

驗毒經驗分享

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驗毒原因

要知悉是否有吸毒，
但是自我稱述的操守報告
未能跟檢測生物樣本的結果一致

驗毒的場合

- 就業
- 學校
- 運動、奧運、賽馬.....
- 懲教服務

驗毒的頻率及方式

- 加入之先(如入職、入學前)
- 週期性
- 隨意的
- 按特別原因

檢測內容

- 單一的，
- 如只檢Morphine (MOP)
- 或Ketamine (KET)
- 多樣的，例如 NIDA 5：

THC – MOP – AMP – POP – COC

Matrices (生物樣本)

- 尿液 (Urine)
- 口液 (Saliva)
- 汗液 (Sweat)
- 頭髮 (Hair)

測試過程中確保

1. 同意 (Consent)
2. 守密 (Confidentiality)
3. 收集過程保安妥當 (Collection Security)

測試系統

1. 篩選 / 甄別 (Screening)
2. 確証 (Confirmatory)

驗尿出術歸類

1. 摻雜 (Adulteration)
2. 竄改 (Tampering)
3. 替代 (Substitution)
4. 頂包 (Impostors)
5. 行賄或威嚇 (Bribes & Threats)

美國Tulares郡的經驗

只有0.001%的被驗者被發覺出術。共171宗。

被發現的作弊者多為女性；

- 被發現作弊後，若能取尿液樣本化驗，71.3%呈陰性，4%呈陽性；
- 再取樣本化驗，5%呈陰性，61%呈陽性。

作弊案例統計

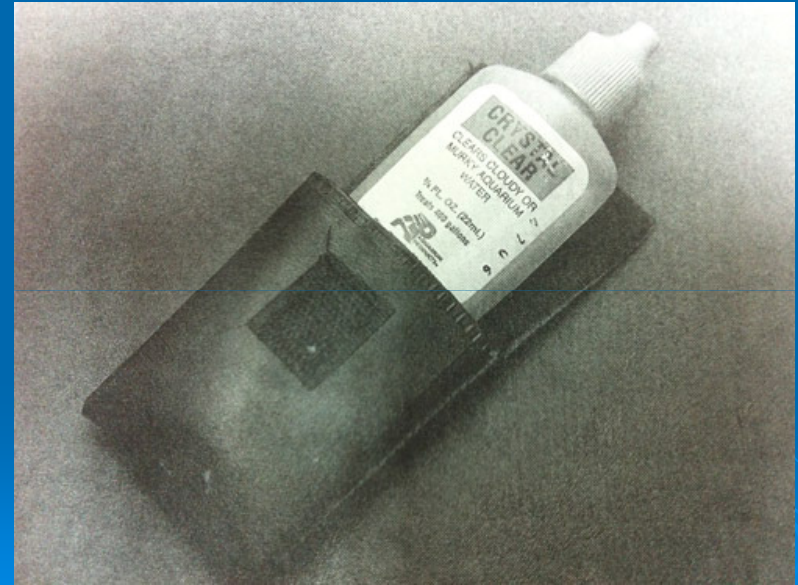
	數目	百分比
陰道內藏樽	61	35.7
溫度在可接受範圍外但沒有器皿	16	9.4
找人頂包	12	7
嘗試行賄	11	6.5
陰道外有尿樽	11	6.5
男性有尿樽	9	5.4
橡膠陰莖 (包括避孕套)	8	4.7
被驗者發惡離去	8	4.7

作弊案例統計

	數目	百分比
Whizzinator™ 沒有附加熱器	8	4.7
膠氣球	5	2.9
有漂白劑的衛生綿	4	2.4
Danche袋附在背喉連接橡膠喉	4	2.4
在進行酒精測試時消極呼氣並拒絕完成程序	2	1.1
牙刷管連接橡膠喉	2	1.1
Whizzinator™ 連加熱器	2	1.1

