

THE FACTS

About Drug Abuse

May 2014

Study Finds Brain Changes in Marijuana Users

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Young adults who occasionally smoke marijuana show abnormalities in two key areas of their brain related to emotion, motivation, and decision making, raising concerns that they could be damaging their developing minds at a critical time, according to a new study by Boston researchers.

Other studies have revealed brain changes among heavy marijuana users, but this research is believed to be the first to demonstrate such abnormalities in young, casual smokers.

The Boston scientists also found that the degree of brain changes appeared to be directly related to the amount participants smoked per week. Researchers did not study whether those changes were linked to

corresponding declines in brain function, but lead author Jodi Gilman, a psychology instructor at Harvard Medical School and a brain scientist at Massachusetts General Hospital, said such abnormalities in young brains are reason for concern.

"This is when you are making major decisions in your life, when you are choosing a major, starting a career, making long-lasting friendships and relationships," Gilman said.

The findings, published in the *Journal of Neuroscience*, come amid an increased debate about the long-term effects of marijuana, as a growing number of states legalize the drug for medicinal and recreational use.

Forty Boston-area young adults aged 18 to 25, many from Boston



University, were selected for the study. Researchers used scans to measure the volume, shape, and density of two regions of the brain — the nucleus accumbens and the amygdala.

Half of the group said they used marijuana at least once a week, and the other 20 had not used the drug in the past year, and reported using it less than five times in their life. Among the group that did smoke, the median use was about six joints per week.

To read the full article, visit: <http://www.bostonglobe.com/lifestyle/health-wellness/2014/04/15/casual-marijuana-use-creates-brain-changes-new-report-shows/XIcN8A7h5pOVJkeYkXTXIJ/story.html>

DRUG STATISTICS

1 in 20 Americans aged 12 and older have misused prescription painkillers.

In 2013, 36.4% of high school seniors used marijuana in the past year.

- Centers for Disease Control and Prevention & National Institute on Drug Abuse

Dear Colleagues,

Another school year is ending, excited graduates are tossing hats in the air and perhaps equally excited teachers are looking forward to some well deserved rest and recharging. I remember it well. More schools, colleges and fraternities than ever before joined with Psychemedics this past year to arm their students to make better decisions about drug use. The results have been gratifying and lives have been saved. Yes, drug use is increasing dramatically and new substances in all sorts of forms are luring our future leaders into unhealthy and illegal behavior; **but not in our schools!** Our powerful patented science makes accountability possible by providing a deterrent that works!

We are seeing new models of implementation like the three schools in Cleveland (page 3) announcing together that they will be testing all students in the fall. Please understand that these three schools compete against each other for students, academic achievements, test scores, victories and championships. However, when it comes to the health and wellness of their students, they are of one mind: drugs have no place in their schools and excellence and bright futures simply don't fit with substance abuse, addiction and illegal behavior. We are also seeing more public schools joining the ranks of our drug free schools and making huge impacts in communities all across America.

Have a great summer and I look forward to visiting with you soon!

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Dr. George Elder,
Vice President, Schools & Colleges

DRUGS IN THE NEWS

Two States to Consider Banning Powdered Alcohol

Legislators in Minnesota and Vermont have introduced measures that would ban powdered alcohol. The federal Alcohol and Tobacco Tax and Trade Bureau approved labels for a powdered alcohol product called “Palcohol,” but earlier this month said the approval was a mistake. Lipsmark, the company that makes Palcohol, has resubmitted an application, the article notes.



Lipsmark says it plans to offer powdered alcohol in six varieties, including rum, vodka, Cosmopolitan, Mojito, Powderita and Lemon Drop. According to the company, a package of Palcohol weighs about an ounce and can fit into a pocket. It warns people not to snort the powder.

Minnesota state Representative Joe Atkins this week introduced a bill that would ban powdered alcohol sales in his state. A similar bill is being considered in Vermont. Some health experts are afraid the product could be easily misused or abused.

“Virtually every possible use for powdered alcohol is nefarious, not to mention potentially dangerous,” Atkins said in a news release. “The different flavorings make it appealing to children and students who could easily sneak packets into school. This powder could also be inhaled or snorted, bringing a whole new world of problems into play. With how quickly this is moving, we shouldn’t wait until next session to deal with this issue. We need to move quickly to protect public health.”

Vermont state Senator Kevin Mullin, who introduced the measure to ban powdered alcohol in his state, told VPR News, “You can’t buy a bottle of gin at the liquor store if you’re 16. But there’s nothing that I can see in Vermont statute that would prohibit you from buying powdered alcohol, if it was available. So think about kids walking around with packets of powdered alcohol in their pocket – hard to detect.”

<http://www.drugfree.org/join-together/alcohol/two-states-to-consider-banning-powdered-alcohol>



DID YOU KNOW??

