

The Opioid Crisis: What You Need to Know



The opioid crisis has swept across the nation at an alarming rate. Drug abuse, dependence, and overdose are issues that affect the lives of millions of Americans. Given the severity of the opioid crisis in the United States, action must be taken at multiple levels to stop the devastating consequences. One of those steps is education. This fact sheet will discuss:

- what opioids are,
- which opioids are most commonly abused and why,
- the risks associated with abusing opioids and who is most vulnerable to an opioid addiction,
- the signs of an opioid addiction and overdose,
- how to respond to an opioid overdose,
- how to safely store and dispose of opioid medications, and
- steps individuals and communities can take to address the opioid crisis.

Key Facts

- Opioids are a class of drugs that include powerful prescription pain relievers — such as oxycodone, codeine, morphine, and fentanyl — and the illegal drug heroin.
- Opioids work by binding to opioid receptors in your body to relieve pain.
- Prescription opioids can be an important part of treatment but carry significant risks for addiction and overdose because of the addictive euphoria they create and the tolerance that occurs after repetitive dosing.
- Drug overdose is the leading cause of accidental death in the United States, of which a large majority is due to prescription and illegal opioids. Seven drug related deaths occur every hour in the United States.
- There are effective treatment options for opioid dependence, yet only 10 percent of people who need such treatment are receiving it.
- Naloxone, also called Narcan® or Evzio®, can completely reverse the effects of an opioid overdose and prevent death.
- If you or someone you know is abusing opioids, seek help NOW. If you suspect someone is experiencing an overdose, CALL 911.

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What are opioids?

Opioids are a class of drugs that include powerful prescription pain relievers and the illegal drug heroin. When hearing or talking about opioids, you might hear several different terms used. Here is a brief review of the terms opioid, opiate, and opium:



Opium is an addictive drug prepared from the juice of the opium poppy plant. *Opiates* are drugs derived from the opium poppy plant. Previously, the term opioid was used only to refer to drugs that used the synthetic version of opium. Now, the term *opioid* is used to describe natural, synthetic, and semi-synthetic drugs derived from opium. Opioids include both the illicit drug heroin and prescription analgesic (pain relieving) medications that are created from natural or synthetic versions of opium.

Prescription opioids can be legally prescribed by medical professionals to treat moderate to severe pain. This pain might be caused from injury, surgery, or even illnesses such as cancer. Some commonly prescribed opioids include oxycodone (OxyContin®), hydrocodone (Vicodin®), and morphine. These medications can be an important and appropriate part of treatment for many people, but opioids can also be very dangerous and addictive. Approximately 30% of individuals who are prescribed opioids for chronic pain report misusing them.

Heroin is an illegal, highly addictive drug derived from morphine, a natural substance extracted from the seedpod of the Asian opium poppy plant. Heroin, like prescription opioids, causes an addictive euphoria that can lead to addiction and overdose. Unlike prescription opioids, heroin is generally considered easier to access, because it does not require a medical visit, prescription, or interaction with a pharmacist to obtain. In addition, street heroin is considerably less expensive than many prescription opioids

– costing less than a pack of 20 cigarettes in many places throughout the United States. Many people incorrectly assume that prescription opioids are safer than illegal drugs because they are medically prescribed, however, research now shows that addiction to or abuse of prescription opioids opens the door to heroin use. In fact, 80% of people who use heroin report having misused prescription opioids first.

According to the National Institute on Drug Abuse, heroin is illegally produced in two forms: a white to brownish powder or sticky “black tar”. Typically, heroin is sold as a white (more pure) to brownish (less pure) powder that is “cut” or mixed with sugars, starch, powdered milk, or quinine. This form of heroin is generally snorted or smoked. Powdered heroin generally originates from South America, and is widely available east of the Mississippi River. “Black tar” heroin is a sticky or hard form of heroin that has been processed with impurities – hence the black color and undesirable texture. Because it cannot be snorted or smoked, “black tar” heroin is usually dissolved, diluted, and injected into veins, muscles, or under the skin. This form of heroin primarily comes from Mexico, and is widely available west of the Mississippi River.

