

## DOA Round 2015.4A

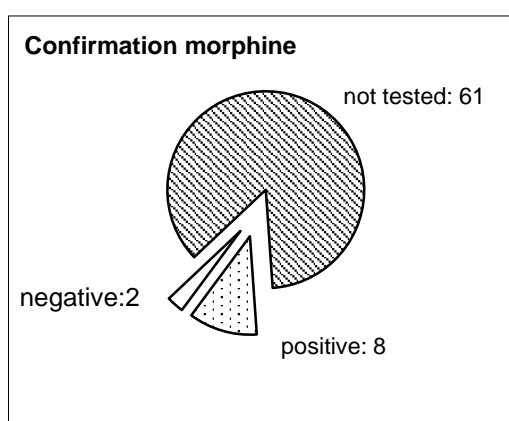
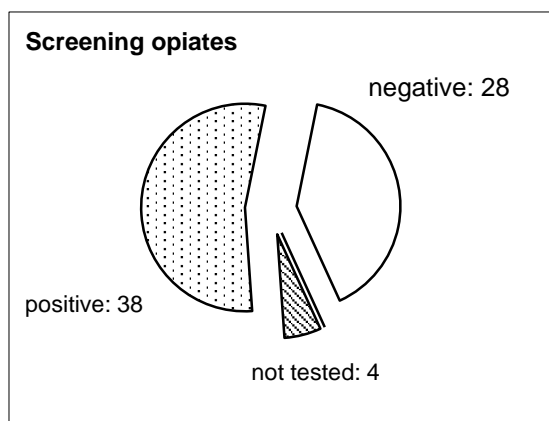
### Casus:

Urine from a person attending a dance event.

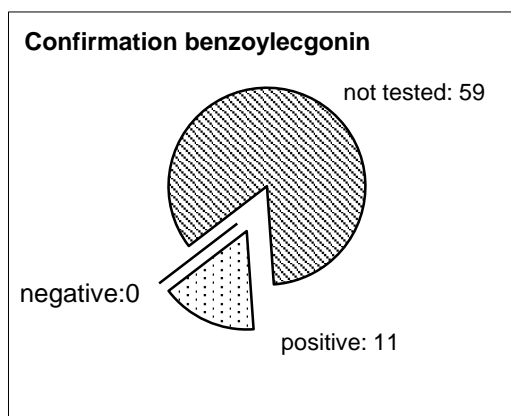
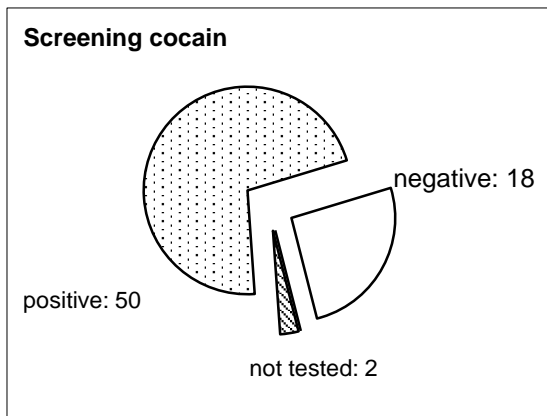
Composition: urine spiked with morphine 289 µg/, benzoylecgonine 327 µg/l en ethanol 2,526 g/l

### Results:

Opiates: screening negative (<300 µg/l)					
Summary statistics:					
number of laboratories: 70					
screening:	pos.	neg.	not tested	FP*	FN*
	38=54%	28=40%	4=6%	38=58	0
confirmation:	pos.	neg.	not tested		
6-MAM	0=0%	6=9%	64=91%	0	0
morphine	8=11%	1=1%	60=86%	8=89%	0
codein	0=0%	6=9%	64=91%	0	0



Cocain: screening positive (>300 µg/l)					
Summary statistics:					
number of laboratories: 70					
screening:	pos.	neg.	not tested	FP*	FN*
	50=71%	18=26%	2=3%	0	18=26%
confirmation:	pos.	neg.	not tested		
benzoylecgonine	11=16%	0=0%	59=84%	0	0

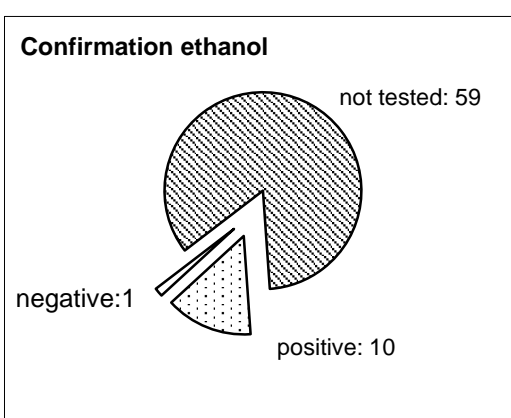
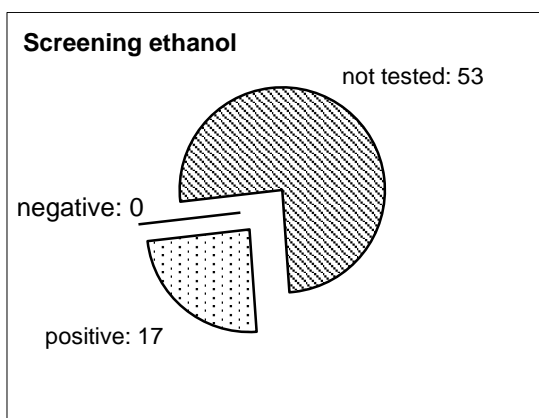


## Ethanol: screening positive (>0,1 g/l)

### Summary statistics:

number of laboratories: 70

screening:	pos.	neg.	not tested	FP*	FN*
	17=24%	0=0%	53=76%	0	0
confirmation:	pos.	neg.	not tested		
	10=14%	1=1%	59=84%	0	1=9%



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

This was blanc urine spiked with morphine 289 µg/L, benzoyllecgonine 327 µg/L and ethanol 2,526 g/L. The creatinine concentration was 2.0 mmol/L, so under the limit that is acceptable. (EWDTS guidelines par. 5.5: "less than or equal to 2.0 mmol/L"). Those substances that are excreted in the kidney like creatinine at a creatinine concentration equal to or less than 2.0 mmol/L are considered to be diluted. Therefore negative conclusions are not valid. Although positive conclusions are valid. This is not applicable for ethanol, although EWDTS does not mention this.

Only 17 labs (out of 70) tested for ethanol in a screening, 11 did a confirmation, and 8 of them quantitatively. The mean value of all determinations is excellent, some values are a bit low. A VC of 8% (screening) and 5% (confirmation) is excellent for clinical or DOA -applications. (For forensic

determinations, especially for driving under the influence, there are more specific/more strict demands in each country.)

Benzoylcegonine and morphine: The analytical values are good. The conclusions is something else. Negative results are invalid because the creatinine concentration is too low.

4 Labs reported a result for Ethylglucuronide, the conjugated metabolite of ethanol. But especially with EtG a referral to creatinine is essential for interpretation.