# COLLEGE 2018 PRESCRIPTION DRUG STUDY

**Key Findings** 

#### **EXECUTIVE SUMMARY**

The College Prescription Drug Study (CPDS) is a multi-institutional survey of undergraduate, graduate and professional students. The CPDS examines non-medical prescription drug use, including the reasons for and consequences of use, access to prescription drugs and perceptions of use among students. The purpose of the CPDS is to understand the non-medical use of prescription drugs among college students. The CPDS was developed and administered as a collaboration between The Ohio State University's Center for the Study of Student Life, Student Life Student Wellness Center and the College of Pharmacy.

During spring 2018, the CPDS was administered to random samples of students attending institutions across the United States via an online anonymous survey. The survey was administered to 113,999 students at the 26 participating institutions; 19,539 students responded for a response rate of 17.1%. More information on the study is available by contacting the CPDS team at <a href="mailto:rxstudy@osu.edu">rxstudy@osu.edu</a>.

#### **HIGHLIGHTS**

#### Frequency of Use

- 9.1% of students reported misusing pain medications, 9.4% reported misusing sedatives and 15.9% reported misusing stimulants.
- Many prescription drug misusers have not used in the past 12 months; 55% of misusers have not used pain medications in the past 12 months, 42% of sedative misusers have not used in the past 12 months and 37% of stimulant misusers have not used in the past 12 months.

#### **Access to Prescription Drugs**

- 16% of students said it is somewhat easy or very easy to obtain pain medication for non-medical use; 20% of students said sedatives are somewhat easy or very easy to obtain; 28% of students said stimulants are somewhat easy or very easy to obtain.
- The majority of students who misuse prescription drugs reported that they typically obtain prescription drugs from friends (51% for pain medications, 57% for sedatives and 79% for stimulants).

#### **Reasons for Use**

• The most common reasons students reported misusing pain medications were to get high (43%) and to relieve pain (40%); sedatives were to get to sleep (53%) and to relieve anxiety (49%); and stimulants were to study or improve grades (79%).

#### **Consequences of Use**

• The most frequently reported effects of misusing prescription drugs included experiencing depression for pain medication users (22%), experiencing memory loss for sedative users (37%) and positive impacts on academics for stimulant users (60%).

#### **Education and Resources**

- 56% of students were aware of resources, either on or off campus, that help with prescription drug safety.
- 79% of students knew where to go to get help if they were worried or concerned about misuse.

#### **Prescribed Medication Behaviors**

 Only 8% of respondents said they kept their prescription drugs in a locked space; the majority kept them in an unlocked medicine cabinet or drawer.



#### INTRODUCTION

The College Prescription Drug Study (CPDS) is a multi-institutional survey of undergraduate, graduate and professional students. The CPDS examines the non-medical use of prescription drugs, including the reasons for and consequences of use, access to prescription drugs and perceptions of use among students. Results provide a better understanding of the current state of non-medical use of prescription drugs on college campuses, including information on the types of prescription drugs misused/abused, attainment of drugs, reasons for use and consequences of use.

The CPDS was developed and administered as a collaboration between The Ohio State University's Center for the Study of Student Life, Student Life Student Wellness Center and the College of Pharmacy. The survey instrument is based on previous research on prescription drug misuse at The Ohio State University, including campus-wide studies beginning in 2009 and the first multi-institutional administration of the CPDS in 2015.

During spring 2018, the CPDS was administered to random samples of students attending 26 institutions across the United States via an online anonymous survey. Eighteen four-year public institutions participated in the study (69.2% of participating institutions) and seven four-year private institutions participated (26.9% of participating institutions). One two-year public institution participated in the study (3.8% of participating institutions). The survey was administered to 113,999 students; 19,539 responded for a response rate of 17.1%. More information on the study is available by contacting the CPDS team at <a href="mailto:rxstudy@osu.edu">rxstudy@osu.edu</a>.

#### **RESEARCH DESIGN & METHODS**

The CPDS is driven by the following research questions:

- 1. What types of prescription or non-prescription drugs do students misuse and/or abuse?
- 2. What are the demographics of students who are most likely to misuse or abuse prescription drugs?
- 3. Why do students misuse or abuse prescription drugs and what are their attitudes toward the misuse or abuse of prescription drugs?
- 4. Are students who misuse or abuse prescription drugs more likely to abuse nonprescription or illicit drugs?

