

Recreational Use of Ritalin on College Campuses

by Daniel Ari Kapner

Although alcohol is the most abused drug on college campuses, Ritalin has also attracted much concern in recent years. This *Infofacts/Resources* describes Ritalin use on college campuses, outlines possible effects of its abuse, and recommends policies for institutions of higher education.



What Is Ritalin Abuse?

Methylphenidate (marketed as Ritalin or Concerta¹) is the common treatment for attention deficit hyperactivity disorder (ADHD), a condition affecting 3–5 percent of the U.S. population. Ritalin is occasionally prescribed for narcolepsy.²

In recent years, Ritalin has become one of the most abused prescription drugs. The U.S. Drug Enforcement Administration (DEA) classifies Ritalin as a schedule 2 drug, a substance with a large potential for misuse.³ Street terms for Ritalin include “vitamin R,” “R ball,” and “cramming drug.”

Prescribed Ritalin costs 25–50 cents per tablet. Ritalin’s street value may be as much as \$2 to \$20 per 20 milligram tablet.¹

For additional information

The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention

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Whereas college students once drank excessive amounts of coffee or took caffeine pills to stay awake while cramming for tests, many now use Ritalin to remain alert.⁴ Anecdotal evidence suggests that Ritalin can allow students to stay awake for many hours in a row and maintain abnormally high levels of concentration. Students have used it to cram for as long as a few days.⁵ Monitoring the Future reports a drop-off in annual prevalence of nonmedical Ritalin use of more than half after age 24, lending support to arguments that students are using it as a “study drug.”⁶ Some students use Ritalin so they can consume more alcohol or mix it with other drugs to prolong partying.^{5,7,8}

Although some students take Ritalin tablets whole, others pursue stronger stimulation by crushing tablets and snorting them. Still others grind the tablets, mix them with water, “cook” them, and inject the mix intravenously.⁹

The National Collegiate Athletic Association (NCAA) bans Ritalin, except for medical exceptions, and the U.S. Olympic Committee and the International Olympic Committee also ban the stimulant.¹⁰



How Prevalent Is Ritalin Abuse?

Ritalin is widely available. Nineteen million prescriptions were filled in 1999, a rise of 500 percent since 1991.¹¹ Monitoring the Future began documenting Ritalin abuse in 2002, and several additional studies indicate that it is widespread, with the rates of student use varying greatly from campus to campus.

- 5.7 percent of college students nationwide admitted to using Ritalin at least once in 2002, and the number has steadily declined to 3.9 percent in 2006.⁶

- A 2008 survey of 2,087 college students revealed that 5.3 percent admitted nonmedical use, with misuse of Ritalin occurring four times more frequently than Concerta.¹²
- In a 2006 study, researchers at a northeastern U.S. university found that 16 percent of respondents abused stimulant medication, 96 percent of whom preferred Ritalin.¹³
- In a 2002 survey of students at the University of Florida, 1.5 percent used Ritalin recreationally in the previous 30 days.¹⁴
- In a 2000 survey, 16 percent of students at a small public liberal arts college reported having tried Ritalin recreationally, and 12.7 percent reported having taken it intranasally.¹⁵
- A 2000 survey at the University of Pennsylvania found that almost 9 percent of undergraduates had used someone else’s prescription medications, many of which were Ritalin.³

Students appear to begin using Ritalin without a prescription at young ages. Monitoring the Future reports suggest that many students arrive on campus having already used Ritalin: in 2006, 4.4 percent of 12th graders admitted annual use, as did 3.6 percent of 10th graders.⁶ A study of 6,000 high school students in Massachusetts showed that 13 percent were found to have abused Ritalin.¹⁶ The same study found that 4 percent of middle school students had also abused Ritalin at some point in their lives.¹¹



