



Victoria Police  
Forensic Services  
Department

# Trends in illicit tablets

## - an analytical perspective

# Outline



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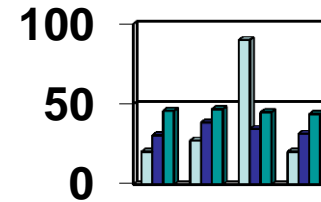
- Source of the data
- Illicit tablet trends over time
- Varying content and purity
- Fentanyl and it's analogues

# Drug Database



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Chemical Drug Intelligence Unit  
(non evidential 80%)



Statistics / Trend Reports

Drug Analysis Unit  
(evidential 20%)



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**30 years ago - 1987**

# 1987 – 30 years ago



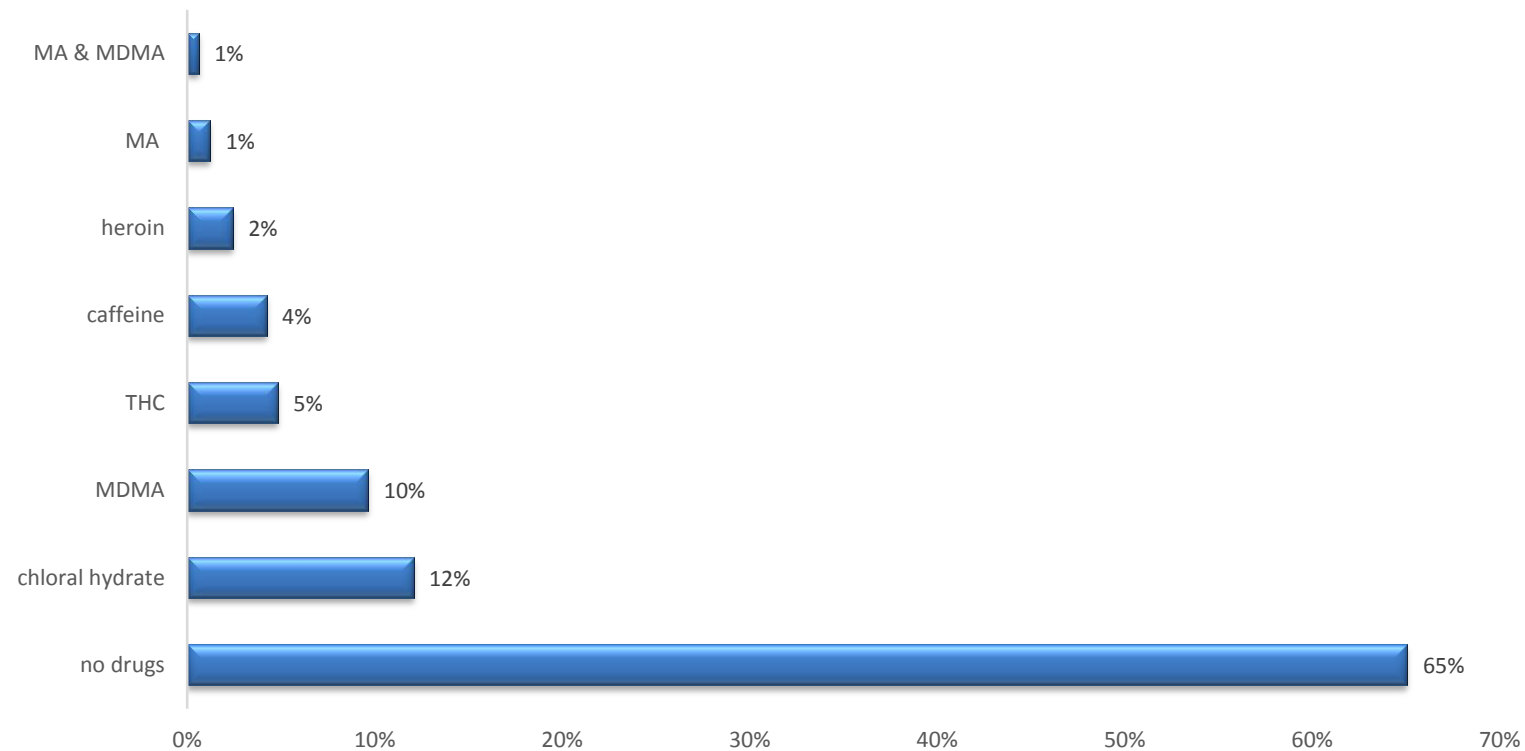
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# 30 years ago



