

TEEN MARIJUANA USE WORSENS DEPRESSION:

AN ANALYSIS OF RECENT DATA
SHOWS "SELF-MEDICATING" COULD
ACTUALLY MAKE THINGS WORSE



**OFFICE OF NATIONAL DRUG CONTROL POLICY
EXECUTIVE OFFICE OF THE PRESIDENT**

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TEEN MARIJUANA USE WORSENS DEPRESSION

An Analysis of Recent Data Shows “Self-Medicating” Could Actually Make Things Worse

Millions of American teens* report experiencing weeks of hopelessness and loss of interest in normal daily activities, and many of these depressed teens are making the problem worse by using marijuana and other drugs. Some teens use marijuana to relieve the symptoms of depression (“self-medicate”), wrongly believing it may alleviate these depressed feelings. In surveys, teens often report using marijuana and other drugs not only to relieve symptoms of depression, but also to “feel good,” or “feel better,” to relieve stress, and help them cope.

However, recent studies show that marijuana and depression are a dangerous combination. In fact, using marijuana can **worsen depression** and lead to more serious mental health disorders, such as schizophrenia, anxiety, and even suicide. Weekly or more frequent use of marijuana **doubles** a teen’s risk of depression and anxiety. Depressed teens are more than **twice as likely** as their peers to abuse or become dependent on marijuana.

Alarming, the majority of teens who report feeling depressed aren’t getting professional help. They have not seen or spoken to a medical doctor or other professional about their feelings. For parents, this means they need to pay closer attention to their teen’s behavior and mood swings, and recognize that marijuana and other drugs could be playing a dangerous role in their child’s life.

* In this report, references to “teens,” “youth,” and “children” include youth ages 12 to 17 unless otherwise noted.

¹ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Pg. 160. URL: <http://www.oas.samhsa.gov/nsduh/2k6nsduh/2k6results.pdf>. References to “depression” and “depressed teens” in this report fall under the definition of Major Depressive Episode. Full definition can be found at the end of this report.

² Patton, GC et al. Cannabis use and mental health in young people: cohort study. *British Medical Journal*, 325:1195-1198, 2002.

³ 2006 National Survey on Drug Use and Health, SAMHSA, 2007, Table 6.36B. URL: <http://www.oas.samhsa.gov/NSDUH/2k6nsduh/tabs/Sect6peTabs36to37.pdf>.

⁴ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Pg. 8. URL: <http://www.oas.samhsa.gov/nsduh/2k6nsduh/2k6results.pdf>.

Executive Summary

Two million teens report feelings of depression and loss of interest in daily activities during the past year.

Depressed teens are twice as likely as non-depressed teens to use marijuana and other illicit drugs.

Depressed teens are more than twice as likely as their peers to abuse or become dependent on marijuana.

Using marijuana can cause depression and other mental illnesses.

Marijuana use can worsen depression and lead to more serious mental illnesses such as schizophrenia, anxiety, and even suicide.

Teens who smoke marijuana at least once a month are three times more likely to have suicidal thoughts than non-users.

The percentage of depressed teens is equal to the percentage of depressed adults, but depressed teens are more likely than depressed adults to use marijuana and other drugs.

Teen girls who use marijuana daily are more likely than girls who do not use marijuana to develop depression.

Drugs and Depression

According to recent national surveys, two million youths (8%) felt depressed at some point in the course of a year.⁵ Another survey of high school students shows that percentage even higher (29%).⁶

