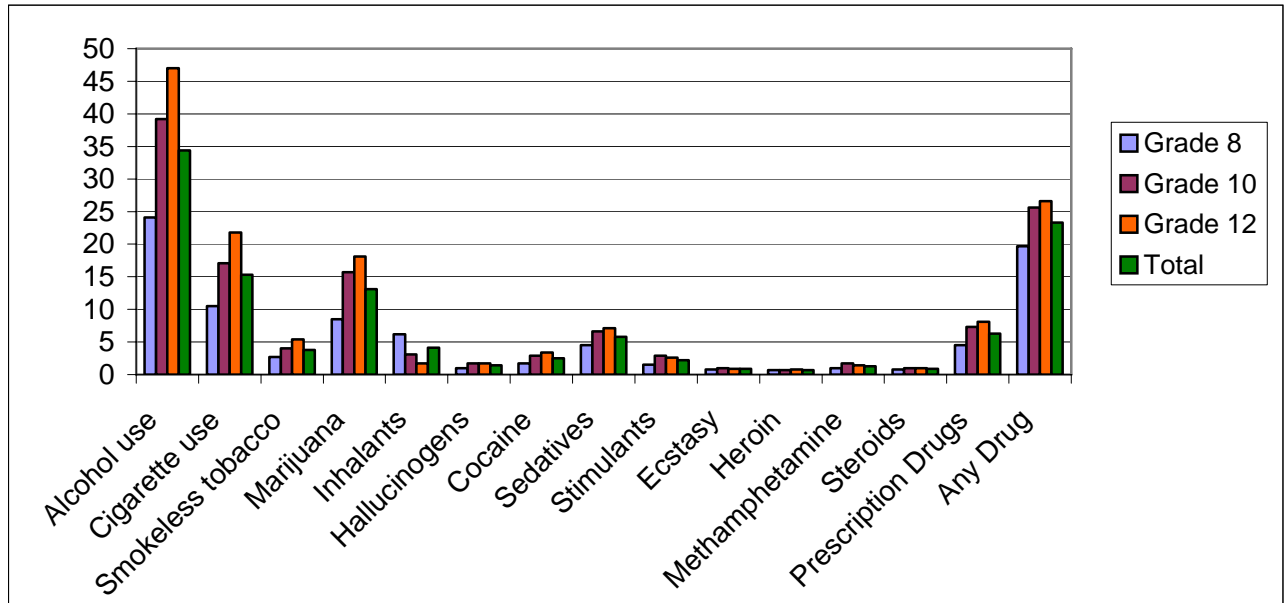
Table 4.82. Percentage of Students Reporting Past 30-Day Substance Use by Substance and Grade, Arizona, 2006

	Grade 8	Grade 10	Grade 12	Total
Alcohol use	24.10	39.20	47.00	34.40
Cigarette use	10.50	17.10	21.80	15.30
Smokeless tobacco	2.70	4.00	5.40	3.80
Marijuana	8.50	15.70	18.10	13.10
Inhalants	6.20	3.10	1.70	4.10
Hallucinogens	1.00	1.70	1.70	1.40
Cocaine	1.70	2.90	3.40	2.50
Sedatives	4.50	6.60	7.10	5.80
Stimulants	1.50	2.90	2.60	2.20
Ecstasy	0.80	1.00	0.90	0.90
Heroin	0.70	0.70	0.80	0.70
Methamphetamine	1.00	1.70	1.40	1.30
Steroids	0.80	1.00	1.00	0.90
Prescription Drugs	4.50	7.30	8.10	6.30
Any Drug	19.70	25.60	26.60	23.30

Note. Percentages in bold indicate the grade reporting the highest percentage of past 30-day substance use.

Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

Figure 4.41. Percentage of Students Reporting Past 30-day Substance Use by Substance and Grade, Arizona, 2006.



Source: Arizona Youth Survey: State Report, 2006. Arizona Criminal Justice Commission.

Finding: Among 12th graders, approximately ¾ (74.5%) have tried alcohol at some point in their life; ½ have tried cigarettes; and over 40% have tried marijuana.

