The High Point P & K HPC strives to guide, educate, encourage, and support their clients

September 2018 Volume 12











Long-Term Health **Effects of Meth Use**

Increased chances for developing cancer Liver failure Kidney failure Malnutrition (due to an extreme loss of appetite) Birth defects Reproductive issues Infections Overdose Death



Beyond the Prescription METH: THE EMERGING CATASTROPHE

I truly believe that in our area deaths due to methamphetamine have surpassed opiate overdose deaths. The reason we can't yet see it, is that meth kills you slowly and the cause of death is not directly attributable to meth. With opiates, a person overdoses and the cause of death is clear. Meth, on the other hand, kills you over several years. It destroys your immune system, causes you to make destructive choices, increases your risk of suicide or trauma, and causes vascular complications like strokes and heart attacks. So if someone dies of a heart attack or pneumonia because their immune system can't fight off the infection, the cause of death is listed as MI or pneumonia, not meth. Many of my patients now are telling me stories of friends and relatives who have died from circumstances directly related to meth yet that is never put on the death certificate as the cause of death.

The statistics in the United States show a slight decrease in conventional opioid deaths in the past year. Yet I believe this is just lulling us into a false sense of security as people flock to methamphetamine. By cutting off the supply of opioids diverted from legal sources, we as a society, have driven people to use meth. That, combined with the huge increase in availability and purity and the decrease in cost, is creating the perfect storm for the next epidemic.

The other issue I am seeing more and more is the number of people being incarcerated due to meth is overtaking the number of those incarcerated due to opioids. I attended a conference just last week in Morristown where the sheriff told me that they don't even have an opioid problem any more. He said that 95 percent of people in jail now are there because of meth; and they are having to build a new jail because of the explosion in the number of inmates on meth.

The final piece in this catastrophic puzzle is the fact that meth is probably the most addictive and most destructive drug on the planet. It is one of the few drugs that can absolutely cause irreversible damage to the human being. It destroys the part of the brain responsible for happiness, and it can create irreversible chemical psychosis. This is a bad drug. Yet it doesn't feel that bad when you first use it. You are not impaired, in fact you believe you can actually perform better. And it gives you a sense of invulnerability. How could something that makes you feel like Superman be bad? But that's the trick! Soon you cannot even feel normal without it, or even function at all without it due to the severe depression that follows cessation of use. Meth is the great trickster.

So in closing I implore you, if you have never used meth, don't. If you have used it in the past, quit. And if you are dependent on it, tell us so we can help you! Do not be ashamed, we all have made mistakes. What is important, as humans, is to learn from our mistakes. One of my favorite quotes from AA is: "We claim spiritual progress, not spiritual perfection." It's not about always getting it right, it's about making progress over time, one day at a time!"

Vance Shaw, MD, FASAM Board Certified by the American Board of Addiction Medicine





Long-Term **Psychological Effects of Meth Use**

Addiction Tolerance, leading to increased dosage Anhedonia (the inability to feel pleasure Impaired cognition, judgment, memory and motor skills Paranoia Aggression Hallucinations Delusions

Meth Overdose Symptoms

Irregular breathing and/or heartbeat Chest pain heart attack Stroke Seizure Agitation High body temperature Extreme anxiety Kidney failure







How to Know If Someone Is On Crystal Meth??

The most common symptoms: Picking at skin or hair Dilated pupils/Rapid eye movement Reduced appetite Insomnia Sudden outbursts/mood swings Paranoia & Hallucinations Changes in physical appearance

Contributed by the Director's Pen **Crystal Methamphetamine**

Crystal Methamphetamine, also known simply as meth, is a powerful, dangerous, and highly addictive stimulant with more than double the strength of cocaine. Meth affects the central nervous system which includes the brain and the spinal cord. It was developed during WWII by the Nazis and give to the

German soldiers to keep them fighting past the point of exhaustion. It was also used in nasal decongestants and bronchial inhalers. Meth has extremely limited medical use for ADHD, narcolepsy and weight loss. Like amphetamine, methamphetamine causes increased activity, talkativeness, decreased appetite, and a pleasurable sense of wellbeing or euphoria. However,

methamphetamine differs from amphetamine in that, at comparable doses, a much greater amount of meth gets into the brain, making it a more potent stimulant. These characteristics make it a drug with high potential for widespread abuse.

Meth addiction is defined as the psychological need for the drug and is the most common side effect of long-term methamphetamine use. The user quickly develops a tolerance to the drug and symptoms of withdrawal are experienced when meth use is not at regular intervals. This is called methamphetamine dependence. The potency of this drug makes it easy for users to overdose and effects from this drug are responsible for irreversible damage to the brain and body. Symptoms of withdrawal include depression, anxiety, fatigue, and an intense craving for the drug. Common **psychological and psychotic symptoms** of meth addiction are: paranoia, anxiety, confusion, insomnia, nervousness, agitation or fidgeting, mood swings, depression, hallucinations and belief that there are insects crawling under the skin. Psychotic symptoms can sometimes last for months or years after a person has quit abusing methamphetamine, and stress has been shown to precipitate spontaneous recurrence of methamphetamine psychosis in formerly psychotic meth abusers. Beyond the common symptoms, some meth users experience severe and immediately life-threatening issues such as seizures, heart attacks, and liver failure. Meth use can increase one's risk of stroke, which can cause irreversible damage to the brain.

