

The NSDUH Report

April 6, 2007

Patterns and Trends in Nonmedical Prescription Pain Reliever Use: 2002 to 2005

In Brief

- The nonmedical use of prescription pain relievers among persons aged 12 or older remained relatively stable between 2002 and 2005
- Combined data from 2002 to 2005 indicate that an annual average of 4.8 percent of persons aged 12 or older (11.4 million persons) used a prescription pain reliever nonmedically in the 12 months prior to the survey
- Combined data from 2002 to 2005 indicate that 57.7 percent of persons who first used pain relievers nonmedically in the past year used hydrocodone products and 21.7 percent used oxycodone products

The illicit use of prescription drugs has been identified as an issue of concern in the United States.^{1,2} In particular, the misuse of opioid pain relievers has been cited as a growing public health problem.^{3,4} Findings from national studies support these concerns.⁵

The National Survey on Drug Use and Health (NSDUH) asks persons aged 12 or older questions related to their nonmedical use of prescription-type drugs, including prescription pain relievers, during their lifetime and the past year.⁶ *Nonmedical use* is defined as use of prescription-type drugs not prescribed for the respondent by a physician or used only for the experience or feeling they caused; over-the-counter drugs are not included. Respondents who used prescription pain relievers nonmedically are asked when they first used them nonmedically; responses to these questions were used to identify persons who had

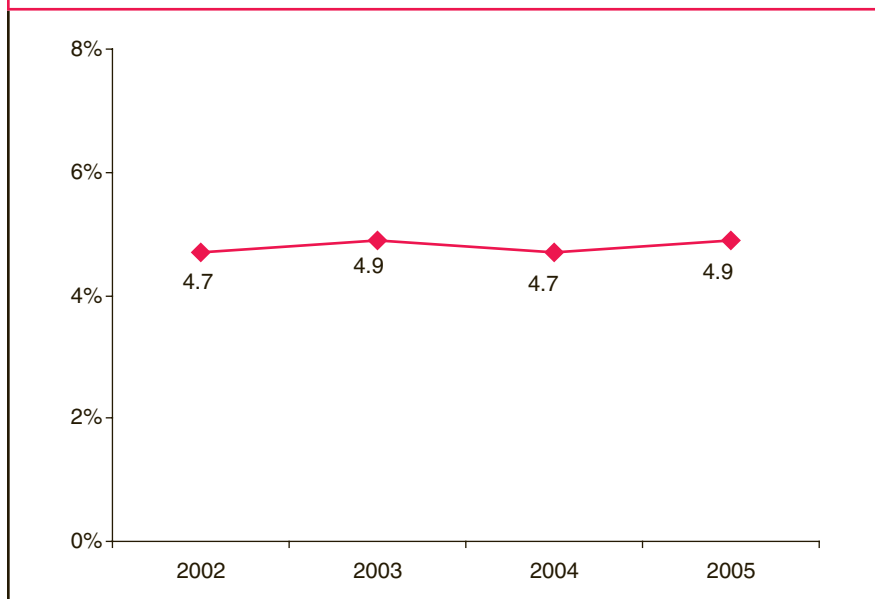
initiated use in the 12 months before the survey.⁷

This report examines patterns and trends in the nonmedical use of prescription pain relievers among persons aged 12 or older based on data from the 2002, 2003, 2004, and 2005 NSDUHs. Because recent research suggests increases in rates of nonmedical use of two classes of pain relievers (i.e., oxycodone and hydrocodone), products containing these substances are considered separately in this report.⁸ For the purposes of this report, oxycodone products include Percocet[®], Percodan[®], Tylox[®], OxyContin[®], and other pain relievers containing oxycodone that respondents specified that they used nonmedically.⁹ Hydrocodone products include Vicodin[®], Lortab[®], Lorcet[®]/Lorcet Plus[®], generic hydrocodone, and other pain relievers containing hydrocodone that respondents specified. Because respondents typically are asked about their nonmedical use of specific pain relievers only for the lifetime period, this report examines nonmedical use of oxycodone and hydrocodone products among persons who first used pain relievers nonmedically in the past year (i.e., past year initiates).

