



## Prescription Pain Medications (Opioids)

*Street names: Oxy, Percs, Vikes*

EXPAND ALL

Revised March 2017

### What is prescription opioid misuse?



**Also known as:** Happy Pills, Hillbilly Heroin, OC, Oxy, Percs, or Vikes

Prescription opioids are medications that are chemically similar to *endorphins* – opioids that our body makes naturally to relieve pain – and also similar to the illegal drug heroin. In nature, opioids are found in the seed pod of the opium poppy plant. Opioid medications can be

natural (made from the plant), semi-synthetic (modified in a lab from the plant), and fully synthetic (completely made by people).

Prescription opioids usually come in pill form and are given to treat severe pain—for example, pain from dental surgery, serious sports injuries, or cancer. Opioids are also commonly prescribed to treat other kinds of pain that lasts a long time (chronic pain), but it is unclear if they are effective for long term pain.

For most people, when opioids are taken as prescribed by a medical professional for a short time, they are relatively safe and can reduce pain effectively. However, *dependence* and *addiction* are still potential risks when taking prescription opioids. Dependence means you feel withdrawal symptoms when not taking the drug. Continued use can lead to addiction, where you continue to use despite negative consequences. These risks increase when these medications are misused. Prescription medications are some of the most commonly misused drugs by teens, after tobacco, alcohol, and marijuana.

Common opioids and their medical uses are listed below.

## Opioids

Opioid Types	Conditions They Treat
<ul style="list-style-type: none"> <li>oxycodone (OxyContin, Percodan, Percocet)</li> <li>hydrocodone (Vicodin, Lortab, Lorcet)</li> <li>diphenoxylate (Lomotil)</li> <li>morphine (Kadian, Avinza, MS Contin)</li> <li>codeine</li> <li>fentanyl (Duragesic)</li> <li>propoxyphene (Darvon)</li> <li>hydromorphone (Dilaudid)</li> <li>meperidine (Demerol)</li> <li>methadone</li> </ul>	<ul style="list-style-type: none"> <li>severe pain, often after surgery</li> <li>acute (severe) pain</li> <li>some forms of chronic pain (severe)</li> <li>cough and diarrhea</li> </ul>

Fentanyl has been in the news recently. It is a powerful opioid prescribed for extreme pain that is 50 to 100 times more potent than morphine. It is extremely dangerous if misused, and is sometimes added to illicit drugs sold by drug dealers. Find out more about [Fentanyl](#).

Types of opioids:

Type of Opioid	How Are They Derived	Examples
Natural opioids (sometimes called <i>opiates</i> )	nitrogen-containing base chemical compounds, called <i>alkaloids</i> , that occur in plants such as the opium poppy	morphine, codeine, thebaine
Semi-synthetic/man-made opioids	created in labs from natural opioids	hydromorphone, hydrocodone, and oxycodone (the prescription drug OxyContin), heroin (which is made from morphine)
Fully synthetic/man-made opioids	completely man-made	fentanyl, pethidine, levorphanol, methadone, tramadol, dextropropoxyphene

## How Prescription Opioids Are Misused

People misuse prescription opioid medications by taking them in a way that is not intended, such as:

- Taking someone else's prescription, even if it is for a legitimate medical purpose like relieving pain.
- Taking an opioid medication in a way other than prescribed—for instance, taking more than your prescribed dose or taking it more often, or crushing pills into powder to snort or inject the drug.

- Taking the opioid prescription to get high.
- Mixing them with alcohol or certain other drugs. Your pharmacist can tell you what other drugs are safe to use with prescription pain relievers.

This Is NIDA: Opioids

## What happens to your brain when you use prescription opioids?

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Opioids attach to specific proteins, called opioid receptors, on nerve cells in the brain, spinal cord, gut, and other organs. When these drugs attach to their receptors, they block pain messages sent from the body through the spinal cord to the brain. They can also reduce or stop other essential functions like breathing.

Opioid receptors are also located in the brain's reward center, where they cause a large release of the neurotransmitter *dopamine*. This causes a strong feeling of relaxation and euphoria (extreme good feelings). Repeated surges of dopamine in the reward center from drug-taking can lead to [addiction](#).

Learn more about [how the brain works and what happens when a person misuses drugs](#). And, check out how the brain responds to natural rewards and to drugs.

## The Reward Circuit: How the Brain Responds to Nat...

### What happens to your body when you use prescription opioids?

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In addition to pain relief and euphoria, other effects of opioids include:

- sleepiness
- confusion
- nausea (feeling sick to the stomach)
- constipation
- slowed or stopped breathing

### Can you overdose or die if you use prescription opioids?

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Yes, you can overdose and die from prescription opioid misuse. In fact, taking just one large dose could cause the body to stop breathing.

