

## **PARALLEL SESSION 3A**

### **Safety, security and smoking**

#### **Second hand smoke: exposure, attitudes and behaviour**

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Occupational exposure to second hand smoke (SHS) has been linked with several adverse health outcomes. Previous research has shown that workers in the hospitality industry are at high risk of exposure to SHS. This study measures the exposure to SHS for employees within hospitality settings in Liverpool and examines the smoking status and smoking behaviour among the customers.

In each of the 55 premises, chosen at random from the 'Flare' database held by Liverpool City Council, measurements of SHS were taken using validated equipment to standardised methods over a four-hour period. The personal exposure to SHS of non-smoking employees (volunteers) working for more than four hours at the time of testing was measured via a saliva sample prior to and after their work shift and by wearing a non-invasive monitoring badge (absorbent badge) during their shift. At the time of testing, questionnaires to assess patrons' smoking status and views towards smoke free public places/workplaces were administered.

High levels of SHS were found in a number of bars, restaurants and social clubs compared to the non-smoking venues tested. In particular the tobacco specific marker compounds (SolPM and nicotine) were found to be noticeably higher in bars in comparison to restaurants. The responses received to the questionnaires showed that there is considerable support to make all workplaces (including pubs, restaurants, night clubs and social clubs) smokefree, with the majority of respondents stating that if all licensed premises became smoke free it would not affect their going out behaviour.



## Second Hand Smoke Exposure (SHS) Within Hospitality Premises in Liverpool

Diane Black  
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### Background



- Workers in the hospitality industry particularly in bars are at high risk of exposure to SHS.
- 1.3 million workers in the UK are exposed to SHS for at least 75% of their working time.
- At least one employee in the British hospitality industry dies from such exposure each week.



Objective of Smoke Free  
Liverpool: 'to make Liverpool a  
smoke free city by 2008'

## Outline



Exposure measurements:

- Atmospheric monitoring
- Personal monitoring

Behaviour and attitude questionnaire

## Exposure measurements

### Aims & Objectives



#### Aim:

To examine risks to health of employees from exposure to SHS in particular within the hospitality industry.

#### Objectives:

- To measure the levels of constituent particles of SHS in the indoor environment of a sample of hospitality premises.
- To measure the workers' personal exposure to SHS by the use of the biomarker cotinine and personal monitors.

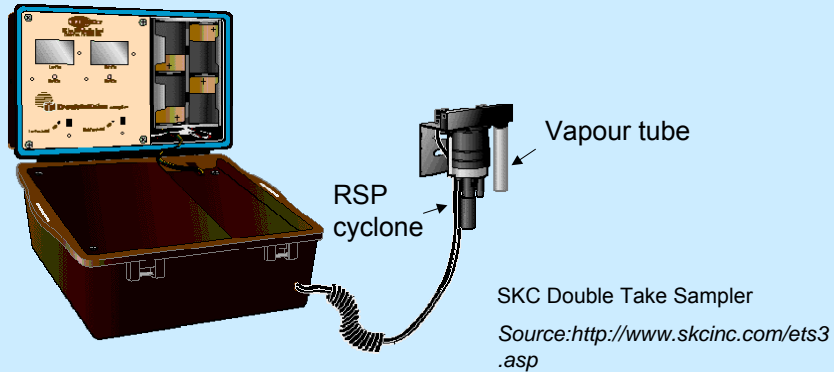
# Exposure measurements

## Methodology



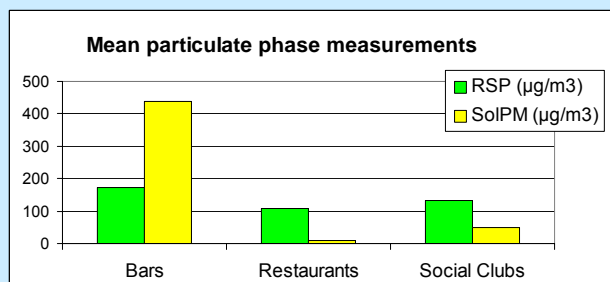
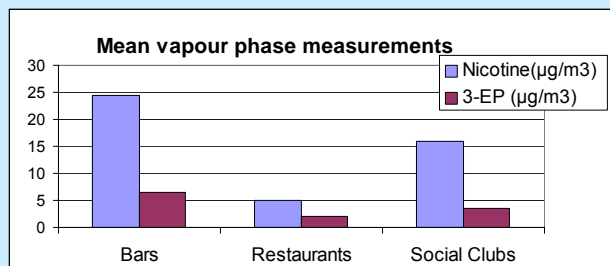
### 1. Indoor atmospheric monitoring

- Two monitors used per premise to measure the vapour and particulate phase of SHS, over a four-hour period.