Institutions were recruited to participate in the 2018 CPDS through emails to health promotion and wellness staff from institutions across the United States. The online survey was sent to random samples of undergraduate, graduate and professional students who were at least 18 years of age at each institution. Surveys were administered in February or April, depending on each institutions' academic calendar and preference. The online survey was administered anonymously using Qualtrics survey software.

#### FREQUENCY OF USE

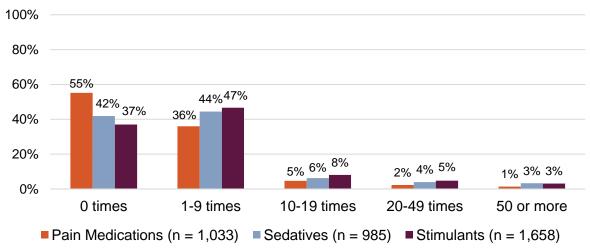
Estimates of the non-medical use of prescription medications vary widely. Prior research has estimated that between 6 and 14% of college students have used prescription drugs for non-medical reasons (SAMSHA, 2014; Zullig and Divin, 2012), which is the highest rate of misuse among 18-25 year olds (SAMSHA, 2014). In the CPDS, 9.1% of respondents reported that they had ever misused pain medications, 9.4% had ever misused sedatives and 15.9% had ever misused stimulants; 22.6% had ever used any of the three types of prescription drugs. 13.3% of respondents reported that they have used more than one prescription drug non-medically at the same time.

#### Have you ever used the following for non-medical reasons?



When looking at misuse among *only* those who reported ever misusing prescription medication and referring to the previous twelve months, 44.6% of respondents reported that they had misused pain medications, 57.9% had misused sedatives and 62.9% had misused stimulants.

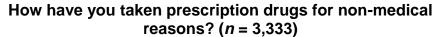
## In the past 12 months, how often did you use the following for non-medical reasons?

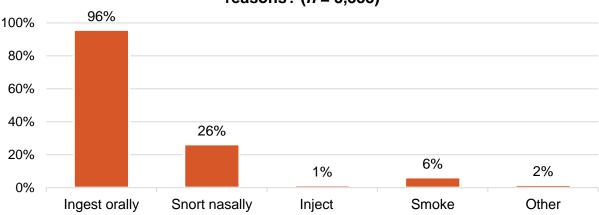


Note. Self-reported estimate of use in the last 12 months among students who indicated they had ever used a prescription drug for non-medical reasons; students who responded "prefer not to say" are not presented in charts but are included in calculation.



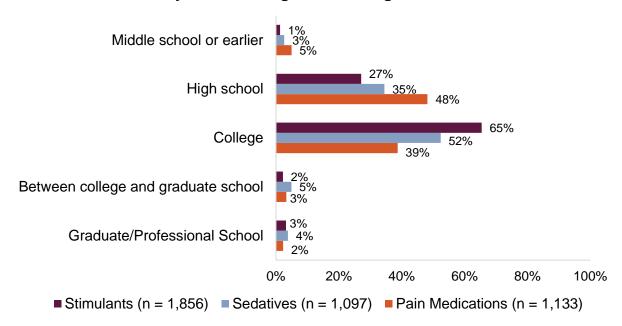
Among respondents who reported misusing prescription medications, a series of follow-up questions asked about how they misused, when they began misusing and why they misused these medications. The vast majority of those who misused had ingested medications orally (96%), while a quarter of respondents (26%) reported snorting medications nasally.





When asked when students began misusing prescription medication, the majority of stimulant users (65%) and sedative users (52%) began misusing during college. Almost half of pain medication users began misusing during high school (48%) and 39% began misusing during college. Very few respondents reported beginning to misuse prescription medications in middle school or earlier.

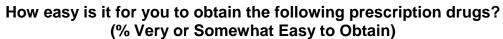
#### When did you start using the following for non-medical reasons?

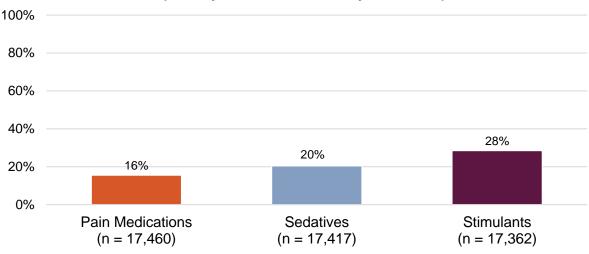


Note. Self-reported among students who indicated they had ever used a prescription drug for non-medical reasons; students who responded "prefer not to say" are not presented in charts but are included in the percentage calculation.

