

Methamphetamine 101

A history and overview of Meth

Methamphetamine

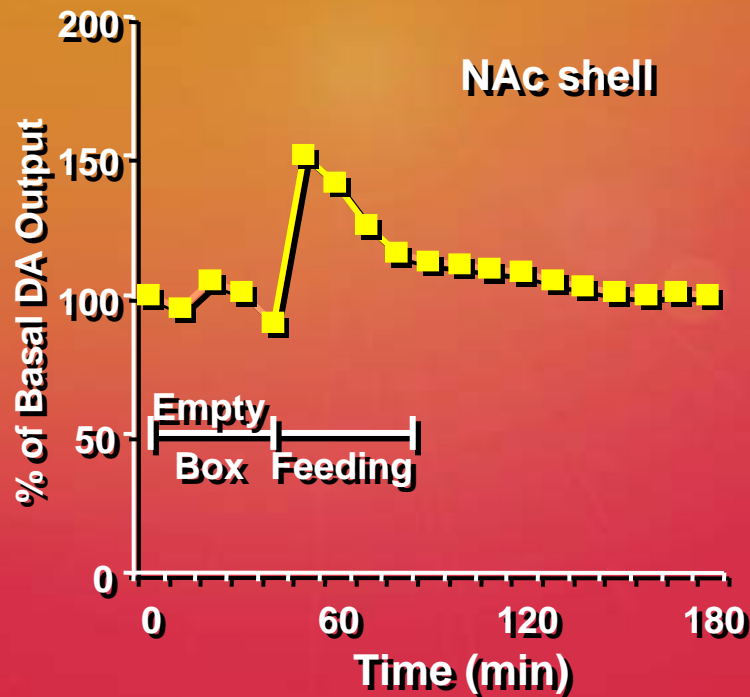
What is Methamphetamine?

- Crystal Methamphetamine is a chemical that has stimulant properties and is highly addictive.



