

## Methamphetamine

**Crystal meth, 'yaba' (ya-ba, ya ba), zip, meth, speed, go-fast, cristy, christal, tina, chalk, crank, shabu, glass, crazy medicine, L.A.**

### What is Methamphetamine?

Methamphetamine (crystal meth) is a central nervous system stimulant with a high potential for misuse and dependence. A synthetic drug, it is closely related chemically to [amphetamine](#) ('speed') but produces greater effects on the central nervous system.

The drug is also known by the street names of 'crystal meth', 'crank' 'tina' or 'ice'.

Its euphoric effects are similar to but more intense and longer lasting than those of cocaine. Methamphetamine takes the form of a white odourless and bitter tasting crystalline powder, readily soluble in water or alcohol, and can also be produced in tablet or powder form. It can be smoked, injected, snorted or consumed orally.

### History

Methamphetamine was first synthesized in 1887, but went unnoticed until it became the alternative to ephedrine, a drug commonly used to treat asthma. [1]

Medically produced amphetamines (including methamphetamine) were used in Japan, Britain, Germany and the US during the Second World War to enable soldiers to stay awake, alert and compulsively focussed. As a consequence of the return home of soldiers who had been using it regularly and a simultaneous flood into the local market of methamphetamine, Japan suffered a meth epidemic after the War (1945-1957). [2]

From 1942, the Nazi leader Adolf Hitler received daily injections of methamphetamine from his personal physician, Dr Theodor Morell. [3]

Amphetamines were used for medicinal purposes in the UK until the late 1960's. The sale of methamphetamine products from retail pharmacists was banned in the UK in 1968. In the USA the drug is available in pharmaceutical form for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) and narcolepsy.

### Prevalence

Methamphetamine use and its spread is of concern in several countries, particularly in South East Asia (Thailand and Japan), the USA, Australia and the Czech Republic. It is relatively uncommon in the UK although the drug's widespread use abroad and its appearance on the UK dance scene have led to fears of it becoming more popular.

There is little evidence of methamphetamine manufacture or importation into the UK but there are reports that the drug is used on the dance scene and within the gay community - a national survey funded by the Terence Higgins Trust showed that in 2005 less than 3% of gay men in the UK had used the drug in the last year (over 6% in London). [4]

In December 2006 three men were the first to be convicted in the UK for the manufacture of methamphetamine [5]

The drug is relatively cheap and easy to manufacture although methods may involve inflammable chemicals and the release of toxic fumes. The chemicals needed to manufacture the drug (e.g., ephedrine, red phosphorous and iodine) are readily available.

A record number of methamphetamine factories were seized globally in 2002, the largest number being in the United States. Levels of use and the number of seizures of methamphetamine factories have fallen in the USA in recent years. [6]

### Effects

The drug alters mood in different ways, depending on how it is taken. Immediately after smoking or injecting the user experiences an intense rush similar to that produced by crack cocaine but longer lasting. Even small amounts of methamphetamine can produce euphoria, arousal, wakefulness, increased physical activity, decreased appetite and increased respiration. Common side effects include nausea, panic attacks, compulsive repetitive behaviour and jaw clenching.

Regular use of methamphetamine can lead to dependency, with increased tolerance to the effects of the drug and physical and psychological withdrawal symptoms. Withdrawal symptoms can include depression, anxiety and craving for the drug. Some studies have linked reduced motor skills with methamphetamine use, which may be indicative of a predisposition towards Parkinson's disease for users of the drug. [7]

Effects can last between 4 and 12 hours, depending on the route of administration, which equates to between four and twelve times the duration of cocaine's effects. [8] Existing studies have been unable to establish a "safe" or "unsafe" level of methamphetamine - even for the same person with repeated doses. [9]

It can cause psychiatric problems with symptoms resembling those associated with paranoid schizophrenia, such as paranoia and hallucinations. Methamphetamine induced psychosis can result in homicidal or suicidal thoughts. It is also associated with violent and aggressive behaviour and with acquisitive crime. [10]

Drug users who inject the drug are at risk of infection from HIV, hepatitis C and hepatitis B if they share needles and other injecting paraphernalia. Increased sexual arousal and loss of inhibition increase the likelihood of unsafe sexual practices. [11]

Heavy and regular users of the drug may suffer tooth loss and decay, a condition known as 'meth mouth'. There is some scientific debate as to whether this is a direct effect of methamphetamine, a result of the route of administration or other behavioural issues. However, dentists are observing increased incidence of decay and tooth erosion among patients who are methamphetamine users. [12]

### The Law

Because methamphetamine has no medical use in the UK, there is no legitimate reason for its possession. In 2006 the Government's independent advisory body, the Advisory Council on the Misuse of Drugs (ACMD), recommended that methamphetamine be reclassified from a Class B to a Class A drug [13]

The reclassification came into force on 18th January 2007. [14] The ACMD also recommended that further steps be taken to limit the availability of the

precursor chemicals used to manufacture the drug.

Amphetamine ('speed') remains a Class B drug but if any amphetamine type drug is prepared for injection it becomes a Class A drug.

## References

1. Feldman R.S. et al. (1997) Principles of Neuropsychopharmacology. Sinauer.
2. Suwaki, H. et al. (1997) Methamphetamine abuse in Japan: its 45 year history and the current situation. In: H. Klee (ed.) Amphetamine misuse: international perspectives on current trends. Harwood Academic.
3. Heston L.L. and R. Heston. (1979) The medical casebook of Adolf Hitler: his illnesses, doctors and drugs. Kimber.
4. <http://www.tht.org.uk/mediacentre/pressreleases/2006/april/surveyontheuseofcrystalmethamonggaymen.htm>
5. <http://news.bbc.co.uk/1/hi/england/hampshire/6194377.stm>
6. United Nations Office on Drugs and Crime. (2003) Global illicit drug trends, 2003. [http://www.unodc.org/pdf/trends2003\\_www\\_E.pdf](http://www.unodc.org/pdf/trends2003_www_E.pdf) (PDF)
7. Willis S. (2005) Drugs of abuse. Pharmaceutical.
8. Ibid.
9. Yudko E. et al. (2003) Methamphetamine use: clinical and forensic aspects. CRC.
10. Cohen J.B. et al. Abuse and violence history of men and women in treatment for methamphetamine dependence. American Journal of Addiction 2003; 12: 377-385.
11. Freese T.E. et al. Methamphetamine abuse: issues for special populations. Journal of Psychoactive Drugs 2000; 32: 177-182.
12. Klasser G.D. and Epstein J. Methamphetamine and its impact on dental care. Journal of the Canadian Dental Association 2005; 71(10): 759-762.
13. <http://www.drugs.gov.uk/publication-search/acmd/ACMDFurtherMethylamphetamine>
14. SI 2006 No. 3331 The Misuse of Drugs Act 1971 (Amendment) Order 2006

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