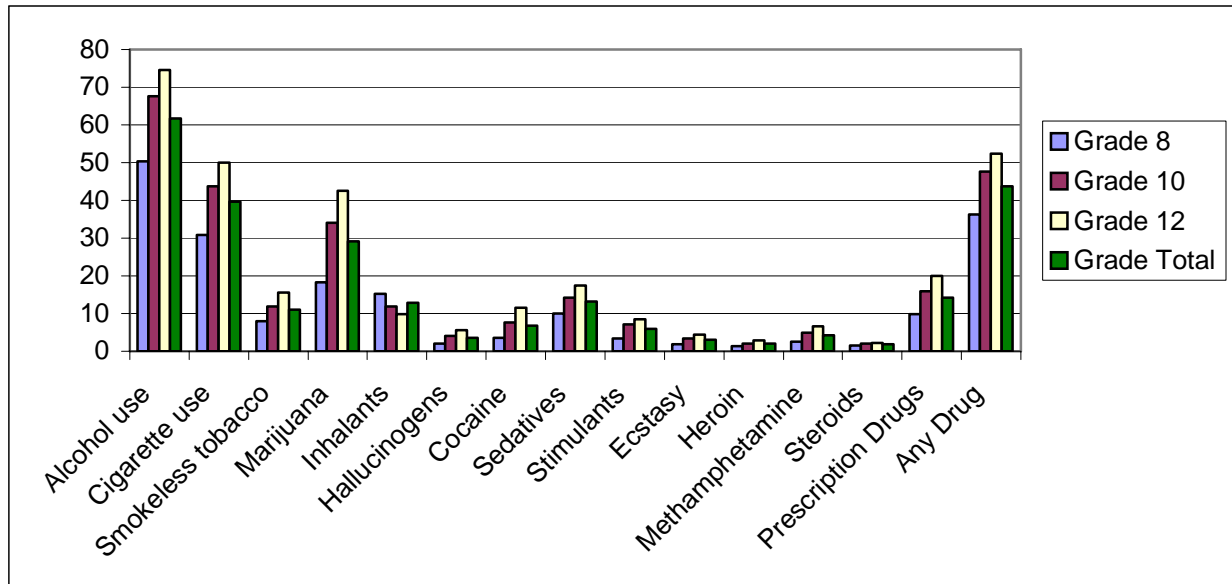
Table 4.83. Percentage of Students Reporting Lifetime Substance Use by Substance and Grade, Arizona, 2006

	Grade 8	Grade 10	Grade 12	Total
Alcohol use	50.40	67.60	74.50	61.70
Cigarette use	30.80	43.80	50.00	39.60
Smokeless tobacco	8.00	11.80	15.60	11.00
Marijuana	18.30	34.00	42.60	29.20
Inhalants	15.20	11.90	9.80	12.90
Hallucinogens	2.10	4.10	5.60	3.60
Cocaine	3.60	7.60	11.60	6.80
Sedatives	10.00	14.30	17.40	13.20
Stimulants	3.40	7.10	8.50	5.90
Ecstasy	1.90	3.40	4.40	3.00
Heroin	1.40	2.10	2.80	2.00
Methamphetamine	2.60	5.00	6.60	4.30
Steroids	1.60	2.00	2.20	1.90
Prescription Drugs	9.80	16.00	20.00	14.30
Any Drug	36.20	47.60	52.30	43.80

Note. Percentages in bold indicate the grade reporting the highest percentage of lifetime substance use.

Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

Figure 4.42. Percentage of Students Reporting Lifetime Substance Use by Substance and Grade, Arizona, 2006.



Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

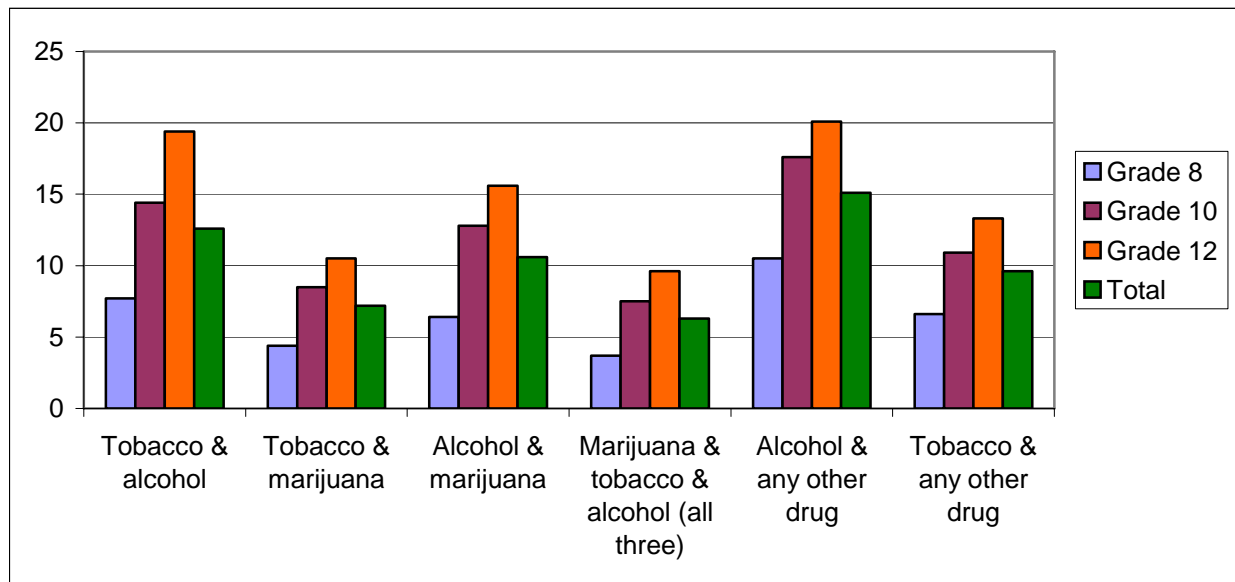
Table 4.84. Percentage of Students Reporting Past 30-day Multiple Drug Use by Grade and Substance, Arizona, 2006

	Grade 8	Grade 10	Grade 12	Total
Tobacco & Alcohol	7.70	14.40	19.40	12.60
Tobacco & Marijuana	4.40	8.50	10.50	7.20
Alcohol & Marijuana	6.40	12.80	15.60	10.60
Marijuana & Tobacco & Alcohol (all three)	3.70	7.50	9.60	6.30
Alcohol & Any Other Drug	10.50	17.60	20.10	15.10
Tobacco & Any Other Drug	6.60	10.90	13.30	9.60

Note. Percentages in bold indicate the grade reporting the highest percentage of past 30-day multiple substance use.

Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

Figure 4.43. Percentage of Students Reporting Past 30-day Multiple Drug Use by Grade and Substance, Arizona, 2006.



Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

When examining individual ages (rather than age groupings), we note the higher percentage of 17-year olds who have used methamphetamine in the past 30 days and the higher percentage of 18-year olds who have used cigarettes, alcohol and binge alcohol use. With few exceptions, the percentage of youth who reported substance use increased for every year of age (i.e., a higher percentage of 18-year olds reported alcohol use than 17-year olds, a higher percentage of which reported alcohol use than 16-year olds, etc.).

Table 4.85. Numbers and Percentages of Students Reporting Past 30-day Substance Use by Substance and Age, Arizona, 2006

