

Metham- 7 phetamine Abuse

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UNDERSTAND the problem

In the past decade, the manufacture and abuse of methamphetamine in the United States has gained increased attention. More than 12 million Americans report having used methamphetamine at least once.¹ The number of new users of methamphetamine increased by 250% between 1996 and 2002.

Regional use of methamphetamine varies widely, with rural areas being the most severely impacted.² Methamphetamine manufacturing and use affects a wide range of individuals, and all patients should be educated about the dangerous effects of the drug.

It is important that healthcare professionals have a solid knowledge of the effects and appropriate treatment of methamphetamine abuse and dependence.

WHAT are the effects

Acute effects of methamphetamine use include:^{2, 3, 6}

- Euphoria
- Hyperactivity
- Restlessness and tremors
- Grandiosity
- Elevated body temperature and sweating
- Aggressive behavior
- Uncontrollable jaw clenching

Chronic effects of methamphetamine use can include:^{2, 3, 6}

- Paranoia
- Insomnia
- Psychosis
- Poor coping abilities
- Sexual dysfunction
- Dermatological conditions

Ask Your Patients...

"Do you or anyone you know use methamphetamine?"

If Your Patient Asks...

"Where can I find help?"

WHO is at risk

Several motivational factors for methamphetamine use have been identified. In comparison to other stimulants (i.e., cocaine), methamphetamine carries the perception of producing a better, cheaper, and more satisfying drug effect. Users are also initially attracted to methamphetamine out of a desire to cope with mental illness, emotional trauma, and/or mental distress; stay awake longer; enhance sexual experience and performance; and/or reduce weight.⁷

Data from a large community survey of drug abuse found the factors most strongly associated with progression from stimulant use to stimulant dependence were early onset of stimulant use, multiple-substance abuse, and daily cigarette smoking between 13 and 17 years of age.⁴

Contributory and risk factors for methamphetamine abuse include the presence of depression, ADHD, a desire to enhance sexual pleasure, the manic phase of bipolar disorder, obesity, childhood conduct disorder, and adult antisocial personality disorder.⁶

- "Meth mouth" (widespread tooth decay and tooth loss, advanced tooth wear and fracture, and oral soft tissue inflammation and breakdown)
- Burn injuries from lab accidents and explosions during production
- Chemical burns from contact with precursors or byproducts of production

Biologically-based causes of methamphetamine-induced mortality include stroke and cerebral hemorrhage, cardiovascular collapse, pulmonary edema, myocardial infarction, hyperpyrexia, and renal failure.⁵

HOW methamphetamine abuse is treated

Compared to other stimulants, the progression to methamphetamine addiction is accelerated, particularly the time from initial use to regular use and regular use to first treatment. Effective treatment of methamphetamine-dependent patients poses many challenges.

Referral to treatment is vital for all methamphetamine users, as effects can be devastating and long-term. Available treatment modalities include psychosocial therapy and pharmacotherapy. It is also important to consider the needs of special populations (women, gay/bisexual individuals, patients who are HIV positive, and those that live in rural areas), as these needs will affect adherence to and effectiveness of treatment.

Most patients will benefit from involvement in a 12-step program, which can enhance the quality of social support and the social network of the member, a potentially highly reinforcing aspect that would be forfeited if drug use is resumed.

WHERE to find resources

Narcotics Anonymous

818-773-9999

<http://www.na.org>

Crystal Meth Anonymous

213-488-4455

<http://www.crystalmeth.org>

National Institute on Drug Abuse

<http://www.nida.nih.gov>

The Partnership for a Drug-Free America

<http://www.drugfree.org>

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- 2 National Institute on Drug Abuse. NIDA InfoFacts: Methamphetamine. National Institute on Drug Abuse. 2006. Available at <http://www.drugabuse.gov/infocfacts/methamphetamine.html>. Last accessed October 2, 2009.
- 3 Nordahl TE, Salo R, Leamon M. Neuropsychological effects of chronic methamphetamine use on neurotransmitters and cognition: a review. *Journal of Neuropsychiatry and Clinical Neuroscience*. 2003;15:317-325.
- 4 Wu LT, Schlenger WE. Psychostimulant dependence in a community sample. *Substance Use and Misuse*. 2003;38:221-248.
- 5 Meredith CW, Jaffe C, Ang-Lee K, Saxon AJ. Implications of chronic methamphetamine use: a literature review. *Harvard Review of Psychiatry*. 2005;13:141-154.
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