

# Crystal Methamphetamine in Society Today

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### **Abstract**

Crystal methamphetamine is a highly addictive drug that destroys lives. Many have reported getting addicted from first-time use, causing a dependence that requires taking more of the drug to receive a similar effect from previous use (Foundation for a Drug-Free World, 2009). This article describes the effects and signs and symptoms of crystal methamphetamine use. It also describes counseling techniques for youth addicted to crystal methamphetamine, motivational interviewing, the counseling process, and cognitive behavior therapy and contingency management.

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### **Statement of the Problem**

Crystal methamphetamine, a growing problem in the world of drug abuse, is often mentioned in passing or in conjunction with other drugs, but warrants a closer look. Methamphetamine is the common name for the chemical n-methyl-1-phenyl-propan-2-amine, commonly shortened to 'meth'. Dr. Anne Marie Helmenstine (2012) provides a few basic facts

regarding crystal meth, including street names for the drug such as ice, Tina, glass, crank, speed, cotton candy, and many others. She goes on to point out that while methamphetamine is available with a prescription for obesity, ADHD or narcolepsy, crystal meth is without a doubt an illegal street drug made in labs by altering the chemical make-up of over the counter drugs. Usually, making crystal meth involves reducing ephedrine or pseudoephedrine, commonly found in cold and allergy medicine. This process is dangerous both to the people making it, and the area where it's being made due to the hazardous chemicals used: red phosphorus, ephedrine/pseudoephedrine, and iodine. If white phosphorus interacts with sodium hydroxide due to overheating red phosphorus, poisonous phosphine gas can be produced, which is lethal to anyone that inhales it.

### **What are the Effects of Methamphetamine Use?**

Dr. Helmenstine details the common immediate affects, as well as affects associated with chronic use. Immediate effects include the following:

- Euphoria
- Increased energy and alertness
- Diarrhea and nausea
- Excessive sweating
- Loss of appetite, insomnia, tremors, jaw-clenching
- Agitation, irritability, talkativeness, panic, compulsive fascination with repetitive tasks, violence, confusion
- Increased libido
- Increased blood pressure, body temperature, heart rate, blood sugar levels, bronchodilation
- Constriction of the walls of the arteries
- In pregnant and nursing women, methamphetamine crosses the placenta and is secreted in breast milk. (2012, para. 8)

### **Signs and Symptoms that Indicate Meth Addiction**

Crystal meth, or ice, or crank, is a highly addictive substance that can overtake a young person's life seemingly effortlessly. In her article, "Ice Shatters Lives," Judy Monroe (1997) quotes the U.S. Substance Abuse and Mental Health Services Administration as reporting that "there have been large increases in methamphetamine deaths and hospital admissions since 1992" (para. 16). Some users have said they were addicted after using the drug only a few times. In its smokable form, the drug reaches the brain quickly and effects are intensely felt by the user (Monroe, 1997). The euphoria and other immediate affects described by Dr. Helmenstine (2012) contribute to the highly addictive nature of crystal methamphetamine. Due to the high risk for addiction, Dr. Helmenstine's list of effects, associated with chronic use, are important so that parents, teachers, and/or loved ones can become more aware of signs of abuse. They include:

- Tolerance (needing more of the drug to get the same effect)
- Drug craving
- Temporary weight loss
- “Meth Mouth” where teeth rapidly decay and fall out
- Drug-related psychosis (may last for months or years after drug use is discontinued). (Helmenstine, 2012, para. 9)

These symptoms manifest differently for every individual, so the changes might be dramatic or subtle, depending on the amount being used and the length of addiction. In the case of overdose, these symptoms can be seen/sustained:

- Brain damage
- Sensation of flesh crawling (formication)
- Paranoia, hallucinations, delusions, tension headache
- Muscle breakdown (rhabdomyolysis) which can lead to kidney damage or failure
- Death due to stroke, cardiac arrest or elevated body temperature (hyperthermia). (Helmenstine, 2012, para. 10)

