

# Drug Free Australia's series - exposing pill testing misinformation

Episode 2 – How Ecstasy causes death

# Their narrative

- Pill Testing Australia falsely claims that pill deaths are from **adulterants** and **impurities** in party pills

“There are more than half a dozen different techniques available for identifying the ingredients of the pill including detecting the presence of **dangerous contaminants.**”

Dr Alex Wodak, The Catholic Weekly 24 January 2019

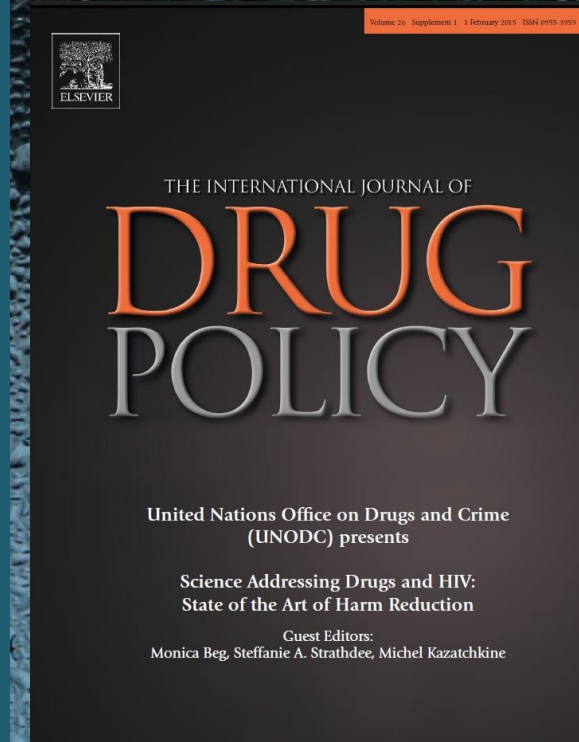
- They also falsely claim deaths are from MDMA **overdose**



<https://www.catholicweekly.com.au/pill-testing-arguments-for-and-against/>

# The Science

- Two scientific analyses of coroners' reports on ecstasy (MDMA) pill deaths in Australia
  - The first is a subset of the second larger study with . . .
  - 392 ecstasy deaths between 2000 and 2018
    - no deaths from impurities identified
    - 5% of deaths had another drug mixed in the pill
    - **this indicates that ecstasy is causal in 95% of deaths**
    - 'bad batch' deaths almost non-existent in Australia
      - only 3 Chapel Street Melbourne deaths (2017)
    - **so it is likely, on the probabilities of ecstasy causing the other 95% of deaths, that 99% are caused by it**

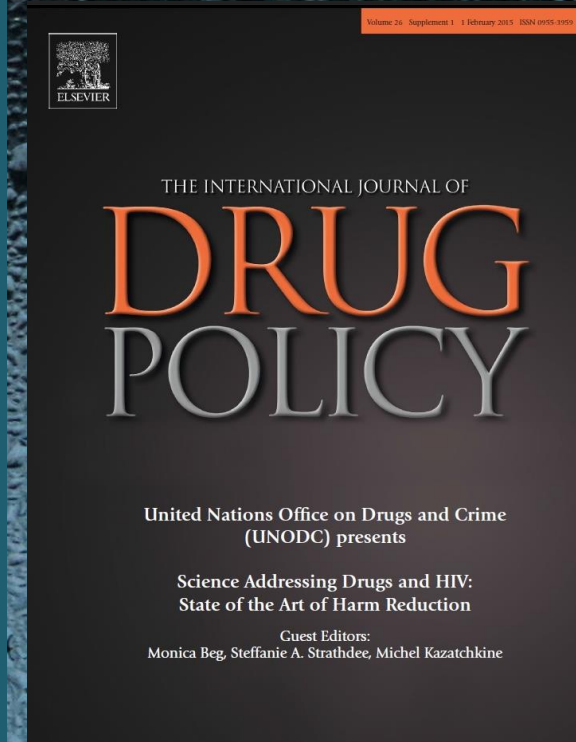
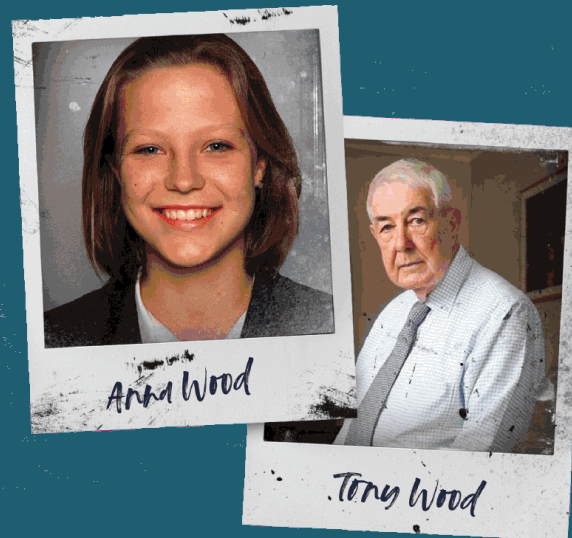


