

# MARIJUANA AND KIDS

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## *Fact Sheet*

Marijuana is the most widely used illicit drug among America's youth.<sup>1</sup> Among kids who use drugs, approximately 60 percent use only marijuana.<sup>2</sup> In 2001, about two-thirds (67%) of new marijuana users were under the age of 18. This proportion has generally increased since the 1960s, when less than half of initiates were under 18.<sup>3</sup> While marijuana use among teens declined in the last year, the number of eighth graders who tried marijuana doubled between 1991 and 2001—from one in ten to one in five.<sup>4</sup> From 2001 to 2003, current marijuana use declined 11 percent. This is the first decline in youth drug use of such a magnitude in more than a decade.<sup>5</sup>

### **Effects on the Brain and Mental Health**

Prolonged use of marijuana leads to some of the same changes in the brain as cocaine, heroin and alcohol.<sup>6</sup> Researchers have found that heavy marijuana use impairs the ability of young people to concentrate and retain information.<sup>7</sup> This may be especially problematic during peak learning years, when their brains are still developing. In one study, adolescents attributed their own attention problems to marijuana use.<sup>8</sup>

Marijuana can also increase anxiety, panic attacks and depression while exacerbating symptoms in people already prone to those problems.<sup>9</sup> Adolescents in one study associated anxiety, depression and thoughts of suicide with their own marijuana use in the past year.<sup>10</sup>

### **Other Health Effects**

Smoking marijuana causes many of the same respiratory complications as smoking tobacco, including daily cough and phlegm (symptoms of chronic bronchitis), frequent chest colds, and increased risk for lung infection, tissue damage and cancer.<sup>11</sup> Regardless of THC content, the amount of tar and carbon monoxide delivered to the lungs is approximately three to five times greater for marijuana smoke than tobacco smoke.<sup>12</sup> This is largely due to differences in the method of smoking tobacco and marijuana, such as larger puff volumes and longer durations of inhalation with marijuana. Some experts have linked marijuana use to a weakened immune system, which could impact the body's ability to resist viruses, bacteria, fungi and other microbes, thereby increasing risk for infections among youth.<sup>13</sup>

Marijuana also negatively affects the skills required to drive safely: alertness, the ability to concentrate, coordination and the ability to react quickly.<sup>14</sup> This increases the likelihood of crashes due to reckless driving, which may cause injury to the driver or other victims. A roadside study of reckless drivers who were not impaired by alcohol found that 45 percent tested positive for marijuana.<sup>15</sup>

### **Effects on Academic Achievement**

In addition to the negative mental health effects, one study found an association between an increase in adolescent marijuana use and a decrease in the likelihood of attaining at least a high school education.<sup>16</sup> Research has also found that youths with an average grade of "D" or below were more than four times as likely to have used marijuana in the past year as youth who reported an average grade of "A."<sup>17</sup> Marijuana use also contributes to increased absenteeism. Students who have smoked marijuana within the past year are more than twice as likely to cut class than those who did not smoke, while health problems associated with using marijuana can keep students from attending school due to illness.<sup>18,19</sup>

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Many schools now impose zero-tolerance policies for drugs, mandating serious consequences for drug possession or use, including suspension and/or expulsion.<sup>20</sup>

## Effects on Behavior and Risk Taking

A recent study found that early adolescent marijuana use correlated with future deviant behavior, including dropping out of school, taking risks and behaving violently.<sup>21</sup> Studies show that adolescents between the ages of 12 and 17 who use marijuana weekly are nearly four times more likely to engage in violence than those who do not, and are more prone to behaviors that include destruction of property, stealing and physical violence against others.<sup>22</sup> In fact, marijuana was the most commonly used drug among juvenile male and female detainees in 1999.<sup>23</sup> Adolescent marijuana use is also associated with social withdrawal, increased delinquency, rebelliousness and poorer family relationships.<sup>24,25</sup> According to the National Center on Addiction and Substance Abuse at Columbia University, teens who use drugs are five times more likely to have sex than are those teens who do not use drugs. Teens who have used marijuana are four times more likely to have been pregnant or to have gotten someone pregnant than teens who have never smoked pot.<sup>26</sup>

## Dependency and Addiction

Research now shows that marijuana can be addictive.<sup>27</sup> A recent study found that when abstaining from marijuana for just three days, regular users experienced withdrawal symptoms, including drug cravings, decreased appetite, sleep difficulty and weight loss, along with increased aggression, anger, irritability and restlessness.<sup>28</sup> Teens are especially at risk for addiction because they generally become addicted to substances faster than adults and rarely receive early intervention because signs of their drug use are frequently passed off as typical teenage behavior. Research shows that marijuana use is three times more likely to lead to dependence among adolescents than among adults.<sup>29</sup>

More kids enter drug treatment for marijuana abuse than for all other illicit drugs combined.<sup>30</sup> In fact, 60 percent of teens in drug treatment are dependent on marijuana.<sup>31</sup> Of all the people entering treatment for marijuana in 1999, more than half first used the drug by the age of 14.<sup>32</sup>

## Today's Marijuana

Today's marijuana is more potent and its effect can be more intense. Research shows that levels of THC (the active ingredient in marijuana) rose from under one percent in the mid-1970s to more than seven percent in 2002. Sinsemilla potency also increased, rising from six percent to more than 14 percent in 2002. Studies have found THC levels of more than 30 percent in some grades due to refined cultivation techniques.<sup>33</sup>