Patterns and Trends in Past Year Nonmedical Prescription Pain Reliever Use

The nonmedical use of any prescription pain reliever among persons aged 12 or older remained relatively stable between 2002 and 2005 (Figure 1). Combined data from 2002 to 2005 indicate that an annual average of 4.8

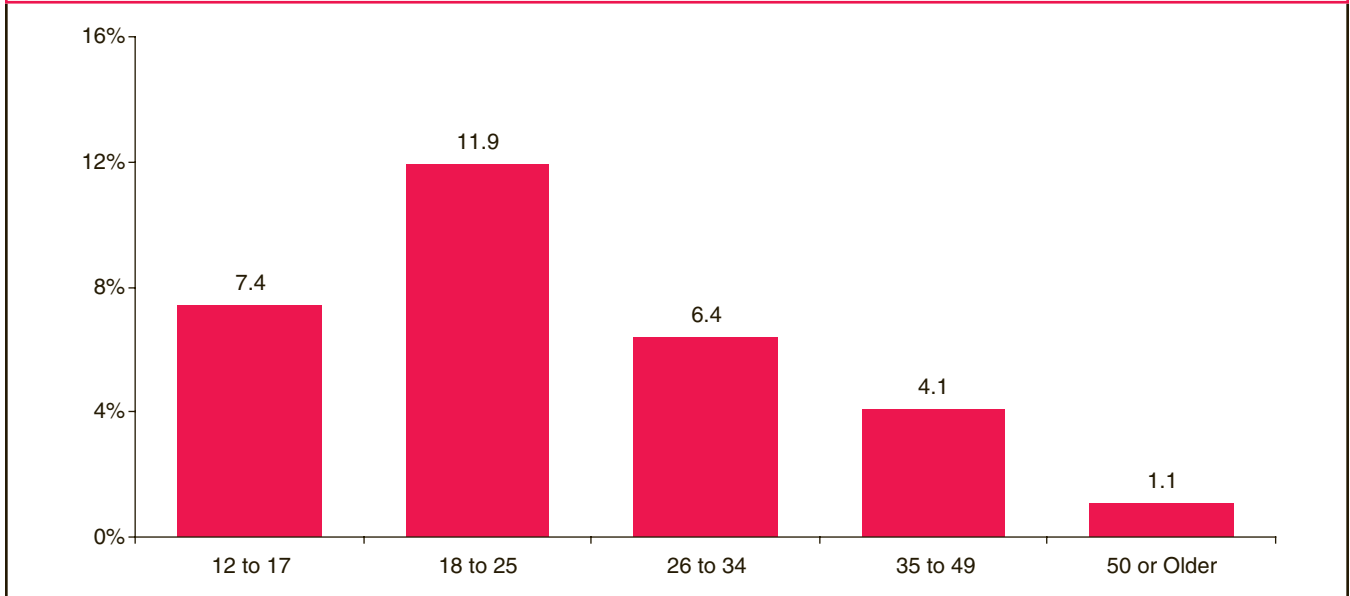
Figure 1. Percentages of Past Year Nonmedical Prescription Pain Reliever Use among Persons Aged 12 or Older: 2002-2005



Source: SAMHSA, 2002-2005 NSDUHs.