Fentanyl: The Next Drug to Lead America’s Opioid Crisis

Fentanyl is a legal, synthetic opioid that is 100 times more potent than morphine and 50 times more potent than heroin. Because of its strength, it is highly desirable to those who are abusing opioids. Currently, fentanyl is being illicitly consumed via theft, fraudulent prescriptions, and illegal distribution by patients, physicians, and pharmacists. Fentanyl can be injected, snorted, smoked, taken orally, or spiked onto blotter paper. Fentanyl patches can be abused by removing the gel contents and then injecting or ingesting the contents all at once. Patches have also been frozen, cut into pieces, and placed under the tongue or in the cheek. Fentanyl has been found to be laced in illicit drugs, such as heroin or cocaine.

Carfentanil is a synthetic opioid 10,000 times stronger than morphine and 100 times more potent than fentanyl and has also recently emerged in the United States. This drug is used as a sedative for large animals, including elephants, and is not approved for use in humans. In 2016, the Drug Enforcement Agency (DEA) issued a warning that Carfentanil was being added to mixtures of heroin and other street drugs and had been linked to thousands of overdose deaths nationwide. Carfentanil is generally manufactured in China and distributed through Mexico, and has common street names such as *grey death*, *drop dead*, and *serial killer*.

What are the most commonly abused opioids?

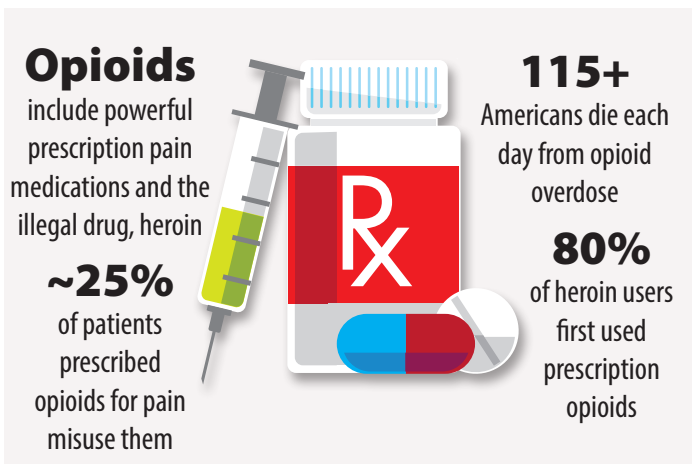
There are dozens of prescription opioids available in the United States, and the illicit opioid, heroin, is easily accessible across the country. The most common opioids, their commercial, brand, and street names, common forms, and the common ways they are taken are detailed in the table below.

