### **CHAPTER 2**

## **Opioid Use, Dependence, Addiction, and Withdrawal**

#### **INTRODUCTION**

**Opioids are a class of drugs that derive from, or mimic, natural substances found in the opium poppy plant;** some prescription opioids are made from the plant directly, and others are synthetically made in labs. Both are commonly used to treat moderate to severe pain, usually associated with surgery and other medical procedures. Prescription opioids may be called by their scientific or brand names but there are also street names for these drugs. Hydrocodone (Vicodin), Oxymorphone (Opana), Oxycodone (OxyContin, Percocet) have street names like "Vike", "Watson-387", "Oxy", "Percs" or "Roxy". Morphine, Fentanyl and Codeine (Kadian, Actiq, Embeda or Nurofen) have street names like "monkey", "tango and cash" and "lean".



Opioids work by attaching their chemical proteins to the brain, spinal cord, and other organs in the body, sticking to neural receptors associated with feelings of pain and pleasure. Once attached, the opioid blocks the body's pain neural receptors and prompts a large release dopamine the brain's reward center (the nucleus accumbens).

**Prolonged use of opioids causes increased tolerance,** so people may misuse the substance by taking larger doses to feel a similar positive effect This procession can motivate people to seek the substance even if it's harmful, which leads to dependence and possibly addiction. Among other detrimental medical and social problems, long-term opioid use has been linked to overdose and unintentional death.

#### In this Chapter:

- <u>Introduction</u>
- <u>Signs of</u>
   <u>Withdrawal</u>



Opioid use and withdrawal have distinct physical and behavioral symptoms.

# KNOWING THE SIGNS OF DRUG USE WITHDRAWAL, and addressing them appropriately, can prevent further harm. Tiredness Isolation Weight Loss Anxiety Pinpoint Pupils Irritability Moodiness

After cutting back or quitting opioids, one might experience agitation, anxiety, insomnia, and sweating followed by more severe flu-like symptoms, including nausea, diarrhea, and abdominal cramping. While uncomfortable, withdrawal symptoms are not generally life-threatening but may induce the person into drugseeking behavior to avoid them. The severity of withdrawal symptoms is dependent upon the person's metabolism, tolerance, and the type of opioid used and may begin to present anywhere between 12 to 30 hours after the last dose.

Some ways of taking opioids require the use of other tools: tightly rolled paper or dollars, spoons with burn marks, small pieces of wet cotton, and needles, included. Seeing these items should alert you that it is time to find support. No matter what they're called, whether they're prescribed or purchased on the street, or how they've administered, these substances are highly addictive and should be avoided when possible and always approached with caution.

Opioid dependence and addiction are possible even while taking a prescription properly, but the two are distinct in their level of harm. Dependence can present with both psychological and physical symptoms. For instance, psychological dependence looks like someone

A Parent's Guide to Opioid Use Prevention

seeking out harmful substances, even alcohol and nicotine, as a way to cope with emotional triggers or stressful events. Physical dependence, however, causes the body's cells and systems to work differently due to increased tolerance and can result in cravings for the substance.

#### **OPIOIDS COME IN A VARIETY OF FORMS** and can be administered in a myriad of ways:



**BY MOUTH** IN THE FORM OF PILLS AND SYRUPS

ADHERED TO THE SKIN AS MEDICATION PATCHES



**INTRANASAL** BY SNORTING CRUSHED PILLS

**INTRAVENOUS** BY INJECTING WITH A SYRINGE

**TRANSMUCOSAL** THROUGH THE MUCOUS MEMBRANES OF THE INNER CHEEK USING LOLLIPOPS

**RECTAL ADMINISTRATION** THROUGH SUPPOSITORIES

#### NATIONAL INSTITUTE ON DRUG ABUSE DESCRIBES ADDICTION AS:

"the compulsive use of drugs despite the consequences and is characterized by the inability to stop use of the drug; failure to meet work, social, and family obligations, and tolerance and withdrawal symptoms dependent upon the drug."

