Methamphetamine Abuse, Complications

Methamphetamine is a powerful stimulant drug. It belongs to the class of drugs known as amphetamines. This drug is known as speed, meth and chalk. In its smoked form, it is often called ice, crystal, crank and glass. It is a white, odorless, bitter-tasting crystalline powder. It easily dissolves in water or alcohol. Meth use causes increased activity, decreased appetite and a general sense of well-being. The effects of meth can last 6 to 8 hours. After the initial rush, there is typically a state of high agitation, which can lead to violent behavior.

Methamphetamines have many medical uses. Unfortunately, the way this drug is used today is not prescribed by physicians and is not the pure drug made by manufacturers and dispensed by pharmacies. Meth is fairly easy to make from commonly available materials. Therefore, a large portion of this drug is made illicitly by cookers in homemade kitchens or labs.

Making meth is very dangerous. The end product is often impure and contains toxic materials hazardous to the cooker, user and anyone in contact with the process. Areas where the drug is made are usually tainted and need decontamination to remove lead and other poisons. These toxins are especially harmful to children. Most illegal meth makers abandon the sites after they are done making the drug.

RISKS AND COMPLICATIONS

- Most of the complications of using this drug can be traced to both:
  - Abusing the drug by using much more of the drug than is safe.
  - The presence of impurities in the substance itself.
- As the user continues to take the drug over a period of time, they find it takes more of the drug to give them the effects they are seeking, primarily:
  - Increased energy, alertness and stamina.
- While the body builds resistance (*tolerance*) to the desired effects, the unwanted and often dangerous side effects increase as well. This is why meth abusers often have problems with their heart, brain, circulation and mental state.

Acute lead poisoning is another risk for meth abusers. A method of illegal meth production uses lead as one of the ingredients. Errors in production may result in contamination. There have been cases of acute lead poisoning with needle use.

Fetal exposure to meth may result in prenatal complications such as:

- Early (*premature*) delivery.
- Altered neonatal behavioral patterns. These include abnormal reflexes and extreme irritability.
- Birth defects.

Meth can cause a variety of heart and blood vessel (*cardiovascular*) problems. These include:

- Rapid heart rate.
- Irregular heartbeat.
- Stroke. This is when there is damage to blood vessels in the brain combined with high blood pressure. This can produce brain damage with paralysis, inability or impairment in speech or death.
- Increased blood pressure.
- Elevated body temperature (*hyperthermia*). This is a medical emergency and can be fatal.
- Convulsions (*seizures*) may occur with meth overdose, and if not treated right away, can result in death.

Long-time use of meth can result in:

- Inflammation of the heart lining.
- Damaged blood vessels and skin abscesses.
- Times of violent behavior, paranoia, anxiety, confusion and problems with sleeping (*insomnia*).

- Social and occupational deterioration.
- Loss of some or all teeth, tooth decay and gum disease.
- Toxicity on the adult human brain when used at high doses over long periods of time.
- Depression and suicidal thinking.
- High-risk sexual behaviors. This may increase sexually transmitted diseases (STDS) like HIV and hepatitis.

Research has also found that former meth users experience long-term brain damage. It is unknown whether the damage can be reversed. This may explain why meth users can have long-lasting behavioral problems, such as:
- Violence.
- Psychosis.
- Personality defects for years after the last time they used the drug.

Withdrawal often causes:
- Depression.
- Abdominal cramps.
- Increased appetite.
- Extreme fatigue.

TREATMENT

Treatment may be divided into two types:
- Short-term (*urgent*) medical treatment. This helps to preserve life and prevent or minimize damage from the complications described above.
- Long-term substance abuse treatment. This helps to achieve recovery from drug abuse or addiction. Most hospital providers can provide referral information for such treatment if the hospital does not offer it.

Addiction cannot be cured, but it can be treated successfully. Treatment centers are listed in telephone directories under:
- Alcoholism and Addiction Treatment, Substance Abuse Treatment or Cocaine, Narcotics and Alcoholics Anonymous. Most hospitals and clinics can refer you to a specialized care center.
- The US government maintains a toll-free number for obtaining treatment referrals: 1-800-662-4357 or 1-800-487-4889 (TDD).
- Website: http://findtreatment.samhsa.gov. Other websites for more information are: www.mentalhealth.samhsa.gov and www.nida.gov.
- In Canada, treatment resources are listed in each province with listings available under: The Ministry for Health Services or similar titles.

HOME CARE INSTRUCTIONS

After treatment discharge, it is essential to do the following:
- Follow all instructions from your caregiver very carefully.
- Take all medications as prescribed. If you cannot, contact your caregiver right away.
- Keep all appointments for further evaluation and counseling.
- **Do not** use drugs, alcohol and all other mind and mood altering drugs unless prescribed by your caregiver.
- **Do not** operate a motor vehicle or machinery until your caregiver says it is OK.

SEEK IMMEDIATE MEDICAL CARE IF:

- You have a seizure (*convulsions*).
- You become shaky or agitated.
- You become light headed or faint.
- You notice sudden or gradual weakness on one side of the body or an arm or leg, or are unable to walk.
- You have a sudden, severe headache, blurred vision or high fever.
- You develop chest pain, nausea or vomiting.

If you have any of the above symptoms, **DO NOT DRIVE**. Have someone else drive you or call 911 for help.

Document Released: 08/23/2005 Document Re-Released: 10/15/2010

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