

# CENTRAL NERVOUS SYSTEM DEPRESSANTS

Rimrock  
Foundation

## FACT SHEET

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**What are CNS depressants?**

**Central Nervous System (CNS) depressants are substances that can slow normal brain function.** Because of this property, some CNS depressants are useful in the treatment of anxiety and sleep disorders. In higher doses, some CNS depressants can be used as general anesthetics. Among the medications that are commonly prescribed for these purposes are the following:

- ❑ Barbiturates, such as mephobarbital (Mebaral) and pentobarbital sodium (Nembutal), which are used to treat anxiety, tension, and sleep disorders.
- ❑ Benzodiazepines, such as diazepam (Valium), chlordiazepoxide HCl (Librium), and alprazolam (Xanax), which can be prescribed to treat anxiety, acute stress reactions, and panic attacks; the more sedating benzodiazepines, such as triazolam (Halcion) and estazolam (ProSom) can be prescribed for short-term treatment of sleep disorders.

**How do CNS depressants affect the brain and body?**

**T**here are numerous CNS depressants; most act on the brain by affecting the neurotransmitter gamma-aminobutyric acid (GABA). Neurotransmitters are brain chemicals that facilitate communication between brain cells. GABA works by decreasing brain activity. Although the different classes of CNS depressants work in unique ways, ultimately it is through their ability to increase GABA activity that they produce a drowsy or calming effect that is beneficial to those suffering from anxiety or sleep disorders.

## Medical effects of depressant abuse

Despite their many beneficial effects, barbiturates and benzodiazepines have significant potential for abuse and should be used only as prescribed. During the first few days of taking a prescribed CNS depressant, a person usually feels sleepy and uncoordinated, but as the body becomes accustomed to the effects of the drug, these feelings begin to disappear. If one uses these drugs long term, the body will develop tolerance for the drugs, and larger doses will be needed to achieve the same initial effects.

In addition, continued use can lead to physical dependence and - when use is reduced or stopped - withdrawal.

**Because all CNS depressants work by slowing the brain's activity, when an individual stops taking them, the brain's activity can rebound and race out of control, possibly leading to seizures and other harmful consequences.**



Although withdrawal from benzodiazepines can be problematic, it is rarely life-threatening, whereas withdrawal from prolonged use of other CNS depressants can have life-threatening complications. Therefore, anyone who is thinking about discontinuing their medications should speak with a physician or seek other competent care.

CNS depressants should not be used with other medications except under a physician's supervision. Typically, they should not be combined with any other medication or substance that causes CNS depression, including prescription pain medicines, some over-the-counter cold and allergy medications, or alcohol. **Using CNS depressants with these other substances - particularly alcohol - can slow breathing, or slow both the heart and respiration, and possibly lead to death.**

## Role of health care providers

About 70 percent of Americans visit a health care provider, such as a primary care physician, at least once every 2 years. **Thus, health care providers are in a unique position to prescribe needed medications appropriately, and to identify prescription drug abuse when it exists.** Routine histories, along with questions about what prescriptions and over-the-counter medicines the patient is taking and why, help the patient recognize the problem, set goals for recovery and seek appropriate treatment. Screening should be performed if a patient presents with specific symptoms associated with problem use of a substance.

Over time, providers should note any rapid increases in the amount of a medication needed - which may indicate the development of tolerance - or frequent requests for refills before the quantity prescribed should have been used. They should also be alert to the fact that those addicted to prescription medications may engage in "doctor shopping," moving from provider to provider in an effort to get multiple prescriptions for the drug they abuse. Preventing or stopping prescription drug abuse is an important part of patient care.

Pharmacists can play a key role in preventing prescription drug misuse and abuse by providing clear information and advice about how to take a medication appropriately, about the effects the medication may have, and about possible drug interactions.

## Role of patients

There are several ways that patients can prevent prescription drug abuse. When visiting the doctor, providing a complete medical history, along with a description of the reason for the visit helps ensure that the physician fully understands the complaint and can prescribe appropriate medication. When doctors prescribe a pain medication, stimulant, or CNS depressant, carefully following the directions for use and learning about the effects that the drug could have are key patient responsibilities. This is especially true during the first few days the body is adapting to the medication.

## The path to healing

Research has shown us that addiction to any drug, illicit or prescribed, is a brain disease that can, like other chronic diseases, be effectively treated.

Patients who have become addicted to barbiturates and benzodiazepines should not attempt to stop taking them on their own, since withdrawal from these drugs can be potentially life-threatening.

**Patients addicted to these drugs should undergo medically supervised detoxification in a licensed treatment facility because the dose must be gradually tapered off.**

Addiction treatment teaches people how to function effectively without drugs, how to handle cravings, how to avoid drugs and situations that could lead to drug use. When delivered effectively, behavioral treatments -- such as individual counseling, group or family counseling, and cognitive-behavioral therapies -- can help patients improve their personal relationships and ability to function at work and in the community.

We directly address the physical and psychological elements of dependency disorders, as well as the defeating beliefs that accompany addiction. We give our patients and their family members an unparalleled understanding about themselves, their illness, their thinking patterns, and alternative behaviors necessary for abstinence from mood-altering chemicals or experiences.



**For further information on Rimrock Foundation's treatment of CNS depressant abuse, call Jen Porter, Admissions Supervisor at 1-800-227-3953 or 1-406-248-3175, or visit our website at [www.rimrock.org](http://www.rimrock.org). For more educational information on CNS depressants, contact the Rimrock Foundation Library at the above numbers.**

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