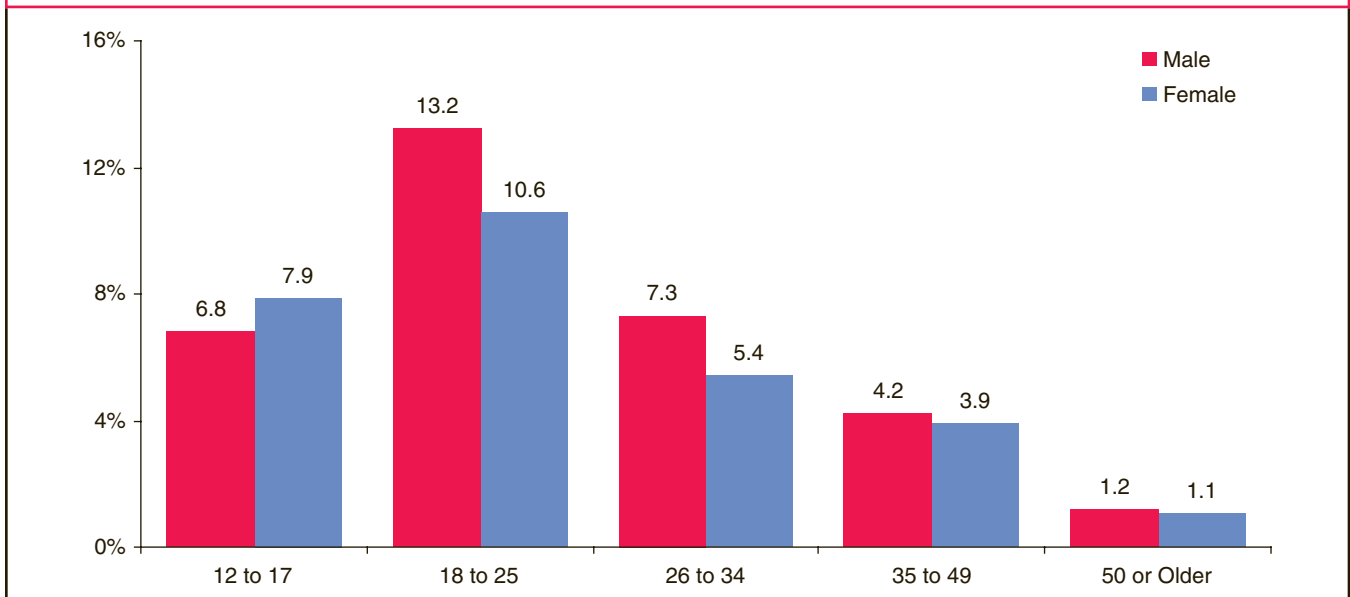
percent of persons aged 12 or older (an estimated 11.4 million persons) used a prescription pain reliever nonmedically in the 12 months prior to the survey. Males were more likely than females to have used a prescription pain reliever nonmedically in the past year (5.2 vs. 4.4 percent). Young adults aged 18 to 25 had the highest rate of past year nonmedical use of prescription pain relievers among all age groups (Figure 2). Among youths aged 12 to 17, females were more likely than males to have used pain relievers nonmedically in the past year (7.9 vs. 6.8 percent), whereas males aged 18 to 25 and males aged 26 to 34 had higher rates than their female counterparts (Figure 3). Among adults aged 35 to 49 and those aged 50 or older, males and females had similar rates of nonmedical use of prescription pain relievers.

Figure 2. Percentages of Past Year Nonmedical Prescription Pain Reliever Use among Persons Aged 12 or Older, by Age Group: 2002-2005



Source: SAMHSA, 2002-2005 NSDUHs.

Figure 3. Percentages of Past Year Nonmedical Pain Reliever Use among Persons Aged 12 or Older, by Age Group and Gender: 2002-2005



Source: SAMHSA, 2002-2005 NSDUHs.

Patterns and Trends in Past Year Initiation of Nonmedical Prescription Pain Relievers

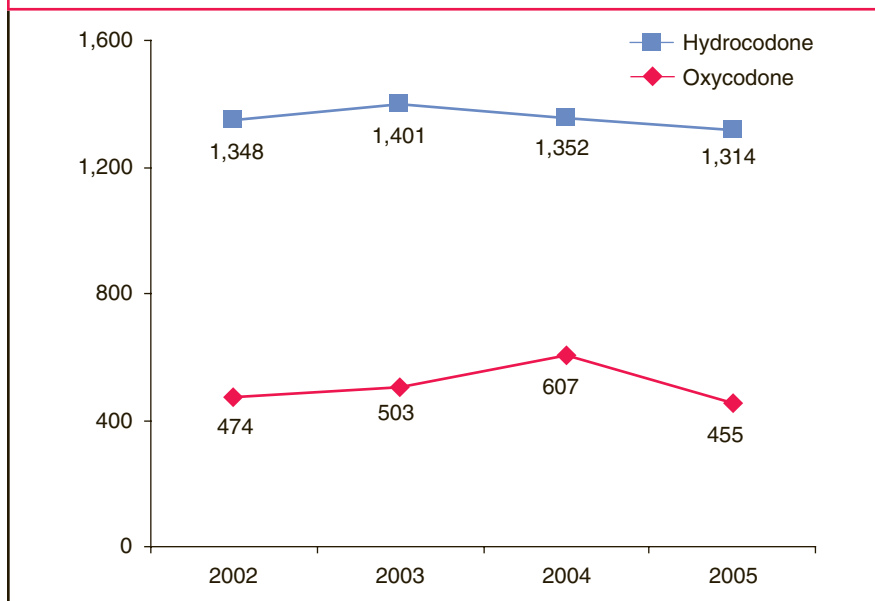
The number of persons who used prescription pain relievers nonmedically for the first time in the past year (i.e., past year initiates) also remained stable from 2002 to 2005, with an estimated 2.3 million persons initiating use in 2002, 2.4 million in 2003, 2.4 million in 2004, and 2.2 million in 2005. The same pattern was found for both males and females and for persons in each of the adult age groups. Among youths aged 12 to 17, however, there were fewer past year initiates of nonmedical use of prescription pain relievers in 2005 (782,000) than in 2002 (905,000).

