

HANDS-ON Health

Health Wave Newsletter, January 2012

Visit us on our website at www.healthwaveinc.com

Current Trends in Teen Drug Use/Abuse: 2011 MONITORING THE FUTURE SURVEY RESULTS

The Monitoring the Future (MTF) survey has studied annually the extent of drug use among 12th-graders since 1975 and, since 1991, it was expanded to include 8th- and 10th-graders. It is funded by The National Institute on Drug Abuse (NIDA) and is conducted by the University of Michigan's Institute for Social Research. The researchers' goal is to collect data on *past month*, *past year*, and *lifetime* drug use among students in these grade levels.

MTF, now in its 37th year, tracks smoking, drinking, and illicit drug use among the nation's secondary school students. Overall, 46,733 students from 400 public and private schools in the 8th, 10th, and 12th grades participated in this year's survey.

The 2011 Monitoring the Future (MFT) Survey found cigarette and alcohol use at historic lows among teens. However, this positive news is tempered by a slowing rate of decline in teen smoking as well as continued high rates of abuse of other tobacco products (e.g., hookahs, small cigars, smokeless tobacco), marijuana and prescription drugs. The survey results appear to show that more teens continue to abuse marijuana than cigarettes; and alcohol is still the drug of choice among all three age groups surveyed.

The gradual rise over the last four years in the use of any illicit drug is largely due to the increased use of marijuana. In this year's survey, 50% of high school seniors tried an illicit drug at some time, 40% used one or more drugs in the past 12 months, and 25% used one or more drugs in the 30 days prior to the survey.

One of the most noteworthy findings of the latest MTF survey involved the use by 12th graders of synthetic marijuana (specifically "Spice" and "K2"), which



Areas of Concern:

MARIJUANA USE

- While marijuana use declined in the late 1990s and early 2000s, 5-year trends are showing significant increases among 10th and 12th graders for daily, current and past year use. This year, 12.5% of 8th graders, 28.8% of 10th graders, and 36.4% of 12th graders reported past-year marijuana use. Although there were no increases between 2010 and 2011, it appears that marijuana use continues to exceed cigarette use in these students. In 2011, 22.6% of high school seniors used marijuana in the past 30 days compared with 18.7% who smoked cigarettes.
- Attitudes toward substance abuse, often seen as harbingers of change, perhaps could explain these findings. Among all three grades, recent trends show a decline in the perceived risk of harm associated with marijuana use.
- This year's survey captured the use of synthetic marijuana, also known as K2 or "Spice", among high school seniors for the first time. Almost 1 in 9, or 11.4%, of high school seniors reported using Spice in the past year.

PRESCRIPTION AND OTC DRUG ABUSE

After marijuana, prescription and over-the-counter medications account for most of the top illicit drugs abused by 12th graders in the past year. On the positive side, past-year nonmedical use of Vicodin by 10th graders declined from 7.7% in 2010 to 5.9% in 2011 and the decrease in the use of Vicodin by high school seniors reported last year remained unchanged, albeit at an unacceptably high level of 8.1% in this year's survey. However, OxyContin use remains an area of concern with past year nonmedical use holding steady across all the three grades for the past 5 years. The abuse of stimulants is also cause for alarm. For example, 8.2% of high school seniors reported past year use of Amphetamines in 2011, up from 6.6% in 2009.

consists of leaves of an ordinary plant sprayed by chemicals that mimic the mind-altering effects of marijuana. In September 2011, the DEA used its emergency scheduling authority to ban the sale of the chemicals used to manufacture K2 and Spice.

The following results are a summary of this year's Monitoring the Future** survey.

** Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (December 14, 2011). University of Michigan News Service: Ann Arbor, MI. Retrieved 12/28/11 from <http://www.monitoringthefuture.org>

Teen Smoking

"That cigarette use has declined to historically low rates is welcome news, given our concerns that declines may have slowed or stalled in recent years," said NIDA director Dr. Nora D. Volkow. "That said, the teen smoking rate is declining much more slowly than in years past, and we are seeing teens consume other tobacco products at high levels. This highlights the urgency of maintaining strong prevention efforts against teen smoking and of targeting other tobacco products."