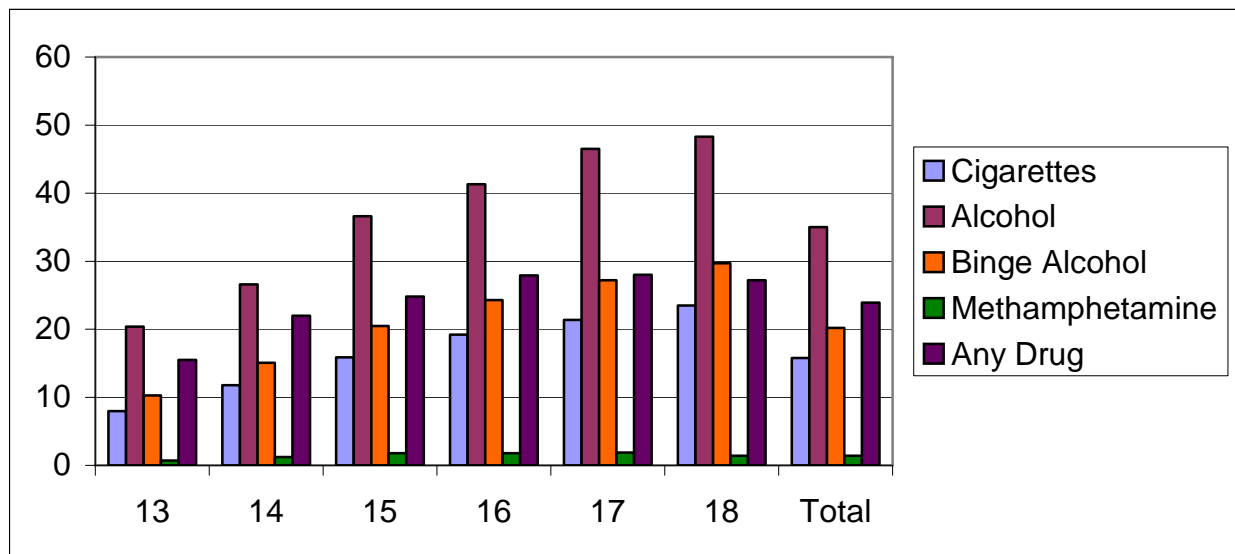
	13		14		15		16		17		18		Total	
	%	N	%	N	%	N	%	N	%	N	%	N	%	N
Cigarettes	8	867	11.80	1,637	15.90	1,610	19.20	2,153	21.40	1,877	23.50	1,569	15.80	9,713
Alcohol	20.40	2,239	26.60	3,735	36.00	3,707	41.30	4,634	46.50	4,067	48.30	3,218	35.00	21,600
Binge Alcohol*	10.30	1,059	15.10	1,987	20.50	2,010	24.30	2,650	27.20	2,339	29.70	1,950	20.20	11,995
Methamphetamine	0.70	69	1.20	149	1.80	168	1.80	191	1.90	158	1.40	85	1.4	820
Any Drug	15.50	1,373	22.0	2,499	24.80	2,140	27.90	2,655	28.00	2,144	27.20	1,564	23.90	12,375

Note. Percentages in bold indicate the age reporting the highest percentage of past 30-day substance use.

* Past 2-week binge alcohol use, which refers to consuming five or more drinks at one time.

Source: *Arizona Youth Survey: Unpublished Data, 2006*. Arizona Criminal Justice Commission.

Figure 4.44. Percentage of Students Reporting Past 30-day Substance Use by Substance and Age, Arizona, 2006.



* Past 2-week binge alcohol use, which refers to consuming five or more drinks at one time.

Source: *Arizona Youth Survey: Unpublished Data, 2006*. Arizona Criminal Justice Commission.

Hospital Discharges and Emergency Department Visits by Age.

The number of hospital discharges and Emergency Department visits for alcohol/drug-related psychoses and neuroses are presented in Tables 4.86 and 4.87. The population in the mid-range group, ages 20 – 44, had the highest number of visits to hospitals for alcohol and drug-related psychoses, dependence, and abuse.