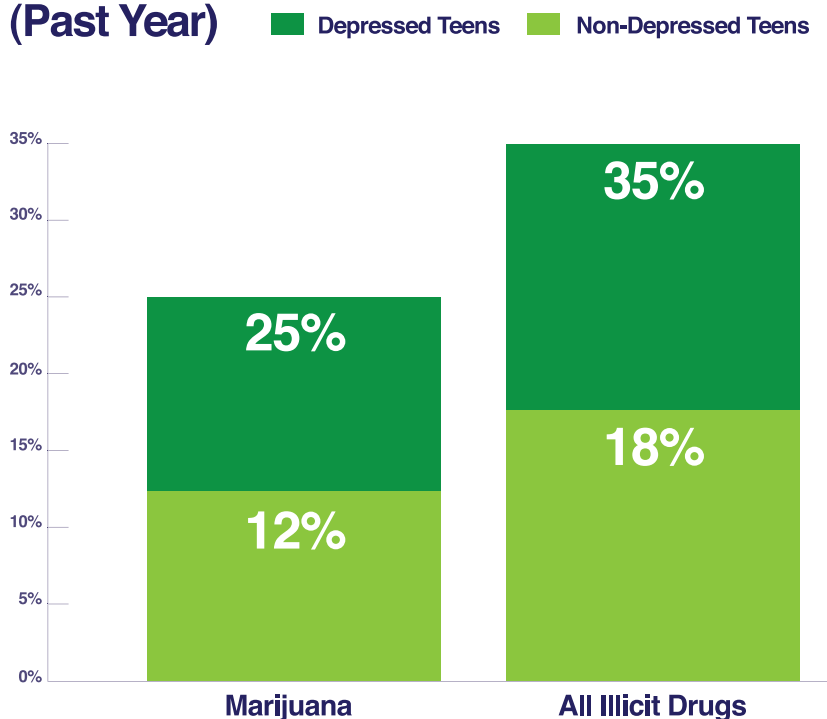
There are indications that many teens are using drugs to “self-medicate” (deal with problems of depression and anxiety by using drugs to alleviate the symptoms). Many teens say they use drugs to “make them feel good” or “feel better.”

However, research shows that using marijuana and other illicit drugs puts a teen at even greater risk for more serious mental illnesses. A teen who has been depressed at some point in the past year is more than **twice as likely** to have used marijuana (25%)

as teens who have not reported being depressed (12%). Similarly, 35 percent of depressed teens used an illicit drug (including marijuana) during the year, compared to 18 percent of teens who did not report being depressed.⁷

Depressed teens are more likely to engage in other risky behaviors, as well. They are more likely than non-depressed teens to report daily cigarette use (5% vs. 3%) and heavy alcohol use (5% vs. 2%).⁸

Marijuana and Illicit Drug Use among Depressed versus Non-Depressed Teens (Past Year)



Source: National Survey on Drug Use and Health, SAMHSA 2007

⁵ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Pg. 8. URL: <http://www.oas.samhsa.gov/nsduh/2k6nsduh/2k6results.pdf>.

⁶ Youth Risk Behavior Surveillance System, 2005. Centers for Disease Control and Prevention, 2006. Pg. 9. URL: <http://www.cdc.gov/mmwr/PDF/SS/SS5505.pdf>.

This survey defines depression as teens who felt so sad or hopeless almost every day for >2 weeks in a row that they stopped doing some usual activities.

⁷ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Table 6.34B. URL: <http://www.oas.samhsa.gov/NSDUH/2k6nsduh/tabs/Sect6peTabs34to35.pdf>.

⁸ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Table 6.34B. URL: <http://www.oas.samhsa.gov/NSDUH/2k6nsduh/tabs/Sect6peTabs34to35.pdf>.

Link Between Marijuana Use, Depression, and Other Mental Health Problems

Teens who use marijuana can end up making tough times worse. Mental health risks associated with recent and long-term marijuana use include schizophrenia, other forms of psychosis, and even suicide. Recent research makes a strong case that cannabis smoking itself may be a causal agent in psychiatric symptoms, particularly schizophrenia.