The 2011 results showed that 18.7 percent of 12th-graders reported current (past-month) cigarette use, compared to a recent peak rate of 36.5 percent in 1997 and 21.6 percent five years ago. Only 6.1 percent of eighth-graders reported current smoking, compared to a recent peak of 21 percent in 1996 and 8.7 percent five years ago.

The proportion of students seeing a great risk of harm associated with being a smoker had been rising prior to and during the period of declining use, but leveled off in the past several years.

However, this year perceived risk associated with smoking rose in all three grades (significantly so in 10th grade). The proportion of teens saying that they disapprove of smoking had leveled recently, as well, but it also increased in

Positive Trends:

CIGARETTE USE

Compared to peak rates in the mid-to late 1990s, daily cigarette use is down significantly among all three grades, with 2.4 percent of 8th graders, 5.5 percent of 10th graders, and 10.3 percent of 12th graders reporting daily use. From 2010 to 2011, there were also significant declines in current cigarette use (use in the past 30 days) among 10th graders, down from 13.6% to 11.8%, and in smoking a half pack or more per day - now under 2%. Despite these continued decreases, the decline in smoking has slowed in recent years and these levels remain too high given the significant morbidity and mortality associated with tobacco use.

ALCOHOL USE

Likewise, five-year trends showed significant decreases in alcohol use among nearly all grades and across all prevalence periods. For example, binge use of alcohol (defined as 5 or more drinks in a row in the last two weeks) declined from 8.7% to 6.4% among 8th graders, 19.9% to 14.7% among 10th graders and 25.4% to 21.6% among high school seniors from 2006 to 2011. From 2010 to 2011, decreases were observed in lifetime, past year, daily, and binge use of alcohol among 10th graders; lifetime and past year use among 8th graders; and daily use among 12th graders.

STATISTICALLY SIGNIFICANT REDUCTIONS

A number of drug categories showed statistically significant reductions between 2010 and 2011 for some grades. These include the following declines:

- Past-year use of **Vicodin** among 10th graders (7.7% to 5.9%);
- Past-year use of **any illicit drug**, including inhalants, among 8th graders (20.3% to 18.2%);
- Past-year use of **inhalants** among 8th graders (8.1% to 7.0%); among 10th graders (5.7% to 4.5%);
- Past-year use of **crack cocaine** among 12th graders (1.4% to 1.0%);
- Past-year use of **amphetamines** among 10th graders (7.6% to 6.6%);
- Past-year use of **tranquilizers** among 8th graders (2.8% to 2.0%);
- Past-year use of **over-the-counter cough/cold medicine** among 12th graders (6.6% to 5.3%);

all three grades in 2011 (significantly so in 10th grade).

"This is very good news for the health and longevity of these young people," states Lloyd Johnston, the principal investigator of the study. "Even a reduction of only one percentage point can translate into thousands of premature deaths being prevented." More than 400,000 Americans per year are estimated to die prematurely as a result of their smoking cigarettes; and most smokers begin their habit in adolescence.

CIGARETTE USE

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Lifetime																		
8th Grade	46.1	46.4	49.2	47.3	45.7	44.1	40.5	36.6	31.4	28.4	27.9	25.9	24.6	22.1	20.5	20.1	20.0	18.4
10th Grade	56.9	57.6	61.2	60.2	57.7	57.6	55.1	52.8	47.4	43.0	40.7	38.9	36.1	34.6	31.7	32.7	33.0	30.4
12th Grade	62.0	64.2	63.5	65.4	65.3	64.6	62.5	61.0	57.2	53.7	52.8	50.0	47.1	46.2	44.7	43.6	42.2	40.0

