

Dec. 16, 2014

Contacts: Jared Wadley, (734) 936-7819, jwadley@umich.edu

EMBARGOED FOR RELEASE AT 12:01 A.M. ET, TUESDAY, DEC. 16, 2014

Note: Video explaining the results is available at http://youtu.be/9lpJO7j3k8U

Use of alcohol, cigarettes, and a number of illicit drugs declines among U.S. teens

ANN ARBOR—A national survey of students in U.S. middle schools and high schools shows some important improvements in levels of substance use.

Both alcohol and cigarette use in 2014 are at their lowest points since the study began in 1975. Use of a number of illicit drugs also show declines this year.

These findings come from the University of Michigan's Monitoring the Future study, which tracks trends in substance use among students in 8th, 10th and 12th grades. Each year the national study, now in its 40th year, surveys 40,000 to 50,000 students in about 400 secondary schools throughout the United States.

ALCOHOL

Alcohol use by the nation's teens continued its long-term decline in 2014. All three grades showed a decline in the proportion of students reporting any alcohol use in the 12 months prior to the survey; the three grades combined dropped from 43 percent to 41 percent, a statistically significant change.

"Since the recent peak rate of 61 percent in 1997, there has been a fairly steady downward march in alcohol use among adolescents," said Lloyd Johnston, the study's principal investigator. "The proportion of teens reporting any alcohol use in the prior year has fallen by about a third."

Of perhaps greater importance, the proportion of teens who report "binge drinking"—that is, consuming five or more drinks in a row at least once in the two weeks preceding the survey—fell significantly again this year to 12 percent for the three grades combined. This statistic is down from a recent high point of 22 percent in 1997. While this is an important improvement, say the investigators, still roughly one in five (19 percent) 12-graders report binge drinking at least once in the prior two weeks.

Some 12th-graders drink even more heavily, reporting having 10 or more, or 15 or more, drinks in a row on at least one occasion in the prior two weeks. Since 2005 (the first year that this "extreme binge drinking" was measured), these measures also have declined, from 11 percent to 7 percent in 2014 for 10 or more drinks, and from 6 percent to 4 percent for 15 or more drinks.

Peer disapproval of binge drinking has been rising since 2000 among teens. Declines in availability may be another contributing factor to the drops in teen drinking. In recent years, there has been a fair decline in all three grades in the proportion saying that alcohol is easy for them to get.

CIGARETTES

Cigarette smoking also reached historical lows among teens in 2014 in all three grades. For the three grades combined, 28 percent reported any smoking in the prior month in 1997, the recent peak year, but that rate was down to 8 percent in 2014.

"The importance of this major decline in smoking for the health and longevity of this generation of young people cannot be overstated," Johnston said.

As with alcohol, there has been a substantial reduction in the proportion of students who say cigarettes are easy for them to get, and this decline continued into 2014. Increasing disapproval of smoking also has accompanied the decline in use, as well as an increased perception that smoking carries a "great risk" for the user. However, there were only modest further increases in these factors in 2014.

ILLICIT DRUGS

A number of measures of illicit drug use showed declines in use this year. The greatest decline was in students' use of synthetic marijuana—a particularly dangerous class of abusable substances.

Synthetic marijuana (K-2, "Spice"), sold over the counter in many states—particularly in gas stations, convenience stores and head shops—has synthetic chemical components of marijuana sprayed onto shredded plant material that is then smoked. It is manufactured and sold in an unregulated system—often being imported from overseas—and it can be very potent and unpredictable in its effects. Side effects are many and are reported to be as severe as acute psychosis and heart attacks.

"Most students still do not recognize synthetic marijuana as a dangerous class of drugs, although the proportion of 12th-graders reporting it as dangerous to use did rise significantly in 2014," Johnston said. "Efforts at the federal and state levels to close down the sale of these substances may be having an effect."

The proportion of 12th-graders reporting use of synthetic marijuana in the prior 12 months has fallen by nearly half. It was 11 percent when first included in the survey in 2011 and was down to 6 percent in 2014.

"Bath Salts," another class of synthetic drugs sold over-the-counter and of particular concern a few years ago, also have declined in use, with the percentages of students in all three grades now down to less than 1 percent.

"Fortunately, students have come to see these synthetic stimulants as more dangerous, which they are, and that appears to have limited their use," Johnston said.

Substantial efforts to make them illegal probably have reduced their availability, but the availability of this drug is not measured in the study.

Marijuana use, after five years of increasing among teens, actually declined slightly in 2014, with use in the prior 12 months declining from 26 percent to 24 percent for the three grades combined.

"The belief that regular marijuana use harms the user, however, continues to fall among youth, so changes in this belief do not seem to explain the change in use this year, as it has done over most of the life of the study," Johnston said.

Personal disapproval of use is also down some in 8th and 12th grades. Reported availability, on the other hand, is down significantly since 2013 in the two lower grades (and unchanged in 12th grade), which may help to explain the modest decline in use this year.

Current daily or near-daily marijuana use—defined as use on 20 or more occasions in the prior 30 days—also declined some in 2014; nonetheless, it remains quite high. About one in every 17 high school seniors in 2014 (5.8 percent) is a current daily or near-daily marijuana user, which is down from 6.5 percent in 2013.