Most Commonly Abused Opioids

	Commercial Names <i>Common Brand Names</i>	Street Names	Common Forms	Common Ways Taken
Prescription	Codeine <i>Tylenol with Codeine® series, Nurofen® Plus, Robitussin® AC</i>	Captain Cody, Cody, doors and fours, lean, loads, pancakes and syrup, purple drank, schoolboy, sizzurp	Tablet, capsule, liquid	Injected, swallowed (often mixed with soda and flavorings)
	Fentanyl <i>Actiq®, Duragesic®, Sublimaze®</i>	Apache, china girl, china white, dance fever, friend, goodfella, jackpot, murder 8, tango and cash, TNT	Lozenge, sublingual tablet, film, buccal tablet	Injected, smoked, snorted
	Hydrocodone <i>Vicodin®, Lortab®, Lorcet®, Norco®</i>	Hydros, vike, watson-387	Capsule, liquid, tablet	Swallowed, snorted, injected
	Hydromorphone <i>Dilaudid®</i>	D, dillies, footballs, juice, smack	Liquid, suppository	Swallowed, injected, rectal
	Meperidine <i>Demerol®</i>	Demmies, pain killer	Tablet, liquid	Swallowed, snorted, injected
	Methadone <i>Dolophine®, Methadose®</i>	Amidone, chocolate chip cookies, fizzies	Tablet, dispersible tablet, liquid	Swallowed, injected
	Morphine <i>Duramorph®, Roxanol®</i>	M, Miss Emma, monkey, white stuff	Tablet, liquid, capsule, suppository	Injected, swallowed, smoked, rectal
	Oxycodone <i>OxyContin®, Percodan®, Percocet®</i>	OC, oxycet, oxycotton, oxy, hillbilly heroin, percs	Capsule, liquid, tablet	Swallowed, snorted, injected
	Oxymorphone <i>Opana®</i>	Biscuits, blue heaven, blues, Mrs. O, O-bomb, octagons, stop signs	Tablet	Swallowed, snorted, injected
Illicit	Heroin	Black pearl, black tar, birdie powder, bombita, boy, brown sugar, la Buena, caballo, carne, carga, chicle, china white, chiva, dope, dragon, gato, H, hell dust, hero, horse, junk, number 2, mud, Mexican horse, pluto, skag, skunk, smack, stuff, tiger, vidrio, white stuff, witch hazel, zoquete	White to brownish powder, sticky tar-like substance, coal-like substance	Snorted, smoked, injected

What is contributing to the opioid crisis?

According to the CDC, from 1999 to 2015, the amount of prescription opioids dispensed in the United States nearly quadrupled, yet there has been no verifiable change in the amount of pain that Americans report. Alongside the increased prescribing rates has come a dramatic increase in prescription opioid misuse, abuse, overdoses, and deaths. Many individuals who misuse prescription opioids may eventually turn to the less expensive and easier to obtain substitute, heroin.



So, why are opioids so addictive? Opioids work by binding to opioid receptors on nerve cells in your brain to relieve pain and produce a pleasurable effect. Although natural pain relievers — such as endorphins — are produced in your body, the body cannot produce enough to mask severe or chronic pain or cause an overdose. Exogenous opioids (those not created in the body, such as heroin and prescription opioids) mimic the endorphins that the body creates, but have many differences that increase the risk for abuse, addiction, and overdose. Both legal and illegal opioids activate the brain's reward system — a neurotransmitter called dopamine — and produce a pleasurable euphoric feeling, or “high.” It is this euphoric feeling that can lead individuals to repeatedly abuse and become addicted to opioids.

What risks are associated with taking opioids?

In addition to the risk of abuse, addiction, and overdose, prescription opioids can have numerous side effects, even when taken as directed:

- Abnormal pain sensitivity — called opioid-induced hyperalgesia
- Sleepiness and dizziness
- Nausea, vomiting, and dry mouth
- Severe constipation
- Physical dependence — or experiencing withdrawal symptoms when you stop taking the medication
- Psychological dependence — or the mental desire for a medication or substance

- Tolerance — or needing more of the medication to achieve the same pain relief
- Respiratory depression — or slow or shallow breathing that can be life threatening

The side effects of opioids are similar for people of all ages, but the older adult population is at a greater risk for experiencing these side effects given the natural aging process and the fact that many older adults take multiple medications per day. A recent CDC report showed that 57 percent of older adults take five or more medications per day. Taking more than one medication per day increases the risk of potentially harmful drug interactions, which could cause dangerous side effects. In addition, the liver and kidneys' ability to filter medicine out of someone's system becomes less effective with age, putting the aging population at risk for more harmful side effects at lower doses.

Much like other medications and street drugs, the effects that an opioid will have depends on how much of it you take and how you take it. Drugs that are injected, inserted rectally, snorted, or smoked act much faster and more intensely than if swallowed. In addition, when opioids are combined with other medications or substances that initiate central nervous system depression — such as alcohol, antianxiety medications, muscle relaxants, sleep aids, and other opioids — the person is at an increased risk for respiratory depression and death.