Crystal methamphetamine is a very dangerous drug, and can quickly cause catastrophic events to occur in an individual’s life. According to Dr. Howard C. Samuels (2012) at the Hills Treatment Center, there are distinct stages of crystal meth abuse. The first is the experimentation or occasional use stage, in which a person might try this drug for recreational or appetite suppressant usage. During this first stage, crystal meth is usually snorted or ingested orally. The second stage is habitual use, in which the user begins using crystal meth on a regular basis. As the usage increases, the user begins to develop a tolerance to the drug. The third stage, dependence, occurs when tolerance increases and the user feels like they need to continue taking more and more meth in order to feel normal. The final two stages are addiction and recovery. Crystal meth causes a strong physical addiction due to the brain’s adaptation to having meth present. There are problems with anger, unstable emotions, paranoia, and delusions that can occur. Recovery is difficult, as meth is one of the most addicting substances, and it is almost always necessary to go to a detox facility, especially to avoid relapse.

### **Crystal Methamphetamine and Youth**

“Crystal methamphetamine is a psychoactive form of methamphetamine whose effects include euphoria, alertness, restlessness, feelings of endless energy, sleep deprivation, depression, paranoia, acute psychosis, and malnutrition” (Bungay et al., 2006, p. 235). Crystal meth is also referred to as ice and is also likely to decreased body weight, anxiety, and increase risk taking behavior (Neal, Abraham, & Russell, 2009). The use and production of crystal meth has impacted the community in many ways. The manufacturing of crystal meth creates health risks for those involved and those living near the manufacturing sites. There are often explosions and fires and “toxic gases and wastes also found at these sites can cause positioning, burns, lung irritation, organ damage, and cancer” (CDAP, 2007, p. 3).

The use of crystal meth has increased over the last decade and use among youth, homosexual males, and injection drug users (Werb, Kerr, Zhang, Montaner, & Wood, 2010; Wood et al., 2008). In regards to first use of crystal meth, the majority of youth CM users snort or smoke the drug upon first use, they are often with people they consider to be friends, and use frequently occurs in public places (Wood et al., 2008). Approximately 80% of the youth surveyed in Wood et al. (2008) reported that using crystal meth for the first time was a gift given to them. The use of crystal meth impacts the body in many ways (Neal et al., 2009). Crystal meth users and street involved youth reported being at risk of malnutrition due to not having enough money to purchase food (Werb et al., 2010). Not only has crystal meth been linked to malnutrition, it has been linked to unhealthy weight loss which contributes to eating disorders in adolescent females (CDAC, 2007; Neal et al., 2009). Female users also become more dependent on the drug quicker than their male peers and they display traits consistent with mood disorders (CDAC, 2007).

Hadland et al. (2011) conducted a study in which they surveyed patterns of drug use among street youth. Of the 447 participants, 108 reported that they were weekly crystal meth users. Of these participants over 75% were male and over 75% reported having problems locating secure housing and being homeless within six months of participating in the study (Hadland et al.). Not only are these youth struggling with securing shelter but approximately 85% reported having a history of incarceration. According to CDCA (2007), youth male users are more likely to exhibit characteristics consistent with antisocial traits coupled with attention deficit and hyperactivity disorder.

Not only is crystal meth use linked to malnutrition, eating disorders, and antisocial traits but the usage of crystal meth along with other illicit drugs is linked to usage from those who are survivors of sexual abuse (Wood et al., 2008). Youth and adolescent users of crystal meth continue to be a population that is hard to reach but they are greatly impacted by substance abuse and the effects of crystal meth. Youth substance abuse continues to be a public health concern, these youth remain at risk for high risk sexual behaviors, suicide, depression, overdosing, sexually transmitted diseases, and they are at risk for premature death (Hadland et al., 2011). There is a need to reach youth struggling with CM addictions as both the short and long term effects of the drugs can be detrimental (CDAC, 2007; Hadland, et al., 2011).

