

Ecstasy and Apathy – Festival finds 2016

It is estimated that 0.8% of European adults (2.5million) aged 15 to 64 took MDMA in the last year, with lifetime prevalence rising to 3.9% (13million); with a market valued at 0.7billion euros and accounting for 3% of the illicit drugs market¹.

In the 2000s there was a decline in the production of MDMA combined with a fall in the content of MDMA within pills. However, over the past few years this has reversed with both the production and content increasing¹.

Dosage - the picture to date

In the 1990s and 2000s the average MDMA content of pills was somewhere between 50–80 mg². In April 2016 the averages were closer to 125 mg MDMA per pill, while there were also reports of 'super pills' found on the market in some countries with a reported range of 270–340 mg³.

Due to concerns relating to this in 2014 the European Monitoring Council for Drugs and Drug Addiction (EMCDDA) and Europol issued a joint alert MDMA⁴.

Ecstasy = MDMA

MDMA was the original chemical sold as 'ecstasy' and is still the substance most associated with 'ecstasy' pills.

In the last decade, however, many other substances have been identified in so-called ecstasy pills. Of 76 tablets submitted to WEDINOS as MDMA/Ecstasy tablets 40% (n=30) contained no MDMA. Within this sample, 20 substances (including MDMA) were identified either in combination or isolation within these pills.

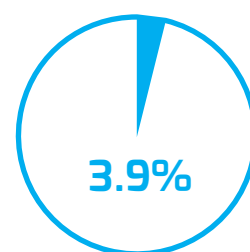
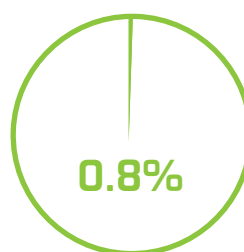
Following a recent collaboration with South Wales police WEDINOS was received pills that were recovered from the site of a music festival in Summer 2016. The following outlines the results of our analysis:

- 56 tablets
- Average weight – 465.3mg (weight range: 318.8mg to 628.6mg)
- Average dose – 129.48mg (dose range: 8.10mg to 274.66mg)

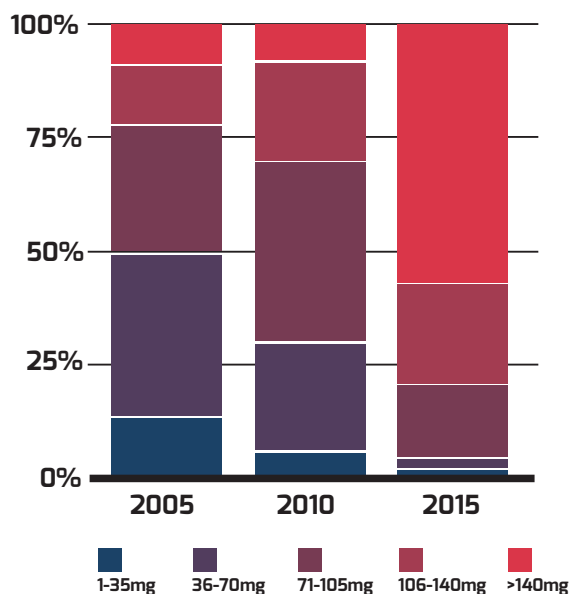
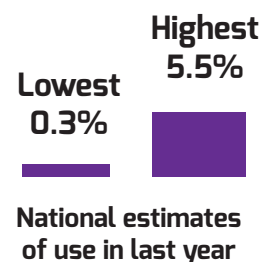
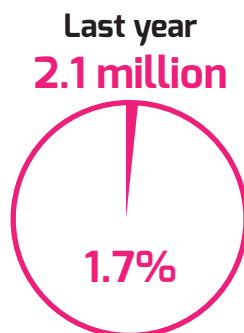
Used:

Last year **2.5 million** Lifetime **13.0 million**

Adults (15-64)



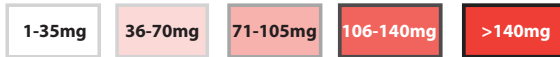
Young adults (15-34)



1. Recent changes in Europe's MDMA/ecstasy market - Results from an EMCDDA trendspotter study, EMCDDA, Lisbon, April 2016 available at <http://www.emcdda.europa.eu/system/files/publications/2473/TDO116348ENN.pdf> [accessed 15th August 2016]
 2. Wood DM, Stribley V, Dargan PI, Davies S, Holt DW, Ramsey J. (2011) Variability in the 3,4-methylenedioxyamphetamine content of 'ecstasy' tablets in the UK. *Emerg Med J* 28:764–765
 3. Recent changes in Europe's MDMA/ecstasy market - Results from an EMCDDA trendspotter study, EMCDDA, Lisbon, April 2016 available at <http://www.emcdda.europa.eu/system/files/publications/2473/TDO116348ENN.pdf> [accessed 15th August 2016]
 4. Tablets with dangerously high levels of MDMA, EMCDDA / Europol Early Warning Notification 2014/6 file:///C:/Users/De123755/Downloads/ewn_high_concentration_mdma_feb_2014_-_public.pdf [accessed 18th August 2016]

Festival samples – Summer 2016

Dosage Range



Doses over 120mg MDMA should be considered as high and users should be aware that they are at increased risk of adverse effects. Adverse effects of MDMA use can include: visual hallucinations, confusion, agitation, hypertension, seizures and coma ¹. Fatalities have been described in individuals who have consumed 150mg MDMA ². Effects occur within 1 hour and last 4-6 hours after 75-150 mg, and up to 48 hours after 100-300 mg ³. Health professionals: please refer to TOXBASE for current management advice.