Deaths from overdoses of prescription drugs have been increasing since the early 1990s, largely due to the increase in misuse of prescription opioid pain relievers. Nearly 23,000 people died from an overdose of a prescription pain medication in 2015, with alarming increases among young people ages 15 to 24.<sup>1</sup> Learn more about [drug overdoses in youth](#).

The risk of overdose and death increase if you combine opioids with alcohol or other medications that also slow breathing, such as Benzodiazepines (e.g. Xanax).

## Signs of Overdose

Signs of a possible prescription opioid overdose are:

- slow breathing
- blue lips and fingernails
- cold damp skin
- shaking
- vomiting or gurgling noise

People who are showing symptoms of overdose need urgent medical help (call 911 immediately). A drug called naloxone can be given to reverse the effects of an opioid overdose and prevent death—but only if it is given in time.

Naloxone is available as an easy-to-use nasal spray or autoinjector. It is often carried by emergency first responders, including police officers and emergency medical services. In some states, doctors can now prescribe naloxone in advance to people who use prescription opioids or to their family members, so that in the event of an overdose, it can be given right away without waiting for emergency personnel (who may not arrive in time). Read more about how [Naloxone Saves Lives](#).

<sup>1</sup> Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, released 2016. Available at <http://wonder.cdc.gov>.

## What about prescription opioids and heroin use?

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Prescription opioids are chemically closely related to heroin, and their effects, especially when misused, can be very similar. Because heroin may be cheaper to get, people who have become addicted to prescription pain medications sometimes switch to using heroin. Nearly 80 percent of people addicted to heroin started first with prescription opioids. However, the transition to heroin use from prescription opioids is still rare; only about 4 percent of people

who misuse prescription opioids use heroin. Even so, because millions of people are using prescription opioids, this adds up to hundreds of thousands of heroin users.<sup>2</sup>

<sup>2</sup>Compton WM, Jones, CM, Baldwin GT. Relationship between nonmedical prescription-opioid use and heroin use. *England Journal of Medicine*, 2016, 374:154-163.

## Are prescription opioids addictive?

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Yes, prescription opioids can be addictive. People who misuse prescription opioids are at greater risk of becoming addicted to opioids than people who take them as prescribed by a doctor.

Opioid withdrawal can cause:

- restlessness
- muscle and bone pain
- sleep problems
- diarrhea
- vomiting (throwing up)
- cold flashes with goosebumps (“cold turkey”)
- involuntary leg movements

Carefully following the doctor’s instructions for taking a medication can make it less likely that someone will develop dependence or addiction, because the medication is prescribed in amounts and forms that are considered appropriate for that person.

Doctors should always weigh the risks of opioid dependence and addiction against the benefits of the medication, and patients should communicate any issues or concerns to their doctor as soon as they arise. The earlier a problem is identified, the better the chances are for long term recovery.

## How many teens use prescription opioids?

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Below is a chart showing the percentage of teens who misuse prescription opioid pain medicines.

### Monitoring the Future Study: Trends in Prevalence of Various Drugs for 8th Graders, 10th Graders, and 12th Graders; 2016 (in percent)\*

Drug	Time Period	8th Graders	10th Graders	12th Graders
Vicodin	Past Year	0.80	1.70	[2.90]
OxyContin	Past Year	0.90	2.10	3.40

\* Data in brackets indicate statistically significant change from the previous year.

For the most recent statistics on teen drug use, see results from [NIDA's Monitoring the Future study](#).

Learn more about [prescription drug misuse among young adults](#).

### What should I do if someone I know needs help?

If you see or hear about someone misusing opioids, talk to a coach, teacher, or other trusted adult.

If you, or a friend, are in crisis and need to speak with someone now, please call:

- **National Suicide Prevention Lifeline at 1-800-273-TALK** (they don't just talk about suicide—they cover a lot of issues and will help put you in touch with someone close by).

If you need information on treatment and where you can find it, you can call:

- **Substance Abuse Treatment Facility Locator at 1-800-662-HELP** or visit [www.findtreatment.samhsa.gov](http://www.findtreatment.samhsa.gov).

For more information on how to help a friend or loved one, visit our [Have a Drug Problem, Need Help? page](#).



## Where can I get more information?

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### Drug Facts

#### NIDA:

- [Commonly Abused Prescription Drugs Chart](#)
- [DrugFacts: Prescription and Over-the-Counter Medications](#)
- [Prescription Pain Medications: What You Need to Know](#)
- [Research Report Series: Misuse of Prescription Drugs](#)
- [Research Report Series: Prescription Opioids and Heroin](#)

### Statistics and Trends

#### NIDA:

- [DrugFacts: High School and Youth Trends](#)

### Centers for Disease Control and Prevention

- [Youth Risk Behavior Surveillance System](#) (YRBSS)

### Monitoring the Future (University of Michigan):

- [Monitoring the Future](#)

### Substance Abuse and Mental Health Services Administration:

- [National Survey on Drug Use and Health](#)

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