

Opioids: A Closer Look at the Opioid Crisis

According to the National Institute on Drug Abuse (NIDA), over 33,000 people died of an opioid overdose in 2015. That number is likely much higher today. Opioid abuse is also causing negative financial consequences in the United States. The Center for Disease Control and Prevention estimate that opioid abuse costs the U.S. an estimated \$78.5 billion per year. The opioid crisis has had devastating consequences. Prevention and early intervention is key to reducing the devastation. Being informed and aware is the first step in preventing opioid abuse.

There are different types of opioids including prescription opioids (pain relievers), heroin and synthetic opioids, like Fentanyl. Prescription opioids, heroin and synthetic opioids all bind to opioid receptors in the brain and other organs causing a reduction in pain sensations.

Side Effects:

- Drowsiness
- Respiratory depression
- Heart arrhythmias
- Nausea and vomiting
- Clouded mental functioning or semi consciousness



Long term effects may include constipation, kidney disease, insomnia, infections or other complications. Repeated opioid use causes a reduction in the body's natural pain relieving chemicals (endorphins) and can cause the body to develop a tolerance. The user then must use additional opioids to achieve the same pain reducing effect.

Opioids have been around for centuries, but became widely used for medical purposes in the U.S. during the 20th Century. For example, Fentanyl was first used in the 1960s as an anesthetic and then it became available as a prescription in the 1970s. Prescription opioid sales increased dramatically in the 1990s as a way to treat pain. As the demand for prescription opioid increased, so did the sales of illicitly manufactured opioids and synthetic opioids in the U.S. (NIDA). Illicit manufacturers are frequently developing new synthetic opioids by slightly changing the chemical compound, which is making it very difficult for law enforcement to keep up and in turn making it harder to keep the public informed and safe.

Illicitly manufactured synthetic opioids have increased dramatically in recent years. Synthetic opioids' overdose deaths have increased from 3,105 in 2013 to 9,580 in 2015 (NIDA). It is believed that Fentanyl was linked to several of those deaths. Fentanyl is 80 times more potent than morphine. There are 12 different analogues of fentanyl, like carfentanil and furanylfentanyl, both more potent than fentanyl. Fentanyl as a prescription is called Actiq®, Duragesic®, and Sublimaze® (NIDA). Street names for Fentanyl include China, China Girl, Apache, TNT and Tango. Fentanyl can be administered through transdermal patch, injection, snorted or ingested in pill form. Opioid addicts tend to inject the drug into the blood stream because the drug will get to the brain faster giving the user instant gratification. Fentanyl is a fat soluble substance which further increases the onset of effects and increases the

potential for addiction. Illicitly manufactured fentanyl exposure can be lethal. If you come in contact with Fentanyl, do not smell it or touch it without protective gear.

Another synthetic opioid that has been circulating in the U.S. recently is U-47700 also called Pink Heroin or Pinky. The Drug Enforcement Administration (DEA) placed U-47700 into Schedule 1 of the Controlled Substance Act in November of 2016 after 46 deaths were linked to the substance. U-47700 is a synthetic opioid that comes in white powder form or pressed into a tablet. The drug is manufactured illicitly in other countries like Mexico or China and then brought into the U.S. Some illicit manufacturers will use pill presses and labels to make U-47700 tablets look like oxycodone or another prescription opioid.

Grey Death another synthetic opioid, led to fatal overdoses in Alabama and Georgia in 2017. Grey Death is a powder that is grey in color, like concrete mix. Drugs manufactured illegally often vary slightly between labs making it difficult to identify the chemical makeup of the substance. Chemists have discovered traces of heroin, fentanyl and U-47700 in Grey Death, but chemists will need more time to determine what exactly is in this grey substance (CNN).

Finally, heroin is an opioid made from opium poppy plants in Asia, Mexico and Colombia. Heroin rapidly binds to opioid receptors causing a rush or euphoric feeling. According to NIDA, 80% of heroin users abused prescription opioids first. Heroin is much cheaper and easier to get than prescription opioids, making it more attractive to addicts. Like other opioids, heroin related deaths have increased in recent years from 3,000 in 2010 to 13,000 in 2015 (NIDA). A significant contributing factor to overdose fatalities is that users do not always know what they are taking. Illicit manufacturers often mix substances, like Fentanyl and heroin, making for a deadly combination.

Opioid abuse does not appear to be slowing down in the U.S. There are things that can be done to prevent further abuse.

What you can do:

- Talk to youth about the dangers of opioids
- Monitor prescriptions carefully, especially prescription opioids
- Monitor internet use, as many drugs can be purchased online
- Watch for warning signs, like changes in behaviors or friends group

Sources:

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