

Narcotic drugs

What are narcotics?

Also known as “opioids”, the term “narcotic” comes from the Greek word “stupor” and originally referred to a variety of substances that dulled the senses and relieved pain. Though some people still refer to all drugs as “narcotics”, today “narcotic” refers to opium, opium derivatives, and their semisynthetic substitutes. A more current term for these drugs, with less uncertainty regarding its meaning, is “opioid”. Examples include the illicit drug heroin and pharmaceutical drugs like OxyContin, Vicodin, codeine, morphine, methadone, and fentanyl.

The term narcotic, originally referred medically to any psychoactive compound with sleep-inducing properties, and euphoric properties as well. Legally speaking the term “narcotic” may be imprecisely defined and typically has negative connotations. In the medical community, the term is more precisely defined and generally does not carry the same negative connotations.

Narcotics have historically been used to refer to a number of mind-altering substances as well as to provide a broad legal designation for a range of illicit drugs; today, the Drug Enforcement Administration (DEA) more specifically defines narcotic drugs as those that relieve pain and dull the senses, and the use of the word is most commonly associated with opioid drugs. The naturally occurring opiates (plant alkaloids derived from the opium poppy) as well as synthetic (man-made) and semisynthetic opioids are considered to be narcotic drugs, which include both legally prescribed and illicit varieties. Opioids not only diminish the perception of pain signaling in the central nervous system but also produce rewarding, euphoric effects, making them targets for abuse and highly addictive.

Commonly Abused Narcotics and Opioids

Below is a brief list of some of the more widely-known narcotics and opioids drugs:

- ❖ Opium
- ❖ Heroin
- ❖ Codeine

- ❖ Oxycodone
- ❖ Hydrocodone
- ❖ Tramadol
- ❖ Morphine
- ❖ Hydromorphone
- ❖ Fentanil
- ❖ Carfentanil

Opium

For years, opium was a widely-used drug derived from the crude botanical extract from the opium poppy plant. With minimal processing, opium consisted of a mixture of naturally-occurring opiate alkaloids – substances that serve as the building blocks for the synthesis of many modern opioid drugs. Opium was sometimes distributed as a liquid or solid, but most commonly encountered as a brownish powder, according to DEA. Opium was most commonly smoked but could also be pressed into pill form or dissolved into a tincture or other solution for oral use or injection. The opioid alkaloids contained in opium extracts are used to synthesize many prescription narcotics. Heroin is also made from raw materials obtained from the opium poppy plant.

Heroin

Opioids like heroin dull pain but can also impair cognition, increase sedation, and slow certain autonomic functions such as those that control respiratory rate. It can be described like a brown or white powder or a sticky black substance called “black tar heroin”. The drug can be snorted, smoked, or injected. Heroin creates an intense and rapid “high” or “rush”, and individuals often cycle between an awake and unconscious state, called being “on the nod”.

Oxycodone (OxyContin, Roxicodone, and Percocet)

OxyContin and other opioids containing oxycodone are effective painkillers for moderate to severe pain; however, they can lead to the development of physical dependence and addiction with regular use or abuse. In its various formulations, oxycodone is dispensed as both immediate and extended-release tablets intended for oral use. Oxycodone is also available in several combination formulations that include analgesic pain relievers such as acetaminophen and aspirin.

Hydrocodone (Vicodin, Norco, Lortab)

Hydrocodone is the top-prescribed and most regularly delivered and abused opioid drugs, according to DEA. It and its many combination products are now classified as a Schedule II controlled substances.

Morphine (MS Contin and Kadian)

Morphine is a natural opiate alkaloid derived directly from the opium plant. Pharmaceutical morphine is used as a narcotic analgesic for both acute and chronic pain management, and also to provide sedation before surgical procedures. Morphine continues to be one of the most widely utilized pain medications in hospital settings, where it was once administered almost entirely as an injectable solution.

Hydromorphone (Dilaudid and Exalgo)

Hydromorphone is available as an injectable solution, an oral solution, and as both release and controlled release tabs. It is commonly diverted after being obtained through “doctor shopping”, forged prescriptions, questionable prescribers, and pharmacy and nursing home theft. When misused, people may attempt to smoke, snort, or inject the crushed tablets. It is a semi-synthetic opioid derived from morphine that is very potent, highly addictive, and has a high potential for overdose when abused.

Fentanyl (Actiq, Fentora, Duragesic, Subsys, Abstral, and Lazanda)

Fentanyl is prescribed to treat chronic and severe pain in those who are tolerant to opioids. It is a synthetic opioid that is also manufactured illicitly in illegal laboratories and may be used to “cut” heroin or used as a cheaper substitute. Individuals may not realize that the drug they are taking is laced with, or contains fentanyl.

Codeine

When extracted from the opium poppy, codeine can be used to directly manufacture pharmaceutical formulations for prescription use. However, much of the codeine used for medicinal use is actually manufactured using a synthetic process that relies on morphine as a chemical building block.

Methadone (Dolophine and Methadose)

Methadone is a synthetic opioid that may be used as an analgesic; however, it may be more commonly prescribed as a replacement therapy to treat opioid

dependence and manage opioid withdrawal as a part of a medical detox protocol. It is dispensed in pill, wafer, or liquid forms to be administered once a day through federally regulated clinics, the Substance Abuse and Mental Health Services Administration (SAMHSA) publishes.

Meperidine (Demerol)

Even when taking Demerol as directed and with a necessary prescription, a person can become dependent on it and suffer withdrawal symptoms when the drug wears off. When physical dependence becomes significantly severe, it can become difficult to stop taking Demerol, which may lead to continued, compulsive misuse and addiction.

Oxymorphone (Opana)

Opana is a powerful painkiller for the treatment of severe pain. It is usually prescribed when alternative treatments are ineffective or when a person is already tolerant to other opioids.

Tramadol (Ultram, Ultracet, and Ryzolt)

Tramadol is somewhat unique opioid analgesic that not only has opioid agonist effects but also acts to block the reuptake of norepinephrine and serotonin.

Carfentanil

A fentanyl analog, carfentanil is a powerful opioid narcotic developed for use in veterinary medicine as a general anesthetic for large animals. This so-called “elephant tranquilizer” is roughly 100 times more potent than fentanyl, 5 000 times more potent than heroin, and as much as 10 000 times more potent than morphine.

Buprenorphine

Buprenorphine is a partial opioid agonist as an analgesic as well as an FDA-approved treatment medication for opioid dependence. It is available in different forms under brand names such as Buprenex, Butrans, and Probuphine. In combination with the opioid antagonist drug naloxone, Buprenorphine is available as Suboxone, Zubsolv, and Bunavail.

Answer the questions:

1. Give a definition about narcotics.

2. Describe the Opium.
3. Describe the Heroin.
4. What is the function of Oxycodone?
5. Describe Morphine.
6. Which are the forms of Hydromorphone?
7. Which are the other names of Fentanyl?
8. What is the application of Codeine?
9. What is the application of Methadone?
10. What are the side effects of Meperidine?
11. What is the function of Opana?
12. Give a definition of Tramadol.
13. What is the application of Carfentanil?
14. What are the brand names of Buprenorphine?

Translate the paragraphs about Opium, Heroin, Oxycodone, Hydromorphone, Codeine, Methadone, Carfentanil, Buprenorphine.