#### **ACCESS**

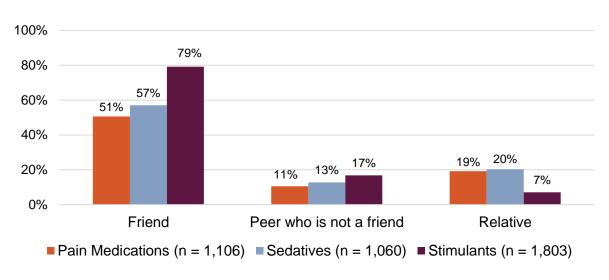
Understanding how students access prescription drugs for non-medical use provides important information that can help practitioners and scholars understand the patterns of prescription drug misuse. Student respondents were asked how easy it is to obtain prescription drugs without a prescription. They were also asked where they typically obtain prescription drugs that they use non-medically.





Students obtained prescription drugs for non-medical use from a variety of sources, including people they know, such as friends, peers who are not friends and relatives. Students were most likely to report obtaining prescription drugs for non-medical use from a friend across all types of prescription drug types. The chart below highlights some sources where students obtain prescription drugs for non-medical use.

#### Means by which students obtain prescription drugs for non-medical use



#### **REASONS FOR USE**

College students use prescription drugs for non-medical reasons due to a variety of environmental and personal factors. Some research suggests that college students may be at a higher risk of misuse due to access, social norms and academic strain (McCabe et al., 2006). Research also suggests that college students are more likely than their non-college attending peers to misuse stimulants (McCabe et al., 2018). Personal factors for non-medical use of prescription drugs vary; about 13% of college student prescription drug misusers reported using for recreational purposes and 39% reported using for self-treatment (McCabe et al., 2009). The CPDS asked students why they used prescription drugs for non-medical reasons. Among student respondents in the CPDS, the top five most frequently reported reasons for use of each type of medication are included below.

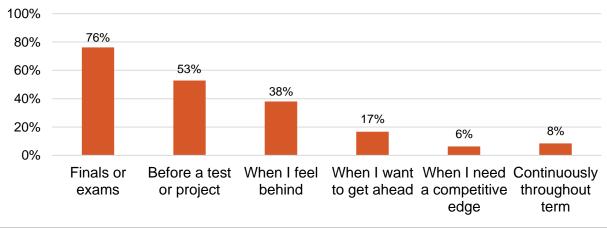
**Top 5 Reasons for Non-Medical Use of Prescription Drugs** 

Pain Medications	Sedatives	Stimulants	
Get high (43.1%)	Sleep (52.8%)	Study or improve grades (79.2%)	
Relieve pain (40.2%)	Relieve anxiety (48.7%) See what it was like (22.		
See what it was like (34.2%)	Get high (34.4%) Enhance social situations (2		
Relieve anxiety (31.1%)	See what it was like (26.7%)	Get high (15.0%)	
Sleep (26.8%)	Feel better (19.8%)	Like way they feel (12.4%)	

#### MISUSE AND STUDYING

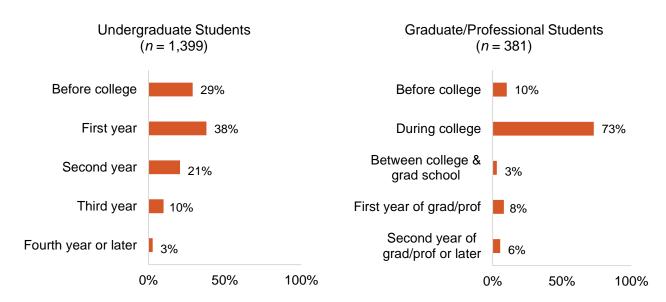
The vast majority of respondents who misused prescription drugs do so to study or improve grades. When asked with whom they misused prescription drugs while studying, 61.2% of respondents reported misusing alone, 11.2% misused with others and 26.5% misused both alone and with others (1.2% of respondents preferred not to answer).

