

# Nonmedical Use of Prescription Stimulants

## What college administrators, parents, and students need to know

### What is nonmedical use of prescription stimulants?

- › Prescription stimulants, such as Ritalin<sup>®</sup> or Adderall<sup>®</sup>, are sometimes used by students who do not have a prescription or used in ways that are inconsistent with the prescribing physician's instructions (e.g., extremely high doses, snorting, injecting). This is called nonmedical use.<sup>1</sup> Typically the reason students have for using prescription stimulants nonmedically is that they think it will help them do better on a test or study more effectively.
- › Prescription stimulants are most commonly prescribed to students for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) and have been shown to be effective for the management of this condition. *This fact sheet on nonmedical use does not address issues related to ADHD treatment and the proper medical use of these medications.*

### How many students are using prescription stimulants nonmedically?

#### › Adolescents

In 2011, less than one in ten adolescents reported using Ritalin<sup>®</sup> or Adderall<sup>®</sup> nonmedically during the past year (see Table 1). The percentage of adolescents who use these medications nonmedically has stayed relatively stable during the past few years.

	8 <sup>th</sup> graders	10 <sup>th</sup> graders	12 <sup>th</sup> graders
Ritalin <sup>®</sup>	1.3%	2.6%	2.6%
Adderall <sup>®</sup>	1.7%	4.6%	6.5%

#### › College Students

The nonmedical use of prescription stimulants is more common among college students than high school students. Studies have found that 4.1% to 10.8% of college students reported using prescription stimulants nonmedically during the past year.<sup>3-7</sup> Table 2 shows findings from the College Life Study.<sup>8,9</sup>

	Freshmen	Sophomores	Juniors	Seniors	Cumulative <sup>a</sup>
Offered	36.0%	38.5%	41.1%	32.0%	61.8%
Used	13.3%	17.9%	20.1%	16.1%	31.0%

<sup>a</sup>Cumulative refers to being offered or used at any time during college.

## Where do students obtain the prescription stimulants they use nonmedically?

Many studies have shown that most students who nonmedically use prescription stimulants obtain the drugs from a friend who has a prescription.<sup>10-12</sup> These friends often give away their pills for free.<sup>10,13</sup>

### › Prescriptions

One study found that 5.3% of college students were currently prescribed ADHD medications.<sup>14</sup>

### › Diversion

Diversion includes the illicit sharing, selling, and trading of prescription medications. In one study, 61.7% of college students diagnosed with ADHD reported diverting their prescription stimulants.<sup>14</sup> Risk factors for diversion are childhood conduct problems<sup>14</sup> and cannabis use disorder.<sup>10</sup>

## Perceived availability

**Table 3.** Adolescents' reported ease of obtaining Adderall® or Ritalin® for nonmedical use (percent reporting "fairly easy" or "very easy").<sup>2</sup>

8 <sup>th</sup> graders	10 <sup>th</sup> graders	12 <sup>th</sup> graders
15.0%	28.5%	47.0%

## What characteristics or behaviors are associated with nonmedical use of prescription stimulants?

### › Excessive drinking and other drug use<sup>3,10,15,16</sup>

### › Lower GPA<sup>3,4,10</sup>

### › Low perceived harmfulness of using prescription stimulants nonmedically<sup>17</sup>

### › Attention difficulties<sup>18</sup>

### › Psychiatric distress or depressed mood<sup>19</sup>

### › Skipping classes

In one study, nonmedical users of prescription stimulants skipped 16.1% of their classes while non-users skipped 9.4% of their classes.<sup>4</sup>

### › Affiliation with a Greek (fraternity/sorority) organization.<sup>3,11</sup>

One study showed that the association between nonmedical use and Greek involvement became non-significant once statistical adjustment was made for drinking and other drug use.<sup>10</sup>