To avoid opioid misuse and overdose:

- Do not take more medication than what is prescribed.
- Do not take other people's prescriptions.
- Do not mix opioids with alcohol, antianxiety medications, muscle relaxants, sleep aids, and other opioids.
- Be proactive in addressing pain. Experts suggest exploring various methods of alleviating pain, such as over-the-counter pain medications, exercise, or alternative therapies.

Who is at risk for abusing opioids?

Anyone who is taking a prescription opioid is at risk for opioid misuse and abuse. However, many people who take these potentially addictive drugs as prescribed do not abuse them or become addicted.

According to the CDC and other research, certain risk factors can make some individuals more susceptible to opioid abuse, addiction, and overdose. These factors are:

- Taking high daily doses of prescription opioids.
- Combining opioids with alcohol or other substances.
- Having a history of substance or alcohol abuse.
- Having a history of overdose on prescription or illicit opioids.
- Having a mental illness.
- Living in rural areas and having a low income.
- History of incarceration or arrest.

A life with chronic pain is devastating, and prescription opioids can play an important role in treatment. However, it is important that you talk with your doctor about the risks and benefits of prescription opioids, especially if you have any of these risk factors.

What are the signs of an opioid addiction?

Some addicts will show few or no outward signs of addiction and will continue to live seemingly normal lives. However, there are some signs to watch out for if you think someone might have an addiction to opioids:

- Small, pinpoint pupils
- Appearing tired or drowsy, or nodding off during conversations
- Slurred speech
- Warm flushing and/or itchy skin
- Constipation (the individual might try to acquire laxatives)
- Nausea, vomiting, or failure to eat
- Excess pill bottles and medications around their home, purse, car, or workplace
- Seeking and/or obtaining multiple prescriptions from multiple providers and pharmacies

Many people will also exhibit changes in their behaviors, such as having a lack of hygiene, changes in exercise habits, loss of relationships, or even stealing. As someone continues to struggle with their addiction, more telling signs can develop.

Individuals who are using and/or are addicted to heroin will often have paraphernalia to support their drug use. Someone having some or all of the following items is a good sign that illicit drug use is taking place:

- Small or burnt spoons
- Tin foil
- Plastic baggies or small paper bags
- Small glass pipes or vials
- Syringes (needles)
- Plastic pen case or a cut up drinking straw
- White to brownish or dark and sticky residue on any of the above items

It is also important to recognize opioid withdrawal symptoms. Opioid withdrawal occurs when an individual stops or reduces their use of an opioid. Withdrawal is generally only associated with those who have used opioids for a prolonged period or have taken the drugs in high doses. Though these symptoms are uncomfortable, they are not life threatening. Signs of opioid withdrawal include:

- Agitation and/or anxiety
- Runny nose
- Excessive tear formation
- Aching muscles
- Chills
- Goosebumps
- Muscle and abdominal cramps
- Nausea and/or vomiting

- Diarrhea
- Drug seeking behaviors
- Insomnia

Where to go for help.

The Substance Abuse and Mental Health Services Administration (SAMHSA) offers online and over the phone assistance 24 hours a day, 7 days a week. Go to findtreatment.samhsa.gov or call 1-800-662-4357. This hotline is a confidential, free source of information (in English and Spanish) for individuals and family members facing mental and/or substance use disorders. This service provides referrals to local treatment facilities, support groups, and community-based organizations.

What are the signs of an opioid overdose?