Methamphetamine

What Meth does to the Brain

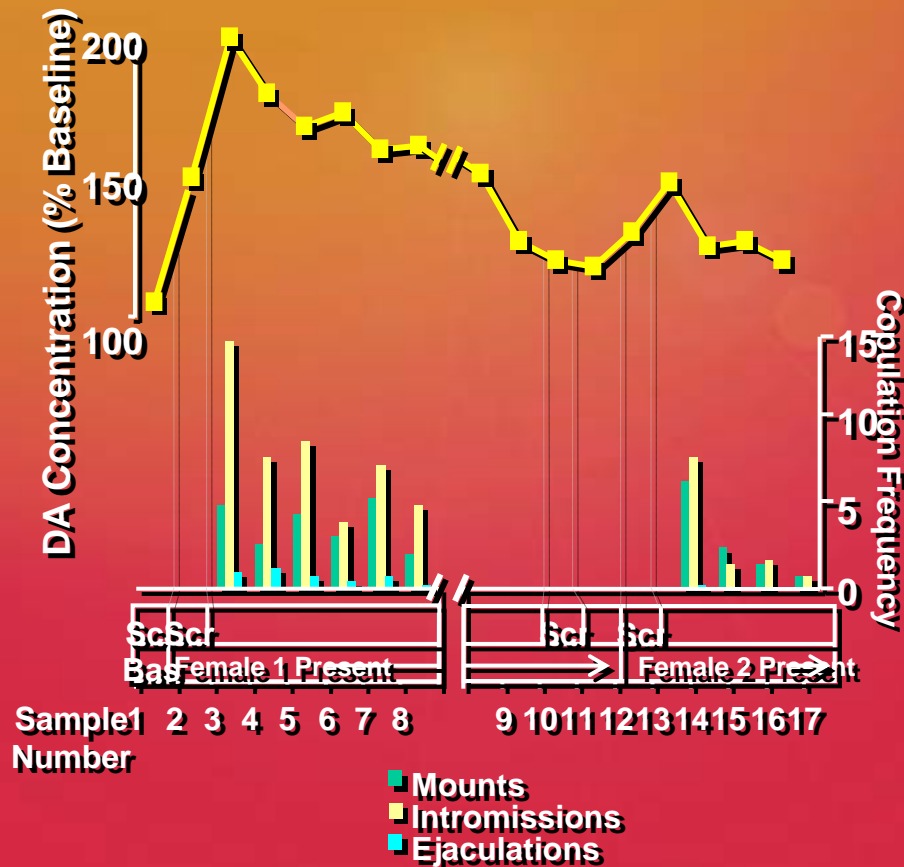


- Natural Rewards elevate dopamine levels
 - Example: Food spikes dopamine levels to 150% of baseline output.

Source: Di Chiara et al.

Methamphetamine

What Meth does to the Brain



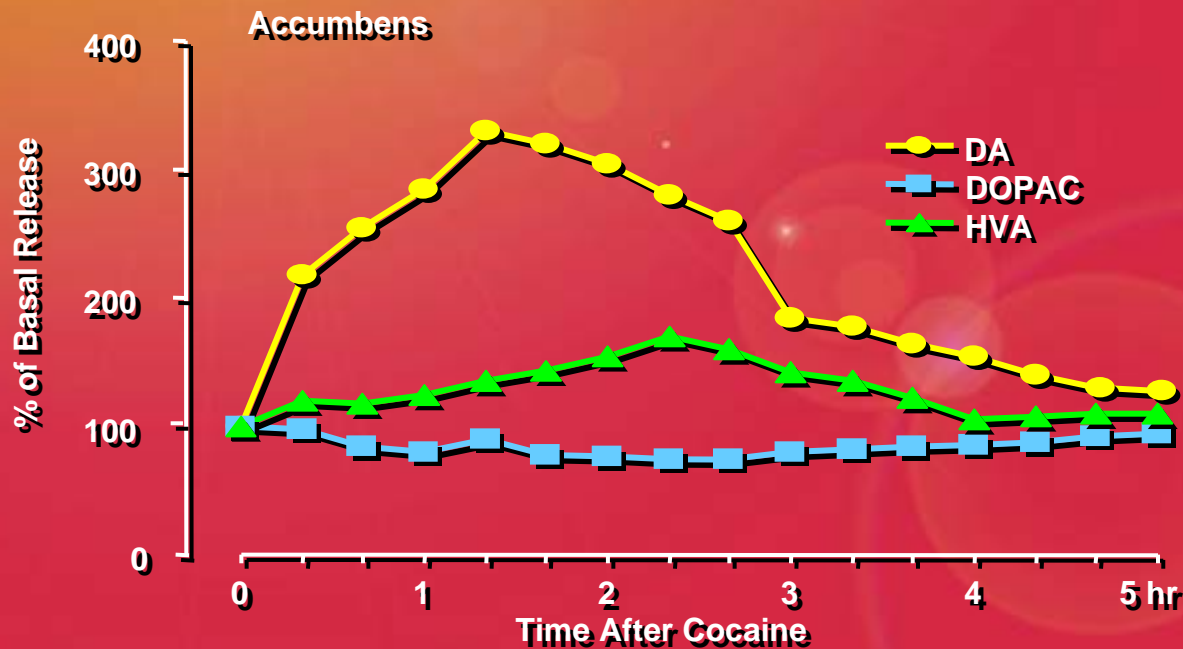
- Natural Rewards elevate dopamine levels
 - Example: Sex spikes dopamine levels to 200% of baseline output.