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**20 years ago - 1997**

# 1997 – 20 years ago



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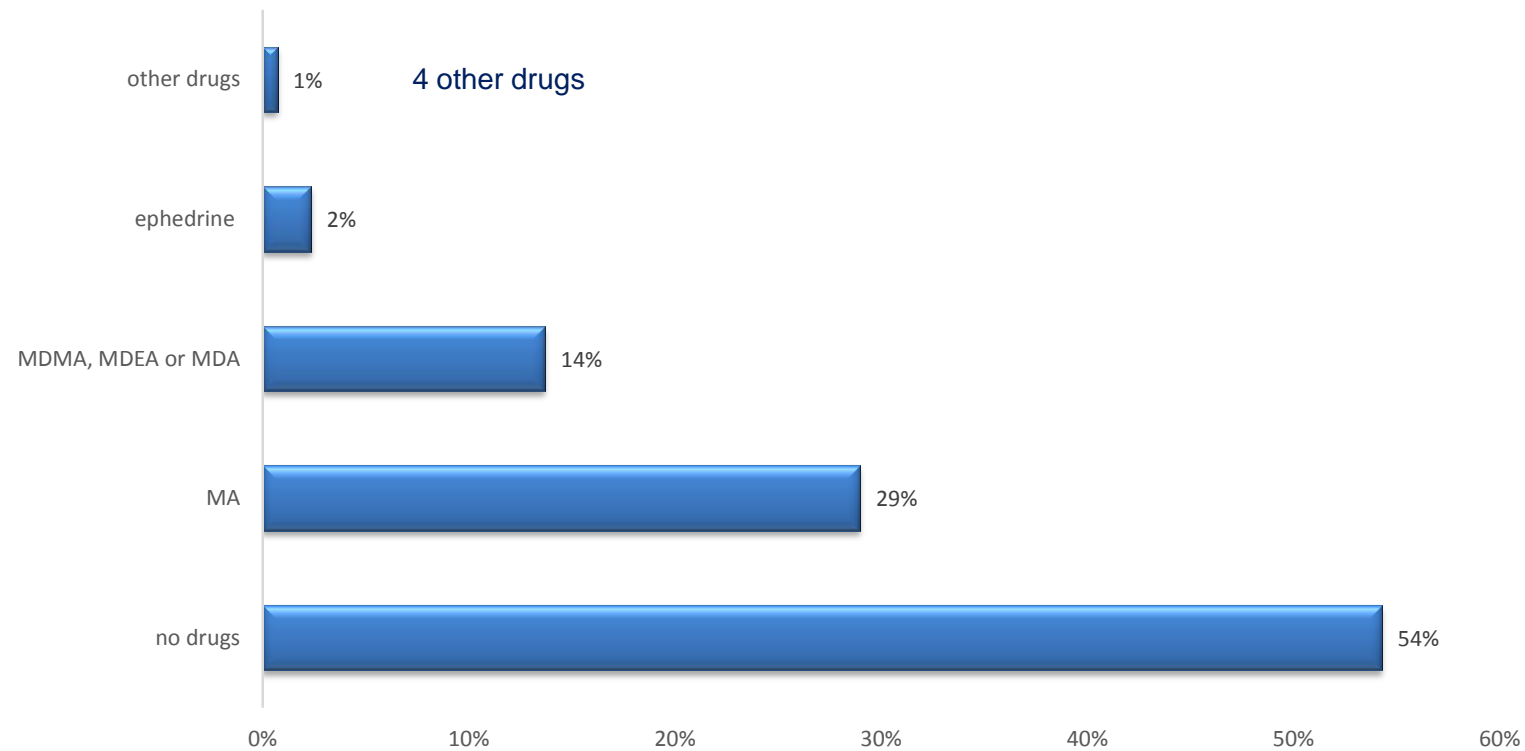




