

# [Speed] Amphetamine and Methamphetamine

## Slang/Street names for Amphetamines:

SPEED, UPPERS, LOUEE, PEP PILLS, BENNIES, UP, FAST, GOEY, WHIZ. TRUCK DRIVERS, BLACK BEAUTIES, CROSSES, HEARTS, LA TURNAROUND

## Slang/Street names for Methamphetamines:

BIKERS, BLACK BEAUTIES, BLUE DEVILS, BLUE METH, BLADE, BLING BLING, CHALK, CHRISTMAS TREE, CHROME CHICKEN FEED, CINNAMON, CLEAR, COFFEE, CR, CRISTY, CROAK, CROSSLES, CRANK, CRYSTAL METH, CRYSTAL, GLASS, GO-FAST, HYDRO, HUGS AND KISSES, ICE, LITHIUM, LOAD OF LAUNDRY, METH, METHLIES QUICK, OZS, POOR MAN'S COCAINE, ROCK, SHABU, SKETCH, SPEED, STOVE TOP, TINA, TRASH, TWEAK, UPPERS, WASH, WHITE CROSS, YA BA (CRAZY DRUG), YABA AND YEL LOW BAM (1)



## Speed comes in many forms

(tablets, capsules, powder, crystals, liquid etc) shapes and colours. It has a strong distinctive smell and bitter taste (2). It works by 'jacking up your system'. It artificially speeds up the body's functions it also artificially increases stamina and alertness and gives the impression of reduced fatigue. It works by causing the brain to increase its production of Adrenaline, Noradrenalin and Dopamine (3).

Methamphetamines are closely related to amphetamines and work in a similar way by causing the brain to release massive amounts of dopamine into its circuits. Methamphetamines however, are far more destructive and are currently second only to alcohol and marijuana as the drug most frequently used in many Western and Midwestern states of the USA (4). It was first developed in 1919 by a Japanese pharmacologist but it wasn't until the 1930's that its promise as a treatment for nasal congestion was discovered. It was initially marketed in 1932 as 'Benzedrine', a nasal decongestant (5).



## UNUSUAL FACTS:

Amphetamine & Methamphetamine psychosis can give the user a feeling of ants, insects or snakes crawling on the skin, a condition known as 'Formication' (12,13), or 'Methmites' (14).

Interestingly Methamphetamines have also been linked to increased risky sexual behaviour (15) commonly known as 'Formication'.

## myths

**Myth - Meth does not cause brain damage.**

**Fact - Research shows otherwise.**

[<http://www.amphetamines.com/braindamage.html>]





## HOW IT MESSES YOU UP... SHORT TERM :

Because of the excess production of the neurotransmitters Adrenaline, Noradrenalin and Dopamine the user feels low and depressed after use (can be referred to as a 'crash'). In essence the brain severely depletes its normal levels of neurotransmitters somewhat like the shelves of a supermarket being emptied prior to a long weekend. It takes time for these levels to go back to normal. However, in the interim the user feels low due to the severely depleted levels of neurotransmitters, and thus tends to want more of the drug to feel normal again beginning a very quick spiral into addiction.

Amphetamines can produce any of the following symptoms: Heart rate, breathing and blood pressure increases, dry mouth, headaches, and difficulty sleeping and sometimes panic attacks. Some can become irritable, hostile and aggressive (6).

Besides the above, Methamphetamines can produce any of the following symptoms: increased body temperature sometimes to lethal levels, convulsions. As with most drugs, higher doses mean more likelihood of greater damage, including death by overdose.



## HOW IT MESSES YOU UP... LONG TERM :

Long term effects of Amphetamines can include any of the following: Malnutrition, Psychosis (including paranoia, delusions and bizarre behaviour) reduced resistance to common infections and Brain damage (7). Methamphetamines are highly addictive and have a toxic effect. It is believed that the very chemical that causes the intense pleasure also contributes to the destroying of the nerve terminals in the brain (8). Long term effects can include any of the following: Severe dental problems, violent behaviour, anxiety, confusion, and insomnia.

They may also experience a range of psychotic symptoms such as delusions, paranoia, auditory hallucinations, and mood disturbances all which can give rise to suicidal or homicidal thoughts and behaviour, out of control rages and extremely violent behaviour (9). It can also produce heart attacks and strokes in young people due to the effect of constricting blood vessels (10). Some research on animals seem to indicate that as much as 50% of the brain's neurons that produce dopamine sustain damage and a higher percentage of serotonin producing neurons sustain damage (11).






The above pictures were taken just two and a half years apart.



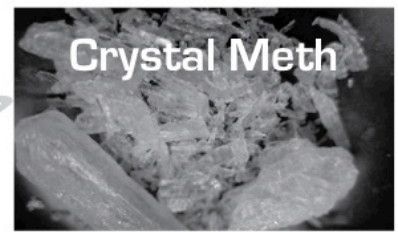
## HOW IT'S INTRODUCED INTO THE BODY :

[The skull indicates the most used methods of ingestion of the drug described in this Fact Sheet]

- Injected/Intravenously 
- Injected/Intramuscularly
- Sniffed/Snorted (powder) 
- Inhaled (vapour) 
- Smoked
- Swallowed
- Eaten
- Absorbed through skin



Methamphetamines typically look like crystals hence the name 'ice'



### OTHER DATA THAT'S RELEVANT :

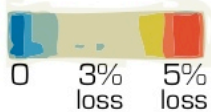
All drugs of abuse increase the dopamine levels in the brain. (17) Amphetamines and Methamphetamines trigger the neurons of the brain into flooding the neural synapse with copious amounts of dopamine. The drug also stops the chemical bath that usually travels through the synapse, from taking the dopamine away.

