

METHAMPHETAMINES

Methamphetamines are getting a lot of attention at this time from law enforcement, news media, parents groups and the medical community, so, what exactly are they? How do they work? What are the effects? How do you know if someone is using/abusing them?

Methamphetamine is a form of amphetamine, a synthetic, stimulant drug. In the past amphetamines were used by dieters to suppress appetite and control weight. They were also used to treat narcolepsy, Parkinson's Disease, alcoholism, ADD and depression. The only current medical application seems to be to treat ADD. Methamphetamines, ("meth"), work on various neurotransmitters in the brain, causing more of them to be released into the brain and blocking the reuptake of those neurotransmitters. Notably it effects: norepinephrine – which impacts arousal, stress, learning and sleep; serotonin – which regulates sleep, dreaming, cravings and appetite; and dopamine – which regulates the motor system, pleasure/reward center and cravings. This list of neurotransmitters and the things they regulate helps explain why people feel "high" when they take meth and why there are so many consequences from using it. Depending on the type of meth and how it was made, it can have a half-life, this is the time it takes to break down in your body, of 7-34 hours. This means the meth will be circulating in your body and brain causing more damage until it is completely broken down and disposed of.

The more that meth is used, over a longer period of time and larger amounts, the greater the amount of damage done. Even using a small amount over a short period of time can cause problems. In the short term you might see an increase in depression and anxiety, the crash always follows the high as the neurotransmitters are destroyed and depleted by the meth. You might see skin rashes or an increase in acne, headaches, chest pains, dizziness, blurred vision, dry mouth, excessive sweating, irritability, agitation, problems with memory, weight loss, hair loss, poor hygiene, shortness of breath, irregular heartbeat, increased blood pressure and increased body temperature which leads to dehydration.

Use of larger amounts over a longer period of time could bring on more serious consequences such as increased depression and anxiety which can lead to suicidal thoughts and attempts or uncontrolled rage which can lead to violence including domestic violence and homicide. There may be an increase in skin rashes and sores from scratching at imagined bugs crawling on the skin or from injecting meth. Other effects are seen such as "meth mouth" extreme tooth decay, poor hygiene, deteriorated nasal cartilage, erectile dysfunction, kidney damage, liver damage, extreme anorexia, heart attacks, strokes, jerky muscular movements, tics, convulsions, psychosis, hallucinations, delusions, cognitive impairment, paranoia and finally, death..

No one starts out thinking about being addicted, they just want to "feel good", "have more energy", or "lose weight". People who abuse meth thought they would only use it once or twice, they never thought about becoming addicted. While using meth it is easy to think "I don't have a problem, I can quit anytime I want to, I just don't want to right now". The reality is, anyone can have any of the problems listed above whether they are

first time users or long time abusers, there is no way to predict how each person's unique body and brain will react to this chemical. Anyone can become addicted and not realize that they are addicted until it is too late and the damage has already been done.

How can you tell if someone is using/abusing meth? Initially when someone starts using meth, especially if it is sporadic and in small amounts, you may not be able to tell. As they continue to use, you will begin to see signs and symptoms such as increased irritability, depression, moodiness, anxiety or agitation. The person using may show signs of erratic sleep patterns, wide awake and up for long periods of time followed by a "crash", or insomnia. You may see increased physical activity, repetitive or compulsive actions, excited speech and excessive sweating. There may be times of mental confusion and memory problems. There can also be nausea, vomiting and diarrhea. Long term use usually results in the signs and symptoms intensifying as well as all the consequences listed above becoming more and more evident.

Use and abuse of methamphetamines is especially damaging to young people. The human brain continues to physically develop until around the age of 24 which means that someone using/abusing meth during that period of time can suffer from damage to the brain that may be irreversible. We are already seeing signs of a marked increase in learning disabilities and clinical depression in young people who have used methamphetamines.

If someone has been using or abusing meth they may have a hard time quitting because of the symptoms they experience when they attempt to quit. They may feel dull, foggy-brained, depressed, fatigued and irritable. They may experience cravings and paranoia and an inability to deal with anger which results in aggressive behaviors. Just like any other illness, addiction takes time for the body and the brain to heal. The brain needs to make and replace the neurotransmitters which have been destroyed by the meth and the body needs to repair the damage done to the tissues and organs. The time needed will depend on the person's unique body and brain and how much damage has occurred, it may take 6 months or it may take 3 years to repair as much of the damage as the body is capable of repairing. In some cases the damage may be permanent and the body and brain unable to repair it.

Need more information? The AKAOK, (Alaska Kids Are Our Kids), group will be presenting a Meth Awareness Night on May 10 from 6:30 to 8:30 in the high school auditorium. Check out websites such as NIDA and SAMSHA also check Wikipedia for more information regarding amphetamines or methamphetamines. For help call APIA at: 581-2742 or IFHS Clinic at 581-1202.

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