When are you most likely to misuse prescription drugs to study? (n = 1,866)



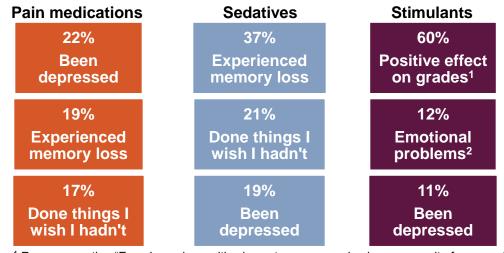
Respondents were also asked when they began misusing prescription medications to study. Among undergraduate students, 29% reported beginning before college and 38% began in their first year of college. Among graduate and professional students, 73% began misusing during college, 10% began prior to college and 8% began in the first year of graduate or professional school.

#### When did you start misusing prescription drugs to study?



#### **CONSEQUENCES OF USE**

There are many potential consequences of misusing prescription drugs. Students were asked to choose from a list of consequences and select which they had experienced because of their non-medical use of prescription drugs. The most frequently reported consequences among student respondents in the CPDS are outlined below.



<sup>&</sup>lt;sup>1</sup> Response option "Experienced a positive impact on your academics as a result of your use"

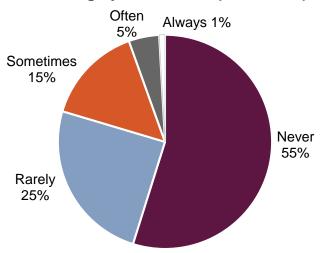
<sup>&</sup>lt;sup>2</sup> Response option "Experienced emotional or psychological problems"



#### ALCOHOL AND OTHER DRUG USE

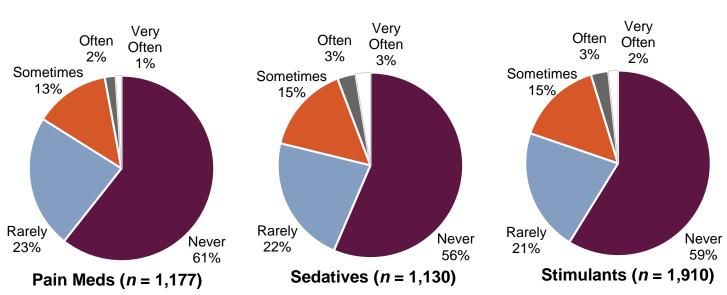
All respondents were asked if they used drugs or alcohol to manage their stress. More than half of respondents (55%) reported that they never use drugs or alcohol to manage their stress.

# How often do you use drugs or alcohol to manage your stress? (n = 18,766)



Respondents who reported misusing prescription medications were asked whether they ever misused these medications while drinking alcohol. The majority of pain medication, sedative and stimulant misusers reported never drinking alcohol while misusing prescription medications.

#### Do you ever use the following prescription medications while drinking alcohol?



Note. Students who responded "I'd rather not say" are not included in the percentage calculations.





Report using illicit drugs in place of prescription drug misuse

Among students who misuse prescription drugs, 35% report they have used illicit drugs in place of prescription drugs; among those who have done this, the most common illicit drugs used to replace prescription drugs are marijuana (92.7%), cocaine (38.3%), hallucinogens (36.7%) and MDMA (28.4%).

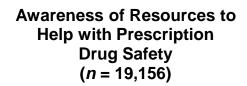
#### Illicit Drugs Used in Place of Prescription Drug Misuse

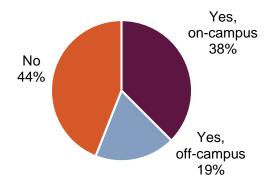
Marijuana	93%	Inhalants	7%
Cocaine	38%	Methamphetamine	6%
MDMA	28%	Heroin	4%
Hallucinogens	37%	Fentanyl	2%

When asked why respondents used illicit drugs in place of prescription drugs, 50% reported because they had a different effect than prescription drugs, 49% reported because they were easier to access, 35% reported they were curious about them, 32% reported because they felt it was safer than prescription drugs and 30% reported that they felt it was less addictive than prescription drugs.

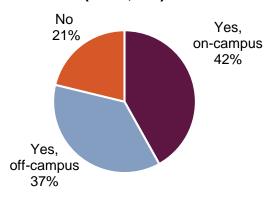
#### **EDUCATION AND RESOURCES**

Respondents were asked a variety of questions on awareness of resources, education and if they knew where to go for help regarding prescription drugs. The majority of respondents (89.2%) reported that they had never taken a workshop, class or had a training on the appropriate ways to use prescription drugs.



