

RED CARD FOR THE KILLER CAMPAIGN

Drug Free Australia and the Dalgarno Institute are sponsoring a national campaign calling out Pill Testing Australia for failing to red-card the very substance responsible for almost every Australian party pill death in both Canberra trials.

Whenever a substance or drug was identified in a pill that Pill Testing Australia considered to be “associated with increased harm/multiple overdoses/death” it classified that pill with a red card (see in ‘Background Information’ below).

Yet an important study of 392 Australian MDMA-related deaths between 2001 and 2016 (see also copied below) found that it was either ecstasy itself, or ecstasy co-consumed with alcohol, cocaine, amphetamines etc that caused each death. No deaths from dangerous impurities or contaminants, and no deaths nominated from other synthetic drugs mixed with MDMA in pills. A majority of deaths were from normal recreational doses of ecstasy, not overdoses (read more on this below).

In Canberra, [seven pills](#) containing N-ethylpentylone were given red cards, most likely from a batch of 200+ that caused no deaths elsewhere. Yet Pill Testing Australia refuses to give ecstasy, which in 2019 was in [90% of the 158 pills tested in Canberra](#), a red card despite it demonstrably exceeding their own criteria of “increased harm” and “death”.

Please e-mail Gino Vumbaca gino@3vc.com.au, President of Harm Reduction Australia (HRA)/Pill Testing Australia, to register your indignation about their failure to red-card Australia’s chief killer. And once ecstasy is red-carded, there is little point to pill testing - only 1% of Australian deaths since 1995 have been caused by other drugs (identifiable by their pill testing equipment) mixed in ecstasy pills, and no government would ever fund an intervention with only a 1% prevention rate. And their claimed counseling of patrons on the dangers of ecstasy clearly doesn’t work with [not one user observed](#) discarding their identified ecstasy in Canberra.

Call HRA’s Pill Testing Australia to account now.

For more information on the real causes of ecstasy deaths see our special section below the Important Background Information following. Please be sure to pass this vital information on to any young person attending music festivals or clubs – it may save a life.

Ecstasy responsible for all 392 MDMA-related deaths between 2001 and 2016 ([see p 18](#))

MDMA-related deaths in Australia

Amanda Roxburgh¹, Shane Darke¹, Julia Lappin^{1,2}

¹National Drug and Alcohol Research Centre, UNSW Sydney; ²School of Psychiatry, UNSW Sydney

Introduction: There are an estimated 22 million users of 3,4-methylenedioxymethamphetamine (MDMA, 'ecstasy') worldwide. Increased manufacture, purity and prevalence of MDMA use in many regions internationally is of concern as the drug is associated with a range of harms. MDMA is typically used by young adults and generally considered to be a safe drug. Fatal effects, though rare, include hypertension, hyperthermia, cardiac arrest, and an elevated risk for traumatic injury and suicide. Many MDMA deaths involve concomitant use of other drugs.

Aims: This presentation provides evidence on:

1. MDMA-related death rates in Australia 2001 to 2016,
2. The characteristics and circumstances of MDMA-related death, and
3. The toxicology of MDMA-related deaths. This presentation provides evidence on:
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 3. The toxicology of MDMA-related deaths.

Methods: *Design:* Analysis of cases of MDMA-related deaths extracted from the National Coronial Information System.

Setting: Australia.

Cases: All cases where MDMA was considered by the coroner to be contributory to death.

Measurements: Information was collected on cause and circumstances of death, demographics and toxicology.

Results: 392 deaths were identified, with a median age of 26 years and 81% being male. Females were significantly younger than male cases (24 v 27 years). The underlying cause of death was attributed to: i) MDMA toxicity alone (n=55), ii) multiple drug toxicity (189), iii). Other causes (n=148: traumatic accident 115, suicide 23, disease 10). Death rates increased significantly between 2001-2007, declined between 2008-2010, and increased again between 2011-2016. The median MDMA concentration was 0.45mg/L, and was significantly higher amongst females than males (0.70 v 0.42mg/L). Deaths attributable to MDMA toxicity alone had a significantly higher blood MDMA concentration than multiple drug toxicity deaths (1.20 v 0.43mg/L). Drug toxicity cases had significantly higher blood MDMA concentrations than cases where death was due to other causes (0.59mg/L v 0.30mg/L). Other drugs detected in addition to MDMA included psychostimulants (54%), alcohol (43%), opioids (30%), cannabis (25%) and benzodiazepines (23%).

Implications: MDMA-related deaths occurred predominantly among males aged in their mid twenties, with females likely to be significantly younger. Three marked periods of trends in death rates (increases and declines) were observed, consistent with the international MDMA supply trends. While most deaths were due to multiple drug toxicity, a notable proportion were attributed solely to MDMA toxicity.

