



What Happens To Your Brain When You Use Heroin

Date: 11 June, 2021 By Robert Alexander Center

It comes as no surprise that heroin is a very damaging substance for the body. But what about the brain, specifically? You could imagine that the brain goes through many big changes when someone uses heroin, and that is definitely true, in both the short term and the long term. But what kinds of changes are those, and what can you expect to happen in general to the brain through using heroin?

In this article, we will list out some of the most significant changes to the brain that can occur as a result of heroin use. We'll look at both immediate effects and longer-term ones, and give as complete a picture as possible of just what is happening to the brain of a heroin user. That could be useful information if you are trying to overcome your addiction.

The Short-Term Effects

First of all, let's look at some of the short-term effects that heroin has on the brain. When someone takes heroin, the experience is often going to be varied, but usually there will be some kind of high. More often than not, this is a feeling of euphoria, while also being characterized by cloudy thinking. But why do these effects occur?

When heroin is taken into the body, the drug attaches itself to opioid receptors. These receptors can be found in the brain, but also in the brainstem, the spinal column and even the lungs. This gives rise to all sorts of different responses throughout the body, but it is those in the brain that we are particularly concerned about here. Heroin attaching to the brain's opioid receptors causes that initial rush or high or euphoria that heroin is known for. This whole process takes less than twenty minutes in most cases, after which time the heroin has been converted into morphine. This is why the initial high may only last around fifteen minutes. The morphine then stays in the brain for a longer duration – often, many hours, continuing to attach to opioid receptors during that whole period of time. This continues to cause milder effects than the initial rush.

Immediate Brain Damage

Most people know that heroin can cause brain damage in the long-term, but did you know it can also cause brain damage immediately after use? The most common way in which this happens is by the drug causing the breathing to slow to a dangerously slow rate. This prevents the brain from receiving enough oxygen, which causes brain cells to die. If enough brain cells die, the person dies – or at the very least, there will be severe brain damage that lasts for a lifetime. The majority of people who die from heroin overdoses die because they simply stop breathing in this way.

The Long-Term Effects

There are also many long-term effects on the brain from heroin use, and it's worth being aware of these as well. One of the main effects is the way in which heroin abuses the reward circuitry in the brain. When you experience something pleasurable, you are motivated to recreate the experience that caused that feeling. With heroin, you are getting a very extreme form of that, which is why it can become so addictive.

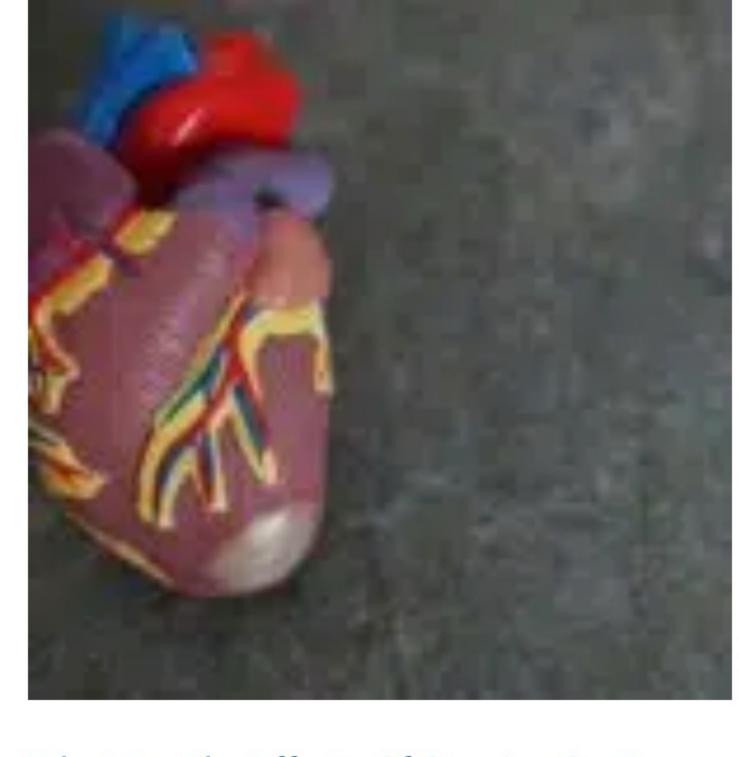
This is how cravings appear, and it is one of the markers of addiction. Another is tolerance, which means that you need to take more of the drug in order to get the same level of high that you did before. Specifically what is happening here is that your opioid receptors are reacting to repeated heroin use by becoming less receptive, and thus the drug has less of an effect. There is really no potential end to this process if you don't get the help you need to recover from the addiction.

The more you take a drug, the more your brain needs it in order to function normally and properly. That is called dependence, and it is the other major hallmark of addiction. Essentially, your receptors are acting abnormally as long as heroin is not present, so you need heroin to make them normal again. But again, this is something that can be reversed with the right therapy.