Name/tablet branding: Silver Bar
Tablet weight average: 464.36mg
(Range 460.9mg to 470.9mg)
Number of pills analysed: 3
Dose range:

1-35mg to 36-70mg



Name/tablet branding: Silver Bar Thin
Tablet weight average: 441.55mg
(Range 434.8mg to 448.3mg)
Number of pills analysed: 2
Dose range:

71-105mg



Name/tablet branding: Go Pro
Tablet weight average: 369.4mg
Number of pills analysed: 1
Dose range:

>140mg



Name/tablet branding: Minion
Tablet weight average: 318.8mg
Number of pills analysed: 1
Dose range:

>140mg



Name/tablet branding: Owl with heart
Tablet weight average: 461.17mg
(Range 458mg to 467.5mg)
Number of pills analysed: 3
Dose range:

>140mg



Name/tablet branding: Peace sign
Tablet weight average: 400.8mg
Number of pills analysed: 1
Dose range:

>140mg



Name/tablet branding: Boom
Tablet weight average: 511.88mg
(Range 488.1mg to 544.2mg)
Number of pills analysed: 3
Dose range:

106-140mg to >140mg



Name/tablet branding: Darth Vader (Black)
Tablet weight average: 534.1mg
(Range 487.9mg to 574mg)
Number of pills analysed: 7
Dose range:

71-105mg to >140mg



Name/tablet branding: Darth Vader (Grey)
Tablet weight average: 434.5mg
(Range 423.8mg to 441.8mg)
Number of pills analysed: 3
Dose range:

71-105mg to 106-140mg



Name/tablet branding: Lego
Tablet weight average: 455.94mg
(Range 449.3mg to 467.7.8mg)
Number of pills analysed: 5
Dose range:

36-70mg to 71-105mg



Name/tablet branding: MasterCard
Tablet weight average: 515.2mg
Number of pills analysed: 1
Dose range:

>140mg



Name/tablet branding: The North face
Tablet weight average: 358.05mg
(Range 340.3mg to 375.8mg)
Number of pills analysed: 2
Dose range:

>140mg

1. R.C.Baselt. Disposition of toxic drugs and chemicals in man (fifth edition), Methylenedioymethamphetamine pg. 562-563, 2000.

2. G.p.Dowling, E.T. McDonough and R.O.Bost. 'Eve' and 'Ecstasy', a report of five deaths associated with the use of MDEA and MDMA. J.Am.Med.Asso.257: 1615-1617, 1987

3. www.toxbase.org [accessed 10th October 2016]

Festival samples – Summer 2016

Dosage Range

1-35mg

36-70mg

71-105mg

106-140mg

>140mg



Name/tablet branding: Elderly People Crossing
Tablet weight average: 433.3mg
Number of pills analysed: 1
Dose range:

>140mg



Name/tablet branding: Shaun the Sheep
Tablet weight average: 367.6mg
(Range 346.6mg to 382.5mg)
Number of pills analysed: 7
Dose range:

71-105mg to 106-140mg



Name/tablet branding: Teenage Mutant Ninja
Tablet weight average: 619.45mg
(Range 610.3mg to 628.6mg)
Number of pills analysed: 2
Dose range:

>140mg



Name/tablet branding: Shell
Tablet weight average: 437.1mg
(Range 430.9mg to 440.6mg)
Number of pills analysed: 3
Dose range:

>140mg



Name/tablet branding: Red Bull
Tablet weight average: 472.9mg
Number of pills analysed: 1
Dose range:

>140mg



Name/tablet branding: Tesla
Tablet weight average: 579.83mg
(Range 568.9mg to 588.9mg)
Number of pills analysed: 4
Dose range:

106-140mg



Name/tablet branding: Saw face
Tablet weight average: 469.5mg
Number of pills analysed: 1
Dose range:

>140mg



Name/tablet branding: Tomorrowland
Tablet weight average: 421.9mg
Number of pills analysed: 1
Dose range:

>140mg

MDMA content varies from batch to batch and pill to pill. This coupled with the difference between dose range and time of onset for MDMA compared to the substituted substances; raises concerns for the wellbeing of individuals consuming what they believe to be MDMA.

Individuals who are determined to use should therefore not be apathetic in their approach. Be aware of doses, duration of effects, the effects themselves and potential risks.

- Start with a low dose, quarter of a pill and wait for effects
- Some of the substances that MDMA is substituted for have a duration of onset up to two hours
- If it feels different from what you are expecting, or if you feel nothing after a long wait (which you should not from a MDMA pill), do not take any more in the hope that increasing the dose will increase the positive psychoactive effects
- Take time to relax regularly and cool down to avoid overheating
- Make sure you have more days where you don't use, than days where you use
- Use in a safe environment with trusted company
- Tell someone you are with what you are taking

MDMA is a ring substituted derivative of methamphetamine. MDMA causes release of serotonin, and to a lesser extent dopamine, in the brain. First synthesised and patented by Merck pharmaceutical company in 1912 and 1914 respectively; MDMA was originally developed as Merck looked to develop a vasoconstrictor to help reduce bleeding. The exact timeline for MDMA becoming a recreational drug is unclear; however the drug gained prominence in late 1970's.