Source: *Fiorino and Phillips*

Methamphetamine

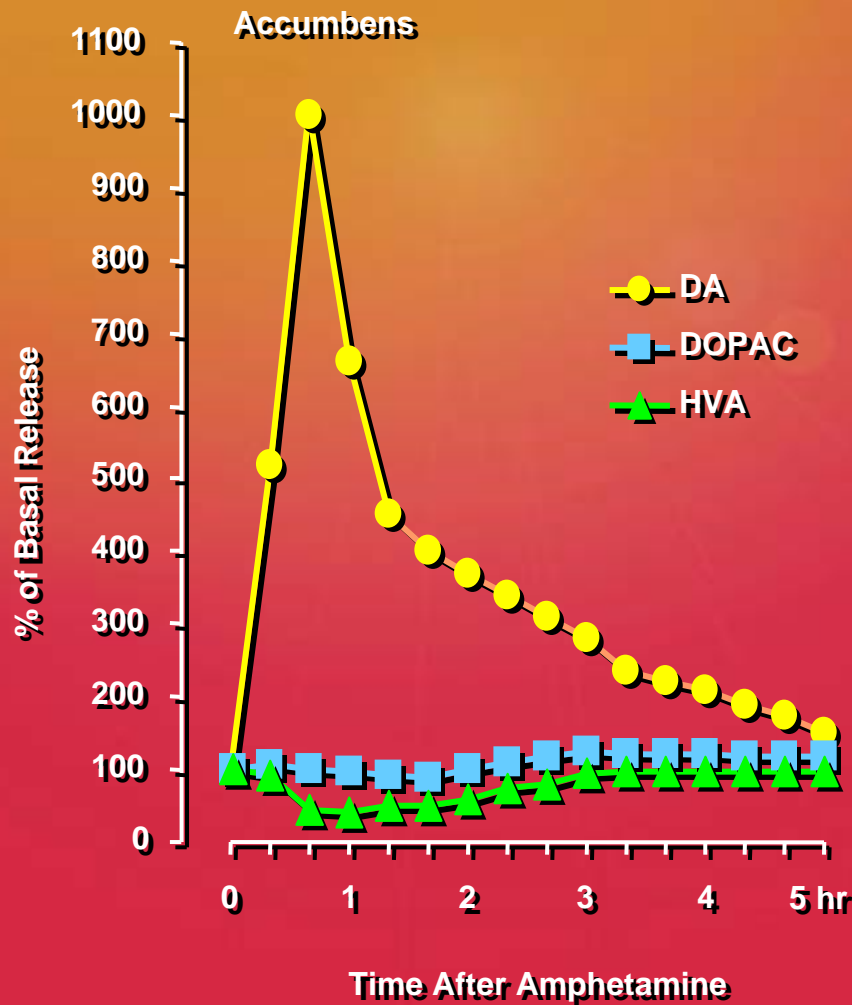
What Meth does to the Brain

- Cocaine spikes dopamine levels to approximately 350% of baseline output.



Methamphetamine

What Meth does to the Brain



- Methamphetamine spikes dopamine levels to 1200% of baseline output.

Methamphetamine

Methamphetamine: Street Names

- Meth
- Crank
- Tina
- Crystal
- Ice
- Chalk
- Quartz
- Go-fast
- Zip
- Amp
- Bump



Methamphetamine

Why do people use Meth?

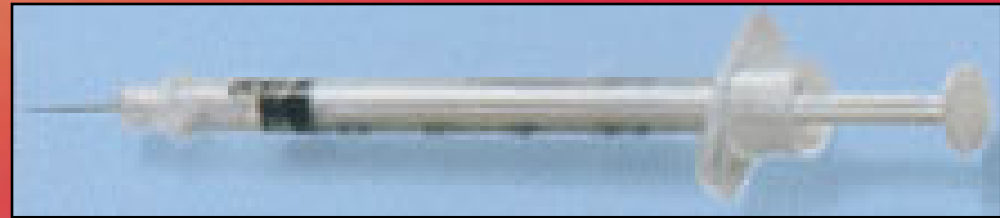
- To lose weight
- To combat exhaustion
- To aid depression
- To have more energy
- To study longer
- To deal with peer pressure
- Because they are curious

Over time, most meth users continue for only one reason: they are addicted.

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How is Meth taken?