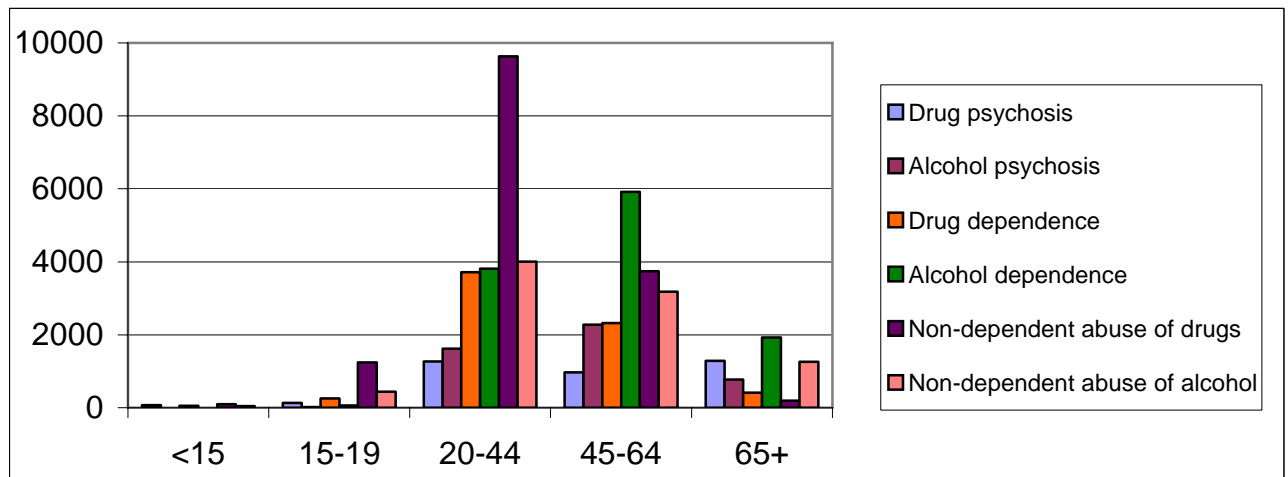
Table 4.86. Hospital Discharges by Age Group for Alcohol/Drug Psychoses and Neuroses (All Mentions), Arizona, 2005

	<15	15-19	20-44	45-64	65+	Unknown
Drug psychosis	72	129	1,270	972	1,287	0
Alcohol psychosis	1	14	1,625	2,280	767	0
Drug dependence	52	258	3,715	2,324	412	0
Alcohol dependence	2	62	3,815	5,917	1,928	0
Non-dependent abuse of drugs	100	1,241	9,634	3,741	192	1
Non-dependent abuse of alcohol	48	437	4,005	3,183	1,258	4

Note. Numbers in bold indicate the age group experiencing the highest number of hospital discharges for alcohol/drug psychoses and neuroses.

Source: *Hospital Discharge Database*, 2005 data. Arizona Department of Health Services.

Figure 4.45. Hospital Discharges by Age Group for Alcohol/Drug Psychoses and Neuroses, Arizona, 2005.



Source: *Hospital Discharge Database*, 2005 data. Arizona Department of Health Services.

As is true for hospital discharges, the age group most frequently visiting the Emergency Department for alcohol/drug psychoses and neuroses is 20 – 44.

Table 4.87. Emergency Department Visits by Age Group for Alcohol/Drug Psychoses and Neuroses, Arizona, 2005

	<15	15-19	20-44	45-64	65+	Unknown
Drug psychosis**	15	87	1,021	509	96	0
Alcohol psychosis*	0	7	863	733	56	0
Drug dependence**	3	40	408	135	10	0
Alcohol dependence*	22	181	3,450	3,118	346	0
Non-dependent abuse of drugs**	280	1,615	7,254	2,973	305	5
Non-dependent abuse of alcohol*	261	1,651	10,791	5,632	794	4

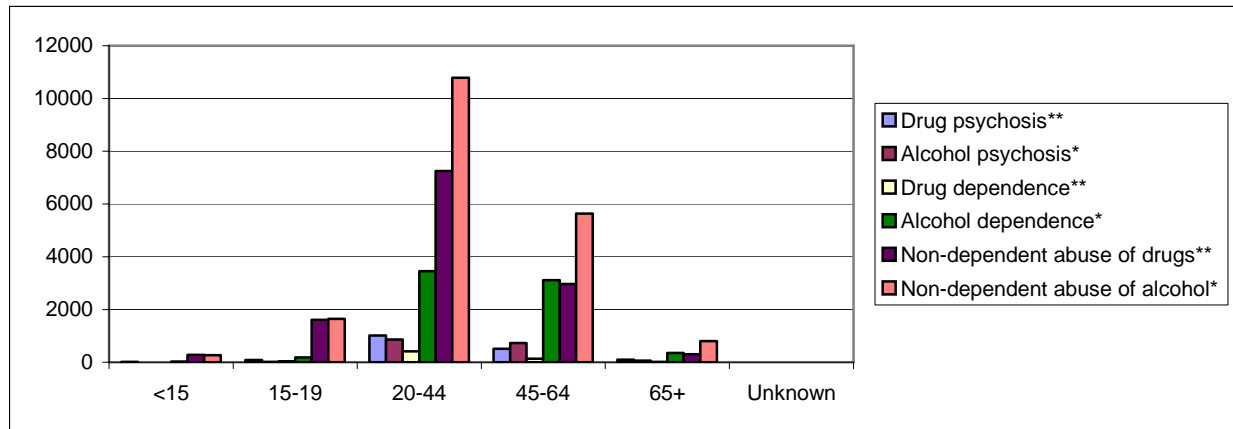
Note. Numbers in bold indicate the age group experiencing the highest number of Emergency Department visits for alcohol/drug psychoses and neuroses.