Combined data from 2002 to 2005 indicate that an annual average of 2.3 million persons used prescription pain relievers nonmedically for the first time in the 12 months before the survey. This represents 1.1 percent of individuals at risk for initiation (i.e., those who had not previously used prescription pain relievers nonmedically). Among those at risk for initiation, the rate of past year nonmedical prescription pain reliever initiation decreased with advancing age, with 3.8 percent of those aged 12 to 17, 3.4 percent of those aged 18 to 25, 0.9 percent of those aged 26 to 34, 0.4 percent of those aged 35 to 49, and 0.2 percent of those aged 50 or older initiating use in the past year.

Patterns and Trends in Past Year Nonmedical Use of Specific Pain Relievers

Among persons who first used any prescription pain reliever nonmedically in the past year, the

Figure 4. Trends in Nonmedical Use of Oxycodone and Hydrocodone Products among Persons Aged 12 or Older Who Used Pain Relievers Nonmedically for the First Time in the Past Year: Numbers in Thousands, 2002-2005



Source: SAMHSA, 2002-2005 NSDUHs.

numbers using oxycodone and hydrocodone products remained relatively stable between 2002 and 2005 (Figure 4). This same pattern was found for both males and females.

Combined data from 2002 to 2005 indicate that an annual average of 57.7 percent of persons who first used prescription pain relievers nonmedically in the past year used hydrocodone products and 21.7 percent used oxycodone products (Table 1).¹⁰ Although male and female past year initiates had similar rates of nonmedical use of oxycodone products (22.9 and 20.8 percent, respectively), male recent initiates were more likely than their female counterparts to have used hydrocodone products nonmedically (61.4 vs. 54.9 percent). Among persons who initiated nonmedical use of pain relievers in the past year, young adults aged 18 to 25 were more likely than their counterparts aged 12 to 17 or aged 35 to 49 to have used oxycodone products (27.4 vs. 20.3 and 14.9 percent).¹¹

Table 1. Percentages Reporting Nonmedical Use of Hydrocodone and Oxycodone Products among Past Year Nonmedical Pain Reliever Initiates Aged 12 or Older, by Gender and Age Group: 2002-2005

Demographic Characteristic	Hydrocodone Products		Oxycodone Products	
	Percent	SE**	Percent	SE
Total	57.7	1.13	21.7	0.80
Gender				
Male	61.4	1.51	22.9	1.16
Female	54.9	1.59	20.8	1.07
Age*				
12 to 17	55.4	1.10	20.3	0.87
18 to 25	64.1	1.24	27.4	1.11
26 to 34	59.5	4.58	20.3	3.47
35 to 49	54.6	5.33	14.9	3.70

Source: SAMHSA, 2002-2005 NSDUHs.

(20) Tramadol (no picture); and (21) Ultram®. Respondents also were asked whether they used any other prescription pain relievers not included in this list for nonmedical reasons and were asked to specify the names of the drugs that they used nonmedically.

⁷ Respondents whose age at first use was equal to or greater than 1 year less than their current age were asked to indicate the year and month in which they initiated use.

⁸ Colliver, J. D., Kroutil, L. A., Dai, L., & Gfroerer, J. C. (2006). *Misuse of prescription drugs: Data from the 2002, 2003, and 2004 National Surveys on Drug Use and Health* (DHHS Publication No. SMA 06-4192, Analytic Series A-28). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies. [Available at <http://www.oas.samhsa.gov/analytic.htm>]

⁹ Prior to 2004, data on nonmedical use of OxyContin® were collected only for the lifetime reporting period, the same procedure used for most of the specific prescription drugs. In 2004, OxyContin® was given separate recognition within the prescription pain reliever category, and recency-of-use questions were added to identify past year and past month OxyContin® users. At the same time, imputation procedures routinely applied to resolve missing data issues for

the major drugs in the survey were initiated for OxyContin®, estimates using such imputation were not available for the OxyContin® data from 2002 and 2003. To compare the 4-year trend between 2002 and 2005, analyses in this report used a version of the oxycodone product variable that does not take into account imputed data for OxyContin® for all 4 years. For this reason, estimates in this report for nonmedical use of oxycodone products in 2004 and 2005 may differ slightly from previously published estimates.

¹⁰ Respondents could report having used more than one type of pain reliever nonmedically. Estimates for past year pain reliever initiation are based on respondents' self-reports of their age at first nonmedical use of any prescription pain reliever and do not necessarily apply to any particular type of product.