- Meth can be smoked, eaten, snorted, injected (slamming) or taken anally (booty bump).



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The Effects of Meth: Short Term

- Temporary mood elevation
- Exhilaration, euphoria
- Perceived extra mental alertness
- Increased libido
- BUT... (see next slide)

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Effects of Meth: Long Term

- Addiction
- Convulsions
- Heart irregularities
- High blood pressure
- Fear, fatigue or depression
- Restlessness
- Tremors
- Wasting
- Skin lesions
- Impotence
- Exposure to HIV/STDs
- Hallucinations
- Desire to self mutilate
- Paranoia
- Insomnia
- Coma
- Death

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Faces of Meth



Methamphetamine

Faces of Meth



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History of Amphetamines

- Meth was first created in 1887 in Germany
- 1919 meth in crystalline powder form created in Japan
- 1919 – 1930
 - Meth used medically as a bronchial dilator and to stimulate central nervous system
 - Benzedrine was available over the counter

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History of Amphetamines

- War time use
 - Japanese soldiers used meth
 - Nazi soldiers used meth
 - Perviitin
 - Hitler was a known meth addict
 - Allied soldiers use meth
 - 5 meth tablets in each soldier's kit

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History of Amphetamines

- 1950s
 - Methedrine and Dexedrine pushed by pharmaceutical companies
 - Huge post-war meth epidemic in Japan

Methamphetamine

Oct 7, 1944, AM

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FOR MEN IN COMBAT

when the going gets tough

To sustain the mental efficiency of men in combat by overcoming the symptoms of fatigue, BENZEDRINE SULFATE TABLETS are available for issue in the Armed Forces.

The tablets are issued for combat use under strict medical supervision, and only on those

occasions when intense or prolonged operations, without opportunity for normal rest, are anticipated.

Although this is, of course, a tactical rather than a therapeutic use of Benzedrine Sulfate, the physician will, we believe, be interested to know that this familiar, clinically established drug has such a unique military application.



**BENZEDRINE
SULFATE TABLETS**

Benzedrine Sulfate Tablets

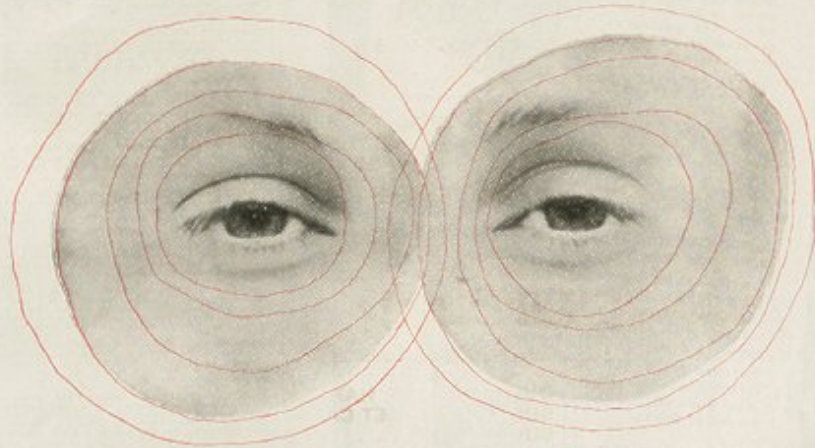
SMITH, KLINE & FRENCH LABORATORIES—PHILADELPHIA, PA.

www.decodog.com

History of “Speed”

- America’s love affair with speed
 - Soldiers were issued speed to combat fatigue

Methamphetamine



tired

Tiredness is of two sorts. First, there is physical tiredness—the result of overexertion. For physical tiredness, rest is the only cure. But there is also psychogenic tiredness—the result of overworry, of monotonous routine, or frustrating circumstance. The two types of tiredness are often confused.

You will find that 'Benzedrine' Sulfate can relieve psychogenic tiredness.