<https://pubmed.ncbi.nlm.nih.gov/31865118/>

# The science

- In the 2020 study of 392 Ecstasy deaths:
  - 14% of deaths were from a reaction to MDMA
  - akin to a deadly allergy as with the first death in Australia, Anna Woods
  - no other drug in the pill

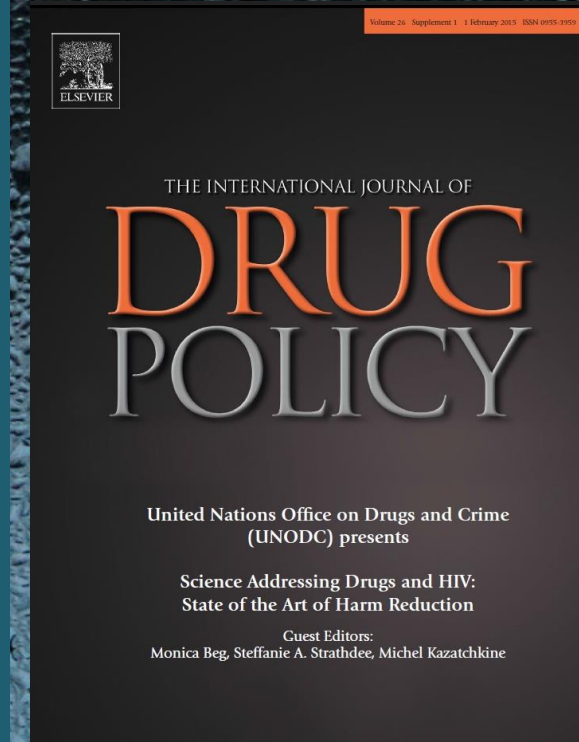
- Pill testing can't identify who is susceptible



