

ASSESSMENT OF EFFECTIVENESS OF PILL TESTING

For each page reference in the grid below please go to www.drugfree.org.au/images/pdf-files/homepagepdf/PillTesting_paper-evidenceforStateandTerritoryParliaments.pdf for detail.

THE SCIENCE

THE SCIENCE	PASS / FAIL	EVIDENCE
Almost all party pill deaths in Australia, which amount to literally hundreds since 1995, have been from normal recreational doses of MDMA (ecstasy)	✗	Pill testing WORLDWIDE greenlights normal recreational doses of MDMA p37 The only scientific Australian study of 82 MDMA related deaths from ecstasy (July 2000-June 2005) found the median blood serum level for MDMA toxicity to not be significantly different to deaths from accident or disease where MDMA was a significant contributing condition p25 Deaths from MDMA overdose are rare, so most deaths are from normal recreational doses of MDMA* p21
The majority of MDMA deaths are from polydrug use where MDMA is used alongside other legal or illegal drugs	✗	Pill testing cannot test for use of other drugs p30
A percentage of these MDMA deaths are from individual allergic-like reactions to MDMA itself	✗	Pill testing cannot test for individual allergic-like reactions p29
MDMA overdose is rare	✗	Pill testing onsite cannot test for dose p17 so advocates' spurious rationale that unknown purity or dose causes 'overdoses' would not be informed by onsite pill testing even if it was true
62% of Australian MDMA-related deaths are at home	✗	Pill testing is incapable of preventing home deaths p27
The triennial National Drug Strategy Household Survey indicates that 31% of Australians do not use drugs because of their illegality, and 18% do not use them for fear of death	✗	Pill testing gives a false sense of security by a. falsely removing users' natural fear of death and b. by making use appear publicly acceptable by neutering police detection of illegal drugs p34

THEIR CLAIMS

THEIR CLAIMS	PASS / FAIL	EVIDENCE
Unknown impurities/fillers deadly	✗	The only Australian study of MDMA-related deaths indicated no deaths from fillers and impurities p14 Pill testing advocates have never detailed any deadly Australian impurities which caused deaths
Unknown other illicit drugs deadly	✓ ✗	DFA has only identified 11 deaths** since 1995 where other deadly drugs masqueraded as ecstasy pills p15 – 7 from PMA before 2007 and 4 from NBOMe or NBOMe/4-FA in 2016/17 – but hundreds from MDMA p15 Onsite pill testing can successfully detect one other drug cut with MDMA, but not more p17 Pill testing onsite fails to identify drugs where 3 or more are combined in the one pill p17 Onsite pill testing could not have identified the 3 x 2017 deaths due to 3 drugs being combined p15 The Canberra pill testing trial failed to identify 53% of the substances presented for testing p17

Continued over page...



THEIR CLAIMS	PASS / FAIL	EVIDENCE
Unknown purity or dose deadly	✗	MDMA overdose is rare, as is admitted by the most senior harm reduction organisations worldwide p23 The science tells us there is not a clear dose-response relationship for MDMA,*** making fatalities more about individual reactions and synergies with other drugs p22 If purity was the issue, a group of the users from a highly pure 'bad' batch of, say, 200 MDMA pills would be expected to die. This is not happening. Recent rises in festival deaths most likely due to sharp increases in high-school age use since 2014 p26
Dr Alex Wodak - "Pill testing will reduce, but not eliminate, the risks of drug taking"	✗	If normal recreational doses of MDMA cause most every Australian death, how will pill testing, which greenlights normal recreational doses of MDMA, possibly reduce deaths? p37
Dr Alex Wodak - The best way to avoid ecstasy deaths is to legalise ecstasy	✗	It's the MDMA that is causing deaths, and MDMA toxicity is not a factor of poor pill manufacture p42 The biggest Australian survey of 25,000 Australians in 2016 shows 97% do not approve of ecstasy use and 92% do not want ecstasy legalised
Bruker Alpha II can measure MDMA purity or dose	✗	This argument is implied by pill testing advocates' focus on unknown purity Onsite pill testing cannot measure dose p18
A small scraping or sample represents the whole	✗	Advocates are the first to say that quality control is non-existent for criminal manufacture, but pill testing hypocritically acts as if homogeneity of ingredients in a pill is assured p42
Use of pill testing in Europe has saved many lives	✗	European studies don't bother to assess or even count numbers of deaths , but only assess self-reported attitudes to party pill use p52
Pill testing is last chance to stop them taking a pill	✗	Pill testing is too late to tell people that MDMA is the major party pill killer. It is too late to tell them to bin their drugs and blow all that hard-earned cash. They need to be told by social media before they blow their money p40
Government-funded DART technology would allow pill testing to determine the dose of MDMA, thus saving lives from deadly high purity pills	✗	Seeing as people have died from taking as little as a quarter of a normal ecstasy pill, advising users to use a part of the pill then wait to gauge the effect does not stop people from suffering individual reactions to MDMA when the second part of the pill may move them over their tolerance threshold
Pill testing is the last opportunity to get a user to discard their ecstasy pill and useful safety information can be given that they will value	✗	The second Canberra trial made no mention of anyone discarding ecstasy pills Seeing as Harm Reduction Australia is seeking to legalise recreational cannabis which is harm production, not reduction, would we really trust them to try to deter ecstasy use? Safety information on a flashing sign at the festival would inform thousands rather than just 200

* The median for Australian MDMA toxicity deaths is 0.85mg/litre in a range of 0.03-93.0mg/litre, which means that 50% of deaths below 0.85mg/l were definitively normal recreational doses, and with overdoses rare, most of the balance outside suicides (eg 93.0mg/l) had to be nothing less than normal recreational doses. A typical range of deaths from MDMA recorded in a medical journal is between 0.1 and 2.4 mg/litre. The Australian toxicity median (0.85) is well within this range. Deaths from very low blood serum levels of MDMA indicate that telling a prospective user to ingest only a quarter of a pill still does not preclude a possible death.

** Drug Free Australia has not counted deaths, such as those between 2012 and 2014 where users knew what they were taking (NBOMe, nor have we considered Newcastle's mass hospitalization of users who had a prescription drug masquerading as ecstasy, who sought medical help when pills did not act as expected.

*** Although Drug Free Australia does recognise a more standard dose-dependent relationship for neuro-toxicity with MDMA.

Logical considerations

The Canberra STA-SAFE trial of April 2018 and 2019 has made much of N-ethylpentylone being identified by their onsite equipment. Assuming that this substance was in the form of a powder, pill or cap which is, in each case, usually sold from batches of several hundred, we would expect a number of deaths reported in Canberra or perhaps Sydney and Melbourne if the contained dose of the drug had been deadly. It thus appears that this substance was not at a dose level to cause death.