Possible Effects of Ritalin Abuse

Since Ritalin is a prescribed medication, students often mistakenly consider it innocent and harmless, without the stigma associated with street drugs.⁹ In fact, illegal Ritalin use can be very dangerous, with effects similar to those produced by cocaine and amphetamines.¹⁷



William Bailey from Indiana University suggests that Ritalin may cause the following adverse effects:⁹

- Nervousness, insomnia
- Loss of appetite, leading to serious malnutrition
- Nausea, vomiting
- Dizziness, headaches
- Changes in heart rate and blood pressure (usually elevation of both, but occasionally depression)
- Skin rashes, itching
- Abdominal pain, weight loss, digestive problems
- Toxic psychosis, psychotic episodes, drug dependence syndrome
- Chronic use and dependence
- Severe depression upon withdrawal

Adverse effects from high doses include the following:

- Loss of appetite, leading to serious malnutrition
- Tremors, muscle twitching
- Fevers, convulsions, and headaches (may be severe)
- Irregular heartbeat and respirations (may be profound and life threatening)
- Anxiety, restlessness
- Excessive repetition of movements and meaningless tasks
- Paranoia, hallucinations, delusions
- Formication (sensation of bugs or worms crawling under the skin)
- Death (uncommon as a result of Ritalin abuse, but reports indicate Ritalin abuse has led to death)

Intravenous use of Ritalin may cause the following:

- Toxic overdose reactions
- Blood clots from scar tissue, resulting from small particles that enter the syringe
- Infections (blood poisoning, abscesses, hepatitis, HIV/AIDS)
- Scars (“tracks” and adhesions)
- Skin and circulatory problems
- Pulmonary problems (“addict’s lung,” embolisms)

In addition, snorting Ritalin through the nose causes the membrane separating the nasal passage and the brain to deteriorate, resulting in nosebleeds and damage to nasal cartilage.⁹



Ritalin Theft

Almost 2,000 instances of Ritalin theft were reported between January 1990 and May 1995, putting the drug among the top 10 most frequently stolen controlled medications.^{7, 18} The DEA estimated that nearly 700,000 doses of Ritalin were stolen between January 1996 and December 1997.¹⁸

Officials counted 376 cases of Ritalin thefts from pharmacies in 1998.² In addition, Ritalin is often stolen from other students, parents, high school nurses’ offices, and high school teachers.



Strategies for Institutions of Higher Education

The recent increase in Ritalin abuse challenges colleges and universities to include commonly abused prescription drugs as they develop and implement prevention and enforcement efforts for alcohol and other drugs. Following are four environmental strategies for reducing Ritalin abuse.¹⁹

1. Promote Alcohol- and Other Drug-Free Social, Recreational, and Extracurricular Options and Public Service

- Sponsor alcohol- and other drug-free social and recreational options for students. Marketing efforts for these events must clearly specify the alcohol- and other drug-free guidelines for the activities.
- Sponsor and publicize volunteer and community service opportunities for students.

2. Create a Social, Academic, and Residential Environment That Promotes Healthy Social Norms

- Survey students to determine the prevalence of Ritalin and other prescription drug abuse on campus.
- Offer resources to educate students about the dangers of Ritalin abuse.
- Develop social norms marketing campaigns to address any exaggerated misperceptions of Ritalin and other prescription drug abuse.²⁰

3. Limit Availability and Access

- Work with local law enforcement to stay informed about trends relating to Ritalin abuse and theft in the area.
- Work with campus health officials and doctors to monitor students’ Ritalin requests.

4. Enforce Campus Policy and State and Local Laws

- Revise campus alcohol and other drug policies as necessary to include commonly abused prescription drugs specifically.
- Communicate campus alcohol and other drug policies clearly and frequently to the community, including possible consequences for violations.



Pursuing Further Research

Prevention professionals on campus should implement surveys that include questions about the recreational use of Ritalin to create a more comprehensive understanding of its prevalence on campuses. Patterns of student use, implications for academic performance, and correlations with other social issues are potential areas for further study.