Benzedrine's dramatic mood effect revitalizes the patient and restores optimism, cheerfulness and a sense of well-being. **BENZEDRINE* SULFATE** 

Smith, Kline & French Laboratories, Philadelphia

*T.M. Reg. U.S. Pat. Off. for racemic amphetamine sulfate, S.K.F.

History of “Speed”

- America's love affair with speed
 - Speed was marketed to general public to reduce tiredness.

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History of “Speed”

- America’s love affair with speed
 - Speed is advertised to help “depressed and anxiety-ridden housewives”



to help the depressed and anxiety-ridden housewife who is surrounded by a monotonous routine of daily problems, disappointments and responsibilities . . .

With 'Dexamyl' you can often help her to face her problems; help her to regain lost interests; help her to rediscover the zest and purpose in life. The salutary effect of 'Dexamyl' is free of the dullness caused by many "anti-anxiety" agents alone; free of the excitation sometimes caused by stimulants alone. Her mood improved, disturbing mental and physical symptoms often vanish.

DEXAMYL * tablets · elixir · Spansule! capsules
smoothly and subtly relieves both anxiety and depression

Each 'Dexamyl' Tablet and each teaspoonful (5 cc.) of the Elixir contains Dexedrine® (dextro-amphetamine sulfate, S.K.F.), 5 mg., and amobarbital, 1/4 gr.
'Dexamyl' Spansule capsules are available in two strengths: 'Dexedrine', 15 mg., and amobarbital, 1/4 gr.; 'Dexedrine', 10 mg., and amobarbital, 1 gr.

Smith, Kline & French Laboratories, Philadelphia

*T.M. Reg. U.S. Pat. Off.
!T.M. Reg. U.S. Pat. Off. for sustained release capsules, S.K.F.

www.decodog.com

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History of Amphetamines

- 1960s
 - Meth labs appear in California
 - Problem for military pilots given methamphetamine for long flights over the Pacific
- Doping
 - 1960 Olympic cyclist Kurt Jensen dies of heart attack
 - 1967 Tour de France: British Tommy Simpson dies
 - 1968 International Olympic Committee bans methamphetamine

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History of Amphetamines

- 1995 – present
 - Epidemic sweeps from California to the east coast of the U.S.
 - 2003: Friendly fire by Americans in Afghanistan attributed to “Go Pills”

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How is Meth Made?

- Main Ingredient: *Pseudoephedrine*



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How is Meth Made?

- Conversion Ratio: One pound of Pseudoephedrine/Ephedrine, equals .92 pounds of Methamphetamine
- 8% remaining is water
- 100% theoretical yield upon conversion to Methamphetamine

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How is Meth Made?

More than 32 dangerous chemicals can be used in the production of Methamphetamine.



Methamphetamine

Ingredients May Include...

- Anhydrous Ammonia (*Fertilizer*)
- Iodine (*Veterinarian Products*)
- Lithium (*Batteries*)
- Methanol (*Gasoline Additive*)
- Red Phosphorus (*Matches*)
- Muriatic Acid (*Used in Pools*)
- Ammonia
- Acetone
- Ether (*Engine Starter*)

Methamphetamine

Two Methods of Cooking

- Red Phosphorus Method
- Ammonia Method
 - Both require the use of ephedrine or pseudoephedrine as the precursor
 - Both methods are known as the ephedrine/pseudoephedrine reduction method

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Red Phosphorus Method

- This method combines red phosphorous, usually taken from the strips on matchboxes; pseudoephedrine, from cold tablets; and iodine.
- *This method produces phosphine gas, which can be lethal!*

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The Ammonia Method

- The other method, more common in farming country, involves anhydrous ammonia, a liquid fertilizer, cooked with pseudoephedrine and lithium, taken from batteries.
- *This method produces a cloud of ammonia gas, which is extremely dangerous!*

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For More Information

- www.stopmethinflorida.gov

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Sponsored by

- Florida Office of Drug Control



**Florida Governor's
Office of Drug Control**

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