¹¹ Rates of oxycodone use among past year initiates were similar between those aged 12 to 17 and those aged 26 to 34. Statistically significant differences were found between the estimates for those aged 18 to 25 and those aged 12 to 17, but not between estimates for those aged 18 to 25 and those aged 26 to 34. Larger variability in the estimate for the 26 to 34 age group precluded significant differences between estimates for this age group and those aged 18 to 25.

End Notes

- ¹ National Institute on Drug Abuse. (2006, June). *Community Epidemiology Work Group: Epidemiologic trends in drug abuse advance report* (NIH Publication No. 06-5878A). Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health. [Available as a PDF at <http://www.drugabuse.gov/about/organization/cewg/Reports.html>]
- ² National Drug Intelligence Center. (2006, January). *National Drug Threat Assessment 2006* (Report No. 2006-Q0317-001). Johnstown, PA: Author. [Available at <http://www.usdoj.gov/ndic/pubs11/18862/index.htm>]
- ³ Compton, W. M., & Volkow, N. D. (2006). Major increases in opioid analgesic abuse in the United States: Concerns and strategies. *Drug and Alcohol Dependence*, 81, 103-107.
- ⁴ Volkow, N. D. (2005). Confronting the rise in abuse of prescription drugs. *NIDA Notes*, 19(5), 3. [Available at http://www.drugabuse.gov/NIDA_Notes/NNVol19N5/Index.html]
- ⁵ Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2006, December 21). *Teen drug use continues down in 2006, particularly among older teens; but use of prescription-type drugs remains high*. Ann Arbor, MI: University of Michigan News and Information Services. [Available at <http://www.monitoringthefuture.org/press.html>]
- ⁶ Respondents were shown a "pill card" displaying the names and color photographs of specific pain relievers. The following drugs were listed on the pain relievers pill card: (1) Darvocet®, Darvon®, or Tylenol® with Codeine; (2) Percocet®, Percodan®, or Tylox®; and (3) Vicodin®, Lortab®, or Lorcet®/Lorcet Plus®. Additional drugs were (4) Codeine; (5) Demerol®; (6) Dilaudid®; (7) Fioricet®; (8) Fiorinal®; (9) Hydrocodone; (10) Methadone; (11) Morphine; (12) OxyContin®; (13) Phenaphen® with Codeine; (14) Propoxyphene; (15) SK-65®; (16) Stadol® (no picture); (17) Talacen®; (18) Talwin®; (19) Talwin® NX;

Table Notes

- * Data for persons aged 50 or older are suppressed due to low precision; no estimate reported.
- ** SE = Standard Error.

Suggested Citation

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Research findings from the SAMHSA 2002-2005 National Surveys on Drug Use and Health (NSDUHs)

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The National Survey on Drug Use and Health (NSDUH) is an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). Prior to 2002, this survey was called the National Household Survey on Drug Abuse (NHSDA). The 2002 data on persons aged 12 or older are based on information obtained from 68,126 persons; the 2003 data from 67,784 persons; the 2004 data from 67,760 persons; and the 2005 data from 68,308 persons. The combined 2002 to 2005 data are based on information obtained from 271,978 persons aged 12 or older. The survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence.

The NSDUH Report is prepared by the Office of Applied Studies (OAS), SAMHSA, and by RTI International in Research Triangle Park, North Carolina. (RTI International is a trade name of Research Triangle Institute.)

Information on NSDUH used in compiling data for this issue is available in the following publications:

Office of Applied Studies. (2006). *Results from the 2005 National Survey on Drug Use and Health: National findings* (DHHS Publication No. SMA 06-4194, NSDUH Series H-30). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Office of Applied Studies. (2005). *Results from the 2004 National Survey on Drug Use and Health: National findings* (DHHS Publication No. SMA 05-4062, NSDUH Series H-28). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Office of Applied Studies. (2004). *Results from the 2003 National Survey on Drug Use and Health: National findings* (DHHS Publication No. SMA 04-3964, NSDUH Series H-25). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Office of Applied Studies. (2003). *Results from the 2002 National Survey on Drug Use and Health: National findings* (DHHS Publication No. SMA 03-3836, NSDUH Series H-22). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Also available online: <http://www.oas.samhsa.gov>.

Because of improvements and modifications to the 2002 NSDUH, estimates from the 2002 to 2005 surveys should not be compared with estimates from the 2001 or earlier versions of the survey to examine changes over time.



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