

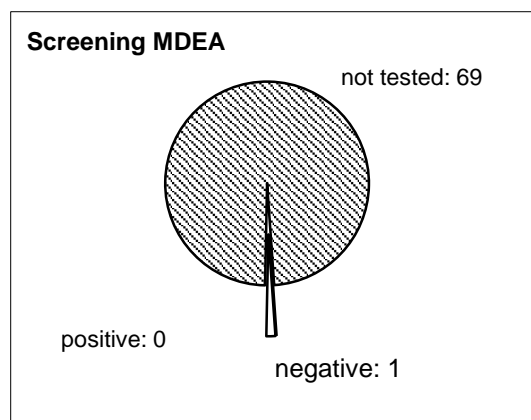
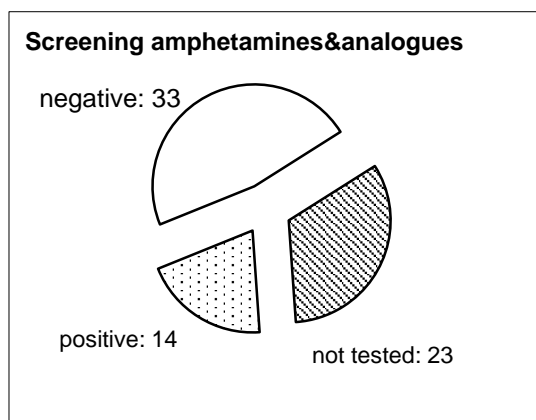
DOA Round 2016.3B

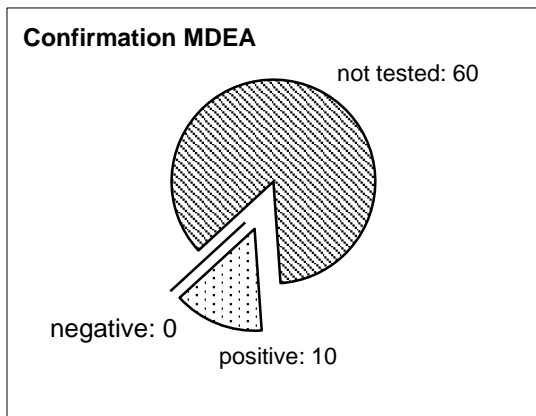
Casus: Urine sample visitor of a festival.

Composition: urine spiked with MDEA 1528 µg/l and GHB 103 mg/l.

Results:

Amphetamines: screening positive (>1000 µg/l)					
Summary statistics:					
number of laboratories: 71					
screening:	pos.	neg.	not tested	FP*	FN*
amphetamines&analogues	14=20%	33=47%	23=33%	0	33=70%
amphetamine	2=3%	31=44%	37=53%	0	0
methylamphetamine	0=0%	28=40%	42=60%	0	0
MDMA	15=21%	6=9%	49=70%	15=71%	0
MDA	0=0%	1=1%	69=99%	0	0
MDEA	0=0%	1=1%	69=99%	0	1=100%
confirmation:	pos.	neg.	not tested		
amphetamine	0=0%	6=9%	64=91%	0	0
methylamphetamine	0=0%	6=9%	64=91%	0	0
MDA	0=0%	5=7%	65=93%	0	0
MDMA	1=1%	5=7%	64=91%	1=17%	0
MDEA	10=14%	0=0%	60=86%	0	0





Discussion by drs. P.G.M. Zweipfenning:

This was blanc urine with MDEA 1528 µg/l and GHB 103 mg/l.

Both well above the cut-off of 1000 or 500 µg/l for amphetamine like substances and the informal cut-off of 10 or 20 mg/l for GHB.

By 19 out of 70 participants the sample was tested for GHB. 8x with an enzyme-test and 11x by a GC/MS or LC/MS technique. None of the latter reported the MS result as confirmation, because it was used here as primary screening. MS methods have a somewhat better mean value but a higher V.C. But lab 3254 contributes heavily to this figure with a result of little more than half of the spiked value.

As far as I know there are no commercial tests with an anti-body specific for MDEA. This means we have to rely on sufficient cross reactivity in tests for "amphetamine-analogues" or "MDMA". When one looks at the outcome of the reports (and not so much on the scores of the individual methods) then it can be concluded that 23 labs out of 70 participants (so 33%) report completely negative on MDEA. 5 labs are "saved" by their conformational method, after their screenings for amphetamines were negative. Or, in a clinical situation one could rather say "their patient is saved by using their conformational method as screening". Put it in another way: in routine DOA screening situations 23 clients would not have got value for their money.