Methamphetamine

Methamphetamine (Meth) is a powerful stimulant that affects the central nervous system. Meth effects may last anywhere from eight to twenty-four hours. Meth can be smoked, snorted, orally ingested, and injected. It is accessible in many different forms and may be identified by color, which ranges from white to yellow to darker colors such as red and brown. Meth comes in a powder form that resembles granulated crystals and in a rock form known as "ice," which is the smokeable version that came into use during the 1980's.

Meth is highly addictive and users can experience physical and psychological effects. Compared with cocaine, meth has a much longer duration of action and a larger percentage remains unchanged in the body. Smoking or ingesting meth causes the user to experience an intense rush or "flash" that lasts only a few minutes, snorting or oral ingestion produces euphoria. Meth is often used in a "binge and crash" pattern. Users try to maintain the high by bingeing on the drug.

The short-term effects of meth use include increased attention, decreased fatigue, increased activity, decreased appetite, increased respiration, violent behavior and hyperthermia (body temperature elevated to dangerous, sometimes lethal levels). Long term effects include dependence and addiction, psychosis, paranoia, hallucinations, mood disturbances, stroke, weight loss, and inflammation of the heart lining.

In addition to the physical effects, the production and processing of meth is also dangerous. The ignitable, corrosive, reactive, and toxic nature of chemicals used to produce the drugs can cause explosions, fires, toxic fumes, and damage to the environment. Meth can be manufactured in clandestine laboratories (meth labs) using ingredients purchased in, or stolen from, local stores. Many of these materials, though, are highly volatile. Meth labs can be portable and are easily dismantled, stored, or moved. This portability helps meth manufacturers avoid law enforcement authorities. Meth labs have been found in many different locations, including apartments, hotel rooms, rented storage spaces, and trucks. Due to its illegal manufacture, dosage is impossible to control and its chemical composition is unknown.

The manufacture of methamphetamine has a severe impact of the environment. The production of one pound of meth releases poisonous gas into the atmosphere and creates 5 to 7 pounds of toxic waste. Many laboratory operators dump the toxic waste down household drains, in fields and yards, or on rural roads. Due to the toxic waste at meth production sites, many first response personnel incur injury when dealing with the hazardous substances. The most common symptoms suffered by first responders when they raid meth labs are respiratory and eye irritations, headaches, dizziness, nausea, and shortness of breath.

Children residing with parents involved in the manufacture of meth are exposed to the toxins used and created. Laboratory studies have demonstrated that by-products of meth manufacturing can be found on all surfaces of the residence, including the children's toys. Currently, very little is known about the long term health and developmental consequences of childhood exposure to meth manufacturing.

Meth use during pregnancy can cause major problems for babies, including asocial behavior, an inability to bond, tremors, and birth defects. Developmental problems may result because of reduced blood flow, and the drug may have a toxic effect on the fetal brain.

Meth users may experience long-term and psychological effects. Current treatment efforts include those used for other addiction, detoxification, residential treatment, and outpatient rehabilitation.