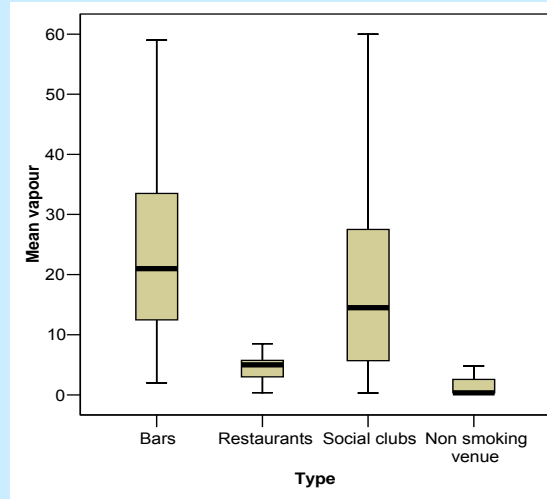


# Exposure measurements

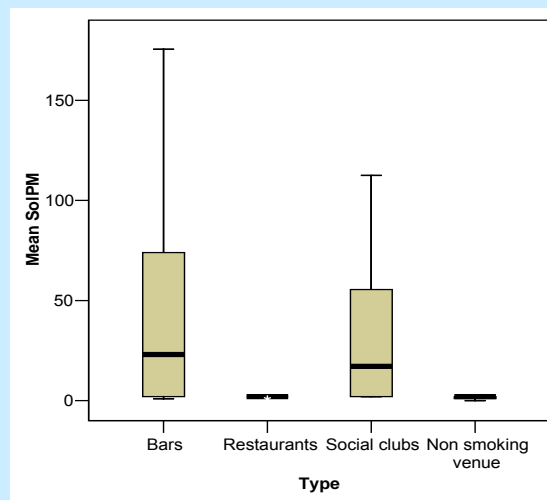
## Results – Indoor atmospheric monitoring



## Exposure measurements Nicotine( $\mu\text{g}/\text{m}^3$ )



## Exposure measurements SolPM ( $\mu\text{g}/\text{m}^3$ )



# Exposure measurements

## Methodology



### 2. Personal monitoring



Saliva samples-  
Cotinine

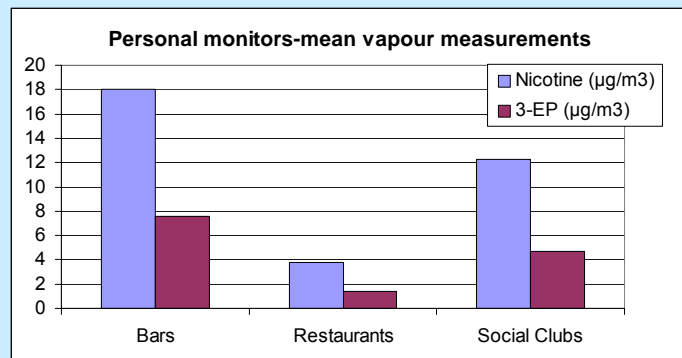


Passive samplers

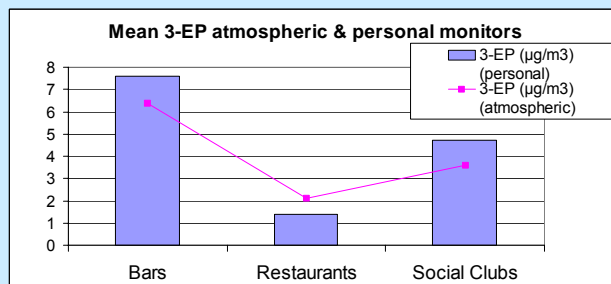
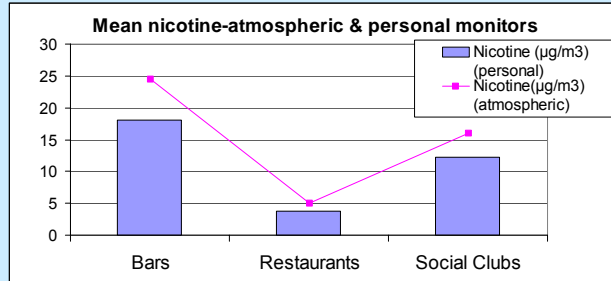
<http://www.skinc.com/passive.asp>

# Exposure measurements

## Results – Personal monitors



## Exposure measurements Results – Personal monitors



## Attitude and Behaviour questionnaire Objectives

### Objectives:

- To examine opinion among smokers and non-smokers on banning smoking in all workplaces (including pubs, restaurants, nightclubs and social clubs).
- To explore potential effects on attendance in bars, restaurants and social clubs in Liverpool should a smoking ban come into force.
- To examine the smoking status and smoking behaviour among customers of hospitality premises.