Daniel Ari Kapner served as writer/researcher at the Higher Education Center for Alcohol and Other Drug Prevention.



References

1. Kelley, J. E., and Jagielski, C. H. "Ritalin." Retrieved August 15, 2008, from <http://www.drugs.indiana.edu/publications/factline/ritalin.pdf>.
2. "Methylphenidate (Ritalin)." Bethesda, Md.: National Institute on Drug Abuse, National Institutes of Health, 1999. Retrieved June 17, 2003, from <http://165.112.78.61/Infofax/Ritalin.html>.
3. Vedantam, A., and Blanchard, M. P. "Ritalin Abuse Growing Epidemic Among Youth," *Knight-Ridder/Tribune News Service*, 24 January 2001.
4. Diaz, J. "Ritalin Grows as 'Cramming Drug' at U.S. Colleges," *Knight-Ridder/Tribune News Service*, 4 November 2001.
5. Jaffe, H. "New Coke: It Was the Pill That Helped Hyper Kids Calm Down, and Millions of Families Signed On. Now Ritalin Is the Big, Black-Market Drug on Campus, for Anybody Who Wants to Work or Party Harder." *Men's Health* 17 (5): 128–134, 2002.
6. Johnston, L. D.; O'Malley, P. M.; Bachman, J. G.; and Schulenberg, J. E. *Monitoring the Future National Survey Results on Drug Use, 1975–2006 Volume II: College Students & Adults Ages 19–45* (Bethesda, Md.: National Institute on Drug Abuse, 2007).
7. Nicklin, J. L. "The Latest Trend: Mixing Prescription Drugs with Other Substances," *The Chronicle of Higher Education*, 9 June 2000: A58.
8. Zielbauer, P. "New Campus High: Illicit Prescription Drugs," *The New York Times*, 24 March 2000.
9. Bailey, W. J. *FactLine on Non-Medical Use of Ritalin (methylphenidate)*. Bloomington, Ind.: Indiana Prevention Resource Center (IPRC), 1995. Retrieved June 17, 2003, from <http://www.drugs.indiana.edu/publications/iprc/factline/ritalin.html>.
10. "Tough Call." *The NCAA News*, June 23, 1997. Retrieved June 17, 2003, from <http://www.ncaa.org/news/1997/19970623/briefly.html#2>.
11. "Abusing Ritalin (Dangers of Prescription Drug Abuse)." *Scholastic Choices* 17 (1): 6, 2001.
12. DuPont, R. L.; Coleman, J. J.; Bucher, R. H.; and Wilford, B. B. "Characteristics and Motives of College Students Who Engage in Nonmedical Use of Methylphenidate." *American Journal on Addictions* 17, 3, 2008.
13. Prudhomme, B.; Becker-Blease, K. A.; and Grace-Bishop, K. "Stimulant Medication Use, Misuse, and Abuse in an Undergraduate and Graduate Student Sample." *Journal of American College Health* 54, 5, 2006.
14. *University of Florida Alcohol and Drug Survey: 2002 Key Findings*. Gainesville, Fla.: Campus Alcohol and Drug Resource Center, University of Florida. Retrieved June 17, 2003, from <http://www.health.ufl.edu/shcc/key02.pdf>.
15. Babcock, Q., and Byrne, T. "Student Perceptions of Methylphenidate Abuse at a Public Liberal Arts College." *Journal of American College Health* 49 (3): 143, 2000.
16. Carter, G., and Winseman, J. "A Prescription for Healing the Whole Student," *The Chronicle of Higher Education* 3 August 2001: B24.
17. "Methylphenidate (Ritalin)." Alexandria, Va.: U.S. Department of Justice, U.S. Drug Enforcement Administration. Retrieved June 17, 2003, from <http://www.dea.gov/concern/methylphenidate.html>.
18. Ziegler, N. "Recreational Ritalin: Kids Using Prescription Drug for Fun." *Associated Press*, 2000.
19. For more information about environmental strategies for alcohol and other drug prevention, see the Higher Education Center's publication *Environmental Management: A Comprehensive Strategy for Reducing Alcohol and Other Drug Use on College Campuses*.
20. For more information about social norms marketing, see the Higher Education Center's publication *Social Marketing Strategies for Campus Prevention of Alcohol and Other Drug Problems* and the Center's Web site at <http://www.higheredcenter.org>.