## Prevention

Despite overwhelming evidence suggesting marijuana is dangerous to youth, fewer than one-third (30 percent) of 12<sup>th</sup> graders believe occasional marijuana use is harmful and nearly 40 percent of teens associated smoking marijuana with popularity.<sup>34,35</sup> The drug is also highly accessible to youth, as more than 88 percent of 12<sup>th</sup> graders say that marijuana is "fairly" or "very" easy to obtain.<sup>36</sup>

Parents remain the most important influence on children when it comes to drugs. Two-thirds of youth ages 13-17 say losing their parents' respect is one of the main reasons they don't smoke marijuana or use other drugs.<sup>37</sup> It is important for parents to send a clear message, as parents who express strong

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disapproval of drug use and who do not use any substances themselves decrease the likelihood that their child will use marijuana.<sup>38</sup>

Research shows that parents who consistently set down rules and expectations for their children's behavior decrease their child's risk for substance abuse.<sup>39</sup> In 2001, only 5.5 percent of youth ages 12-17 who indicated that their parents would strongly disapprove if they tried marijuana once or twice had used marijuana in the past month, while 30.2 percent of youth whose parents would only somewhat disapprove or neither approve nor disapprove of their trying marijuana reported using the drug in the past month.<sup>40</sup>

## SOURCES:

<sup>1</sup> *National Survey on Drug Use and Health, 2002*

<sup>2</sup> *National Household Survey on Drug Abuse, 2000.*

<sup>3</sup> *National Survey on Drug Use and Health, 2002.* <http://www.samhsa.gov/oas/NHSDA/2k2NSDUH/Results/2k2results.htm#chap6>

<sup>4</sup> Johnston, LD, O'Malley, PM, Bachman, JG. (2002). *Monitoring the Future, National Results on Adolescent Drug Use: Overview of key findings, 2001.* National Institute on Drug Abuse.

<sup>5</sup> *Monitoring the Future. NIDA, 2003.*

<sup>6</sup> *Marijuana: Facts Parents Need to Know*, Revised, NIDA, November 1998

<sup>7</sup> *Infifax: Marijuana.* (Revised October 2001). National Institute on Drug Abuse (NIDA). [Online: <http://www.nida.nih.gov/Infifax/marijuana.html>.]

<sup>8</sup> "Press Release: Federal Study Links Wide Range of Behavior Problems to Marijuana Use By Teens." (1998). Substance Abuse and Mental Health Services Administration (SAMHSA). [Online: <http://www.samhsa.gov/press/980922fs.htm>.]

<sup>9</sup> *NewsScan*, January 2001. National Institute on Drug Abuse (citing a study published in the January 2001 *New York State Psychologist*).

<sup>10</sup> "Press Release: Federal Study Links Wide Range of Behavior Problems to Marijuana Use By Teens."

<sup>11</sup> *Infifax: Marijuana.*

<sup>12</sup> *Infifax: Marijuana.*

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<sup>14</sup> *Marijuana: Facts for Teens.* (updated 2001). National Institute on Drug Abuse (NIDA). [Online: <http://www.drugabuse.gov/MarijBroch/Marijteenstxt.html>.]

<sup>15</sup> Dan Brookoff, et al., *New England Journal of Medicine*, 331:518-522, 1994.

<sup>16</sup> Judith S. Brook, Elinor B. Balka and Martin Whiteman, "The risks for late adolescence of early adolescent marijuana use," *American Journal of Public Health*, October 1999.

<sup>17</sup> *Marijuana Use Among Youths, The National Household Survey on Drug Abuse Report*, July 19, 2002.

<sup>18</sup> *Analyses of Substance Abuse and Treatment Need Issues Analytic Series A-7.* (1998). Office of Applied Studies, Substance Abuse and Mental Health Services Administration. U.S. Department of Health and Human Services.

<sup>19</sup> *Infifax: Marijuana.*

<sup>20</sup> *Malignant Neglect: Substance Abuse and America's Schools.* (September 2001). The National Center on Addiction and Substance Abuse at Columbia University. [Online at: [http://www.casacolumbia.org/usr\\_doc/malignant.pdf](http://www.casacolumbia.org/usr_doc/malignant.pdf).]

<sup>21</sup> Brook, J. S., Balka, E. B., and Whiteman, M. (1999). The risks for late adolescence of early adolescent marijuana use. *American Journal of Public Health*, 89, 1549-1554.

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<sup>23</sup> 1999 Annual Report on Drug Use Among Adults and Juvenile Arrestees. (June 2000). Arrestee Drug Abuse Monitoring (ADAM) program. National Institute of Justice. [Online: <http://adam-nij.net/files/INTO.PDF>.]

<sup>24</sup> "Press Release: Federal Study Links Wide Range of Behavior Problems to Marijuana Use By Teens."

<sup>25</sup> *Infifax: Marijuana.*

<sup>26</sup> *Dangerous Liaisons: Substance Abuse and Sex*, CASA, Columbia University, December 1999.

<sup>27</sup> *Marijuana: Facts for Teens*

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<sup>29</sup> "Cannabis Youth Treatment Randomized Field Experiment. Preliminary report, U.S. Department of Health and Human Services, 2002.

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<sup>31</sup> *Treatment Episode Data Set (TEDS): 1994-1999.* (2001).

<sup>32</sup> *Treatment Episode Data Set (TEDS): 1994-1999.* (2001).

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<sup>40</sup> *National Survey on Drug Use and Health, 2002.* <http://www.samhsa.gov/oas/NHSDA/2k2NSDUH/Results/2k2results.htm#chap7>