

DOA Round 2014.4B

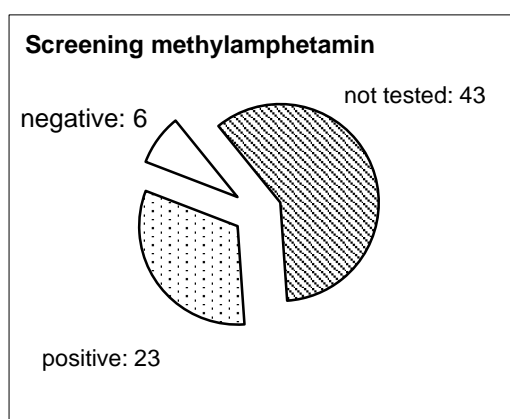
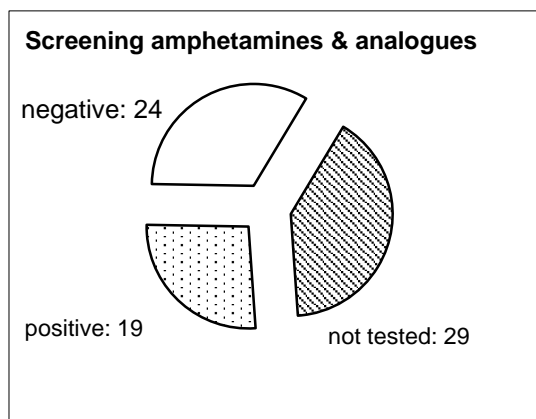
Casus:

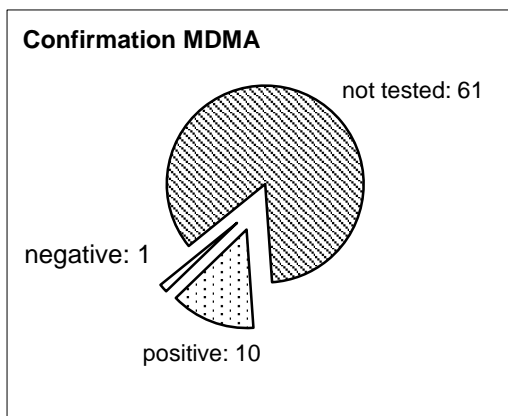
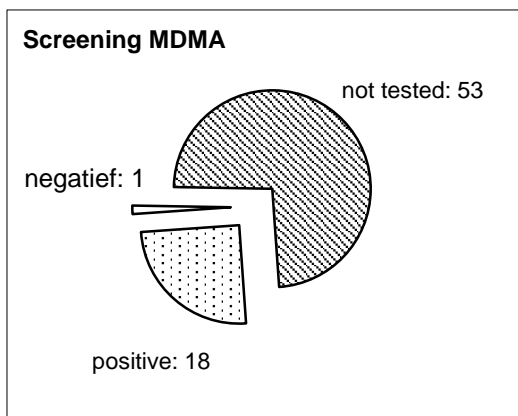
Urine of a visitor of a pop concert, feeling not well.

Composition: urine spiked with MDMA 1287 µg/l en THCCOOH 76,5 µg/l.

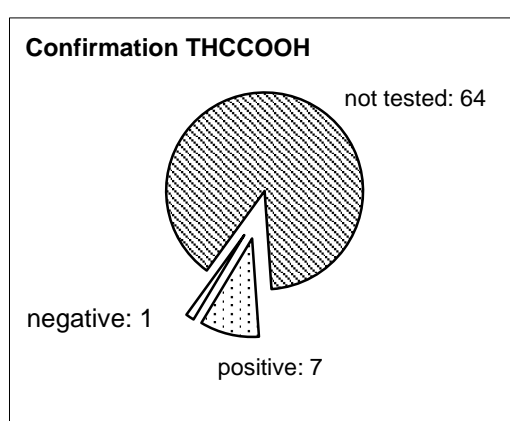
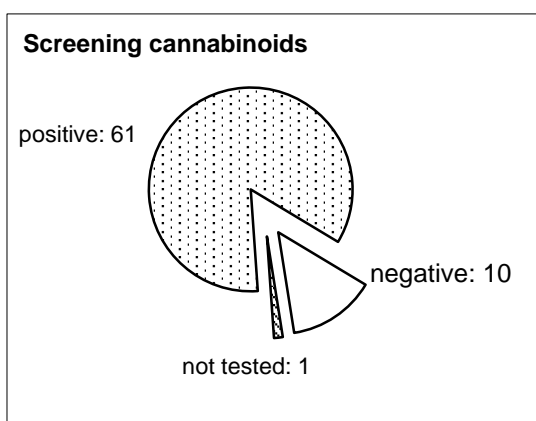
Results:

Amphetamines screening positive (>1000 µg/l)					
Summary statistics:					
number of laboratories: 72					
screening:	pos.	neg.	not tested	FP*	FN*
amphetamines & analogues	19=26%	24=33%	29=40%	0	24=56%
amphetamine	2=3%	31=43%	39=54%	2=6%	0
methylamphetamine	23=32%	6=8%	43=60%	0	6=21%
MDMA	18=25%	1=1%	53=74%	0	1=5%
MDA	0=0%	1=1%	71=99%	0	0
MDEA	0=0%	0=0%	72=100%	0	0
confirmation:	pos.	neg.	not tested		
amphetamine	0=0%	6=8%	66=92%	0	0
methylamphetamine	0=0%	6=8%	66=92%	0	0
MDA	0=0%	6=8%	66=92%	0	0
MDMA	10=14%	1=1%	61=85%	0	1=9%
MDEA	0=0%	6=8%	66=92%	0	0





Cannabinoids screening positive (>50 µg/l)					
Summary statistics:					
number of laboratories: 72					
screening:	pos.	neg.	not tested	FP*	FN*
	61=85%	10=14%	1=1%	0	10=14%
confirmation:	pos.	neg.	not tested		
	7=10%	1=1%	64=89%	0	1=13%



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

This was blanc urine spiked with methyleendioxyethylamfetamine (MDMA) 1287 µg/L and THCCOOH 76,5 µg/L.

The presence of MDMA was picked up by the tests for MDMA and amphetamine-like substances.

Tests for methamphetamine (in this round all of type 6) apparently gave a strong cross reactivity for MDMA (23 out of 29 positive). That could lead to misunderstandings when not confirmed. But the sad thing is: 20 Labs that performed tests on any type of substance: amphetamine(-like) and/or MDMA-like, reported everything negative. Cross reactivity in this category of substances is difficult. But when more than one in four Labs give the signal to the customer "there is nothing the matter" that will be not good for confidence in drug testing Labs. Of course, it is possible to write down very precisely what one can measure and what not. In that case it will formally not be incorrect. But who

has really done this. And if so, what customer will be really aware of the fact that an MDMA concentration of 120% of the cut-off will stay undetected.

The KIMS amphetamine test appears also sensitive for MDMA (2 out of 2).

THCCOOH was 150% of the cut-off value. This should not pose any problem. But 10 out of 72 Labs missed it! The variation in quantitative screening results is quite large (Var. Coef. 29%) and the mean value of 34 Labs is 66 µg/L (86%) which is quite low. The combination of these two facts can have led to relatively many false negatives. Lab nr. 3214 reports confirmation as done by immuno assay (type 2). That is not according to international guide lines.