* All mentions

** First-listed diagnosis

Source: *Hospital Discharge Database*, 2005 data. Arizona Department of Health Services.

Figure 4.46. Emergency Department Visits by Age Group for Alcohol/Drug Psychoses and Neuroses, Arizona, 2005.



* All mentions

** First-listed diagnosis

Source: *Hospital Discharge Database*, 2005 data. Arizona Department of Health Services.

Alcohol-Related Motor Vehicle Crashes by Age.

Table 4.88 presents age data for alcohol-related crashes.

Individuals between the ages of 25 and 34 had the most alcohol-related fatal accidents and accidents that caused injuries and property damage. However, it is important to note that this group is inclusive of 10 years, whereas the 21 – 24 year old age group comprises only 5 years. If we collapse the age categories that are inclusive of drivers between the ages of 0 and 20 and 21 and 24, we note that drivers between the ages of 0 and 24 had more alcohol-related accidents than did those between the ages of 25 and 34.

The number of alcohol-related accidents is highest for the 25 – 34 age cohort, are fewer for those drivers between 35 and 44 years old, and continue to decline as drivers become older.

Table 4.88. Number of Drivers Involved in Alcohol-Related Crashes by Age Group, Arizona, 2005.

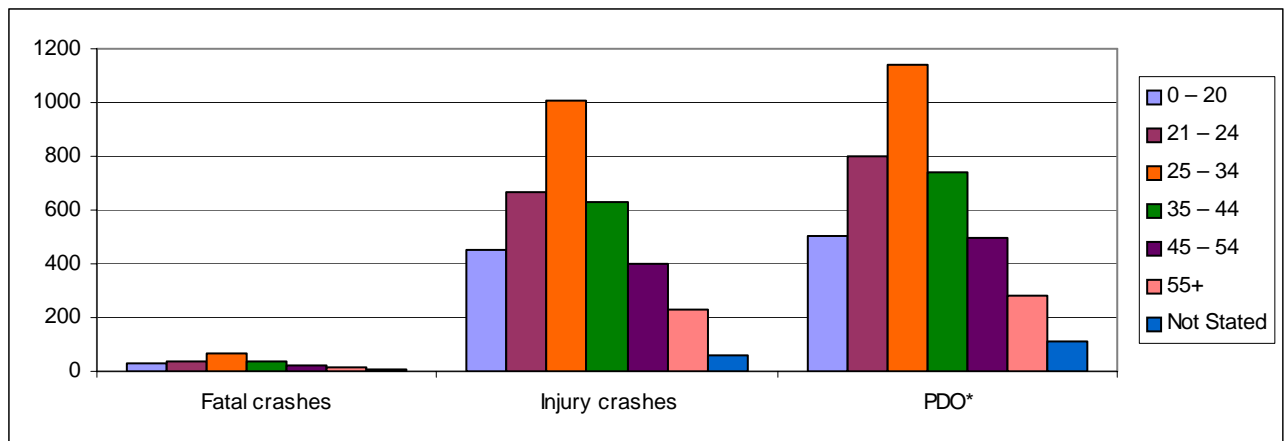
	0 – 20	21 – 24	25 – 34	35 – 44	45 – 54	55+	Not Stated
Fatal crashes	31	38	66	38	24	13	7
Injury crashes	454	669	1,011	630	400	233	61
PDO*	503	799	1,142	739	498	281	113

* Property Damage Accidents

Note. Numbers in bold indicate the age group with the highest number of drivers involved in alcohol-related crashes.

Source: 2005 Arizona Crash Facts Summary, Arizona Department of Transportation.