Research shows that teens who smoke marijuana at least once a month in the past year are three times more likely to have suicidal thoughts than non-users during the same period.⁹ Yet another study found that marijuana use was associated with depression, suicidal thoughts, and suicide attempts.¹⁰ One 16-year study showed that individuals who were not depressed and then used marijuana were four times more likely to be depressed at follow up.¹¹ Another study conducted over a 14-year period found that marijuana use was a predictor of later major depressive disorder.¹²

An extensive analysis of longitudinal studies on marijuana use and risk of mental illness later in life showed that marijuana use increases the risk of developing mental disorders by 40 percent. The risk of psychosis increases with frequency of marijuana use, from 50 to 200 percent among frequent users. The authors conclude that “there is now sufficient evidence to warn young people that using cannabis

could increase their risk of developing a psychotic illness later in life.”¹³

Other studies also show a strong relationship between marijuana and schizophrenia. A study from New Zealand showed “a clear increase in rates of psychotic symptoms after the start of regular use” of marijuana.¹⁴ Another 21-year longitudinal study showed that marijuana use was associated with psychotic symptoms and suggested a causal relationship.¹⁵ A study published in *Schizophrenia Research* found that cannabis use seems to be a specific risk factor for future psychotic symptoms.¹⁶

Another study of young adults from birth to age 21 found a relationship between early initiation and frequent use of cannabis and symptoms of anxiety and depression, regardless of a history of mental illness.¹⁷

Teens who smoke marijuana when feeling depressed are also more likely to become addicted to marijuana or other illicit drugs. Eight percent of depressed teens abused or became dependent on marijuana during the year they experienced depression, compared with only three percent of non-depressed teens.¹⁸ Overall, more teens are in treatment for marijuana dependence than for any other illicit drug.¹⁹

⁹ Greenblatt, J. Adolescent self-reported behaviors and their association with marijuana use. Substance Abuse and Mental Health Services Administration (SAMHSA), 1998. URL: <http://www.oas.samhsa.gov/NHSDA/Treatan/treana17.htm>.

¹⁰ Fergusson, DM et al. Cannabis use and psychosocial adjustment in adolescence and young adulthood. *Addiction* 97:1123-1135, 2002. URL: <http://www.chmeds.ac.nz/research/chds/publications/2002/adjustment.pdf>.

¹¹ Bovasso, GB. Cannabis abuse as a risk factor for depressive symptoms. *The American Journal of Psychiatry*, 158:2033-2037, 2001.

¹² Brook, DW et al. Drug use and the risk of major depressive disorder, alcohol dependence, and substance use disorders. *Archives of General Psychiatry*, 59:1039-1044, 2002. URL: <http://archpsyc.highwire.org/cgi/content/full/59/11/1039>.

¹³ Moore, T et al. Cannabis use and risk of psychotic or affective mental health outcomes: a systemic review. *The Lancet*, Vol. 370: 319-328, 2007.

¹⁴ Fergusson, DM et al. Tests of causal linkages between cannabis use and psychotic symptoms. *Addiction*, 100, 3:354-366, 2005. URL: <http://www.chmeds.ac.nz/research/chds/publications/2005/symptoms.pdf>.

¹⁵ Fergusson, DM et al. Cannabis dependence and psychotic symptoms in young people. *Psychological Medicine*, 33:15-21, 2003. URL: <http://www.chmeds.ac.nz/research/chds/publications/2003/cannabis.pdf>.

¹⁶ Ferdinand, RF et al. Cannabis--psychosis pathway independent of other types of psychopathology. *Schizophrenia Research*, 79(2-3):289-95, 2005.

¹⁷ Hayatbakhsh, MR et al. Cannabis and anxiety and depression in young adults: a large prospective study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46(3):408-17, 2007.

¹⁸ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Table 6.36B. URL: <http://www.oas.samhsa.gov/NSDUH/2k6nsduh/tabs/Sect6peTabs36to37.pdf>.