## MYTHS AND REALITIES

<b>MYTH</b>	Everyone is doing it.
<b>REALITY</b>	Use is not the norm. In 2011, less than one in ten adolescents used prescription stimulants nonmedically. <sup>2</sup>
<b>MYTH</b>	These drugs are safe.
<b>REALITY</b>	Taking prescription stimulants without a physician's supervision carries health risks to the nonmedical user because of the possibility of unknown interactions with other drugs, risk for dependence, and adverse health consequences. Specifically, taking high doses of prescription stimulants may result in dangerously high body temperatures, irregular heartbeat, seizures, or heart attack. Nonmedical use also carries risk for the person diverting the medication; trading, sharing, or selling medication might mean the diverter is skipping doses and not treating their disorder appropriately. The diversion of prescription stimulants also carries legal risks for the diverter.
<b>MYTH</b>	These drugs are perceived to be safer than illicit drugs by individuals who nonmedically use them.
<b>REALITY</b>	In one study, more college students perceived a "great risk" from occasional nonmedical prescription stimulant use than from occasional marijuana use. <sup>17</sup>
<b>MYTH</b>	Most students who use prescription stimulants nonmedically do well academically.
<b>REALITY</b>	Nonmedical use is concentrated among students who have lower GPAs. <sup>3,7,20,21</sup> Moreover, nonmedical users often have a history of heavy drinking and other drug involvement, especially with marijuana. <sup>3,10,15,16</sup> If other drug use is an underlying factor in poor academic performance, then nonmedical use of prescription stimulants might be seen as a compensatory behavior for not having studied or gone to class. There is evidence to suggest that prescription stimulants are used as an attempt to meet academic demands in the context of an active social lifestyle, which often includes drinking, illicit drug use, and little time for studying. Yet there is no evidence that this compensatory strategy is effective.
<b>MYTH</b>	By using prescription stimulants nonmedically, students can improve their cognitive performance and gain a competitive edge.
<b>REALITY</b>	Experimental research has shown mixed findings on the performance effect of prescription stimulants among study volunteers with no attention difficulties. There is much uncertainty about their effectiveness due to dosage issues, individual differences, expectancy of the effect, and type of task. Thus, it is unlikely that these drugs can improve academic performance in the long run.

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## IMPLICATIONS AND PRACTICE SUGGESTIONS

**College administrators, health care providers, parents, and students all have the responsibility to actively discourage nonmedical use of prescription stimulants, as well as all other forms of drug use, because of the possible adverse impact that drug use has on health, safety, and well-being.**

### College Administrators

- › Colleges should consider providing a comprehensive support structure that integrates academic advising with assessment of substance use and mental health problems. One recommendation might be to flag students who exhibit a precipitous drop in their academic performance (e.g., from a 3.8 GPA to a 3.2 in one semester) and investigate what factors might be responsible.
- › Early intervention strategies should be put into place to assist students who are struggling academically. These strategies should include screening for substance use and an individualized plan to address it.
- › Most campus health centers are underfunded and need more resources and tools to address substance use, mental health problems, and adjustment issues among college students.

### Health Care Providers

- › Physicians who prescribe stimulants should: a) be mindful of the prevalence of diversion, b) give their patients explicit instructions regarding the ways in which these medications should—and should not—be used, c) provide clear instructions to their patients regarding sharing and selling of medications, and d) include specific instructions on how to dispose of any unneeded medication.
- › Health care providers are encouraged to drug test and monitor students with a history of substance abuse to insure that they remain drug-free.

### Parents

- › Parents should not condone or facilitate the nonmedical use of these drugs but rather view this practice as a red flag for substance use. Some parents might be tempted to turn a blind eye toward sharing of prescriptions among friends simply because they believe it might help their college-aged child get better grades. However, the link between the use of multiple drugs and nonmedical use of prescription drugs is strong. When parents suspect their child might be nonmedically using prescription stimulants, they should seek out a comprehensive evaluation for that child in order to determine the presence and severity of substance use and/or other mental health problems, including ADHD, anxiety, and/or depression.
- › The pressures of college, both academically and socially, are real. Parents can be part of a supportive network that contributes to the success of a student in appropriate, safe, and healthy ways. This might involve encouraging healthy habits like getting enough sleep, eating well, exercising, and practicing effective time management.

### Students

- › Students must understand that there are few shortcuts to success. The way to good grades and a successful career is through hard work and constructive activities such as working part-time, taking an extra class, or participating in extracurricular activities. Not getting enough sleep, skipping class, and partying through college while taking prescription stimulants nonmedically to study and cram will be counterproductive in the long run.

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