# 1997 - 20 years ago



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**10 years ago - 2007**

# 2007 – 10 years ago



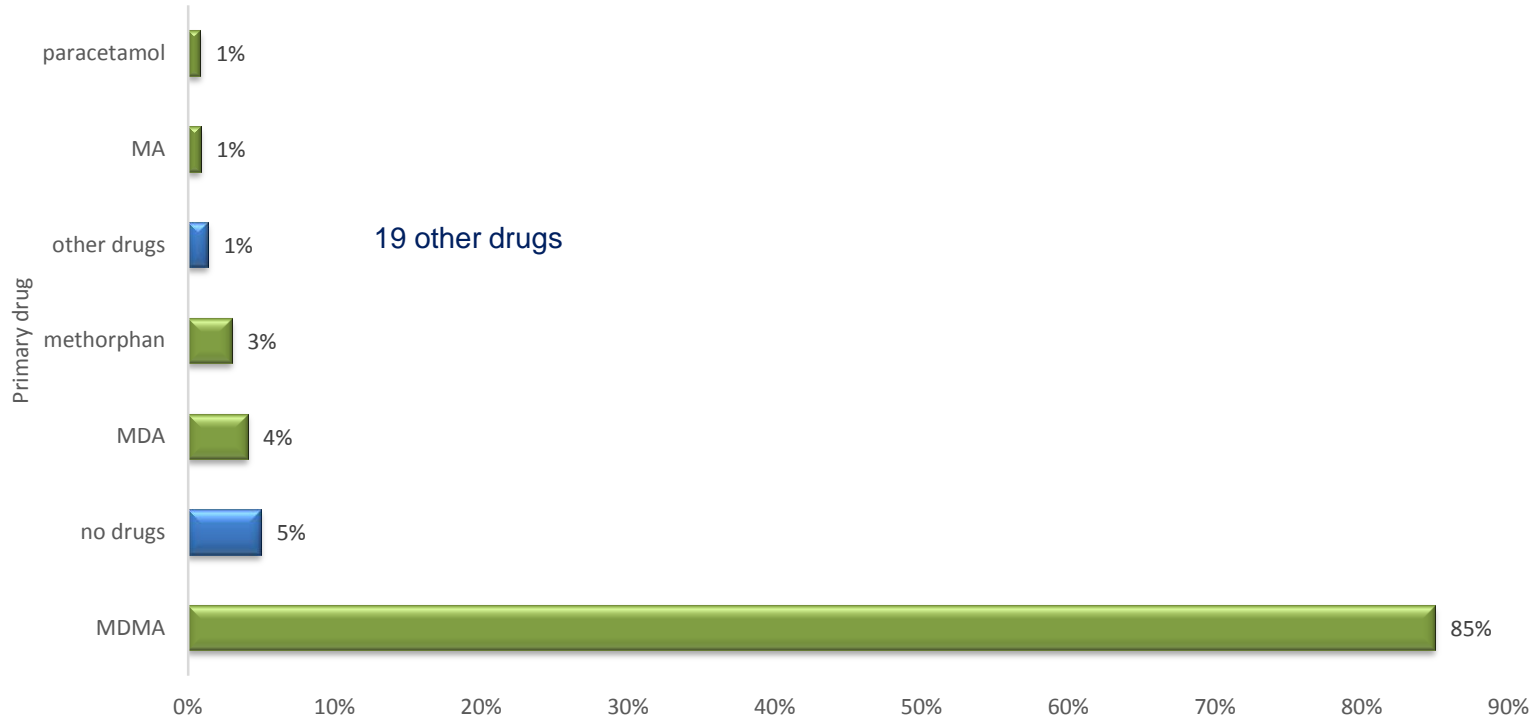
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# 2007 – 10 years ago