Rapper Macklemore Takes on Prevention

A famous rapper (his “Thrift Shop” single reached #1 on the US Billboard Hot 100 chart in 2013) is helping make prevention cool. Macklemore is a 30-year old male artist with a history of drug and alcohol use. Instead of bragging about it, he is using his music to warn young people about addiction and to learn from his mistakes. Macklemore tells teens that they don’t need to use drugs to live out their dreams or emulate their idols - unfortunately, far more drug users become addicts than famous musicians.



SPOTLIGHT ON...



Gilmour Academy, St. Edward and St. Ignatius are Catholic high schools in Cleveland, OH.

Drug Testing for all Students to Begin at 3 Local High Schools

(The following article was recently published on Cleveland.com.)

CLEVELAND, Ohio -- Students at three area Catholic high schools found out that they will each have to part with a bit of their hair for drug testing when they return to class in the fall.

The testing will affect about 340 students at Gilmour, nearly 980 students at St. Ed's and more than 1,500 students at St. Ignatius.

The timing of the announcement - with just a few weeks remaining before summer vacation - is not accidental. School officials say they're giving students who need it plenty of time to clean up their act.

Hair analysis can detect drug use from as long as three months ago.

The drug testing is not meant to be punitive, school officials said. Rather, it is a wellness initiative meant to connect students who are using or abusing illegal drugs and prescription medications with the appropriate assessment, counseling and treatment – and to keep other

students from experimenting.

In separate interviews, school leaders all cited the heroin epidemic in Northeast Ohio as the impetus for the testing, which will continue on a random basis throughout the school year. Discussions about mandatory drug testing have been in the works for nearly two years.

The leaders also said they hope the new initiative will give students a useful tool to wield against societal and peer pressure.

In the fall of 2012, St. John's Jesuit High School & Academy in Toledo began testing its students and staff.

It's one of more than 200 schools that have retained the services of Boston-based Psychemedics Corp., the company that will conduct drug testing for Gilmour, St. Ed's and St. Ignatius. It is the world's largest provider of hair testing for the detection of drugs.

Among Psychemedics' other clients are schools in Florida, Kansas, Nebraska and

'The most powerful thing to me is that this gives a kid a legitimate chance to say no.'

- St. Edward's President

the entire diocese of Peoria, Illinois. College clients include the University of Notre Dame's athletic department. Near Youngstown, the Boardman school district is also considering mandatory drug testing for every student on a sports team or who drives to school.

Mandatory, random drug testing will be new for the more than 1,500 students at St. Ignatius on Cleveland's West Side, but drug testing itself is not, said the Rev. William Murphy, the school's president.

"Sometimes a parent will ask us to help test [their child]," he said. "Sometimes a student's behavior will encourage us ... but this hasn't happened very often."

Article Link: <http://tinyurl.com/lhoycwn>

LAKE HIGHLAND PREP TOUTS DRUG TESTING RESULTS

(Orlando Sentinel)

Since starting drug testing this fall, Lake Highland Preparatory School in Orlando has conducted nearly 1,700 tests and found nine violations, said school President Warren son.

"We feel we have changed student behavior," Hudson said. The drug tests, he said, have "empowered students who want to avoid drugs with a perfect excuse."

The nine violations do not include students whose screens turned up prescription drugs that could be matched with valid prescriptions.

The school started testing its about 1,200 students in grades 7 to 12 this fall in concert with a drug education program. In addition to a test of all seventh- to 12th-graders at the beginning of the year, students have been randomly chosen six times for tests during the year. The school takes hair samples that give a 90-day history of drug use for a slate of about 18 illegal drugs.



Lake Highland Preparatory School is the largest private school in Orlando

*Superior Detection
of Drug Abuse*

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Why Choose Psychemedics?

Psychemedics Corporation is the world's largest provider of hair testing for drugs of abuse and has been successfully operating for over 25 years. The Company serves schools and colleges around the world, and thousands of corporations, nationally and internationally, rely on the patented Psychemedics drug testing services. Psychemedics' clients include over 10% of the Fortune 500, many of the largest police departments both domestic and global, and six Federal Reserve Banks. Our team of experts stand ready to help through every step: policy development, communication, implementation and sustainability.

Since 1987, Psychemedics has offered the most effective hair testing technology, based upon scientifically validated drug testing methods. All hair testing is not the same – our patented technology uses a unique process to release the drugs trapped in the hair without destroying the drugs and removes virtually 100% of the drugs from the hair. Our patent is fundamental to hair analysis drug testing because if you cannot get all the drugs out of the hair, you cannot accurately measure them; and if you cannot accurately measure the drugs, you cannot identify all of the drug users. This patented technology provides superior detection of drugs of abuse, and is what sets us apart.

The Psychemedics web site is www.psychemedics.com