Office of Safe and Drug-Free Schools (OSDFS)

U.S. Department of Education
<http://www.ed.gov/osdfs>; 202-245-7896

OSDFS supports efforts to create safe schools, respond to crises, prevent alcohol and other drug abuse, ensure the health and well-being of students, and teach students good character and citizenship. The agency provides financial assistance for drug abuse and violence prevention programs and activities that promote the health and well-being of students in elementary and secondary schools and institutions of higher education.

The U.S. Department of Education's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention

<http://www.higheredcenter.org>; 1-800-676-1730;
TDD Relay-friendly, Dial 711

The Higher Education Center offers an integrated array of services to help campuses and communities come together to identify problems; assess needs; and plan, implement, and evaluate alcohol and other drug abuse and violence prevention programs. Services include training; technical assistance; publications; support for the Network Addressing Collegiate Alcohol and Other Drug Issues; and evaluation activities. The Higher Education Center's publications are free and can be downloaded from its Web site.

The Network Addressing Collegiate Alcohol and Other Drug Issues

<http://www.thenetwork.ws>; see Web site for telephone contacts by region

The Network Addressing Collegiate Alcohol and Other Drug Issues (Network) is a national consortium of colleges and universities formed to promote healthy campus environments by addressing issues related to alcohol and other drugs. Developed in 1987 by the U.S. Department of Education, the Network comprises member institutions that voluntarily agree to work toward a set of standards aimed at reducing AOD problems at colleges and universities. It has more than 1,600 members nationwide.





Other Organizations

Drug Enforcement Administration (DEA)

<http://www.usdoj.gov/dea/index.htm>; 1-800-882-9539

The DEA operates in conjunction with the U.S. Department of Justice. It provides information regarding specific drugs, statistics, and national programs targeted at curbing drug abuse. The DEA's fact sheet on Ritalin, geared toward law enforcement, can be found online at <http://www.dea.gov/concern/methylphenidate.html>.

National Association of Drug Diversion Investigators, Inc.

<http://www.naddi.org>

In addition to the most recent drug diversion news, NADDI offers a helpline devoted to answering questions about prescription drug abuse. Full access to this site requires a subscription.

Indiana Prevention Resource Center (IPRC)

<http://www.drugs.indiana.edu>; 812-855-1237

The Indiana Prevention Resource Center at Indiana University is a statewide clearinghouse for prevention, technical assistance, and information about alcohol, tobacco, and other drugs for the state of Indiana. It is Indiana's officially designated RADAR (Regional Alcohol and Drug Awareness Resource) Network State Center. IPRC offers fact sheets and other information regarding alcohol and other drugs. IPRC's fact sheet on Ritalin abuse can be found online at <http://www.drugs.indiana.edu/publications/iprc/factline/ritalin.html>.

National Institute on Drug Abuse (NIDA)

<http://www.nida.nih.gov>; 301-443-1124

NIDA's mission is to lead the nation in bringing the power of science to bear on drug abuse and addiction. This charge has two critical components: The first is to support and conduct research across a broad range of disciplines. The second is to ensure that these research results are disseminated and implemented rapidly and effectively, thus significantly improving the prevention and treatment of drug abuse and addiction. NIDA's fact sheet on Ritalin abuse is available online at www.nida.nih.gov/Infifax/ritalin.html. NIDA has also published a research report on prescription drug abuse, available online at <http://www.nida.nih.gov/ResearchReports/Prescription/Prescription.html>.



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