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# 2007 – 10 years ago

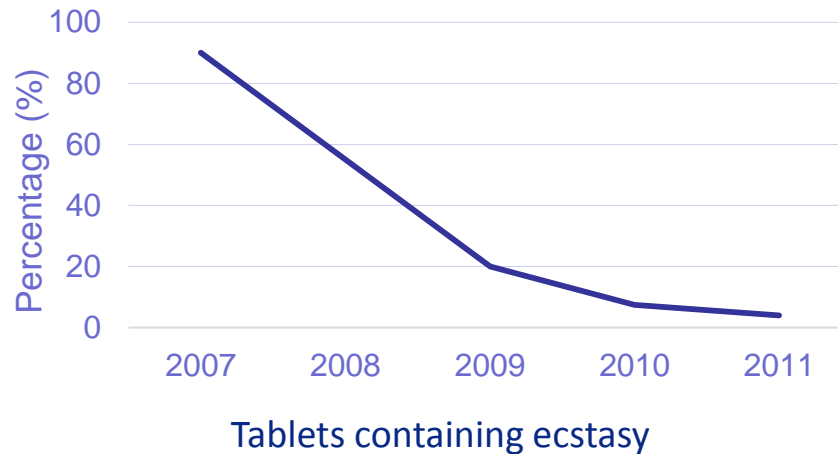


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Drugs detected	Proportion	Most common combination
MDMA only	60.2%	MDMA + MDEA
MDMA + 1 other	39.1%	
MDMA + 2 others	0.3%	
MDMA + 3 others	0.2%	
MDMA + 4 others	0.2%	
MDA only	89.5%	MDA + MDMA
MDA + 1 other	9.9%	
MDA + 2 others	0.5%	
MDA + 3 others	0.1%	
methorphan only	73.5%	Methorphan + fluvoxamine
methorphan + 1 other	25.2%	
methorphan + 2 others	0.1%	
methorphan + 3 others	0.8%	
methorphan + 4 others	0.4%	
MA only	86.6%	MA + BZP
MA + 1 other	8.8%	
MA + 2 others	0.6%	
MA + 3 others	3.6%	
MA + 4 others	0.1%	
MA + 5 others	0.3%	
paracetamol only	92.3%	Paracetamol + 1-4-BD
paracetamol + 1 other	7.7%	