作弊案例統計

	數目	百分比
人造尿液	2	1.1
陰道內藏Turkey baster	2	1.1
針筒藏尿	2	1.1
橡膠提子	2	1.1
總數	171	



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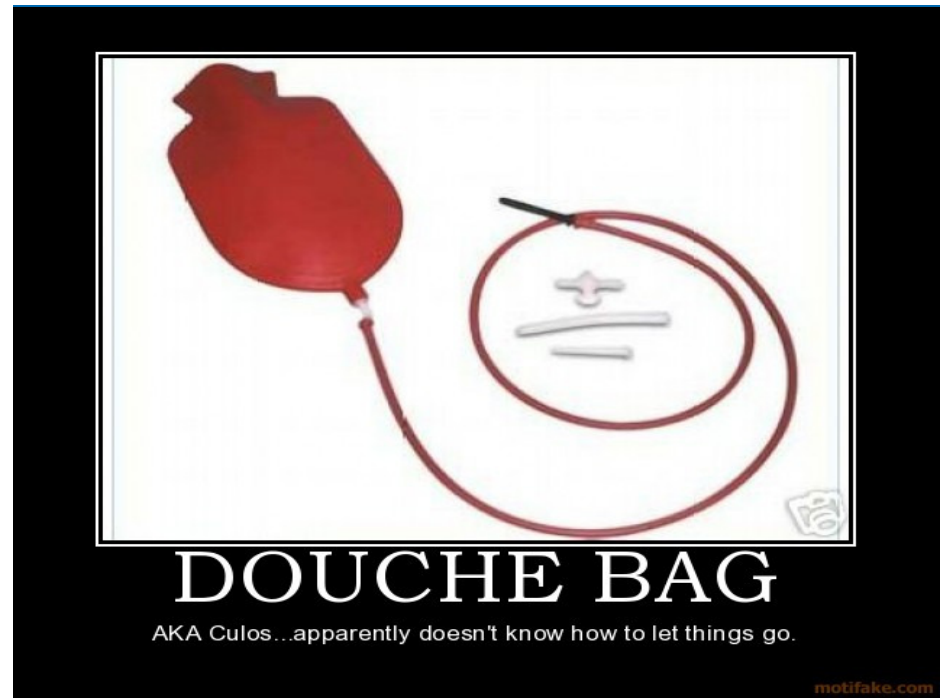
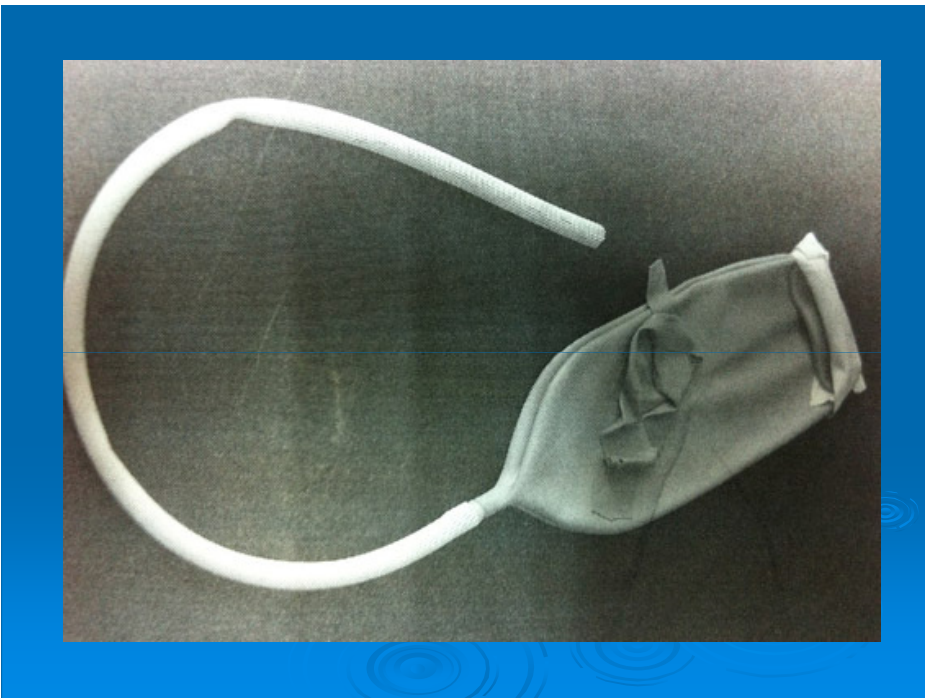
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要察覺此等出貓技倆，機構可採取的措施包括

1. 聘用誠實、可靠之員工
2. 為員工提供訓練，監察取樣本過程
3. 設立適當格局及設施，做好收集過程的監察
4. 要確切執行認清被驗者身份，要求除去外衣，洗手及檢查



