<u>MDA</u>

<u>History/Background</u>

1910	MDA first synthesized by G. Mannish and W. Jacobson $\underline{1}$
1939	Animal tests are first performed with MDA. $\underline{1}$
1941	First human trials with MDA as part of an exploration of possible the rapies for Parkinsonism. $\underline{2}$
1949- 1957	MDA studied as a potential antidepressant and/or anorexic agent by Smith, Klein & French. More than 500 people were given MDA during the course of this investigation. [More Info]
Jan 8, 1953	Harold Blauer dies of an overdose of MDA (code name EA-1298) during an army-sponsored drug experiment. The army was working to develop new "truth serums" or incapacitating agents and injected Blauer with 500 mg MDA IV. <u>3</u> [Details] [More Info]
1957	Gordon Alles describes the MDA experience at a conference in Princeton New Jersey, sponsored by the Josiah Macy, Jr., Foundation. The proceedings of the conference were published two years later (1959) in <i>Neuropharmacology: Transactions of the 4th Conference</i> . <u>1</u>
1958- 1961	MDA is patented by several different groupsas a cough suppressant by H.D. Brown (1958), as an sedative by Smith, Kline, and French, Co. (1960), and as an appetite suppressant under the trade name "Amphedoxamine" (1961). $\underline{2}$
May 17, 1961	Dr. Alexander Shulgin first tries MDA at a dose of 4.8 mg. After this single dose Dr. Shulgin would not try MDA again until four years later in 1965. <u>4</u> [Details] [More Info]
1963- 1964	MDA begins showing up in the counterculture. $\underline{1}$
Oct 1967	The U.S. Bureau of Drug Abuse Control reports in its publication Micro-gram their "first encounter with the compound [MDA]". <u>5</u> [Details] [More Info]
Oct 27, 1970	The Comprehensive Drug Abuse Prevention and Control Act is passed. Part II of this is the Controlled Substance Act (CSA) which defines a scheduling system for drugs. It places most of the known hallucinogens (LSD, psilocybin, psilocin, mescaline, peyote, cannabis, & MDA) in Schedule I. It places coca, cocaine and injectable methamphetamine in Schedule II. Other amphetamines and stimulants, including non-injectable methamphetamine are placed in Schedule III.
1980-	

MDA continues to be used recreationally, often sold in tablet form as 'ecstasy'.

For more

Potential Benefits

Antidepressant effects, enhancement of love and empathy, appetite suppression, general physical stimulation. Possible adjunctive use for psychotherapy, but data is extremely limited. (2)

<u>Pharmacology</u>

MDA acts as a releasing agent and reuptake inhibitor of the neurotransmitters known as serotonin, dopamine and norepinephrine. It also functions as a 5-HT2A,5-HT2B, and 5-HT2C receptor agonist and shows affinity for the TAAR1, α 2A-, α 2B-, α 2C-adrenergic receptors and 5-HT1A and 5-HT7 receptors.

The effect on serotonin may explain the similar euphoric and empathogenic effects of the two compounds MDMA and MDA. However, MDA has a higher efficacy in stimulating the 5-HT2A receptor than MDMA; thus MDA tends to cause more psychedelic-like effects, such as visual geometry and hallucinations.

General Effects

Here is one account of the differences between MDA & MDMA.

(2) "MDA is more hallucinogenic with noticeable closed eye imagery, is a much greater aesthetic enhancer, especially of people and of music; is more euphoric; more "drug-like", a heavier and more obviously body-involved trip. Tactile sensation is more powerful, erotic and noticeable on MDA. Physical effects are more up-front: gastric upset, pupil dilation, water retention, limbic arousal. On the whole, we find MDA a more enjoyable and interesting trip; longer lasting and more sexual/sensual "

POSITIVE

- extreme mood lift
- increased willingness to communicate
- increase in energy (stimulation)
- ego softening
- feelings of comfort, belonging, and closeness to others
- feelings of love and empathy
- forgiveness
- increased awareness & appreciation of music
- increased awareness of senses (taste, smell, touch, hearing, vision)
- profound life-changing spiritual experiences
- neurotically based fear dissolution
- sensations bright and intense
- urge to hug and kiss people

NEUTRAL

- decreased appetite
- visual distortion
- rapid, involuntary eye jiggling (nystagmus)
- mild visual hallucinations
- moderately increased heart rate and blood pressure (increases with dose)
- restlessness, nervousness, shivering
- change in body temperature regulation
- strong desire to do or want more when coming down

NEGATIVE

(negative side effects increase with higher doses and frequent use)

- · inappropriate and/or unintended emotional bonding
- tendency to say things you might feel uncomfortable about later
- mild to extreme jaw clenching (trisma), tongue and cheek chewing, and teeth grinding (bruxia)
- difficulty concentrating & problems with activities requiring linear focus
- short-term memory scramble or loss & confusion
- muscle tension
- erectile dysfunction and difficulty reaching orgasm
- increase in body temperature, hyperthermia, dehydration (drink water)
- hyponatremia (don't drink too much water)
- nausea and vomiting
- headaches, dizziness, loss of balance, and vertigo
- post-trip Crash unpleasantly harsh comedown from the peak effect
- hangover the next day, lasting days to weeks
- mild depression and fatigue for up to a week
- severe depression and/or fatigue (uncommon)
- possible strong urge to repeat the experience, though not physically addictive
- possible psychological crisis requiring hospitalization (psychotic episodes, severe panic attacks, etc) (rare)
- possible liver toxicity (rare)
- possible neurotoxicity (controversial & up for debate)
- small risk of death. Assuming similar risk to MDMA, approximately 2 per 100,000 users have extreme negative reactions resulting in death. (rare)

<u>Dosing</u>

Threshold	20 mg
<u>Light</u>	40 - 60 mg
<u>Common</u>	60 - 100 mg
Strong	100 - 145 mg
<u>Heavy</u>	145 mg +

Duration – 4-8 hours (the plateau is from 2-4 hours)

Interactions/Contraindications

MDA is contraindicated in developing children, and in pregnant and lactating women. Avoid taking MDA if you're feeling highly nervous, stressed or depressed. It is not recommended for those with serious hypertension. Contraindicated with Tramadol, cocaine, 5MeODMT, and MAOIs. Be very cautious if mixing with other stimulants or alcohol. Better yet don't do it.

Driving or operating machinery while under the influence should be strictly avoided.

Due to the potential for addiction, those with a history of addictive behaviours and tendencies should probably avoid MDA in favour of other therapeutic agents.

For more info read Andrew Weil's account of MDA at the link below

<u>References</u>

- 1) https://erowid.org/chemicals/mda/mda.shtml
- 2) <u>https://erowid.org/references/refs_view.php?ID=8923</u>
- 3) https://erowid.org/chemicals/mda/mda_effects.shtml
- 4) Andrew Weil's account of MDA https://erowid.org/chemicals/mda/mda_article1.shtml