## Worldwide safrole shortages reported in 2008



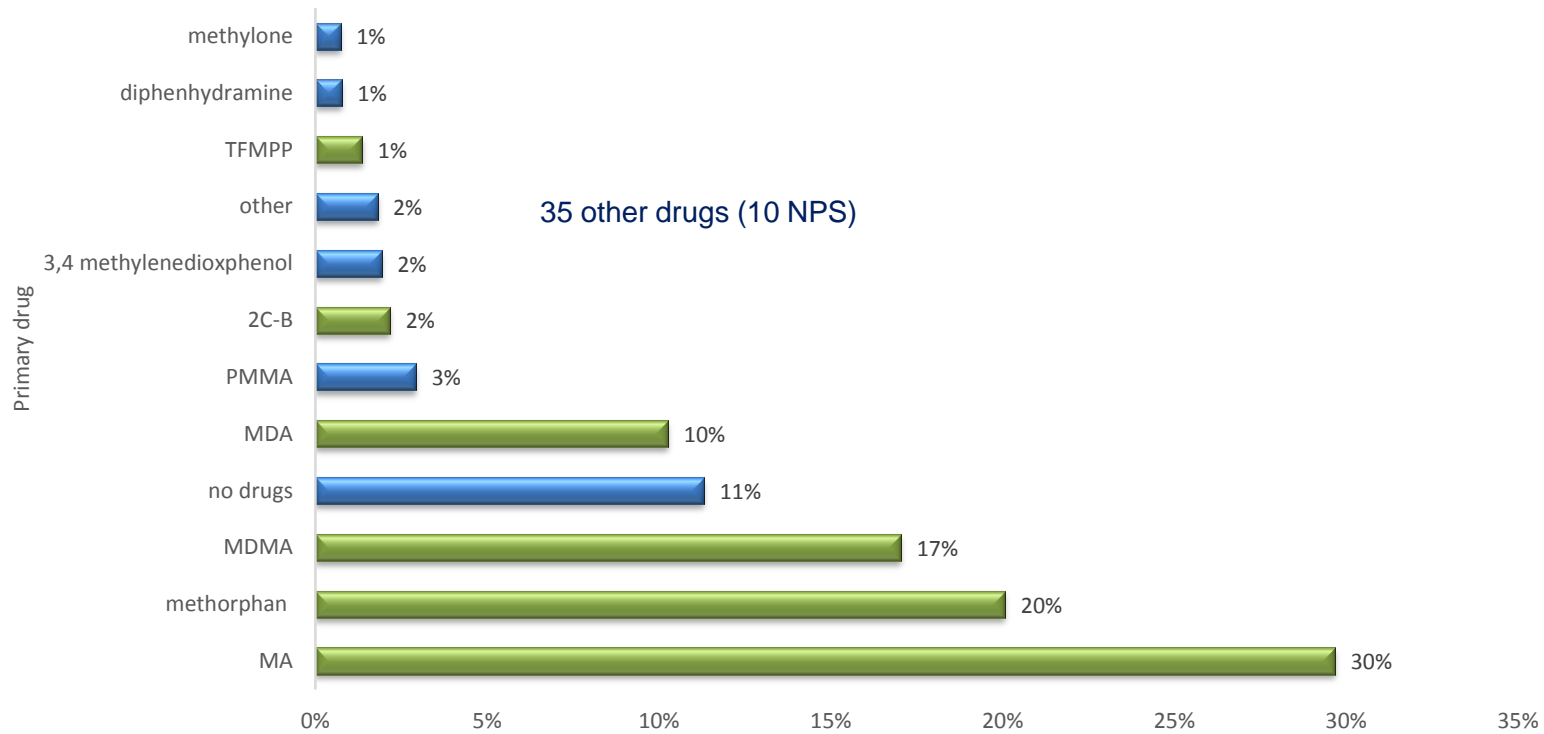
# 2007 to 2011



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## Primary drug found in illicit tablets:

2007	89% MDMA or MDA
2008	55% MDMA, MDA or MDEA
2009	55% Caffeine
2010	60% Methorphan
2011	30% Methorphan & 26% 2C-Family (99.9% 2C-B)





