

# Opioid Overdose in the U.S.

## What is an Opioid Overdose?

An opioid overdose is a potentially life-threatening condition that can cause a person's breathing to severely slow down and even stop. Opioid medications have a relatively narrow therapeutic window, meaning that even small changes – such as a single extra dose or the addition of a small amount of alcohol – can cause a potentially lethal overdose.<sup>1,2</sup>

## How do Opioid Overdoses Occur?

Opioids work by binding to specific receptors in the brain, minimizing the body's perception of pain. In overdose, they can also cause slow heart rate, a widening of blood vessels and decrease the natural drive to breathe. People experiencing an opioid overdose become unresponsive, or unconscious, and their breathing slows or stops because opioids attach to receptors found in the brain that are responsible for major breathing functions, including a person's breathing rate.<sup>1,3</sup>

Many prescription pain medications are opioids. While opioids have been used for thousands of years to treat acute and chronic pain, prescription opioid overdoses have become a public health epidemic in recent years. Accidental drug poisoning has now surpassed automobile collisions as the leading cause of accidental death in the U.S., and this trend is driven in large part by prescription opioids. While opioid overdose deaths also result from illicit drug use, many opioid deaths occur in people using opioids for medical reasons as prescribed by their physicians.<sup>4,5,6,7</sup>

## The following risk factors for opioid overdose have all been documented for opioid users:<sup>8,9,10,11,12</sup>

- > History of substance abuse or dependence
- > Taking high doses of opioids
- > No previous history of taking opioids
- > A recent dosage increase or switching from one opioid to another
- > Taking extended-release or long-acting opioid formulations
- > Taking certain antidepressants like monoamine oxidase inhibitors (MAOIs) or certain drugs for anxiety
- > A history of respiratory conditions such as asthma, COPD or sleep apnea

In addition, children living with someone consuming prescription opioids have been shown to be at increased risk.

## Signs and Symptoms:<sup>12</sup>

- > Very slow or absent breathing
- > Loss of consciousness
- > Extremely small pupils
- > Slow or irregular heartbeat
- > Blue or purple fingernails or lips
- > Vomiting or gurgling sounds

**The sooner an opioid overdose is recognized and emergency medical assistance obtained, the better the chances of survival.**<sup>3,12</sup>

**238 million**

prescriptions for opioid medications were issued in 2011<sup>8</sup>

**16,651**

people died from opioid overdose, or one person every 36 minutes, in 2010<sup>13</sup>

**45 to 54**

year olds have had the highest rate of drug poisoning deaths since 2004<sup>6</sup>

**13,652**

unintentional deaths were caused by prescription opioids in 2010, about 37 per day<sup>13</sup>

**Up to 60%**

of opioid overdose deaths occur in medical users<sup>7</sup>

**475,000**

emergency department visits in 2009 were due to the misuse and abuse of prescription opioids, a number that nearly doubled in five years<sup>14</sup>

## References

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