Pill Testing Australia's classification system

Below is a screenshot from page 11 of their [evaluation](#) – compare page 9 of their [second evaluation](#) which shows they used the same classifications.

Diagram 3: Classification and reporting of detected substances

WHITE:	Where a substance was analysed, and was the same as what the patron anticipated that it might be
YELLOW:	Where a substance was analysed, and there was a significant disparity between the result and what the patron anticipated that it was
RED:	Where a substance was analysed, and revealed the presence of a substance known to be associated with increased harm / multiple overdoses/ death Where a substance was analysed and returned an ambivalent result, or functional groups known to be associated with significant harm

The white card assigned to samples where MDMA was the only psychoactive substance identified signals by default that ecstasy is NOT “a substance known to be associated with increased harm / multiple overdoses / death” according to their red card description displayed above. This can only increase the likelihood that more ecstasy will be consumed as a result of pill testing – precisely what was found by the [evaluation](#) conducted by the Australian National University. It states that “most of the patrons had a generally accurate perception of the contents” of their pills before testing, but also states that “those who received a test result confirming the substance to be what they thought it was **were likely to take as much or more than originally intended**” and “concordance between expectation and identification is associated with **stable or increased intention to take a substance.**”

WHAT EVERY AUSTRALIAN YOUNG PERSON NEEDS TO KNOW ABOUT ECSTASY DEATHS

What causes ecstasy deaths?

[Most](#) ecstasy deaths involve [hyperthermia](#) where the body heats above 40 degrees Celsius, causing [organ shutdown and death](#).

Idiosyncratic vulnerabilities

Many die from idiosyncratic vulnerabilities to MDMA (ecstasy) where some individuals’ inability to metabolise ecstasy appears to cause their deaths. As with Anna Wood, Australia’s first ecstasy death in 1995, she bought ecstasy tablets along with four friends but only she died. There were no deadly impurities in her tablet, nor other drugs mixed with the MDMA. It was ecstasy alone that killed Anna

and ecstasy alone that was directly responsible for 23% of all MDMA-related [deaths between July 2000 and June 2005](#), and for 14% of all MDMA-related deaths between 2001 and 2016 (see the Roxburgh study displayed above). Many die from very small doses of ecstasy – see [this](#), [this](#), [this](#) and [this](#). A person's individual vulnerability to ecstasy is not found in a pill, making pill testing of nil value for this cause.

Ecstasy taken with other legal and illegal drugs

Polydrug use, where ecstasy is consumed along with alcohol, cocaine, amphetamines etc caused 48% of the 392 MDMA-related deaths between 2001 and 2016.

Alcohol is known to interfere with the metabolism of MDMA, leading to [higher](#) MDMA blood concentrations. Methamphetamine, like ecstasy, [causes hyperthermia](#), and when taken together can cause deaths from its complications. Polydrug use is not found by pill testing equipment in a pill, making pill testing of nil value for this cause.

Accidents resulting from ecstasy intoxication

29% of all MDMA-related deaths between 2001 and 2016 were from fatal accidents deemed by coroners to be caused by ecstasy (see Roxburgh study displayed above). While accidents such as drowning causes only the death of that ecstasy user, car accidents can cause the deaths of other occupants of their vehicle, or occupants of other vehicles hit by an intoxicated driver. Intoxication is not identifiable by pill testing equipment, nor is the likelihood of an accident, making pill testing of nil value for this cause.

Unpredictability of ambient temperature and social context

Making ecstasy use entirely unpredictable, scientific studies with rodents show that changes in social context and ambient temperature [cause deaths](#). Rats given one fifth the lethal dose of MDMA exhibit brain temperature increases when merely put into a social situation with other rats, but when this was combined with an increase in ambient temperature from 22 degrees to 29 degrees Celsius, which rats would normally tolerate well, all rats died from hyperthermic overheating. This may explain why experienced ecstasy users die taking identical pills on differing occasions. Pill testing equipment does not measure susceptibilities to differing social interactions or ambient temperature, making it of nil value for this cause.

In Australia, deaths not from contaminants, and very rarely from adulterants

Of 392 MDMA-related deaths between 2001 and 2016, there were no deaths from contaminants or impurities in ecstasy pills. This is one of the major rationales for pill testing, but it has not happened. None of the 392 were from other drugs mixed with MDMA in a pill or tablet.

However, going back to 1995 there were 6 deaths in South Australia from MDMA mixed with PMA, which pill testing equipment could have potentially identified. There were an additional 3 deaths in Melbourne in 2017 which Pill Testing Australia's equipment would not have identified with the complex

mix of MDMA, 4-FA and 25c-NBOMe ([see p 15ff](#)). Deaths from GHB were from pills previously [known to contain GHB](#), as with five other deaths since 2001 from intentionally-taken PMA or NBOMe.