收集尿液樣本時可作以下測試 以確保是新鮮生產的人體樣本

1. 顏色
2. 氣味
3. PH值 (酸鹼值)
4. 比重
5. 溫度



False / True原因

- cross reaction
- substitution
- error

False negative

- 用後時間長
- 藥物不純
- 沒有測出 (流料)
- 出錯
- 沒有測某些毒品
- 混亂
- 飲用大量水

經驗之談

- 除驗毒外尚有其他指標：如工作表現、經濟狀況、學業、以致其他行為。
- 不能單靠單一次測試了解所有真相。
- 了解凡工具皆有其限制。
- 要了解工具，細讀說明書，遇上疑難須找專家諮詢。供應商有責任解答疑難。

經驗之談

- 用即時驗尿盒要有確證化驗支援。
- 不能以一款驗尿盒之陰性結果推翻另一款驗尿盒之陽性結果。
- 驗頭髮結果不能推翻驗尿結果。
- 無法推翻過去之驗毒結果，除非有保存樣本。

經驗之談

- 要平衡所需時間、成本以致精確度。
- 要選擇何時用單一藥物測試；何時用多項藥物測試。
- 無故缺席、未能交樣本通常有問題。
- 避免定期定數量，如逢週二或每月四次。

參考書目

Drug Courts

Things to be aware with drug testing

Before doing drug testing

- Know the principles
- Know the tools
- Know who pays
- Know the limitations
- Have the tools ready

During drug testing

After the test

- Get consent
- Make sure identity of person attending test
- Avoid scams
- Have proper guidelines and procedures

- Work with doubtful results
- Do confirmatory tests
- Check with people and other indicators
- Keep proper record
- Do follow up work
- Work through resistance, e.g.confrontation

Considering the cost and benefits

Instant tests vs laboratory tests

Bio-samples: urine, blood, saliva, hair

Three charts: matrix, cut off and specificity,

A. 各種化驗測試的特色

Assay	Sensitivity	Specificity	Accuracy	Turn-Around	
				time	Cost(s)
On-site EMIT;FPIA;	Moderate-high	Moderate	Qualitative	Minutes	4-25
RIA;KIMS	Moderate-high	Moderate	Low-high	1-4 hours	1-5
TLC	Low-high	High	Qualitative	1-4 hours	1-4
GC	High	High	High	Days	5-20
GC/MS	High	High	High	Days	10-100

B. 各種測試的Cutoff濃度和可測查時間

Drug	Screening cutoff concentrations(ng/ml)	Analyte tested in confirmation	Confirmation cutoff concentrations(ng/ml)	Urine detection
Amphetamine	1000	amphetamine	500	2-4 days
Barbiturates	200	amobarbital; secobarbital; other barbiturates	200	2-4 days for short acting; up to 30 days for long acting
Benzodiazepines	200	oxazepam; diazepam; other benzodiazepines	200	Up to 30 days
Cocaine	300	benzoylecgonine	150	1-3 days
Codeine	300	codeine	300	1-3 days
Heroin	300	morphine	300	1-3 days
Marihuana	100;50;20	6-acetylmorphine	10	1-3 days for casual use; up to 30 days for chronic use
		tetrahydrocannabinol	15	
Methadone	300	methadone	300	2-4 days
Methamphetamine	1000	methamphetamine	500	2-4 days
Phencyclidine	25	amphetamine	200	2-7 days for casual use; up to 30 days for chronic use
		phencyclidine	25	

C. 尿液、唾液、汗液和毛髮測試比較

Bio-logical matrix	Drug detection time	Major advantages	Major disadvantages	Primary use
Urine	2-4 days	Mature technology; on-site methods available; established cutoffs	Only detects recent use	Detection of recent drug use
Saliva	12-24 hours	Easily obtainable; samples "free" drug fraction; parent drug presence	Short detection time; oral drug contamination collection methods influence pH and s/p ratios; only detects recent use; new technology	Linking positive drug test to behavior and performance impairment
Sweat	1-4 weeks	Cumulative measure of drug use	High potential for environmental contamination; new technology	Detection of recent drug use (days-weeks)
Hair	months	Long-term measure of drug use; similar sample can be recollected	High possibility for environmental contamination; new technology	Detection of drug use in recent past (1-6 months)