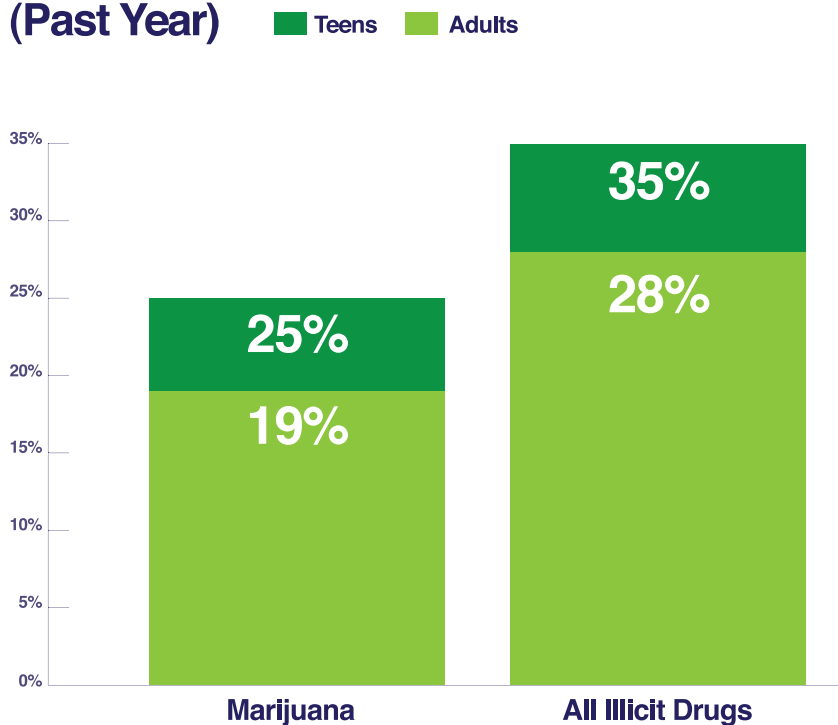
¹⁹ 2005 Treatment Episode Data Set (TEDS), SAMHSA, 2008. URL: <http://www.dasis.samhsa.gov/web/quicklink/US05.htm>.

Depressed Teens More Likely To Use Drugs than Depressed Adults

The percentage of teens reporting being depressed is similar to the percentage of adults reporting depression. Depressed teens, however, are more likely than depressed adults to use drugs. In the course of a year, seven percent of adults²⁰ reported feeling depressed, compared to eight percent of teens.²¹

But a quarter (25%) of depressed teens used marijuana in the course of a year, while only 19 percent of depressed adults did.²² Additionally, 35 percent of depressed teens used other illicit drugs (including marijuana), compared to 28 percent of depressed adults.²³

Marijuana and Illicit Drug Use among Depressed Teens versus Depressed Adults (Past Year)



Source: National Survey on Drug Use and Health, SAMHSA 2007

²⁰ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Pg. 7. URL: <http://www.oas.samhsa.gov/nsduh/2k6nsduh/2k6results.pdf>.

²¹ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Pg. 8. URL: <http://www.oas.samhsa.gov/nsduh/2k6nsduh/2k6results.pdf>.

²² 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Table 6.34B, 6.35B. URL: <http://www.oas.samhsa.gov/NSDUH/2k6nsduh/tabs/Sect6peTab s34to35.pdf>.

²³ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Table 6.34B, 6.35B. URL: <http://www.oas.samhsa.gov/NSDUH/2k6nsduh/tabs/Sect6peTab s34to35.pdf>.

