

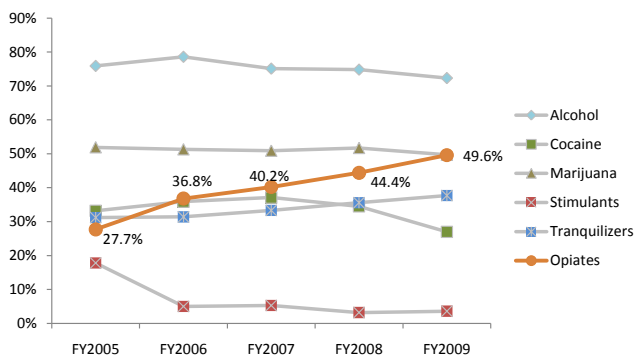
## Examining Prescription Opiate Abuse in Kentucky: A Look at an Emerging Trend

This report shows the trends in substance use among individuals in publicly funded treatment programs in Kentucky. Historically, alcohol and marijuana have been the most prevalent substances reported by individuals in treatment. However, the prevalence rates over the past five years suggest that prescription opiate use is emerging as a popular misused substance. In fact, the SAMHSA Office of Applied Studies found that Kentucky was the state with the highest level of non-medical use of prescription pain relievers<sup>1</sup>. This report explores substance use trends as well as the prevalence rates and demographics for prescription opiate users in Kentucky over a five year period using Kentucky Treatment Outcome Study (KTOS) intake data from state fiscal years 2005 to 2009.

### State Trends in Use of Prescription Opiates

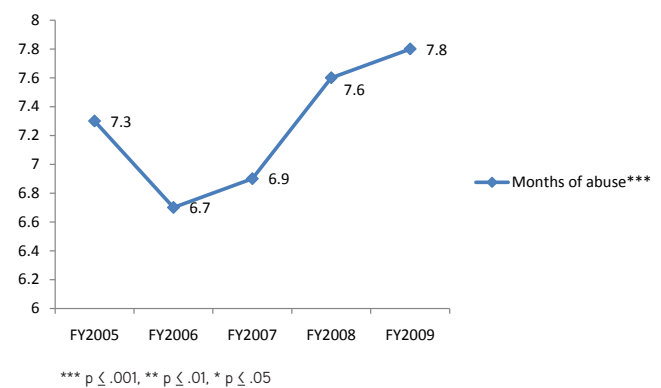
Figure 1 shows drug use patterns across the state over the past 5 years. The use of prescription opiates has quickly increased over the years while the use of many other drugs has either remained steady or decreased. Tranquilizer use has increased, but not nearly at the rate of prescription opiate use. In fact, the misuse of prescription opiates has increased by almost 60% over the past 5 years while tranquilizer misuse has increased by approximately 36%.

Figure 1. Overall pattern of 12-month major drug use across Kentucky in the past 5 years



Not only are there more clients reporting prescription opiate use in the 12 months prior to treatment intake, but for those who report misusing prescription opiates, the number of months of prescription opiate use has also increased since FY 2005 (see Figure 2).

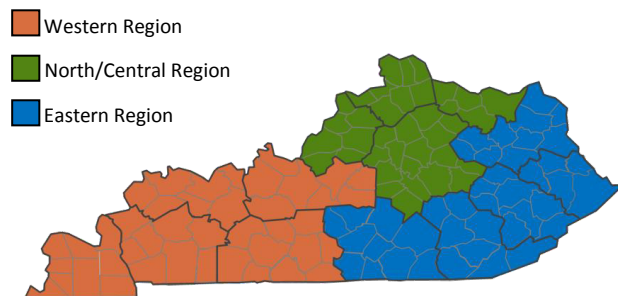
Figure 2. Average number of months of prescription opiate abuse over the past 5 years



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In order to compare prescription opiate misuse across the state, the regions were combined into the Western region (Four Rivers, Pennyroyal, River Valley, Lifeskills, Communicare), North/Central region (NorthKey, Bluegrass, Seven Counties, and Comprehend), and Eastern region (Pathways, Mountain, Kentucky River, Cumberland River, and Adanta) of the state. The regional breakdown is shown in Figure 3.