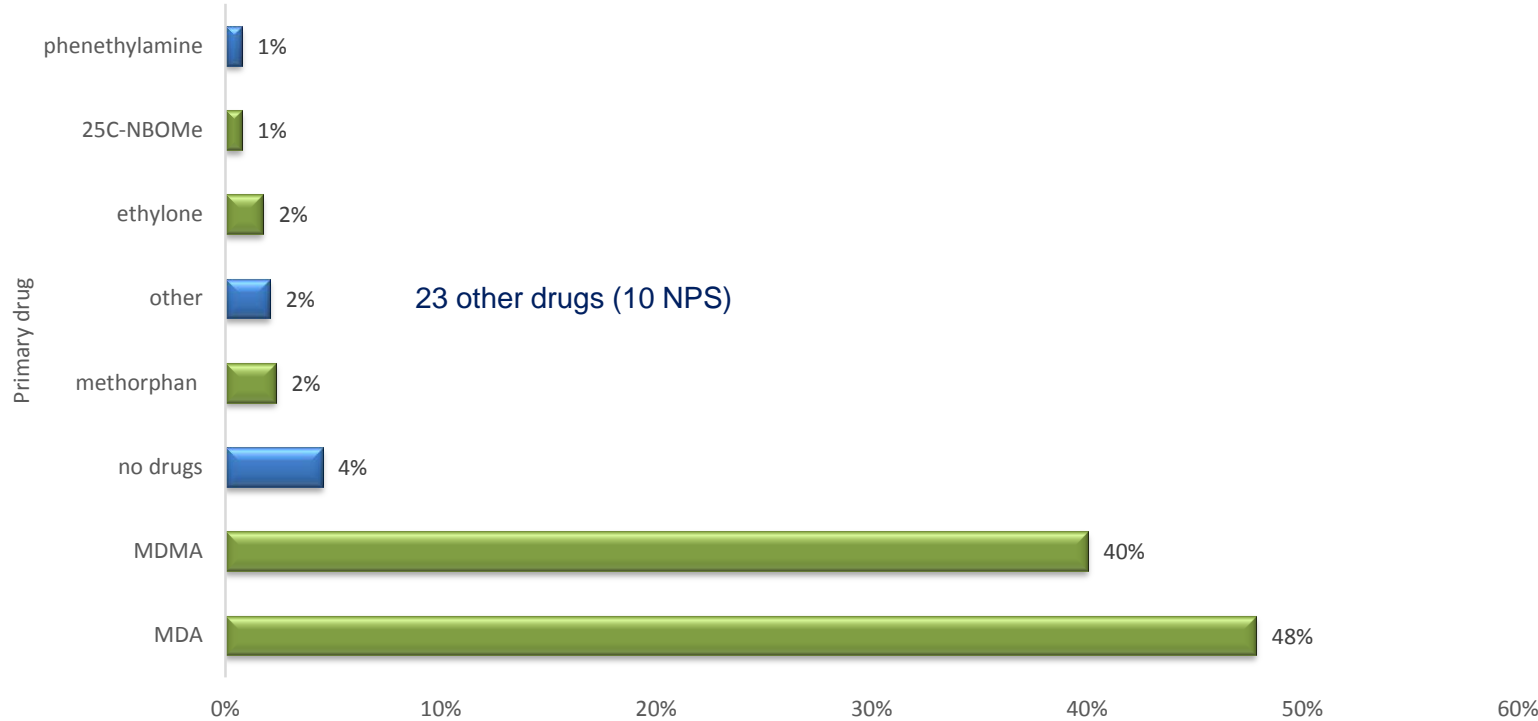


Drugs detected	Proportion	Most common combination
MA	91.5%	MA + MDMA + safrole
MA + 1 other	8.4%	
MA + 2 others	0.1%	
methorphan only	63.2%	Methorphan + MA + diphenhydramine
methorphan + 1 other	2.8%	
methorphan + 2 others	33.9%	
methorphan + 3 others	0.1%	
MDMA only	88.1%	MDMA + MA
MDMA + 1 other	10.7%	
MDMA + 2 others	0.9%	
MDMA + 3 others	0.1%	
MDMA + 4 others	0.2%	
MDA only	91.5%	MDA + 2C-B
MDA + 1 other	8.4%	
MDA + 2 others	0.1%	
2C-B only	99.4%	2C-B + MA + MDA
2C-B + 1 other	0.2%	
2C-B + 2 others	0.4%	
TFMPP only	92.6%	TFMPP + BZP
TFMPP + 1 other	7.4%	

# 2016



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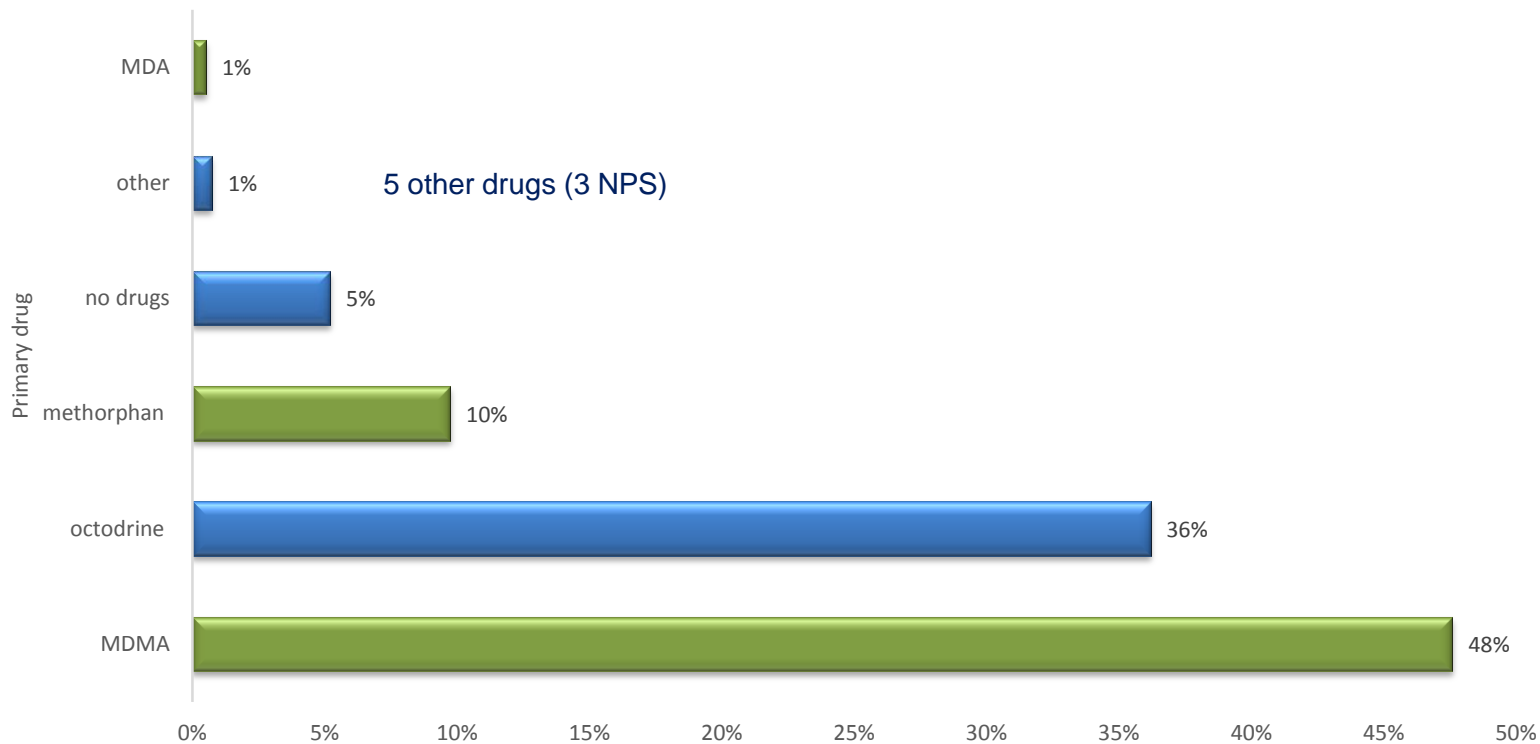