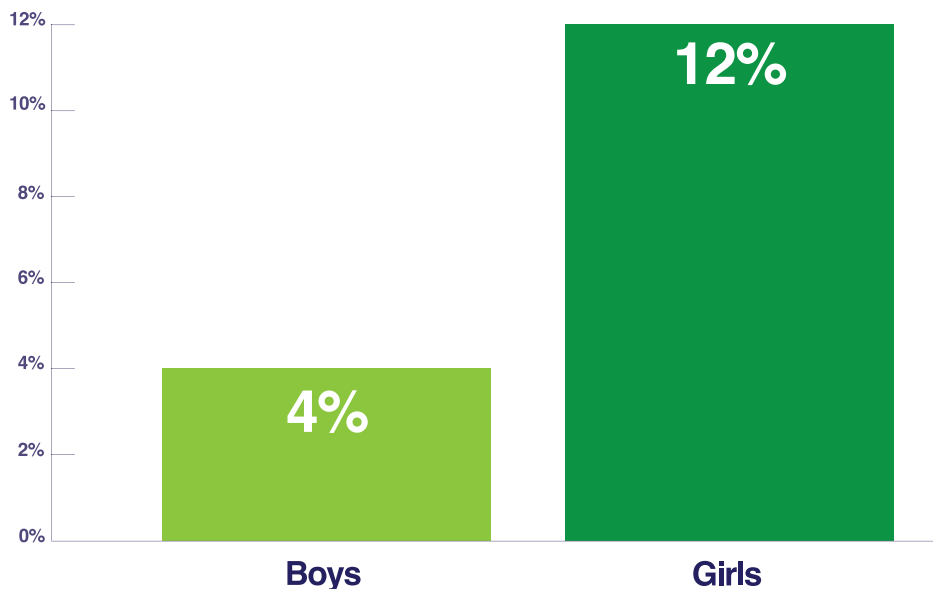
Girls at Greater Risk

Teen girls are especially at risk. In fact, three times as many girls (12%) as boys (4%) experienced depression during the year.²⁴ Another study confirms that girls are more likely than boys to report feelings of sadness or hopelessness (37% vs. 29%).²⁵

Substance abuse can compound the problem. Girls who smoke marijuana daily are significantly more likely to develop symptoms of depression and anxiety: their odds are more than five times higher than those of girls who do not smoke marijuana.²⁶

Girls Surpass Boys in Reported Depression (Past Year)

■ Girls ■ Boys



Source: National Survey on Drug Use and Health, SAMHSA 2007

²⁴ 2006 National Survey on Drug Use and Health, SAMHSA, 2007. Table 6.27B. URL: <http://www.oas.samhsa.gov/NSDUH/2k6nsduh/tabs/Sect6peTabs27to33.pdf>.

²⁵ CDC Surveillance Summaries. June 2006) MMWR 55. Table 16. URL: <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5505a1.htm#tab16>.

²⁶ Patton, GC et al. Cannabis use and mental health in young people: cohort study. British Medical Journal, 325:1195-1198, 2002.

Parental Involvement

Parents should not dismiss changes in their teen’s behavior as a “phase.” Their teen could be depressed, using drugs – or both. Parents can help their teen understand the risks of marijuana use, and should be on the lookout for signs of depression.

It’s been shown that parents who make an effort to understand the pressures and influences on young people are more likely to keep their teen healthy and drug-free.

Teens who report having conversations with their parents about alcohol and drug use are more likely to stay drug-free, compared to teens who do not talk about substance abuse with their parents.²⁷

²⁷ 2006 National Survey on Drug Use and Health, SAMHSA, September 2007. URL: <http://www.oas.samhsa.gov/nsduh/2k6nsduh/2k6results.pdf>.

*Definition for MDE: A person was defined as having had a lifetime major depressive episode (MDE) if he or she had at least five or more of the following nine symptoms in the same 2-week period in his or her lifetime, in which at least one of the symptoms was a depressed mood or loss of interest or pleasure in daily activities: (1) depressed mood most of the day, nearly every day; (2) markedly diminished interest or pleasure in all or almost all activities most of the day, nearly every day; (3) significant weight loss when not dieting or weight gain or decrease or increase in appetite nearly every day; (4) insomnia or hypersomnia nearly every day; (5) psychomotor agitation or retardation nearly every day; (6) fatigue or loss of energy nearly every day; (7) feelings of worthlessness nearly every day; (8) diminished ability to think or concentrate or indecisiveness nearly every day; and (9) recurrent thoughts of death or recurrent suicide ideation. This definition is based on the definition found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (APA, 1994). A person was defined as having an MDE in the past year if he or she had a lifetime MDE and a period of time in the past 12 months when he or she felt depressed or lost interest or pleasure in daily activities for 2 weeks or longer, while also having some of the other symptoms defined above for a lifetime MDE. See Section B.4.5 of Appendix B for additional details.