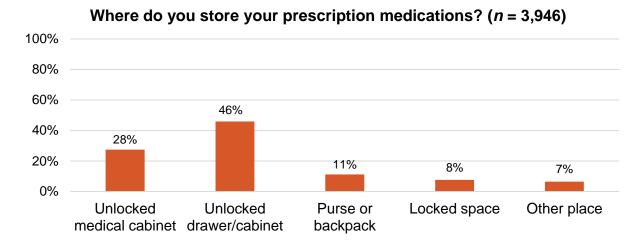


# Awareness of Where to Go for Help if Concerned or Worried about Misuse (n = 4,063)



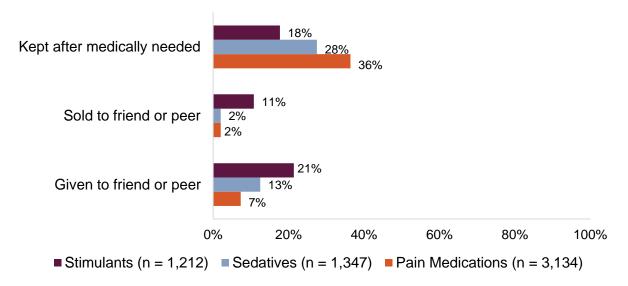
#### PRESCRIBED MEDICATION BEHAVIORS

Respondents were asked where they stored their prescription medication. The most frequent response was in an unlocked drawer or cabinet (46%); only 8% kept medications in a locked space.



Respondents were asked if they had kept a prescribed medication past when it was needed, sold a prescribed medication or given a prescribed medication to someone else. Respondents were the most likely to give or sell stimulants to friends or peers. Pain medications were the type of medication that respondents were most likely to keep after they were medically needed.

### Have you done the following with your prescribed medications in the last 12 months?



#### REFERENCES

- McCabe, S. E. (2008). Misperceptions of non-medical prescription drug use: A web survey of college students. *Addictive Behaviors*, 33, 713-724.
- McCabe, S. E., Teter, C. J., Boyd, C. J., Wilens, T. E., & Schepis, T. S. (2018). Sources of prescription medication misuse among young adults in the United States: The role of educational status. *Journal of Clinical Psychiatry*, 79(2), 33-40.
- McCabe, S. E., Boyd, C. J., & Teter, C. J. (2009). Subtypes of nonmedical prescription drug misuse. *Drug and Alcohol Dependence*, *102*, 63-70.
- McCabe, S. E., Teter, C. J., & Boyd, C. J. (2006). Medical use, illicit use, and diversion of abusable prescription drugs. *Journal of American College Health*, *54*(5), 269–278.
- Substance Abuse and Mental Health Services Administration, *Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-48, HHS Publication No. (SMA) 14-4863. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014.
- Zullig, K. J., & Divin, A. L. (2012). The association between non-medical prescription drug use, depressive symptoms, and suicidality among college students. *Addictive Behaviors*, *37*, 890-899.

#### **ACKNOWLEDGEMENTS**

A study of this magnitude necessitates the cooperation and support of many offices at The Ohio State University. The research team extends gratitude to the Office of Student Life and the College of Pharmacy. We would like to acknowledge the following individuals for their support, feedback and assistance on current and previous administrations of the study:

- Dr. Javaune Adams-Gaston, Senior Vice President for Student Life, The Ohio State University
- Blake Marble, Director, Student Life Student Wellness Center
- Dr. Kenneth Hale, Clinical Professor, College of Pharmacy; Associate Director, Higher Education Center for Alcohol and Drug Misuse Prevention and Recovery, The Ohio State University
- Dr. Nicole C. Kwiek, Clinical Associate Professor, College of Pharmacy, The Ohio State University
- Christina Athas, Clinical Research Exercise Physiologist, The Ohio State University Wexner Medical Center
- Kirstan Duckett, Birth Defects Surveillance Coordinator, Ohio Department of Health
- Connie Boehm, Director of Student Resilience, University of Nebraska-Lincoln
- Dr. Lance Kennedy-Phillips, Vice Provost for Planning and Assessment, Pennsylvania State University
- Dr. Richard Shadick, Director, Counseling Center and Adjunct Associate Professor, Department of Psychology, Pace University
- Colleagues in The Ohio State University's College of Pharmacy, Student Life Counseling and Consultation Service, Student Life Student Health Services and Student Life Student Wellness Center

We would also like to thank the students who participated in the survey.

Suggested citation: Phillips, Erica L. & McDaniel, Anne E. (2018). *College Prescription Drug Study Key Findings Report*. Center for the Study of Student Life, The Ohio State University: Columbus, Ohio.