<https://pubmed.ncbi.nlm.nih.gov/31865118/>

# The science

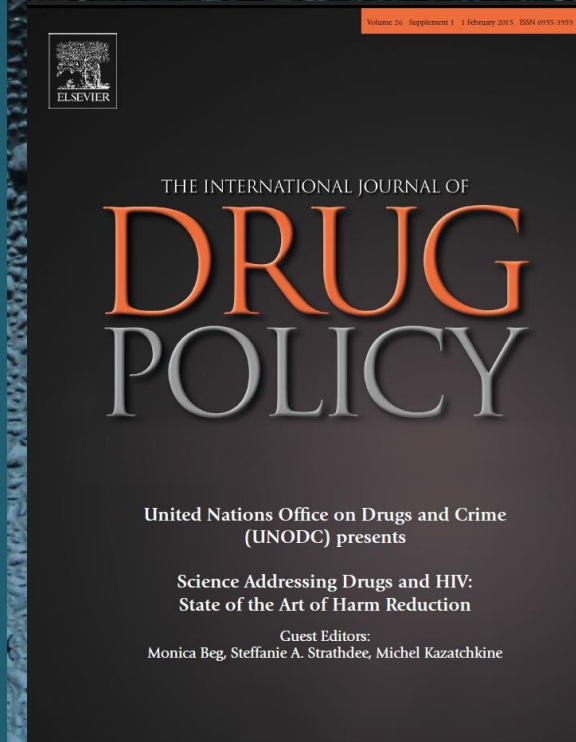
- In the 2020 study of 392 Ecstasy deaths:
  - 48% of deaths were from **co-using MDMA pills with other legal and illegal drugs** – alcohol, amphetamines etc
  - pill testing does not test users for their use of other drugs
- **Pill testing can't identify who is using other drugs**
- (and users can be educated of these dangers via ads on festival and nightclub screens)



<https://pubmed.ncbi.nlm.nih.gov/31865118/>

# The science

- In the 2020 study of 392 Ecstasy deaths:
  - 29% of deaths were from accidents, mostly car accidents
  
- Pill testing cannot identify those who will have accidents



<https://pubmed.ncbi.nlm.nih.gov/31865118/>

# The science

- A medical journal study shows that rats that readily tolerate MDMA
  - at room temperature
  - with no social interaction
- all die when
  - room temperature is increased 7 degrees Celsius and
  - when placed socially amongst other rats
  - **Pill testing is superfluous for these factors**

The screenshot shows the JNeurosci website interface. The article title is "Critical Role of Peripheral Vasoconstriction in Fatal Brain Hyperthermia Induced by MDMA (Ecstasy) under Conditions That Mimic Human Drug Use". The authors listed are Eugene A. Kujawa, Albert H. Kim, Ken T. Watabayashi, Michael H. Baumann, and Yoon Shikhan. The article is published in the Journal of Neuroscience, Volume 34, Issue 17, pages 7754-7763, on June 19, 2014. The page includes an abstract, a table of contents, and a list of keywords. The abstract states: "MDMA (Ecstasy) is an illicit drug used by young adults at hot, crowded 'rave' parties; yet the data on potential health hazards of its abuse remain controversial. Here, we examined the effect of MDMA on temperature homeostasis in male rats under standard laboratory conditions and under conditions that simulate drug use in humans, the chronically hyperthermic homeostatic microclimate in the nucleus accumbens, brain muscle, and rectal muscle, and facial skin to measure temperature continuously from freely moving rats. While focusing on brain hyperthermia, temperature monitoring from the two peripheral locations allowed us to evaluate the physiological mechanisms (i.e., increased heat production and heat loss via skin surfaces) that underlie MDMA-induced brain temperature responses. Our data confirm previous reports on high individual variability and relatively weak brain hyperthermic effects of MDMA under standard control conditions (quiet rest, 22–23°C), but demonstrate dramatic enhancements of drug-induced brain hyperthermia during social interaction (exposure to male conspecifics) and in warm environments (22°C). Importantly, we identified peripheral vasoconstriction as a critical mechanism underlying the active- and state-dependent potentiation of MDMA-induced brain hyperthermia. Through this mechanism, which prevents proper heat dissipation to the external environment, MDMA at a moderate nonlethal dose (3 mg/kg or ~1/10 of LD<sub>50</sub>) in rats can cause fatal hyperthermia under environmental conditions commonly encountered by humans. Our results demonstrate that doses of MDMA that are nonlethal under cool, quiet conditions can become highly dangerous under conditions that mimic recreational use of MDMA at rave parties or other hot, crowded venues."