An index of using **any illicit drug other than marijuana** in the prior 12 months declined by 1.9 percent (not a statistically significant change) to 15.9 percent in 12th grade; but in 8th and 10th grades the prevalence was virtually unchanged and stood at 6.4 percent and 11.2 percent, respectively.

Ecstasy (MDMA) use showed a statistically significant decline in 2014. For the three grades combined use in the prior 12 months dropped from 2.8 percent in 2013 to 2.2 percent in 2014. In 2001, the peak year of use, the rate had reached 6 percent.

Salvia, another drug used for its hallucinogenic properties, has fallen to quite low levels of use, and it continued to fall significantly in 2014. For example, it was used in the prior 12 months by 5.7 percent of the 12th-graders in 2009 but by less than 2 percent in 2014.

Use of **hallucinogens other than LSD**, which for the most part involves the ingestion of hallucinogenic mushrooms (Psilocybin or "shrooms"), is continuing a longer-term decline. Availability of these drugs has been falling since 2001 and continued to decline in 2014.

Any prescription drug misuse includes use of narcotics, sedatives, tranquilizers, and/or amphetamines without medical supervision. It has been of considerable public health concern in recent years, because most of these drugs showed a substantial increase in use in the 1990s, which then continued into the first decade of the 2000s, when many of the illegal drugs already were in decline.

Only 12th-graders report on their use of all of these drugs; they show a statistically significant decline between 2013 and 2014, from 16 percent to 14 percent, saying that they used one or more of these prescription drugs in the 12 months prior to the survey. The gradual turnaround began after 2005, when 17 percent indicated misuse of any of these drugs.

"It's not as much progress as we might like to see, but at least the number of students using these dangerous prescription drugs is finally declining," Johnston said.

Narcotic drugs other than heroin—among the most dangerous of the prescription drugs—have been declining in use by 12th-graders since 2009, when 9 percent indicated using them without medical supervision in the prior 12 months. Their use continued to drop significantly, from 7 percent in 2013 to 6 percent in 2014. Use of these drugs is reported only for 12th grade; students are reporting that these drugs are increasingly difficult to obtain.

Use in the prior 12 months of the specific narcotic analgesic *OxyContin* also declined this year, significantly so in 8th grade. OxyContin use reached a recent peak among adolescents around 2009 and use has declined since then in all three grades. The 2014 reports of use in the past 12 months stand at 1.0 percent, 3.0 percent and 3.3 percent in grades 8, 10 and 12, respectively.

Cough and cold medicines constitute a class of drugs available over-the-counter in most drug stores. These medicines usually contain the drug dextromethorphan which, when taken in large quantities, as teens sometimes do to get high, can be dangerous. Abuse of these drugs has been falling among teens since 2006 and declined significantly again in 2014, with annual prevalence declining from 4.0 percent to 3.2 percent for the three grades combined.

Use of a number of the **other illicit drugs** remained essentially unchanged between 2013 and 2014, including some particularly dangerous ones like **heroin**, **crack**, **methamphetamine** and **crystal methamphetamine**. Other drugs for which use remained unchanged in 2014 include **Ritalin** and **Adderall**—both stimulants used in the treatment of ADHD—as well as **LSD**, **inhalants**, **powder cocaine**, **tranquilizers**, **sedatives** and **anabolic steroids**. However, most of these drugs are now well below their recent peak levels of use according to the investigators.

"In sum, there is a lot of good news in this year's results, but the problems of teen substance use and abuse are still far from going away," Johnston said. "We see a cyclical pattern in the 40 years of observations made with this study. When things are much improved is when the country is most likely to take its eye off the ball, as happened in the early 1990s, and fail to deter the incoming generation of young people from using drugs, including new drugs that inevitably come along."

Tables and figures associated with this release may be accessed at: http://monitoringthefuture.org/data/data.html

#

Monitoring the Future has been funded under a series of competing, investigator-initiated research grants from the National Institute on Drug Abuse, one of the National Institutes of Health. The lead investigators, in addition to Lloyd Johnston, are Patrick O'Malley, Jerald

Bachman, John Schulenberg, and most recently Richard Miech—all research professors at the University of Michigan's Institute for Social Research.

Surveys of nationally representative samples of American high school seniors were begun in 1975, making the class of 2014 the 40th such class surveyed. Surveys of 8th- and 10th-graders were added to the design in 1991, making the 2014 nationally representative samples the 24th such classes surveyed. The 2014 samples total 41,551 students located in 377 secondary schools. The samples are drawn separately at each grade level to be representative of students in that grade in public and private secondary schools across the coterminous United States.

The findings summarized here will be published in January in a forthcoming volume: Johnston, L. D., O'Malley, P. M., Miech, R.A., Bachman, J. G., & Schulenberg, J. E. (2015). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2014.* Ann Arbor, Mich.: Institute for Social Research, the University of Michigan. The content presented here is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute on Drug Abuse or the National Institutes of Health.

This year's findings on the use of e-cigarettes are presented in a separate companion news release: http://monitoringthefuture.org/press.html