This is how the drug causes the blaze of intense pleasure that is felt by the user. This pleasure is far more than what is usually produced through normal activities such as eating, exercise and sex etc. The process also empties the reserves of the 'feel good' chemicals in the brain leaving the user lower than normal.

### ERODING THE MIND...

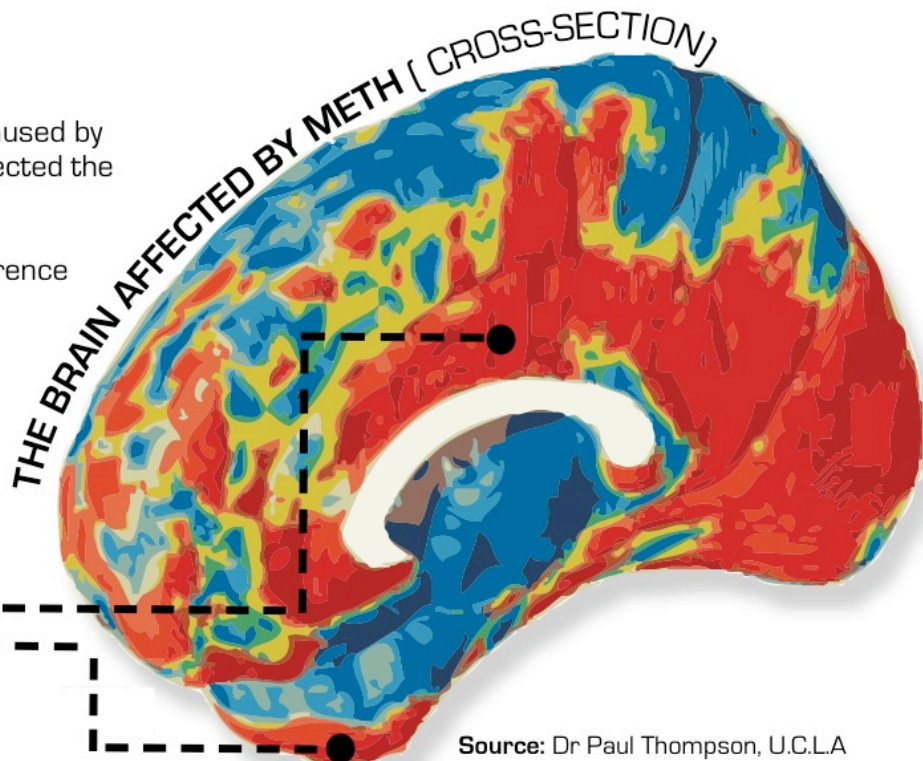
Researchers have mapped brain decay caused by methamphetamine use. The damage affected the memory, emotion and reward systems.

The scale below shows the average difference in brain tissue volume [loss] of methamphetamine users, as compared with non users:



#### Areas of greatest loss:

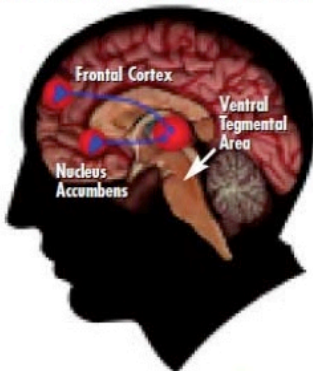
- Emotion, reward [ limbic system ]
- Memory [ hippocampus ]



Source: Dr Paul Thompson, U.C.L.A

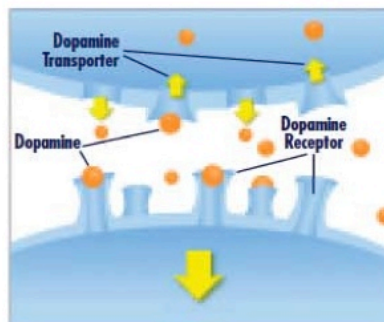
## DRUGS OF ABUSE TARGET THE BRAIN'S PLEASURE CENTER

### Brain reward (dopamine) pathways

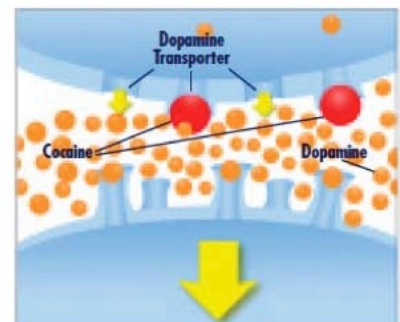


These brain circuits are important for natural rewards such as food, music, and sex.

### Drugs of abuse increase dopamine



FOOD



COCAINE

Typically, dopamine increases in response to natural rewards such as food. When cocaine is taken, dopamine increases are exaggerated, and communication is altered.



## FIRST AID :

Speed overdose is a medical emergency and some will die without medical intervention. If you suspect someone has overdosed, check to see if they are breathing, put them on their side and gently tilt their head back to open their wind-pipe.

**Call an ambulance immediately (dial 000) and follow the operator's instructions.**

The patient should be made as comfortable as possible, preferably by a qualified medical or first aid person, until paramedics arrive. If breathing stops give mouth to mouth resuscitation. If there is no pulse give CPR. (16)

## BEST AID :

# never touch it



## WHERE TO GET HELP : medical and other

- DirectLine Alcohol and Drug Counselling and Referral Line 1800 888 236
- The Australian Drug Foundation Drug Info Line 1300 85 85 84
- Live Free Victoria 03 58523777



## REFERENCES:

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The Great Brain Robbery
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17. [www.nida.nih.gov/](http://www.nida.nih.gov/)



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