

Stockholm and the STAD cooperation

- 1) How drunk are young adults in Stockholm city's nightlife?
- a study of blood alcohol levels on weekend nights
- 2) A new way of involving bar owners towards less over-serving

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Polisen

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STAD (Stockholm prevents alcohol and drug problems)

- Research and development unit within Stockholm County Council, CPF (Centre for Psychiatric Research and Evaluation) and the Karolinska Institute
- General mission is to *identify, develop, and evaluate* promising methods for prevention of alcohol- and drug-related problems.
- Most prevention interventions utilize a *community-based strategy*, theoretically based on an environmental approach to prevention.
- Working together with authorities and the restaurant business to prevent over-serving and under age drinking



Background to the Intoxication study

- Alcohol consumption is strongly related to problems in the nightlife settings
- No previous studies on the levels of intoxication in Stockholm city's nightlife exists
- Blood Alcohol Concentration (BAC) levels is used as an objective measure to estimate levels of intoxication



Aim

To estimate the level of intoxication in young adults in Stockholm city's nightlife during weekend nights in terms of BAC-levels

(voluntary breathe samples between 00.00-03.00 hrs,)

1. Do BAC-levels differ between those who are indoors in pubs/nightclubs in comparison with those being outside?
2. Do BAC-levels vary between men and women and between those who preload or not?
3. How do BAC-levels in this group of young adults compare with what is found in other studies?



Results

General demographics

Total number of participants N=795

	Total	Inside	Outside
Gender % (n)			
men	57,0 (453)	50,7 (206)	63,5 (247)
women	43,0 (342)	49,3 (200)	36,5 (142)
Average age	23,0	22,7	23,3

Results

Proportions preloading

	Total % (n)	Men % (n)	Women % (n)
Preload			
Yes	69,8 (555)	69,3 (314)	70,5 (241)
No, only in bars	26,7 (212)	26,5 (120)	26,9 (92)
Non drinkers	3,5 (28)	4,2 (19)	2,6 (9)



Results

BAC-levels

	Total	Gender		P-value
		Women	Men	
Mean value	0,74 (795)	0,70 (453)	0,77 (342)	*
≥ 1 permille, %	27,0 (215)	24,0 (82)	29,4 (133)	ns

* $p < 0,05$

ns = non significant



BAC-levels

	Location			Preload		
	Inside	Outside	p-value	Yes	No	p-value
Total	0,78 (406)	0,70 (389)	*	0.81 (555)	0.67 (212)	***
Men	0,85 (206)	0,71 (247)	**	0.83 (314)	0.75 (120)	ns
Women	0,70 (200)	0,69 (142)	ns	0.78 (241)	0.55 (92)	***

* $p < 0,05$

** $p < 0,001$

ns = non significant



BAC-levels – a comparison between studies

	Age	Total	Men	Women
Stockholm city nightlife during weekend nights	18-30	0,74	0,77	0,70
Elektronic dance event (Baltic sea ferry) ¹	18-35	1,0	1,1	0,8
The Netherlands, ²	16-35		0,9	0,7
Slovenia ²	16-35		0,8	0,5
Spain ²	16-35		0,7	0,6
Great Britain ²	16-35		1,3	1,0

¹ Gripenberg-Abdon m.fl. (2012).

² Hughes m.fl. (2011).



Conclusion

All in all quite modest BAC-levels in Stockholm city's nightlife

but;

- About 25% of the participants had BAC-levels above 1.0 permille
- Preloading is an obvious riskfactor för higher BAC-levels
- Men have higher BAC-levels and also drink more inside the venues

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Background information

- Supervision by the police and the municipality
- 1000 licenses within the centre of Stockholm City
- Normal closing time is 1 am, not later than 5 am
- Less violence nationally, but the trend is stronger within the Stockholm City
- Bar inspections by the police, all information to the municipality
- We want change – not withdrawn licences



New feedback model

- Before – only immediate feedback to the responsible manager
- Now – the holder of the license gets feedback before the next weekend
- Each area has a police officer responsible for the feedback
- More rapid responses to our feedback, stronger actions are taken by the bar owners, more satisfied bar owners, less violence