CIGARETTE USE (continued)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
30-day use																			
8th Grade	18.6	19.1	21.0	19.4	19.1	17.5	14.6	12.2	10.7	10.2	9.2	9.3	8.7	7.1	6.8	6.5	7.1	6.1	
10th Grade	25.4	27.9	30.4	29.8	27.6	25.7	23.9	21.3	17.7	16.7	16.0	14.9	14.5	14.0	12.3	13.1	13.6	11.8	
12th Grade	31.2	33.5	34.0	36.5	35.1	34.6	31.4	29.5	26.7	24.4	25.0	23.2	21.6	21.6	20.4	20.1	19.2	18.7	
Daily use																			
8th Grade	8.8	9.3	10.4	9.0	8.8	8.1	7.4	5.5	5.1	4.5	4.4	4.0	4.0	3.0	3.1	2.7	2.9	2.4	
10th Grade	14.6	16.3	18.3	18.0	15.8	15.9	14.0	12.2	10.1	8.9	8.3	7.5	7.6	7.2	5.9	6.3	6.6	5.5	
12th Grade	19.4	21.6	22.2	24.6	22.4	23.1	20.6	19.0	16.9	15.8	15.6	13.6	12.2	12.3	11.4	11.2	10.7	10.3	

Alcohol Use

In general there has been a long-term decline in the use of alcohol by teens going back to the 1980s (Figure 15). The early- to mid-1990s saw a pause in this decline as their alcohol use rose for several years along with the use of cigarettes and many of the illicit drugs. However, a sustained further decline resumed in the latter half of the 1990s, similar to changes in use of cigarettes and a number of illegal drugs. This gradual decline in alcohol use continued into 2011, when all grades showed a further drop in all measures of alcohol use—lifetime, annual, 30-day, daily, and 5+ drinks on one or more occasions during the prior two weeks. For the three grades combined, the one-year declines in 2011 were statistically significant on all of these measures.

For alcohol, 63.5 percent of 12th-graders reported past year use, compared to a recent peak of 74.8 percent in 1997. Similarly, 26.9 percent of eighth-graders reported past year use of alcohol in 2011, compared to a recent peak rate of

46.8 percent in 1994. There also was a five-year decrease in binge drinking, measured as five or more drinks in a row in the past two weeks, across all three grades. Binge drinking was reported by 6.4 percent of eighth-graders, 14.7 percent of 10th-graders, and 21.6 percent of 12th-graders, down from the 2006 rates of 8.7 percent, 19.9 percent and 25.4 percent respectively.

"These are substantial changes in a long-established behavior in our culture," concludes Johnston, "and we believe that a number of factors have contributed to it." In the 1980s a number of states raised their minimum drinking age to twenty-one, which these researchers were able to demonstrate reduced drinking. But even among the states that already had an age 21 law, there was some decline in drinking, likely due in part to campaigns to reduce drunk driving and later to encourage the use of designated drivers. The dangers perceived to be associated with episodic heavy drinking grew in the 1980s, as did students' personal disapproval of such drinking. Both of these measures also rose in the 2000s, but more slowly.

ALCOHOL USE

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Lifetime use																			
8th Grade	55.8	54.5	55.3	53.8	52.5	52.1	51.7	50.5	47.0	45.6	43.9	41.0	40.5	38.9	38.9	36.6	35.8	33.1	
10th Grade	71.1	70.5	71.8	72.0	69.8	70.6	71.4	70.1	66.9	66.0	64.2	63.2	61.5	61.7	58.3	59.1	58.2	56.0	
12th Grade	80.4	80.7	79.2	81.7	81.4	80.0	80.3	79.7	78.4	76.6	76.8	75.1	72.7	72.2	71.9	72.3	71.0	70.0	
30-day use																			
8th Grade	25.5	24.6	26.2	24.5	23.0	24.0	22.4	21.5	19.6	19.7	18.6	17.1	17.2	15.9	15.9	14.9	13.8	12.7	
10th Grade	39.2	38.8	40.4	40.1	38.8	40.0	41.0	39.0	35.4	35.4	35.2	33.2	33.8	33.4	28.8	30.4	28.9	27.2	
12th Grade	50.1	51.3	50.8	52.7	52.0	51.0	50.0	49.8	48.6	47.5	48.0	47.0	45.3	44.4	43.1	43.5	41.2	40.0	
Been Drunk in last 30 days																			
8th Grade	8.7	8.3	9.6	8.2	8.4	9.4	8.3	7.7	6.7	6.7	6.2	6.0	6.2	5.5	5.4	5.4	5.0	4.4	
10th Grade	20.3	20.8	21.3	22.4	21.1	22.5	23.5	21.9	18.3	18.2	18.5	17.6	18.8	18.1	14.4	15.5	14.7	13.7	
12th Grade	30.8	33.2	31.3	34.2	32.9	32.9	32.3	32.7	30.3	30.9	32.5	30.2	30.0	28.7	27.6	27.4	26.8	25.0	

