

Pub customers exposed to high levels of harmful tobacco particles

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UK scientists have questioned the use of partial smoking bans in pubs and clubs, following alarming new figures about how much non-smokers actually breathe in.

Researchers from an alliance of universities found that customers sitting in non-smoking areas of pubs were, on average, exposed to as much as two-thirds of the smoke that circulated in smoking areas.



Staff behind the bar were exposed to even higher levels – between 87-95% of smoke in smoking areas.

Furthermore, they found little or no evidence that ventilation made a difference to levels of smoke, and even in smoke-filled areas of ventilated pubs the levels of second-hand smoke were several times higher than average levels in other workplaces or homes where smoking is allowed.

Serious health concern

Exposure to second-hand tobacco smoke in the workplace has been shown to cause serious conditions like heart disease and lung cancer.

The Government's White Paper on Public Health, due to pass through Parliament later this month*, proposes introducing smoke-free workplaces except in pubs and bars that do not prepare and serve food. The only restrictions in exempt venues will be a smoke-free area at the bar.

Dr Adrian Watson, senior lecturer in environmental science at Manchester Metropolitan University, said: "Second-hand smoke levels were worryingly high throughout all areas of the pubs. Even where drinkers may not be able to smell smoke or see clouds of it billowing around, the particles and other substances which can damage health are still there."

Researchers placed sample pumps in 59 pubs in Greater Manchester.

Average concentrations high

Over four-hours they measured average concentrations of respirable



suspended particles (RSP), solanesol tobacco-specific particles and vapour-phase nicotine (VPN).

In smoking areas mean RSP was 114 micrograms per cubic metre, falling to 109 behind the bar and 76 in the non-smoking area.

VPN levels were measured at 88 micrograms per cubic metre on average in smoking areas. This fell to 77 behind the bar and to 27 in nonsmoking areas.

Solanesol was measured as 102 micrograms per cubic metre on average in smoking areas. This fell to 93 behind the bar and to 48 in non-smoking areas.

Of the sample pubs, 13 were mechanically ventilated, 12 naturally ventilated and 34 had extractor fans.

Added Dr Watson: "Previous research has shown that bar staff are one of the most heavily exposed occupational groups for passive smoking in the workplace. This research shows that partial measures on smoking in workplaces, like those proposed in the Public Health White Paper, will leave bar staff in exempted pubs unprotected from the hazard of second hand smoke."

Source: Manchester Metropolitan University

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