Tip Sheet: Understanding Opioids

Opioids are a class of drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and pain relievers available legally by prescription, such as oxycodone (OxyContin®), hydrocodone (Vicodin®), codeine, morphine, and many others.

What are prescription opioids?
Opioids are a class of drugs naturally found in the opium poppy plant. Some prescription opioids are made from the plant directly, and others are made by scientists in labs using the same chemical structure. Opioids are often used as medicines because they contain chemicals that relax the body and can relieve pain. Prescription opioids are used mostly to treat moderate to severe pain, though some opioids can be used to treat coughing and diarrhea. Opioids can also make people feel very relaxed and “high” - which is why they are sometimes used for non-medical reasons. This can be dangerous because opioids can be highly addictive, and overdoses and death are common. Heroin is one of the world’s most dangerous opioids, and is never used as a medicine in the United States. Popular slang terms for opioids include Oxy, Percs, and Vikes.

What are common prescription opioids?
- hydrocodone (Vicodin®)
- oxycodone (OxyContin®, Percocet®)
- oxymorphone (Opana®)
- morphine (Kadian®, Avinza®)
- codeine
- fentanyl

How do people misuse prescription opioids?
Prescription opioids used for pain relief are generally safe when taken for a short time and as prescribed by a doctor, but they can be misused. People misuse prescription opioids by:
- taking the medicine in a way or dose other than prescribed
- taking someone else’s prescription medicine
- taking the medicine for the effect it causes-to get high
- When misusing a prescription opioid, a person can swallow the medicine in its normal form. Sometimes people crush pills or open capsules, dissolve the powder in water, and inject the liquid into a vein. Some also snort the powder.

How do prescription opioids affect the brain?
Opioids bind to and activate opioid receptors on cells located in many areas of the brain, spinal cord, and other organs in the body, especially those involved in feelings of pain and pleasure. When opioids attach to these receptors, they block pain signals sent from the brain to the body and release large amounts of dopamine throughout the body. This release can strongly reinforce the act of taking the drug, making the user want to repeat the experience.
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What are some possible effects of prescription opioids on the brain and body?
In the short term, opioids can relieve pain and make people feel relaxed and happy. However, opioids can also have harmful effects, including:

- drowsiness
- confusion
- nausea
- constipation
- euphoria
- slowed breathing

Opioid misuse can cause slowed breathing, which can cause hypoxia, a condition that results when too little oxygen reaches the brain. Hypoxia can have short- and long-term psychological and neurological effects, including coma, permanent brain damage, or death. Researchers are also investigating the long-term effects of opioid addiction on the brain, including whether damage can be reversed.

What are the other health effects of opioid medications?
Older adults are at higher risk of accidental misuse or abuse because they typically have multiple prescriptions and chronic diseases, increasing the risk of drug-drug and drug-disease interactions, as well as a slowed metabolism that affects the breakdown of drugs. Sharing drug injection equipment and having impaired judgment from drug use can increase the risk of contracting infectious diseases such as HIV and from unprotected sex.

Prescription Opioids and Heroin
Prescription opioids and heroin are chemically similar and can produce a similar high. In some places, heroin is cheaper and easier to get than prescription opioids, so some people switch to using heroin instead. Nearly 80 percent of Americans using heroin (including those in treatment) reported misusing prescription opioids prior to using heroin.

However, while prescription opioid misuse is a risk factor for starting heroin use, only a small fraction of people who misuse pain relievers switch to heroin. This suggests that prescription opioid misuse is just one factor leading to heroin use.

Can I take prescription opioids if I’m pregnant?
If a woman uses prescription opioids when she’s pregnant, the baby could develop dependence and have withdrawal symptoms after birth. This is called neonatal abstinence syndrome, which can be treated with medicines. Use during pregnancy can also lead to miscarriage and low birth weight.
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**Tolerance vs. Dependence vs. Addiction**
Long-term use of prescription opioids, even as prescribed by a doctor, can cause some people to develop a tolerance, which means that they need higher and/or more frequent doses of the drug to get the desired effects.

Drug dependence occurs with repeated use, causing the neurons to adapt so they only function normally in the presence of the drug. The absence of the drug causes several physiological reactions, ranging from mild in the case of caffeine, to potentially life threatening, such as with heroin. Some chronic pain patients are dependent on opioids and require medical support to stop taking the drug.

**Can a person overdose on prescription opioids?**
Yes, a person can overdose on prescription opioids. An opioid overdose occurs when a person uses enough of the drug to produce life-threatening symptoms or death. When people overdose on an opioid medication, their breathing often slows or stops. This can decrease the amount of oxygen that reaches the brain, which can result in coma, permanent brain damage, or death.

**How can an opioid overdose be treated?**
If you suspect someone has overdosed, the most important step to take is to call 911 so he or she can receive immediate medical attention. Once medical personnel arrive, they will administer naloxone. Naloxone is a medicine that can treat an opioid overdose when given right away. It works by rapidly binding to opioid receptors and blocking the effects of opioid drugs. Naloxone is available as an injectable (needle) solution, a hand-held auto-injector (EVZIO®), and a nasal spray (NARCAN® Nasal Spray).

Some states have passed laws that allow pharmacists to dispense naloxone without a personal prescription. This allows friends, family, and others in the community to use the auto-injector and nasal spray versions of naloxone to save someone who is overdosing.

**Can use of prescription opioids lead to addiction?**
Yes, repeated misuse of prescription opioids can lead to a substance use disorder (SUD), a medical illness which ranges from mild to severe and from temporary to chronic. Addiction is the most severe form of an SUD. An SUD develops when continued misuse of the drug changes the brain and causes health problems and failure to meet responsibilities at work, school, or home.