Marijuana

Marijuana use continued to rise among 10th and 12th graders this year for all prevalence periods (lifetime, past year, past 30-days, and daily use in the past 30-days). No one of these changes was large enough to be statistically significant, but they all continue the pattern of a gradual rise. Among 12th-graders, 36.4 percent reported past year use, and 6.6 percent reported daily use, up from 31.5 and 5 percent, respectively, five years ago.

A great concern is the rise in daily or near daily marijuana use, defined as use on 20 or more occasions in the prior 30 days. The rates of current daily marijuana use rose significantly in all three grades last year, and they rose slightly higher in all three grades again this year (though none of this year's changes were large enough to reach statistical significance); but here again, the increases since 2007 are highly significant at every grade level. Current daily prevalence levels in 2011 are 1.3%, 3.6%, and 6.6% in grades 8, 10, and 12.

The upward trend in teens' abuse of marijuana corresponded to downward trends in their perception of risk. For example, only 22.7 percent of high school seniors saw great risk in smoking marijuana occasionally, compared to 25.9 percent five years ago. Similarly, 43.4 percent of eighth-graders reported that they saw great risk in smoking marijuana occasionally, compared to 48.9 percent five years ago.



Concerns about the use of synthetic marijuana, known as K2 or spice, prompted its inclusion in the survey for the first time in 2011. Sometimes sold online, in head shops, convenience stores, or gasoline stations, synthetic marijuana is meant to mimic the effects of marijuana (cannabis), and it often contains synthetic cannabinoids that did not appear on the DEA's list of scheduled substances.

Surprisingly, 11.4 percent of 12th-graders reported past year use. "K2 and spice are dangerous drugs that can cause serious harm," said Gil Kerlikowske, director of National Drug Control Policy. "We will continue to work with the public health and safety community to respond to this emerging threat but in the meantime, parents must take action. Parents are the most powerful force in the lives of young people and we ask that all of them talk to their teens today about the serious consequences of using marijuana, K2, or spice."

MARIJUANA USE

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Lifetime																			
8th Grade	16.7	19.9	23.1	22.6	22.2	22.0	20.3	20.4	19.2	17.5	16.3	16.5	15.7	14.2	14.6	15.7	17.3	16.4	
10th Grade	30.4	34.1	39.8	42.3	39.6	40.9	40.3	40.1	38.7	36.4	35.1	34.1	31.8	31.0	29.9	32.3	33.4	34.5	
12th Grade	38.2	41.7	44.9	49.6	49.1	49.7	48.8	49.0	47.8	46.1	45.7	44.8	42.3	41.8	42.6	42.0	43.8	45.5	
Annual																			
8th Grade	13.0	15.8	18.3	17.7	16.9	16.5	15.6	15.4	14.6	12.8	11.8	12.2	11.7	10.3	10.9	11.8	13.7	12.5	
10th Grade	25.2	28.7	33.6	34.8	31.1	32.1	32.2	32.7	30.3	28.2	27.5	26.6	25.2	24.6	23.9	26.7	27.5	28.8	
12th Grade	230.7	34.7	35.8	38.5	37.5	37.8	36.5	37.0	36.2	34.9	34.3	33.6	31.5	31.7	32.4	32.8	34.8	36.4	
30-day use																			
8th Grade	7.8	9.1	11.3	10.2	9.7	9.7	9.1	9.2	8.3	7.5	6.4	6.6	6.5	5.7	5.8	6.5	8.0	7.2	
10th Grade	15.8	17.2	20.4	20.5	18.7	19.4	19.7	19.8	17.8	17.0	15.9	15.2	14.2	14.2	13.8	15.9	16.7	17.6	
12th Grade	19.0	21.2	21.9	23.7	22.8	23.1	21.6	22.4	21.5	21.2	19.9	19.8	18.3	18.8	19.4	20.6	21.4	22.6	

