



## Effects of Chronic Adolescent Treatment Procedures and Diagnosis with Methamphetamine

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### DESCRIPTION

Methamphetamine is commonly known as meth or crystal meth which has become a significant concern worldwide due to its devastating impact on individuals, families, and communities. This potent synthetic stimulant drug has surged in popularity, exacerbating the global drug crisis. Methamphetamine is a strong, highly addictive stimulant that has an effect on the central nervous system. It appears as a white, odorless powder with a harsh taste that rapidly dissolves in water or alcohol. Methamphetamine belongs to the amphetamine class of drugs and acts by increasing the release, blocking the reuptake, and inhibiting the breakdown of certain neurotransmitters, such as dopamine, norepinephrine, and serotonin, in the brain. These results in a surge of euphoria, heightened energy levels, increased focus, and reduced appetite. However, the effects of methamphetamine extend far beyond these initial sensations. The physical and mental health consequences of methamphetamine use are severe and can be long-lasting. Chronic use of the drug can lead to cardiovascular problems, including hypertension, irregular heart rate, and potentially fatal heart attacks. Methamphetamine abuse also damages brain cells and disrupts neural pathways, resulting in impaired cognitive function, memory loss, and psychosis.

Furthermore, the process of manufacturing methamphetamine involves toxic chemicals, which pose a serious threat to both producers and consumers. Exposure to these substances can cause respiratory issues, chemical burns, and even explosions. The drug's addictive nature and its ability to induce often lead to a cycle of dependence, fueling a demand that drives its illicit production and distribution networks. Children are disproportionately affected by the consequences of methamphetamine use. The drug's production and use frequently occur in households with children, exposing them to toxic environments, and abuse. The long-term effects on these children can be profound, leading to developmental issues, educational setbacks, and perpetuating a cycle of addiction and crime. Side effects of methamphetamine include dry mouth, nausea,

diarrhea, constipation, dizziness, weight loss, trouble sleeping, and headaches. Most of the people who have taken this drug did not experience any serious side effects. Seek immediate medical attention if experienced any of the following very serious side effects like fainting, severe headache, fast/pounding irregular heartbeat, seizure, heart attack symptoms (chest/jaw/left arm pain, shortness of breath, excessive sweating, etc.), stroke symptoms (weakness in one arm), difficulty speaking, sudden changes in vision, and confusion. Drug interactions can change how a drug works or increase the risk of serious side effects.

Amphetamine is a substance from which methamphetamine was derived, and it was first utilized in bronchial inhalers and nasal decongestants at the turn of the 20<sup>th</sup> century. Methamphetamine, like amphetamine, makes users more talkative and active, decreases their hunger, and gives them a pleasant feeling of happiness. However, methamphetamine differs from amphetamine in that it is a more potent stimulant because at comparable doses much more drug reaches the brain.

Additionally, it has more detrimental and long-lasting effects on the central nervous system. Due to these qualities, it has a great potential for widespread abuse. Methamphetamine can be smoked, snorted, injected, or taken orally and comes in a variety of forms. The preferred way to use the medicine differs from person to person. With the use of very inexpensive, over-the-counter substances like pseudoephedrine, a frequent component in cold medicines, and the drug may be easily produced in a small, hidden lab. Restrictions on the chemicals used in the manufacture of methamphetamine in the United States have led to a significant decline in domestic methamphetamine production. As with many drugs, tolerance to the feel-good effects of methamphetamine develops with repeated use.

To get the desired effect, drug users often need to take higher doses, take drugs more frequently, or change the way they take them. Chronic methamphetamine users have difficulty experiencing pleasures other than drug-induced pleasure, which can lead to further abuse. Methamphetamine withdrawal occurs when chronic drug addicts stop using drugs. Withdrawal symptoms that

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include depression, anxiety, fatigue, and cravings for drugs. Currently, no drug exists that counteracts the unique effects of

methamphetamine, prolongs methamphetamine abstinence, or reduces methamphetamine use in drug dependent patients.