Of the conservatively-estimated 500+ pill deaths that have happened since 1995, pill testing equipment would have red-carded the six PMA pills causing death in 1995-6. It likely would have read the three pills causing death in Melbourne as ecstasy ([see p 15ff](#)). With a prevention rate of just 6 in 500+ ecstasy deaths in 25 years, no government would ever contemplate funding a service with a prevention rate of just 1% (6/500+ deaths).

And ecstasy overdose is rare

Scientific studies demonstrate that ecstasy overdose is rare. What is more, Harm Reduction Australia, which auspices Pill Testing Australia, is part of an international network of “harm reduction” organisations such as the [Drug Policy Alliance](#) and [Dancesafe](#) which readily acknowledge that ecstasy overdose is rare even if HRA refuses to dishonestly admit it. So almost all deaths from ecstasy, by extrapolation, are from normal recreational doses of ecstasy. This is backed by the Australian science on MDMA-related deaths (see [page 25](#) and following section)

Pill testing can't advise any appropriate dose

Pill Testing Australia is now calling for governments to buy them new equipment that can measure the purity and dose in an MDMA pill, saying they need to advise users on how to more safely moderate their doses.

Given that every person metabolises the MDMA in their ecstasy pill differently there will be blood concentrations which will differ tenfold for roughly the same amount of MDMA taken. The graph below from this South Australian [study](#) shows the blood MDMA concentrations for 49 ecstasy users, NONE of which died in the study, against the amount of carefully measured MDMA they ingested.

The light blue shaded area in the graph below shows the blood concentration range for 196 of the 392 MDMA-related Australian deaths (the lower 50%) between 2001 and 2016 (30 - 450 ng/ml – see [this](#) and the Roxburgh study displayed above for the range). As can be clearly seen, even small doses of MDMA (80-90 mgs) yield blood concentrations well ABOVE the levels which caused 50% of our Australian ecstasy deaths. Notice that ingestion of just 100-115 mg of ecstasy gives blood levels ranging tenfold from 120 – 1040 ng/ml. When it is considered that of [125](#) – [150](#) mg of ecstasy can be routinely used for experimental PTSD research with no ethics approval problems, such individual differences against toxic levels makes advice on dose absurd.

Festivals do not need pill testers advising on dose. All that is needed is a large photo of a decedent at each festival captioned – “this ecstasy user died after taking ¼ of a pill”. Messages on what to look for when someone is hyperthermic or toxically affected by ecstasy can be delivered via all sorts of social media and screens at festivals. No need for pill testing at all.

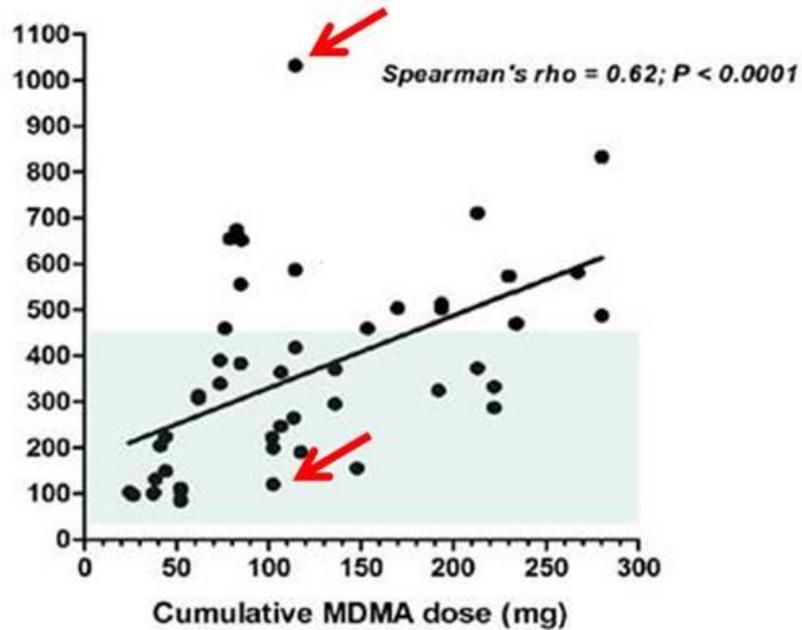


Figure 4 The relationship between maximum plasma 3,4-methylenedioxy-methamphetamine (MDMA) concentration (C_{max}) and cumulative MDMA dose consumed by the time of maximum plasma concentration ($n=49$). Correlation coefficient (Spearman's rho), P -value and line of best fit are shown ($n=49$ participants where MDMA detectable in plasma)