People addicted to an opioid medication who stop using the drug can have severe withdrawal symptoms that begin as early as a few hours after the drug was last taken. These symptoms include:
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- muscle and bone pain
- sleep problems
- diarrhea and vomiting
- cold flashes with goose bumps
- uncontrollable leg movements
- severe cravings

These symptoms can be extremely uncomfortable and are the reason many people find it so difficult to stop using opioids. There are medicines being developed to help with the withdrawal process, and the U.S. Food and Drug Administration recently approved sale of a device, NSS-2 Bridge, that can help ease withdrawal symptoms. The NSS-2 Bridge device is a small electrical nerve stimulator placed behind the person's ear, that can be used for up to five days during the acute withdrawal phase.

**What type of treatment can people get for addiction to prescription opioids?**

A range of treatments including medicines and behavioral therapies are effective in helping people with opioid addiction.

Two medicines, buprenorphine and methadone, work by binding to the same opioid receptors in the brain as the opioid medicines, reducing cravings and withdrawal symptoms. Another medicine, naltrexone, blocks opioid receptors and prevents opioid drugs from having an effect.

Behavioral therapies for addiction to prescription opioids help people modify their attitudes and behaviors related to drug use, increase healthy life skills, and persist with other forms of treatment, such as medication. Some examples include, cognitive behavioral therapy which helps modify the patient's drug use expectations and behaviors, and also effectively manage triggers and stress. Multidimensional family therapy, developed for adolescents with drug use problems, addresses a range of personal and family influences on one's drug use patterns and is designed to improve overall functioning. These behavioral treatment approaches have proven effective, especially when used along with medicines.

Drug addiction is a chronic disease characterized by compulsive, or uncontrollable, drug seeking and use despite harmful consequences and long-lasting changes in the brain. The changes can result in harmful behaviors by those who misuse drugs, whether prescription or illicit drugs.

You always thought that you were in control. You never realized that it would affect your job or your family. The legal and financial stresses have become overwhelming. When you find yourself
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dealing with any sort of addiction, you may find yourself feeling buried by stressors that you certainly do not need. Like most people, you never sought to become addicted. But over time, the addiction gradually took over your life, becoming the most important thing in it.

Millions of people every year find themselves addicted to something. Many people become addicted to substances – like alcohol, marijuana, heroin, cocaine, or nicotine. However, people also become addicted to certain behaviors, like gambling, shopping, using the internet or sex, that can get in the way of their work and other relationships.

Sometime it can be very difficult to recognize you have an addiction. When you find yourself relying on drugs, alcohol or patterns of behavior that are potentially harmful to your health, relationships and quality of life, you may be facing an addiction. Overcoming an addiction involves having to give up something that you have come to think you need, and is not something that is easy for most people. Fortunately, contrary to popular belief, you do not have to hit “rock bottom” to begin to make positive changes in your life.

Recognizing an Addiction

Knowing when you or a family member has an addiction to drugs, alcohol or certain behavior can sometimes be difficult. We often find ourselves in denial that there is a problem, and when we are confronted, we may make excuses or blame others. Family members of someone with an addiction sometimes enable those behaviors by ignoring the problem or by trying to rescue the person each time their addiction gets them into trouble.

To deal with an addiction, you first have to recognize that there is a problem. Here are some questions to consider. If you wonder if you’re in denial, check with your family and friends to see how they would answer these questions for you.

- Do you feel that you need to use drugs or alcohol, or engage in behaviors such as gambling, regularly or multiple times per day?
- Have you been absent from work repeatedly to engage in the addictive behaviors?
- Have you tried to stop or cut back and been unsuccessful?
- Do you find yourself using drugs or alcohol, or engaging in the behaviors when you are feeling stressed instead of dealing with your problems head-on?
- Has your use of the alcohol, drugs or your behavior increased over time?
- Do you find yourself thinking about using or engaging in the behavior so much that you are unable to concentrate on other things?
- Has your performance at work deteriorated as a result of this problem?
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- If you are using drugs or alcohol, do find yourself having to drink or use drugs to avoid withdrawal symptoms such as hangover, shaking, nausea, or vomiting?
- Have your friends or family expressed concerns to you about your drug/alcohol use or other behaviors?
- Do find yourself going out of your way to get the drugs and alcohol, or to engage in the behavior, such as driving long distances, or avoiding placing where you can’t use drugs, alcohol or engage in the behavior?

If you find yourself answering “yes” to some or all of these questions, then it may be time to consider getting help. Dealing with an addiction can be difficult, but it is not something anyone must do alone. Fortunately, help is available for anyone dealing with addiction.

Where to Start

Your EAP can be a great place to start. At some point in our lives, each of us faces a problem or situation that is difficult to resolve. SupportLinc is a confidential resource that helps you deal with life’s challenges, including addiction. SupportLinc provides comprehensive assessments, professional counseling and referrals to resources to help you address and resolve your problem. Services are available 24/7/365, and offered at no cost to you and your eligible family members. For more information, call SupportLinc at 888-881-LINC (5462) or visit our website at www.supportlinc.com.

Additional Resources

Substance Abuse and Mental Health Services Administration (SAMHSA)

SAMHSA’s National Helpline
1-800-662-HELP (4357)
TTY: 1-800-487-4889
Website: www.samhsa.gov/find-help/national-helpline

Also known as, the Treatment Referral Routing Service, this Helpline provides 24-hour free and confidential treatment referral and information about mental and/or substance use disorders, prevention, and recovery in English and Spanish.