A variety of effective treatments are available for heroin addiction, including both behavioral and pharmacological (medications). Both approaches help to restore a degree of normalcy to brain function and behavior, resulting in increased employment rates and lower risk of HIV and other diseases and criminal behavior. Although behavioral and pharmacologic treatments can be extremely useful when utilized alone, research shows that for some people, integrating both types of treatments is the most effective approach.

**PHARMACOLOGICAL TREATMENT (MEDICATIONS)**

Scientific research has established that pharmacological treatment of opioid addiction increases retention in treatment programs and decreases drug use, infectious disease transmission, and criminal activity.

When people addicted to opioids first quit, they undergo withdrawal symptoms (pain, diarrhea, nausea, and vomiting), which may be severe. Medications can be helpful in this detoxification stage to ease craving and other physical symptoms, which often prompt a person to relapse. While not a treatment for addiction itself, detoxification is a useful first step when it is followed by some form of evidence-based treatment.

Medications developed to treat opioid addiction work through the same opioid receptors as the addictive drug, but are safer and less likely to produce the harmful behaviors that characterize addiction.

Three types of medications include:

1. **Agonists**, which activate opioid receptors;
2. **Partial agonists**, which also activate opioid receptors but produce a smaller response; and
3. **Antagonists**, which block the receptor and interfere with the rewarding effects of opioids. A particular medication is used based on a patient’s specific medical needs and other factors.

Effective medications include:

**Methadone** (Dolophine® or Methadose®) is a slow-acting opioid agonist. Methadone is taken orally so that it reaches the brain slowly, dampening the “high” that occurs with other routes of administration while preventing withdrawal symptoms. Methadone has been used since the 1960s to treat heroin addiction and is still an excellent treatment option, particularly for patients who do not respond well to other medications. Methadone is only available through approved outpatient treatment programs, where it is dispensed to patients on a daily basis.

**Buprenorphine** (Subutex®) is a partial opioid agonist. Buprenorphine relieves drug cravings without producing the “high” or dangerous side effects of other opioids. Suboxone® is a novel formulation of buprenorphine that is taken orally or sublingually and contains naloxone (an opioid antagonist) to prevent attempts to get high by injecting the medication. If an addicted patient were to inject Suboxone, the naloxone would induce withdrawal symptoms, which are averted when taken orally as prescribed.
FDA approved buprenorphine in 2002, making it the first medication eligible to be prescribed by certified physicians through the Drug Addiction Treatment Act. This approval eliminates the need to visit specialized treatment clinics, thereby expanding access to treatment for many who need it. In February 2013, FDA approved two generic forms of Suboxone, making this treatment option more affordable.

**Naltrexone (Depade® or Revia®)** is an opioid antagonist. Naltrexone blocks the action of opioids, is not addictive or sedating, and does not result in physical dependence; however, patients often have trouble complying with the treatment, and this has limited its effectiveness.

**Vivitrol®** is an extended-release formulation of naltrexone administered by intramuscular injection once a month. Naltrexone works to block opioid receptors in the brain. It blocks the effects of drugs like morphine, heroin, and other opioids. It was approved to treat alcohol dependence in 2006.

**BEHAVIORAL THERAPIES**

The many effective behavioral treatments available for heroin addiction can be delivered in outpatient and residential settings. Approaches such as contingency management and cognitive-behavioral therapy have been shown to effectively treat heroin addiction, especially when applied in concert with medications. Contingency management uses a voucher-based system in which patients earn “points” based on negative drug tests, which they can exchange for items that encourage healthy living. Cognitive-behavioral therapy is designed to help modify the patient’s expectations and behaviors related to drug use and to

**WHAT CAN BE DONE FOR A HEROIN OVERDOSE?**

Overdose is a dangerous and deadly consequence of heroin use. A large dose of heroin depresses heart rate and breathing to such an extent that a user cannot survive without medical help. Naloxone (e.g., Narcan®) is an opioid receptor antagonist medication that can eliminate all signs of opioid intoxication to reverse an opioid overdose. It works by rapidly binding to opioid receptors, preventing heroin from activating them. Because of the huge increase in overdose deaths from prescription opioid abuse, there has been greater demand for opioid overdose prevention services. Naloxone that can be used by nonmedical personnel has been shown to be cost-effective and save lives.

**How to use Naloxone (Narcan) to Reverse an Opioid Overdose**


In addition, the Substance Abuse and Mental Health Services Administration (SAMHSA) 2016 Opioid Overdose Prevention Toolkit provides helpful information necessary to develop policies and practices to prevent opioid-related overdoses and deaths, [www.store.samhsa.gov/shin/content//SMA16-4742/SMA16-4742.pdf](http://www.store.samhsa.gov/shin/content//SMA16-4742/SMA16-4742.pdf).