Drugs detected	Proportion	Most common combination
MDA ONLY	22.3%	MDA + MDMA
MDA + 1 other	46.3%	
MDA + 2 others	0.5%	
MDA + 3 others	30.0%	
MDA + 3 others	0.9%	
MDMA only	82.2%	MDMA + MA + ketamine
MDMA + 1 other	8.1%	
MDMA + 2 others	7.0%	
MDMA + 3 others	1.6%	
MDMA + 4 others	0.1%	
MDMA + 5 others	1.0%	
methorphan only	71.4%	Methorphan + 1,4-BD + BZP + TFMPP
methorphan + 1 other	5.3%	
methorphan + 2 others	19.1%	
methorphan + 3 others	3.8%	
methorphan + 4 others	0.3%	
methorphan + 5 others	0.1%	
ethylone only	5.3%	Ethylone + MAPB
ethylone + 1 other	94.6%	
ethylone + 2 others	0.1%	
25C-NBOMe + 1 other	13.6%	25C-NBOMe + 25C-NBOMe + safrole
25C-NBOMe + 2 others	84.2%	
25C-NBOMe + 2 others	2.2%	

# 2017 (YTD)



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# 2017 (YTD)



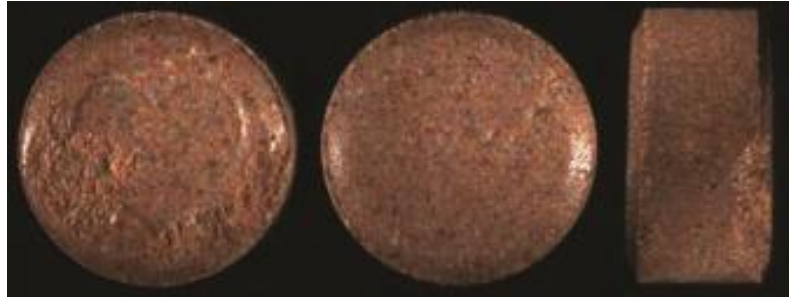
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Drugs detected	Proportion	Most common combination
MDMA only	0.65%	MDMA + MDA + ethylone
MDMA + 1 other	0.10%	
MDMA + 2 others	0.08%	
MDMA + 3 others	99.16%	
MDMA + 4 others	0.01%	
methorphan only	99.9%	Methorphan + 25C-NBOMe + 25I-NBOMe
methorphan + 2 others	0.1%	
MDA only	56.5%	MDA + MA
MDA + 1 other	26.1%	
MDA + 2 others	7.3%	
MDA + 3 others	10.1%	

# Varying Content



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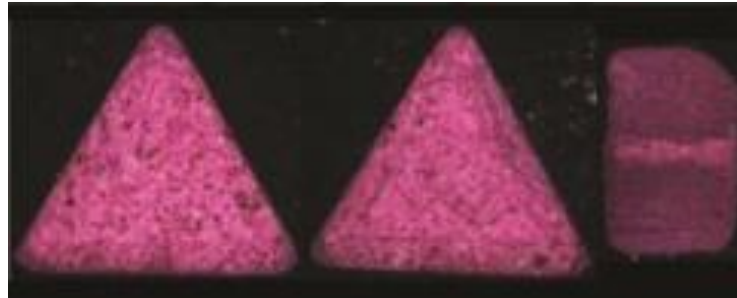