Anabolic Steroids

The annual prevalence of anabolic steroid use has declined by between 50% and 60% at all three grades from their recent peak levels in the early 2000s. There has been little systematic change in use since 2008. In 2011, the

proportions reporting any use of anabolic steroids in the past year were only 0.7%, 0.9%, and 1.2% in grades 8, 10, and 12, respectively. Among boys, who generally have had considerably higher use than girls, the rates in 2011 were 1.0%, 1.4%, and 1.8%.

STEROID USE

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Annual																		
8th Grade	1.2	1.0	0.9	1.0	1.2	1.7	1.7	1.6	1.5	1.4	1.1	1.1	0.9	0.8	0.9	0.8	0.5	0.7
10th Grade	1.1	1.2	1.2	1.2	1.2	1.7	2.2	2.1	2.2	1.7	1.5	1.3	1.2	1.1	0.9	0.8	1.0	0.9
12th Grade	1.3	1.5	1.4	1.4	1.7	1.8	1.7	2.4	2.5	2.1	2.5	1.5	1.8	1.4	1.5	1.5	1.5	1.2

Prescription Drugs

After marijuana, prescription and over-the-counter medications account for most of the top drugs abused by 12th graders in the past year. Prescription painkillers such as **OxyContin** as well as amphetamines such as **Ritalin** continue to remain at high levels.

Abuse of the opioid painkiller **Vicodin**—the most widely used of the narcotic drugs, most of which are analgesics—

was reported by 8.1 percent of 12th graders. These percentages are similar to 2010 and down from 9.7 percent in 2009. There was also a decline reported by 10th graders – to 5.9 percent from 7.7 percent in 2010. However, no such declines were seen for the opioid painkiller OxyContin.

Health Wave Publishing Company
 39 Davenport Street
 Stamford, CT 06902
 Tel: 203-975-7810 or
 800-374-7953
 Fax: 203-975-7946
 e-mail: hpwinfo@healthwaveinc.com



VICODIN USE

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Annual																		
8th Grade									2.5	2.8	2.5	2.6	3.0	2.7	2.9	2.5	2.7	2.1
10th Grade									6.9	7.2	6.2	5.9	7.0	7.2	6.7	8.1	7.7	5.9
12th Grade									9.6	10.5	9.3	9.5	9.7	9.6	9.7	9.7	8.0	8.1

OXYCONTIN USE

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Annual																		
8th Grade									1.3	1.7	1.7	1.8	2.6	1.8	2.1	2.0	2.1	1.8
10th Grade									3.0	3.6	3.5	3.2	3.8	3.9	3.6	5.1	4.6	3.9
12th Grade									4.0	4.5	5.0	5.5	4.3	5.2	4.7	4.9	5.1	4.9

RITALIN USE

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Annual																		
8th Grade								2.9	2.8	2.6	2.5	2.4	2.6	2.1	1.6	1.8	1.5	1.3
10th Grade								4.8	4.8	4.1	3.4	3.4	3.6	2.8	2.9	3.6	2.7	2.6
12th Grade								5.1	4.0	4.0	5.1	4.4	4.4	3.8	3.4	2.1	2.7	2.6