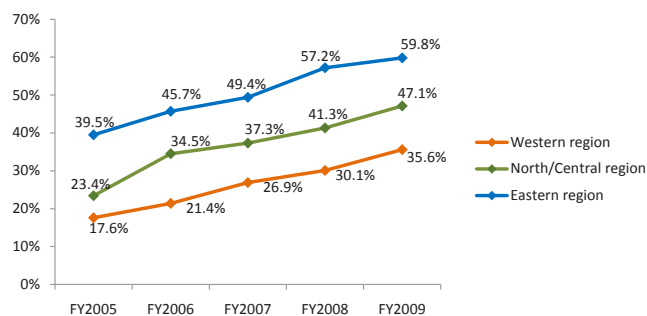
Figure 3. Regional breakdown



According to the regional breakdown of reported past 12 month use of prescription opiates, reported use has increased over the past 5 years in all regions (see Figure 4). In the Western and North/Central regions, prescription opiate use has doubled while reported use in the Eastern region has increased by 50%. Though the Eastern region has seen a relatively smaller increase in prescription opiate use over the years compared to the other two regions, reported prescription opiate use in FY2009 is over 30% greater than the Western region and has remained at a higher level than in other regions.

**Prescription opiate misuse in the Eastern region of Kentucky is 30% higher than in other regions**

Figure 4. Regional breakdown of past 12 month reported use of prescription opiates



## Profile of Prescription Opiate Users

Compared to non-users of prescription opiates, KTOS data suggest that there are more females in the group reporting prescription opiate use. In addition, a greater percentage of prescription opiate users are female, white, not married, unemployed, and younger compared to non-users of prescription opiates.

Table 1. Demographic characteristics

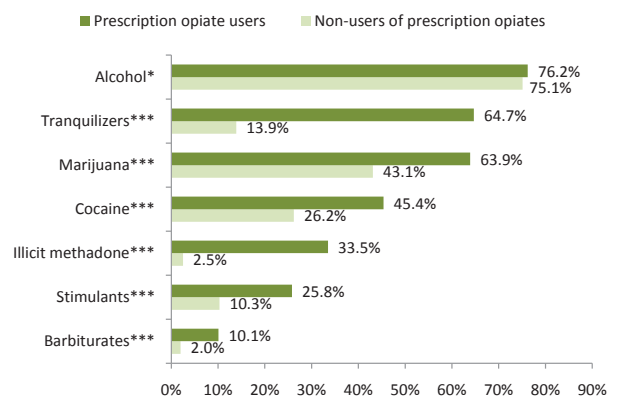
	Non-users of prescription opiates (n = 22,068)	Prescription opiate users (n = 13,992)
Gender***		
Female	34.3%	41.0%
% White***	81.5%	95.2%
% Not married	79.6%	79.3%
% Unemployed***	50.7%	55.4%
Average age***	34.5 (18-85)	30.6 (18-81)

\*\*\* p ≤ .001, \*\* p ≤ .01, \* p ≤ .05

## Other Drug Use among Prescription Opiate Users

Prescription opiate users are also significantly more likely to use other illicit/illegal drugs. While almost 60% of non-users of prescription opiates reported some other type of drug use in the past 12 months, 90% of prescription opiate misusers reported using other illicit/illegal drugs. Specific drug use is broken down in Figure 5.

Figure 5. Comparison of opiate and non-opiate users on other drug use



\*\*\* p ≤ .001, \*\* p ≤ .01, \* p ≤ .05

In order to determine if prescription opiate users were more likely to use more drugs (other than prescription opiates) than non-users of prescription opiates and to understand if these comparisons were not just a matter of the significant demographic differences between the two groups, logistic regression models of association were used controlling for age, gender, race and employment. The results indicate that prescription opiate users were almost twice as likely to use cocaine in the past 12 months, 1.4 times more likely to use marijuana, and 11.7 times more likely to report illicit methadone use. In addition, prescription opiate users were 2.1 times more likely to report stimulant use, 4.3 times more likely to report barbiturate use, and 4.4 times more likely to report tranquilizer use compared to non-users of prescription opiates (see Table 2).

**Clients  
who misused  
prescription opiates  
were 1.5 times more  
likely to use other  
illicit drugs**

Table 2. Multiple logistic regression analysis of association of prescription opiate use and other illicit drug use<sup>a,b</sup>

	Odds ratio	Relative Risk
Cocaine***	2.7	1.9
Marijuana***	2.2	1.4
Illicit methadone***	16.1	11.7
Stimulants***	2.4	2.1
Barbiturates***	4.7	4.3
Tranquilizers***	9.8	4.4
Any drug***	6.3	1.5

<sup>a</sup>Controlled for age, gender, race and employment

<sup>b</sup>Because of the relatively small difference between the percentages, alcohol was not included in the logistical model