Due to the current opioid epidemic, it has become increasingly important to recognize and understand the signs and symptoms of opioid overdoses, as well as what to do until emergency services arrive. The primary indication that someone has overdosed is reduced or stopped breathing. Opioids depress breathing rates, especially if taken in large quantities. Reduced or stopped breathing might look like:

- Shallow breathing
 - Pale skin
 - Gasping for air
- Having blue lips and/or fingertips

Other symptoms of an opioid overdose might include:

- Becoming unconscious or experiencing extreme confusion
 - Small, pinpoint pupils (the black area of the eye)
 - Choking sounds or a snore-like gurgling noise
- Cold or clammy skin

Overdose from heroin will typically begin 10 minutes after the individual has taken the dose. The timeline for overdose on prescription opioids is less clear, but the overdose process is suspected to begin minutes after the dose and last up to several hours or until death. However, a quick response can prevent brain damage and even death.

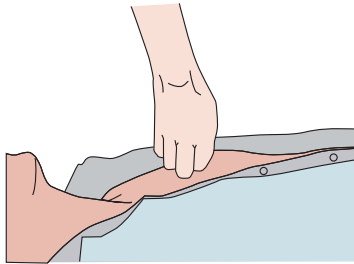
Conclusion

The misuse of opioids is a serious national crisis that is putting millions of lives at risk. If steps are not taken to curb the crisis, more lives will be lost, life expectancy will continue to decrease, and the burden of addiction will be placed upon future generations. Take a proactive role and fight against the opioid crisis by seeking help if you are addicted, becoming trained in CPR, properly storing and disposing of medications, and mobilizing your community to take action. For more information on opioids or to learn how to get involved in combating the epidemic, contact your local Extension office.

How to respond to an overdose in three steps

1. Rouse and stimulate.

Attempt to wake the person. Shake them and yell, "Are you okay?" If the person does not answer, make a fist and rub it on the person's breastbone to attempt to wake them up.



2. Call 911.

It is critical that emergency help arrives as quickly as possible. Call 911 and follow the dispatcher's instructions until the person wakes up or medical help arrives. The dispatcher may advise you to provide CPR or rescue breaths. The individual may need to be rolled onto their side to help keep their airway open and prevent choking if they begin to vomit.



3. Administer naloxone.

Administer naloxone, also called Narcan® or Evzio®, if it is available. If bystanders do not have naloxone, first responders will administer it upon their arrival.



Naloxone reverses an opioid overdose within seconds to minutes by blocking the receptors in the brain that the opioids would affect. Naloxone is administered via a nasal spray or by injection, similar to an EpiPen®. Naloxone is safe and has no effect on individuals who have not taken opioids. You cannot get high off naloxone, and there is no potential for abuse.

How to properly store prescription opioids

To prevent theft and accidental exposure, opioid medications should be stored securely and preferably locked up. The National Safety Council recommends treating opioids medications as you would a firearm:

- Choose a location that cannot be reached and is out of sight from children and visitors.
- It is highly recommended to store your medication in a lock box or a locked medicine cabinet.

- Do not leave medication on countertops, nightstands, or other noticeable locations that can be easily accessed by others.
- Return medication to a secure location after every use.
- Be safe at work or while traveling by using locking travel medication cases.

How to properly dispose of prescription opioids

Once you are finished with an opioid prescription, it is important to dispose of it promptly and safely. Do not keep unused medications for later use. Before you dispose of a medication, it is important to destroy the label so that you do not become a target for opioid-related break-ins. The most preferred methods of medication disposal are:

1. Follow any specific disposal instructions on the prescription bottle.
2. Dispose of medications with the local household hazardous waste department or locate the appropriate drop-off location by calling your local police department, health department, or K-State Research and Extension office. You can also call 1-800-882-9539 to find the nearest Drug Enforcement Agency authorized medication collector. Watch for local take-back events that allow the public to bring unused medications to a central location for proper disposal. National Prescription Drug Take-Back events take place each spring and fall.
3. Purchase a medication disposal bag from a local pharmacy or another retailer (about \$4). To use these bags, simply put in the medication and add water. A chemical inside of the bag will deactivate the medication and make it unusable and undesirable. Dispose of this bag in regular household trash.
4. Remove the medication from its original container and mix it with an undesirable substance (such as kitty litter or dirt). Place this mixture into a sealable bag and dispose of it in regular household trash. Mixing medications with an undesirable substance will make them less appealing to children or pets and unrecognizable to people who may intentionally search your trash for medications.
5. A small number of medications may be especially harmful, and even fatal with just one dose if they are taken by someone other than the person intended. To prevent individuals from accessing these medications, it is strongly recommended that these medications be disposed of immediately after use through medication take-back programs or through a Drug Enforcement Agency authorized collector. If these disposal options are not available, these medications may be flushed down the toilet as soon as they are no longer needed. To access the most up-to-date flush list, type "FDA flush list" into an online search engine, such as Google.

