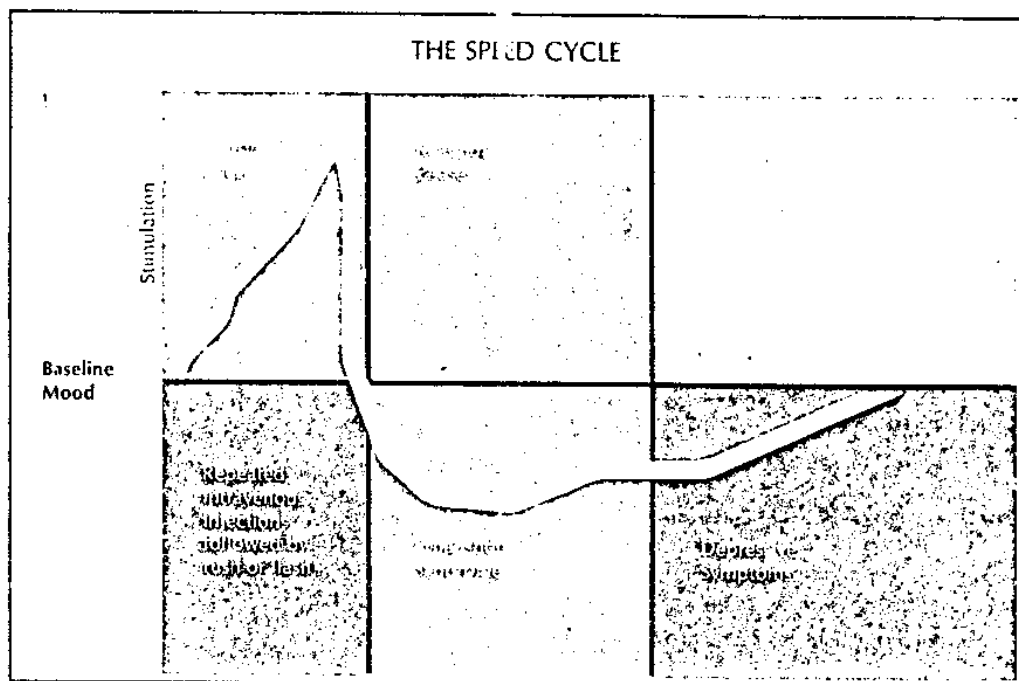




"cured" by renewed dosage of pills, the dependence becomes difficult to break. Some individuals gradually increase their daily intake of amphetamines and begin taking sleeping pills or alcohol to relieve the insomnia which usually develops. The development of this "upper-downer" cycle is especially dangerous because it increases the probability of overdose.

3. High-dose intravenous methamphetamine use

This is the widely publicized pattern of "street" amphetamine abuse. Although the pattern involves fewer individuals than does oral amphetamine use, the bizarre behavior and dress of the intravenous "speed freak," the high incidence of violent behavior, and the resultant medical complications have focused disproportionate public and professional attention on this pattern. A major motivation is the "flash" or "rush," an intense feeling of pleasure immediately following the injection. During a speed binge, an individual may inject between 500 and 1,000 mg of methamphetamine every 2 or 3 hours; by contrast, the usual prescribed dose ranges between 2.5 and 15 mg per day. The substance, called "crank" or "crystal," may consist of illegally produced methamphetamine or dissolved prescription tablets.

David E. Smith (1969) described the "speed cycle" in terms of an "action-reaction" phenomenon, illustrated in the accompanying diagram. With the onset of the drug effect, one sees the "action phase" or "high." During the action phase the individual is hyperactive

and may continue to shoot methamphetamine many times a day in order to perpetuate his "high" when it begins to wear off. Because of the marked stimulation the individual is unable to sleep, and because of the anorectic effect may not eat. As the individual accumulates progressively larger amounts of methamphetamine within his body, he frequently develops extreme suspiciousness which merges into an overt paranoid psychosis. The high energy level associated with paranoia results in unpredictable behavior and, sometimes, violent behavior.

For a variety of reasons—fatigue, paranoia, or simply the lack of the drug—the individual eventually stops injecting methamphetamine and the "reaction phase" begins. As the effects of the amphetamine wear off, the individual lapses into a period of exhaustion and may sleep continuously for 1 or 2 days. Following this exhaustion phase, the individual often has a prolonged and severe depression which may last days to weeks.

High-dose intravenous methamphetamine

In an analysis of 310 cases of high-dose methamphetamine abuse, David Smith (1970) divided psychological adverse reactions into five categories:

1. Anxiety reactions, in which the individual becomes fearful and tremulous with concerns about his physical well-being.
2. Amphetamine psychosis, in which the individual misinterprets the actions of others, hallucinates, and