# Attitude and Behaviour questionnaire Methodology



*'Are you for or against a law to make all workplaces (including pubs, restaurants and night clubs) smoke free?'*

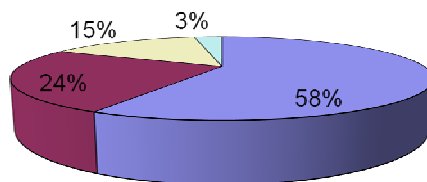
*'If all licensed premises (including pubs restaurants and night clubs) became smoke free would you...Go out less, go out more, not change your going out behaviour'*

# Attitude and Behaviour questionnaire Results



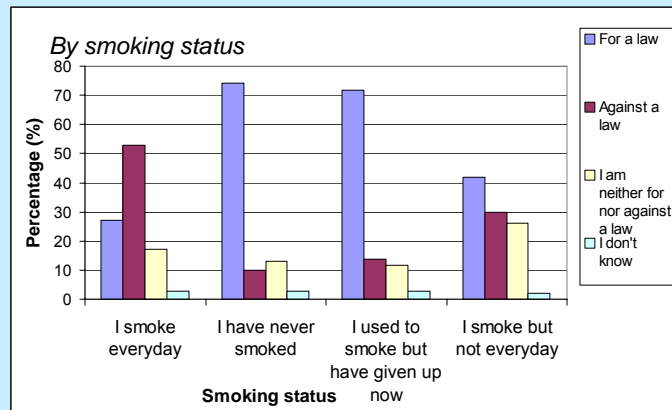
A total of 1252 questionnaires were completed  
(900 in pubs/bars, 335 in restaurants and 17 in social clubs)

*For or against a law to make all workplaces smokefree?*

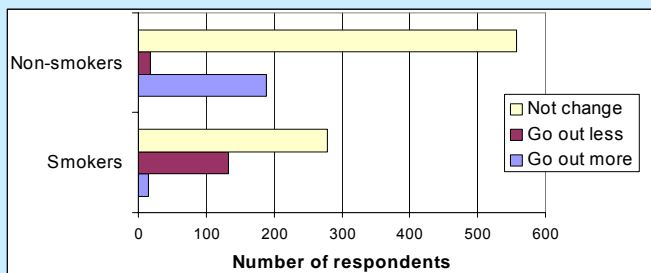
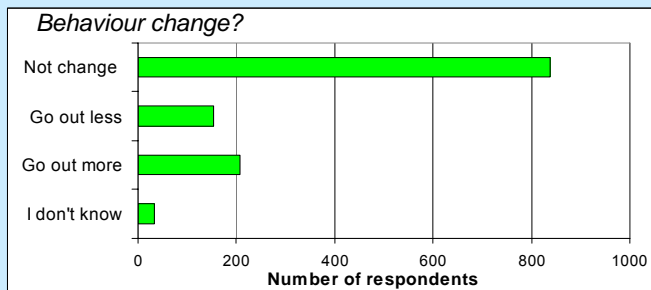


- For a law
- Against a law
- Neither for nor against a law
- Don't know

## Attitude and Behaviour questionnaire Results



## Attitude and Behaviour questionnaire Results



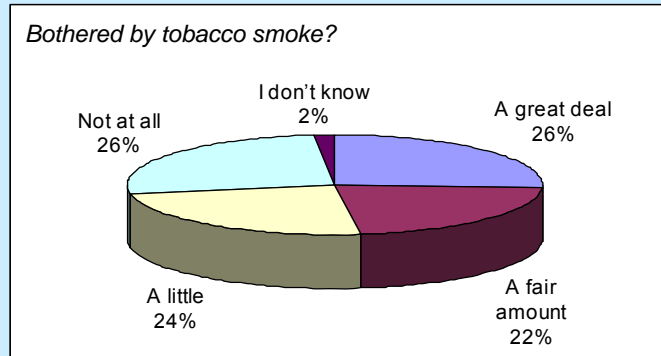
**Smokers:**

- I smoke every day
- I smoke but not every day.

**Non smokers:**

- I have never smoked
- I used to smoke but have given up now.

## Attitude and Behaviour questionnaire Results



Bothered by tobacco smoke (a great deal, fair amount & a little): 26% smokers, 74% non-smokers

## Conclusions



- High levels of all the SHS marker compounds were found in a number of bars, restaurants and social clubs compared to the non-smoking venues tested.
- Employees were found to be exposed to high levels of SHS during their shift within hospitality premises that allowed some degree of smoking.
- In Liverpool there is considerable support for a law to make all workplaces smoke free, with respondents who smoke everyday are less likely to support the introduction of a law to make all workplaces smoke free.
- If all licensed premises became smoke free the majority of respondents stated that it would not effect their going out behaviour, this included a large proportion of smokers.

## Acknowledgements



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