Addiction

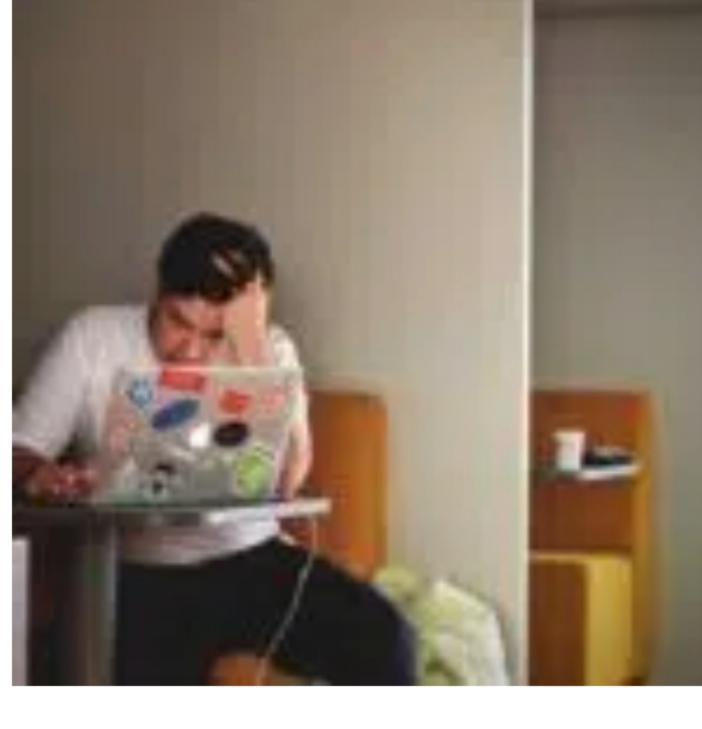
Ultimately, in the long-term, heroin use can cause addiction, which is where you need to use heroin merely to avoid the horrible effects of withdrawal, and you feel completely incapable of not using heroin even though you are aware of how much it is damaging you. This is actually recognized as a disease – but it is one you can get help with, if you need it.

Related Posts

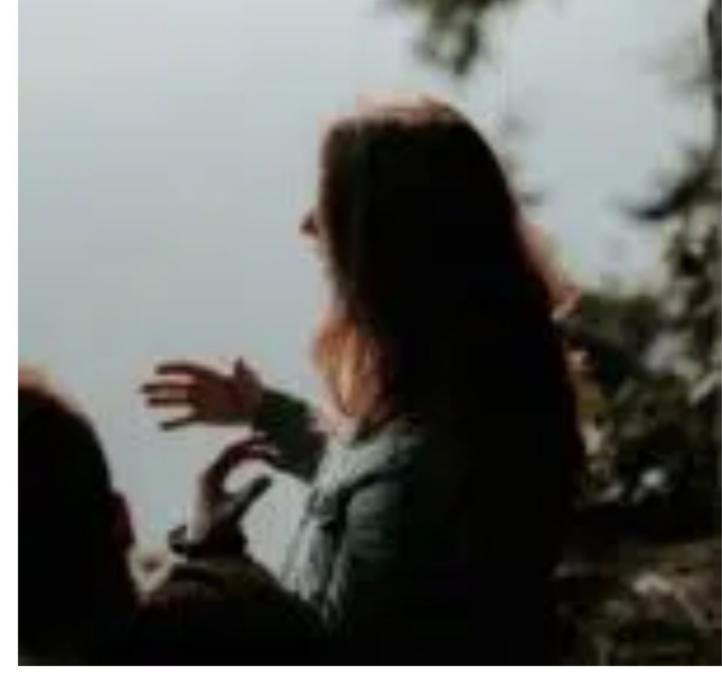


What Are The Effects Of Cocaine On Your Heart?

