

Prescription Opioids

Opioids are drugs that possess morphine-like activity. They can be naturally occurring, semi-synthetic or synthetic substances. Opioids are available in many dosages and dosage formulations. Because the mechanism of action of the opioids is the same, patients who abuse or overdose on prescription opioids often develop similar clinical effects and are largely managed the same.

The potency of opioids varies greatly. Hydromorphone (Dilaudid®, Palladone®) is approximately 8 times more potent than morphine, and fentanyl (Sublimaze®, Duragesic® patch) is 80 times more potent than morphine. In other words, a dose of 0.125 mg of fentanyl is equivalent to a 10 mg dose of morphine! Codeine is less potent than morphine; 120 mg of codeine is equivalent to 10 mg of morphine. Oxycodone, (OxyContin®, Percocet®), and hydrocodone (Vicodin®, Lortab®) are equipotent to morphine. **Why then are these prescription opioids abused more than others?**

Although highly potent opioids are often abused, the dosage form and availability also influence the potential for abuse. OxyContin®, Vicodin® and fentanyl diversion and abuse has escalated dramatically in recent years. Oxycontin® has a controlled-release drug delivery system that when swallowed whole, allows the drug to be delivered slowly. When crushed or chewed, that mechanism is destroyed, enabling the user to absorb the entire dose rapidly by snorting it or dissolving in water and injecting it. Similarly, Duragesic® patches (fentanyl) are often chewed or otherwise altered to release a large dose of the drug immediately, producing an intense euphoric effect.

Hydrocodone is the most frequently prescribed opioid in the U.S. It is a Schedule II opioid that is marketed in multi-ingredient Schedule III products such as Vicodin® and Lortab®. Schedule III drugs are easier to obtain through fake call-in prescriptions, altered prescriptions and purchases from internet sources.

Palladone®, an extended-release form of hydromorphone, was recently approved by the FDA. The large dose of hydromorphone in Palladone® (12-32 mg) makes it highly susceptible to abuse.

DID YOU KNOW THAT...there is heroin being sold in New Jersey and Pennsylvania that is possibly laced with cyanide?

There recently have been cases of heroin users developing signs and symptoms similar to cyanide poisoning. These poisonings were unconfirmed but responded to a component of the Cyanide Antidote Kit. If you are treating a suspected heroin overdose in a patient who also has lactic acidemia and arteriolization of venous blood gases ($pO_2 > 60$), call the poison center for advice regarding the administration of the Cyanide Antidote Kit and send blood for further testing.



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If you do not wish to receive faxes or emails from the Maryland Poison Center, call 410.706.7604 or circle your fax number and fax this back to 410.706.7184. Supported by Maryland Department of Health and Mental Hygiene