<https://www.jneurosci.org/content/34/23/7754>

# Overdose is rare

- Honest harm reduction organisations admit MDMA overdoses are **rare**
  - **Drug Policy Alliance** says “Overdoses are extremely rare and are also usually linked to dehydration or mixing drugs, rather than as a direct result of using ecstasy.”
  - **Dancesafe** says “Stop calling them overdoses”
  - Despite overdose being rare, pill testing outfits keep telling the public and politicians that pill testing is needed to test the MDMA dose and purity in pills – a notion falsely premised on MDMA overdose being common

**FACTS about DRUGS:**  
**MDMA**  
May 2015

**We are the Drug Policy Alliance.**

**What is MDMA?**  
MDMA (3,4-methylenedioxymethylamphetamine) is commonly referred to as pressed pill, tablet, ecstasy, or swallowed. MDMA is a stimulant and psychotomimetic. MDMA's effects include decreased fear and increased empathy. MDMA's effects include increased energy, increased sociability, and increased feelings of closeness to others. MDMA's effects include increased energy, increased sociability, and increased feelings of closeness to others.

People who use ecstasy feel open, accepting, people around them. They especially among the rave community. MDMA's effects are similar to those of amphetamine and touch. A typical dose lasts four to six hours. It causes a loss of appetite, but most people report feeling good. Ecstasy causes distortion of time and space. Ecstasy causes distortion of time and space. Ecstasy causes distortion of time and space. Ecstasy causes distortion of time and space.

Before MDMA became a controlled substance, it was used for therapeutic purposes and other mental health treatments in the early 1980s. After MDMA was classified as a Schedule I drug in 1985, a lawsuit challenging its classification resulted in a favorable ruling from the Ninth Circuit Court of Appeals in 2002. The ruling found that MDMA has medical uses and should be rescheduled. However, the U.S. Supreme Court later reversed the ruling in 2007. MDMA remains in Schedule I to this day. ("Reducing Americans' Access to Ecstasy" by the Drug Policy Alliance)

**MDMA-Related Deaths: Stop Calling Them Overdoses**  
Post Date: July 10, 2014  
Last Updated: March 6, 2023

**DanceSafe Responds to LA Weekly Misinformation**  
By Emanuel Sferios and Missi Wooldridge

DanceSafe was founded in 1998 in order to help young people in the electronic music community stay safe. In particular, our aim was to help reduce the potential risks and harms associated with the use of ecstasy (MDMA), a therapeutic medicine and recreational drug whose prohibition in 1985 quickly spawned the most adulterated, illicit drug market in the world. Not only were there dozens of other drugs being sold under the name "ecstasy," but many of them were far more dangerous than MDMA. (The situation remains the same today, despite ecstasy's re-branding as "molly.") Following the example of the Dutch government, we began [testing ecstasy tablets](#) at raves in the San Francisco Bay Area in order to help people who used the drug avoid ingesting the fake and adulterated pills. In addition, we launched a [laboratory analysis program](#) where anyone

[https://web.archive.org/web/20201020063248/https://drugpolicy.org/sites/default/files/DPA\\_Fact\\_Sheet\\_MDMA.PDF](https://web.archive.org/web/20201020063248/https://drugpolicy.org/sites/default/files/DPA_Fact_Sheet_MDMA.PDF)

<https://dancesafe.org/mdma-related-deaths-stop-calling-them-overdoses/>



# Summary

- With MDMA deaths caused by:
  - idiosyncratic, personal reactions
  - polydrug use
  - accidents
  - social environment
  - ambient temperature
  
- Pill testing has no value in identifying any of the real factors

# Next episode

- In this series

1. It's the ecstasy, stupid!!
2. How ecstasy causes death
3. **More deaths the result**
4. The UK's bad experience
5. Better equipment useless
6. Call out your politicians

# Information

- For more detail



[https://d3sdr0llis3crb.cloudfront.net/images/book-paper-pdf/Ecstasy\\_Deaths-INFOsheet31-01-20.pdf](https://d3sdr0llis3crb.cloudfront.net/images/book-paper-pdf/Ecstasy_Deaths-INFOsheet31-01-20.pdf)