Read More

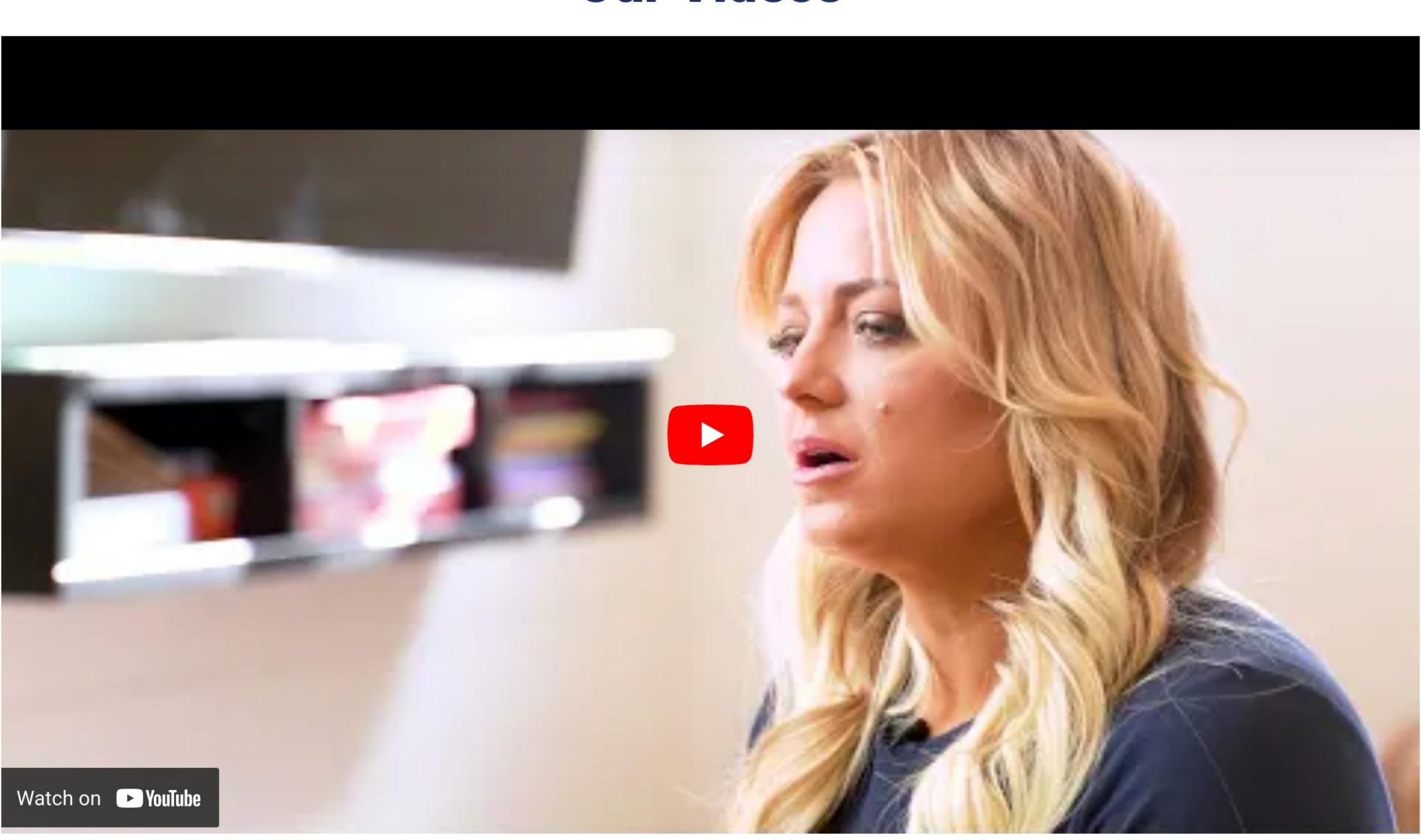


10 Warning Signs Of Substance Abuse Among College Students Read More



6 Ways to Break the Chains of Addiction at **Drug Treatment Centers** Read More

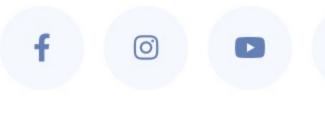
Our Videos

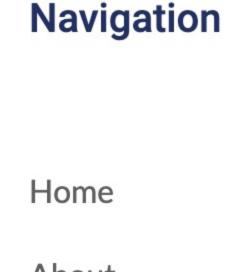




P: 1-844-328-8406

The Robert Alexander Center for Recovery is a brand new, state of the art addiction treatment center in Kentucky, offering evidence-based treatment for substance abuse.

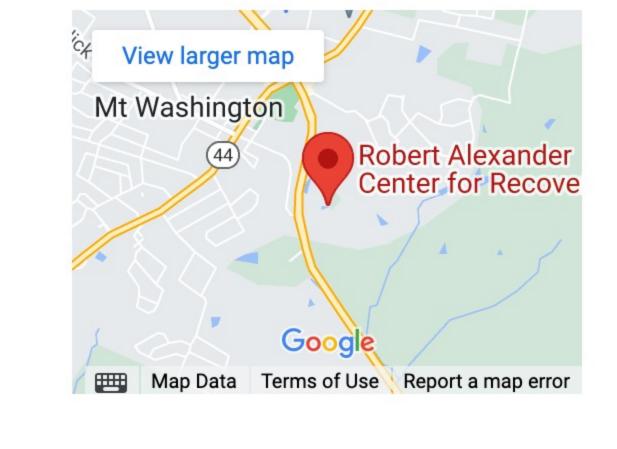




Detoxification About Residential Inpatient Tour Partial Hospitalization Admissions **Outpatient Programs** Blog Aftercare & Alumni

Get In Touch

130 Hope Street Mount Washington, Kentucky 40047









Treatment Solutions



Interpreters Available