Methamphetamine comes in several forms and can be smoked, inhaled (snorted), injected or orally ingested. It goes by many names including meth, chalk, crank, getgo, Mexican crack, tweak, tick tick, beannies, fast, crypto, ice, speed and crystal. Smoking meth is currently the most common way of ingesting it which amplifies the drug's addiction potential and adverse health consequences. As with many stimulants, meth is most often abused in a "binge and crash" pattern. The brain is comprised of neurotransmitters, or brain chemicals that send messages from the brain to the body. Methamphetamine affects a number of these transmitters, but the most affected is **dopamine**, or the pleasure neurotransmitter. When triggered, dopamine sends pleasure signals to various parts of the body and brain and is then stored for later use. When a person uses meth, an excess of dopamine is released into the brain causing users to feel an excess of pleasure or a high. Unlike normal brain functionality, the dopamine released into the brain causing users to reel an excess of pleasare of a right. Offline hornial brain reflectionally, the dopartitle released is not recycled and stored for later, which in turn overstimulates the brain. Instead, it remains in the body until the high is replaced with the crash of unpleasant feelings. In order to replicate that feeling and avoid the crash, users will want more of the drug at higher doses. Because the pleasurable effects of methamphetamine disappear even before the drug concentration in the blood falls significantly, users try to maintain the high by taking more of the drug. In some cases, abusers indulge in a form of binging known as a "run," foregoing food and sleep while continuing to take the drug for up to several days. What makes it so dangerous other than its potency and intense, euphoric high, is that it is often cut with dangerous chemicals.

The consequences of meth abuse are terrible for the individual; psychologically, medically, and socially. EVERY inch of the body and brain are adversely influenced by the drug. Abusing the drug can cause memory loss, aggression, psychotic behavior, damage to the cardiovascular system, malnutrition and severe dental problems. Long-term abuse can cause a major decline in IQ, induce a state of psychosis, and cause irreversible damage to nerve cells. Beyond its devastating effects on an individual's health, methamphetamine abuse threatens whole communities, causing new waves of crime, unemployment, child neglect or abuse and other social ills. Meth abuse has also been shown to contribute an increased transmission of infectious diseases, such as hepatitis

and HIV/AIDS.

At present, there are no medications which have proven effective in counteracting the specific effects of methamphetamine or that prolong abstinence from and reduce the abuse of meth by an individual addicted to the drug. The most effective treatments for meth addiction at this point are behavioral therapies, such as cognitive-behavioral and contingency-management interventions. This includes things like individual counseling, 12-step support, drug testing and encouragement for non-drug-related activities. Contingency management interventions, which provide tangible incentives in exchange for engaging in treatment and maintaining abstinence, have also been shown to be effective.

Information for this article was taken from "Methamphetamine, the Research Report Series" from the US Department of Health:

and "Crystal Meth (Methamphetamine) Side Effects, Signs & Symptoms

Behavioral Signs of Meth Addiction Loss of interest in usual activities Neglecting relationships Isolating themselves from others Sudden shift in social groups Risky financial behavior to buy meth Criminality, such as stealing money to buy meth Obsessive focus on an issue or task Forgetting important dates, times or events Increased aggression or violent behavior Clumsiness (decreased fine motor skills) Distracted behavior in social situations Risky sexual behavior Erratic sleep patterns, such as insomnia and hypersomnia Hyperactivity and high energy Extreme loss of appetite (eating little or not at all) for several days)

Displaying a tic or twitch (a small, repetitive

spot on the skin)

behavior, such as pulling hair or picking at a

Psychological Symptoms of Meth Addiction

Paranoia, Anxiety, Nervousness Agitation or fidgeting Mood swings, Depression Hallucinations, Belief that there are insects crawling under the skin (leading to "meth sores")

Dangerous Ingredients of Meth

Acetone

Phosphorus Hazardous
Toluene Lithium

Sulfuric acid
Sodium hydroxide
Anhydrous amp

Symptoms of Meth Use

Meth Mouth

Sudden or severe weight loss Extreme perspiration Irregular breathing patterns

Nosebleeds

Sores that are slow to heal/open wounds predominantly on their faces and arms; Formication is a tingling sensation resembling insects crawling under the skin which causes the abuser to incessantly pick at their skin to rid themselves of the "bugs."

Dilated pupils

Burns, particularly on the lips or fingers Track marks on the arms

Blackened, rotting teeth (also known as "meth mouth")

Bad breath

Premature aging of skin