MDMA  
Methorphan  
25I-NBOMe & MDMA  
MDMA & methorphan

# Varying Content



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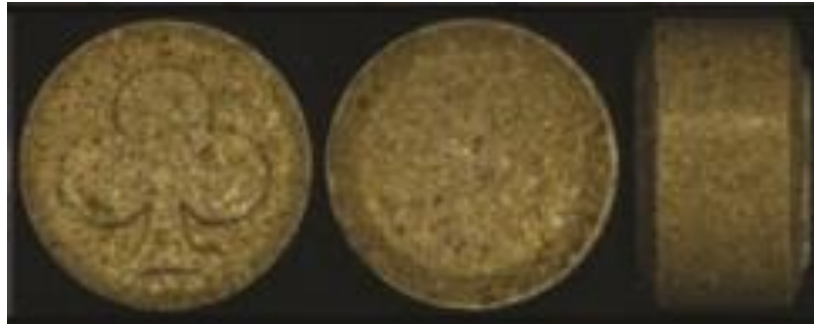


MDMA  
MDA, MDMA & 4-fluoroamphetamine  
No drugs

# Varying Content



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MDMA & MDEA

MDA & MDEA

MDMA

MDA

Methorphan, dimetridazole, levamisole, MA & CPCPP

Methorphan, BZP, 14-butanediol, TFMPP

No drugs

MDMA & MA

2C-B

Methorphan, BZP, TFMPP & ketamine



# Varying Purity



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5% MDA



4% MDMA



4% methorphan



2% MA



15% MDA



38% MDMA



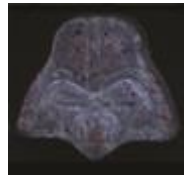
27% methorphan



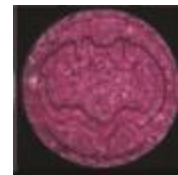
24% MA



44% MDA



73% MDMA



43% methorphan



77% MA



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# Fentanyl type substances



## Forensic Intelligence Bulletin

Fentanyl and its analogues in Australia:  
The present state and current outlook



Report Date: 7 July 2017

PROMIS Document ID 9356371

- Fentanyl is 50 to 100 times stronger than morphine.
- Due to the high potency of fentanyl type substances (FTS), exposure to very small amounts can be life threatening.
- In North America, fentanyl and fentanyl analogues are commonly found to be the active ingredient in counterfeit tablets purported to contain other pharmaceutical opioids, and is often mixed with heroin.



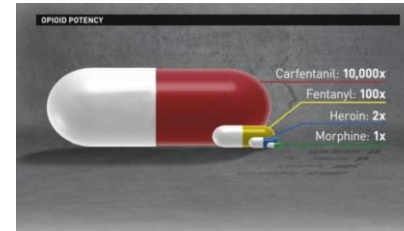


## Forensic Intelligence Bulletin

Fentanyl and its analogues in Australia:  
The present state and current outlook

Report Date: 7 July 2017

PROMIS Document ID 9356371



- The purchase of fentanyl and its analogues in various forms from online sources is relatively easy.
- Since 2013, the AFP have analysed 35 detections of fentanyl type substances totalling 70.3g. These have included fentanyl, carfentanil, furanyl fentanyl, ocfentanil and butyryl fentanyl.
- It is unlikely that Australia will see the use of fentanyl and its analogues reach such levels currently seen in North America.

# Conclusion



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## **Illicit tablets:**

- Composition, purity and complexity of illicit tablets has changed over the years.
- Content cannot be predicted from appearance.
- Large variation in purity of drugs.

## **Fentanyl type substances:**

- Since 2013, the AFP has detected 70.3 grams of FTS.
- It is unlikely that Australia will see the use of FTS reach the levels currently seen in North America.

# Acknowledgements



Victoria Police  
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Drug Sciences Group staff, past and present, who have contributed to the production of the analytical results presented today.



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**Thank-you**