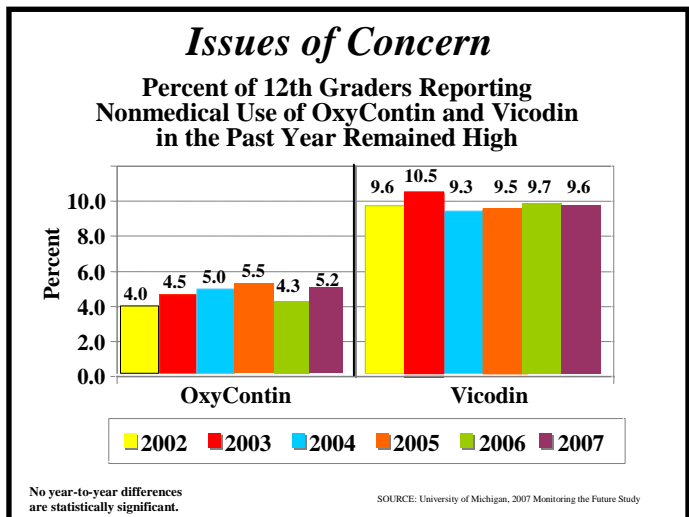


Prescription Drug Abuse – March 2008

A Research Update from the National Institute on Drug Abuse

Prescription drug abuse is a significant emerging problem in the United States

- In 2006, approximately 7.0 million persons were current users of psychotherapeutic drugs taken nonmedically (2.8 percent of the U.S. population). This class of drugs is broadly described as those targeting the central nervous system, including drugs used to treat psychiatric disorders (NSDUH, 2007).
 - Pain relievers - 5.2 million
 - Tranquilizers - 1.8 million
 - Stimulants - 1.2 million
 - Sedatives - 0.4 million.
- Abuse of prescription drugs is particularly problematic among adolescents.
 - NIDA's 2007 Monitoring the Future (MTF) survey found continued high rates of nonmedical use of the prescription pain relievers Vicodin and OxyContin in each grade. In 2007, many 12th grade students reported nonmedical use of Vicodin and OxyContin during the past year—9.6% and 5.2%, respectively (figure).
 - And while the non-medical use of some stimulants (i.e., methamphetamine) decreased among 12th graders between 2006 and 2007, levels reported remain high. For past year nonmedical use of amphetamines, 7.5% of 12th graders reported abuse; for Ritalin, 3.8% reported abuse; and for methamphetamine, 1.7% reported abuse.
- It is generally believed that the broad availability of prescription drugs (e.g., via the medicine cabinet, the Internet, and physicians) and misperceptions about their safety make prescription medications particularly prone to abuse.
- Among those who abuse prescription drugs, high rates of other risky behaviors, including abuse of other drugs and alcohol, have also been reported.



Most commonly abused classes of prescription drugs

- Opioids, such as OxyContin and Vicodin, which are most often prescribed to treat pain;
- Central nervous system (CNS) depressants, such as Valium and Xanax, which are used to treat anxiety and sleep disorders; and
- Stimulants, which are prescribed to treat certain sleep disorders and attention deficit hyperactivity disorder (ADHD), and include drugs such as Ritalin and Adderall.

Risks of prescription drug abuse

Opioids:

- High risk for addiction and overdose. This is a major concern, particularly for recently synthesized slow-release formulations, which abusers override by crushing the pills and injecting or snorting the contents, heightening their risk for respiratory depression and death.
- Dangerous combination effects. Combining opioids with other drugs, including alcohol, can intensify respiratory distress.

- Heightened HIV risk. Injecting opioids increases the risk of HIV and other infectious diseases through use of unsterile or shared equipment.

CNS Depressants:

- Addiction and withdrawal dangers. These drugs can be highly addictive and, in chronic users, discontinuing them absent a physician's guidance can bring about severe withdrawal symptoms that must be properly managed by a medical professional.
- Risk of overdose. Overdose can cause severe breathing problems and lead to death, especially when these drugs are combined with other medications or alcohol.

Stimulants:

- Reputation as performance enhancers. Incorrectly perceived as **safe** for enhancing academic achievement and weight loss, these drugs are highly addictive and potentially harmful.
- Range of risky health consequences. These include risk of dangerously high body temperature, seizures, and cardiovascular complications.

NIDA Supported Research on Prescription Drug Abuse

NIDA is actively expanding its research portfolio in this area. For example, NIDA's new initiative - Prescription Opioid Use and Abuse in the Treatment of Pain - is soliciting a broad range of both human and animal studies from across the sciences. Through this initiative, NIDA aims to provide a scientific foundation that can help inform health care providers about how to treat pain successfully while minimizing the risks of abuse and addiction to opioids. NIDA also hopes to gain information on how to optimally treat patients with pain so that they do not become addicted.

Current NIDA-supported researchers are conducting large-scale epidemiological studies investigating the patterns and sources of illicit use of prescription medications in high school and college students. Results suggest that socialization contributes to prescription drug abuse and that prevention efforts should include a focus on this aspect of adolescent development, as well as the motivations behind the abuse, which often have an age-gender bias. Other populations of interest include older adults, who are frequently prescribed psychotherapeutic drugs and who may be particularly vulnerable to the health consequences of misuse or abuse.

Treatments for Prescription Drug Abuse

Several options are available for effectively treating addiction to prescription drugs, depending on the medication being abused. Approaches to treating addiction to pain relievers are drawn from research on treating addiction to heroin, also an opioid, and include medications such as naltrexone, methadone, and buprenorphine, combined with behavioral counseling.

NIDA's National Drug Abuse Treatment Clinical Trials Network is sponsoring the first large-scale, multi-site study to test the effectiveness of buprenorphine/naloxone—a medication used to treat heroin addiction—as a treatment for addiction to prescription pain medication.



Treatment of addiction to prescription stimulants, such as Ritalin, is often based on behavioral therapies that have proven effective in treating addiction to cocaine and methamphetamine. While no medications have yet proven efficacious for the treatment of stimulant addiction, NIDA is supporting a number of studies examining medications with this potential.

For further information please visit NIDA on the web at www.drugabuse.gov or contact:

Public Information and Liaison Branch
Office of Science Policy and Communications
Phone 301-443-1124/Fax 301-443-7397
information@nida.nih.gov