Figure 4.47. Number of Drivers Involved in Alcohol-Related Crashes by Age Group, Arizona, 2005.



* Property Damage Accidents

Source: 2005 Arizona Crash Facts Summary, Arizona Department of Transportation.

Drug and Alcohol-Related Arrests by Age.

Table 4.89 presents data for substance abuse-related arrests, including arrests for driving under the influence of alcohol.

Individuals between the ages of 18 and 25 had the most arrests for all substance abuse indicators—drug sale/manufacturing, drug possession, and driving under the influence. However, the number of arrests for drug possession and driving under the influence was high for all age groups.

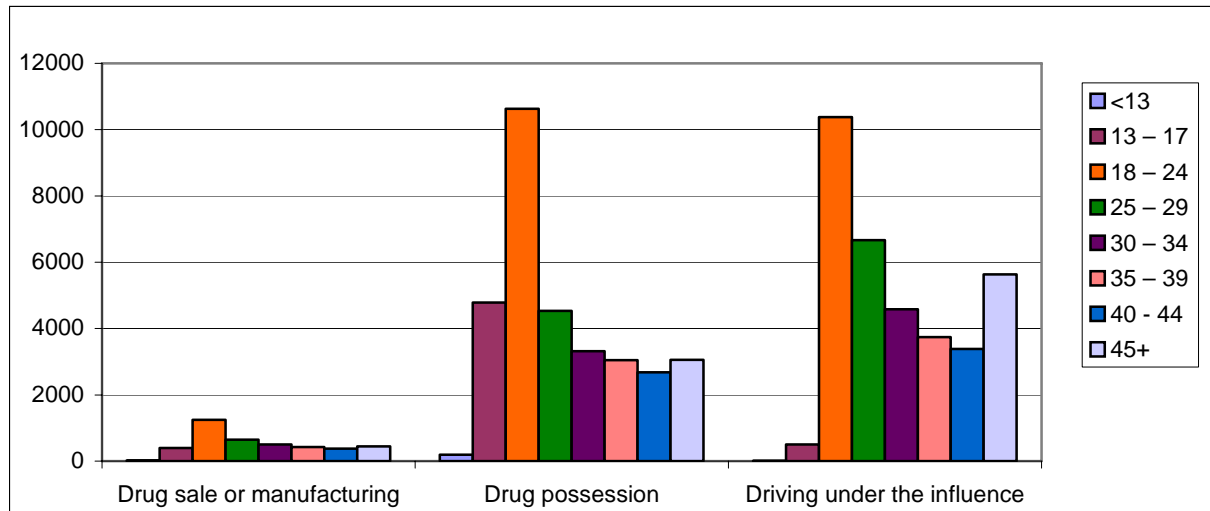
Table 4.89. Substance-Related Arrests by Age Group, Arizona, 2005.

	<13	13 - 17	18 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45+
Drug sale/ manufacturing	21	396	1,242	650	500	420	378	447
Drug possession	193	4,786	10,631	4,532	3,321	3,045	2,682	3,060
Driving under the influence	11	505	10,376	6,664	4,584	3,745	3,382	5,631

Note. Numbers in bold indicate the age group experiencing the highest number of substance-related arrests.

Source: *Crime in Arizona, 2005*. Arizona Department of Public Safety.

Figure 4.48. Substance-Related Arrests by Age Group, Arizona, 2005



Source: *Crime in Arizona, 2005*. Arizona Department of Public Safety.

Problem Indicators by Age Summary: While 12th graders had the highest percentage of students reporting past 30-day substance use for most indicators, 8th graders had the highest percentage of students reporting inhalant use, possibly due to its relatively easy access in comparison to other substances at this young age. Further, almost one in four 8th graders reported being able to secure and consume alcohol. This figure almost doubles by the end of high school, when almost half of 12th graders reported consuming alcohol in the 30 days preceding the survey. Among 12th graders, approximately $\frac{3}{4}$ have tried alcohol at some point in their life; $\frac{1}{2}$ have tried cigarettes; and over 40% have tried marijuana. Among adults, the highest experimentation appears to occur during the ages between 18 and 25 and individuals in this age group also seem to experience the most substance abuse-related consequences.