### **Counseling with Crystal Methamphetamine Addicted Youth**

Counselors working with crystal methamphetamine addicts to assess and develop the client's skills need to abstain from drug use. In addition motivational indicators are addressed to evaluate behavior evidenced by a willingness to change. Cognitive-Behavioral Therapy and Motivational Interviewing are evidenced based treatment strategies that have been utilized by counseling practitioners in their work with clients challenged with addiction, and both theoretical orientations have been favored in the treatment of crystal meth addicts.

## **Motivational Interviewing and Crystal Meth Addiction**

Motivational Interviewing (MI) has been a widely used method of intervention in studies examining clients with substance abusing behaviors (DiClemente, Bellino, & Neavins, 1999; Dunn, Deroo, & Rivara, 2001); however, little evidence of MI as an exclusive method of therapeutic treatment with crystal meth clients exists. Bux and Irwin (2006) noted key themes that clinicians must be mindful of when using this intervention with crystal meth addicts. Clients engaged in substance abuse treatment can present ambivalent in their desire to cease the behavior. Clinicians must be mindful that while many clients are driven to the desire for new behavior, he or she is not without an ambivalence to change. Referencing the continuum for change, there is a basic tenet for counselors to recognize the client's motivation for change. Bux and Irwin believe the client is the driving force for personal decision making and the primary agent of change.

## **The Counseling Process**

The initial process for clinicians is gain information from the client regarding their current and past patterns of substance use, the frequency of use, method of administration, and critical incidents in the past and present that may have impacted the pattern of use. Counselors should also note periods of time in the client's life marked by abstaining behaviors. The responsibility of the counselor is to engage the client using empathy, promotion of self-efficacy, development of discrepancy, and empathic responses to resistance (Bux & Irwin, 2006). Key strategies for Motivational Interviewing include counselor utilization of open communication, reflective listening and attending skills, and summary statement. The encouragement of positive self-talk indicative of change and commitment statements to be expressed by the client is also part of the counseling process. Finally, counselors should also deflect the resistance initiated by the client to change.

## **Cognitive Behavioral Therapy and Contingency Management**

Cognitive-Behavioral Therapy is a theoretical modality that incorporates interventions based on social learning theory in conjunction with classical and operant conditioning (Irwin, 2006). Counselors utilizing Cognitive-Behavioral Therapy ascribe to practice under the theory's basic assumptions while acknowledging that the process of recovery is a learning dimension that takes place over time. Issues to address with the client include self-defeating and irrational beliefs about their personal drug use, coping skills, and client expectations for change (Bux & Irwin, 2006). Irwin (2006) noted that functional analysis should be incorporated to identify these issues. Abstinence from drug use is usually precluded by cognitive distortions that impact behavioral response patterns.

Cognitive Behavioral Therapy has been coupled with contingency management in the treatment of crystal meth abusers. Buxton and Dove (2008) stated, "Contingency management is based on the operant conditioning principal that behavior is more like to be repeated when followed by positive consequences" (p. 1538). When the client is able to engage in behaviors that support therapeutic goals related to abstinence from the use of crystal meth rewards are

given to substantiate positive behavior. The combination of Cognitive Behavioral Therapy and contingency management are key interventions within the Matrix Model. The model also integrates the use of individual and family education on addiction and the prevention of potential relapse (Buxton & Dove).

### Summary

Crystal Methamphetamine is an addictive synthetic stimulant that affects the central nervous system. Reported use amongst suburban and upper middle and high class societal youths has been on the decline, however the long-term use of this type of drug can have significant adverse effects. The use of crystal meth among at risk youth and gay men has increased over the last half-decade, and has been difficult to study for researchers with this area of interest. The Matrix Model, Cognitive Behavioral Therapy, and Motivational Interviewing are all evidenced based methods of intervention practiced by clinician working with addictions and specifically crystal meth addicts. Treatment for the use of crystal meth is complicated by the lack of evidenced interventions having success over long periods of time outside of the context of initial treatment.

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