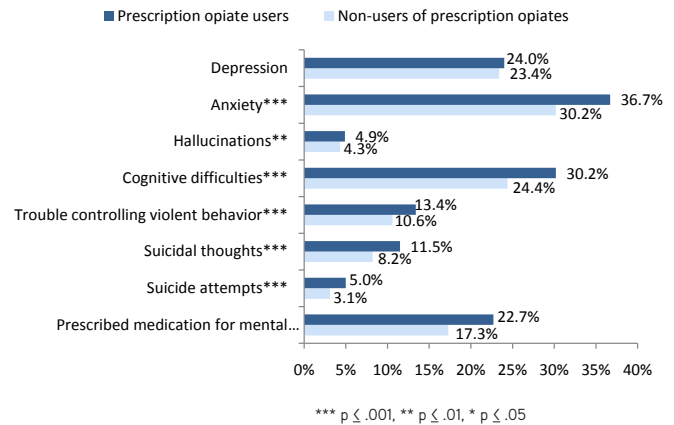
\*\*\* p < .001, \*\* p < .01, \* p < .05

### Mental Health and Prescription Opiate Use

Clients reporting prescription opiate use were more likely to report co-occurring mental health problems, with the exception of depression, compared to clients not using prescription opiates. Figure 6 shows reported mental health problems in the 12 months prior to treatment intake. Prescription opiate users were significantly more likely to report anxiety, hallucinations, cognitive difficulties, trouble controlling violent behavior, suicidal thoughts, suicide attempts,

and were more likely to have been prescribed medication for a psychological or emotional problem.

Figure 6. Comparison of prescription opiate and non-users of prescription opiates on mental health status in the past 12 months



So as to control for potential demographics related to opiate use, logistic regression models of association were again used to control for age, gender, race, and employment. Based upon these findings, prescription opiate users were 1.2 times more likely to report anxiety, hallucinations, cognitive difficulties, and to

### Prescription opiate misusers were 1.2 times more likely to suffer from a mental/emotional problem compared to non-users of prescription opiates

have trouble controlling violent behavior compared to those who did not use prescription opiates. In addition, prescription opiate users were 1.4 times more likely to have suicidal thoughts and to have attempted suicide. Finally, prescription opiate users were 1.3 times more likely to have been prescribed medication for mental or emotional problems in the 12 months prior to substance abuse treatment intake.

Table 3. Multiple logistic regression analysis of association of prescription opiate use and mental health<sup>a</sup>

	Odds ratio	Relative Risk
Anxiety***	1.3	1.2
Hallucinations***	1.2	1.2
Cognitive difficulties***	1.3	1.2
Trouble controlling violent behavior***	1.2	1.2
Suicidal thoughts**	1.4	1.4
Suicide attempts***	1.5	1.4
Prescribed medication for a mental problem***	1.3	1.3

<sup>a</sup>Controlled for age, gender, race and employment

\*\*\* p < .001, \*\* p < .01, \* p < .05

## What Does All of This Mean to Kentucky?

The significant increase in the use of prescription opiates in Kentucky raises concern about how these drugs get distributed into the population. Concern about the treatment of chronic nonmalignant pain and the relative ease of access to prescription opiates has important implications for health care providers and law enforcement.

As the data suggest, prescription opiate users are more likely than non-users of prescription opiates to use other drugs as well. Given the co-occurrence of other mental health problems with prescription opiate use, closer case management and monitoring of access to prescriptions may be indicated. In addition, prescription opiates used with alcohol or barbiturates creates potentially life-threatening health problems, such as respiratory distress or failure<sup>2</sup>. The Drug Abuse Warning Network (DAWN) reports that in 2006, well over 30% of emergency room visits involved the misuse of prescription pain relievers<sup>3</sup>. In addition, prescription opiates have caused more drug overdose deaths than either cocaine or heroin<sup>4</sup> and over 90% of drug-related suicide involved prescription drugs<sup>3</sup>.

More prescription opiate users translates to more treatment admissions for opiate abuse into already full facilities. Nationally, prescription opiate abuse alone accounted for almost 20% of substance abuse treatment admissions in 2007<sup>5</sup>. Given the steady increase in prescription opiate users in treatment, it is crucial for treatment providers to understand the various co-occurring conditions and lethality risk associated with this type of drug abuse.

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## References

1. 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.
2. National Institute on Drug Abuse. (2009). NIDA InfoFacts: Prescription and Over-the Counter Medications. Retrieved September 9, 2009 from <http://www.nida.nih.gov/infofacts/PainMed.html>.
3. Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2008) Drug Abuse Warning Network, 2006: National Estimates of Drug-Related Emergency Department Visits. DAWN Series D-30, DHHS Publication No. (SMA) 08-4339, Rockville, MD.
4. Drug Enforcement Administration (2009). Fact sheet: Prescription drug abuse—a DEA focus. Retrieved September 10, 2009 from [http://www.usdoj.gov/dea/concern/prescription\\_drug\\_fact\\_sheet.html](http://www.usdoj.gov/dea/concern/prescription_drug_fact_sheet.html).
5. Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (August 27, 2009). The TEDS Report: Heroin and Other Opiate Admissions to Substance Abuse Treatment. Rockville, MD.