Steps Individuals and Communities Can Take to Address the Opioid Crisis

- **Host an opioid town hall.** Extension professionals are often trained to facilitate community discussions. Bring key stakeholders as well as residents together to discuss the issue and resources currently available in the community, identify needed resources, and develop a community action plan.
- **Educate the community.** Extension professionals have access to research-based information and professionals that can help educate individuals on the opioid crisis. To schedule a presentation, contact the local K-State Research and Extension office.
- **Create a multidisciplinary task force.** Bring the relevant and necessary agencies, organizations, and individuals together to create an opioid task force. Members to consider are a police chief, sheriff, or narcotics officer, public health professional, city or county leadership, extension professionals, medical professionals, and so on. These individuals can work together to identify needs, develop action plans, and meet community needs.
- **Host a community drug take-back day.** Work with local law enforcement, hazardous waste site, health department, and local pharmacies to host a penalty-free prescription drug take-back day. These events can be successful in properly disposing of thousands of pounds of prescription drugs. Although national events are offered twice a year, the more opportunities residents have to safely dispose of unused medications, the better.
- **Set up a secure prescription drug drop-off site.** Consider creating a safe location where individuals can drop off prescription medications at any time. Be sure that the container is locked, under video surveillance, and is tamper proof. The lobby of your law enforcement offices might be a viable option.
- **Talk about it!** Talking about prescription and illegal drug abuse with family members, neighbors, and community can make a big difference. Make an effort to share this fact sheet with others so that they, too, can be informed on the crisis.
- **Identify and publicize resources.** Communities should make a concerted effort to identify local opioid-related services and publicize their availability to local residents.
- **Ask local decision-makers to consider ways to increase or improve the use of Prescription Drug Monitoring Programs (PDMPs).** A PDMP is an electronic database that tracks controlled substance prescriptions in a state. PDMPs can provide health authorities with timely information about prescribing and patient behaviors that give health-care providers information to improve patient safety and prevent abuse.
- **Encourage local medical professionals to follow the CDC's opioid prescribing guidelines.** Following these guidelines can help primary care providers offer safer, more effective care for chronic pain and other conditions.
- **Expand the access and use of naloxone in your community.** Naloxone, a safe antidote to reverse opioid overdose, is available without a prescription in Kansas and many other states. Identify appropriate individuals who should have quick access to naloxone in the event that someone overdoses. Some individuals to consider might be librarians, school nurses, restaurant/bar employees, or family members of those with an opioid addiction. Identify naloxone administration trainings for these individuals to attend so they are adequately prepared to assist during an opioid overdose.
- **Expand access to evidence-based substance abuse treatment.** Evidence-based substance abuse treatment, such as Medication-Assisted Treatment (MAT), can help those individuals who are already struggling with an opioid addiction. If therapies do not exist near your community, talk with local stakeholders to explore bringing treatment options to your area.
- **Consider enrolling in a Chronic Pain Self-Management Program.** Stanford University's Chronic Pain Self-Management Program is an evidence-based intervention designed for any adult who experiences chronic pain and their family members or caregivers. Program participants learn how to better manage their pain and set goals for incorporating life-improving activities into their daily routine. To locate a class near you, contact your local extension office.

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