

Non-smoking hotel rooms still expose occupants to tobacco smoke

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Non-smokers should give hotels that allow smoking in certain rooms a wide berth, say the authors, and instead choose completely smoke free hotels.

The researchers analysed the surfaces and [air quality](#) of rooms for evidence of tobacco smoke pollution ([nicotine](#) and 3EP), known as third hand smoke, in a random sample of budget to mid-range hotels in San Diego, California.

Ten hotels in the sample operated complete bans and 30 operated partial smoking bans, providing designated non-[smoking rooms](#).

Non-[smokers](#) who spent the night at any of the hotels, provided urine and finger wipe samples to assess their exposure to nicotine and a cancer causing agent found specifically in tobacco smoke - known as NKK - as measured by their [metabolites](#) cotinine and NNAL.

The findings showed that smoking in hotels left a legacy of tobacco pollution in both smoking and non-smoking rooms. A partial smoking ban did not protect the occupants of non-smoking rooms from exposure to tobacco pollution.

Compared with hotels operating total smoking bans, surface nicotine and air 3EP levels were higher in both non-smoking and smoking rooms of hotels operating partial bans.

Surface nicotine levels were more than twice as high in non-smoking rooms of hotels operating partial bans as those of hotels operating total smoking bans ($3.7 \mu\text{g}/\text{m}^2$ compared with $1.4 \mu\text{g}/\text{m}^2$), while air levels of 3EP were more than 7 times as high.

Surface and air nicotine levels in rooms where previous guests had smoked were 35 and 22 times higher than those of rooms in hotels operating a total smoking ban.

Air nicotine levels in smoking rooms were significantly higher than in non-smoking rooms; and they were also higher 40% higher in non-smoking rooms of hotels operating partial smoking bans than in those operating total bans.

Similarly, hallway surfaces outside smoking rooms also showed higher nicotine levels than those outside non-smoking rooms.

Non-smokers who stayed in hotels with partial smoking bans also had higher levels of finger nicotine and urinary cotinine than those staying in hotels operating total bans. Urinary NNAL was also significantly higher in those staying in the 10 rooms containing the highest levels of tobacco pollutants.

"Our findings demonstrate that some non-smoking guest rooms in smoking hotels are as polluted with [\[third hand smoke\]](#) as are some smoking rooms," write the authors. They go on to say: "Moreover, non-smoking guests staying in smoking rooms may be exposed to tobacco smoke pollutants at levels found among non-smokers exposed to second hand smoke."

Few countries have adopted a [smoking ban](#) that includes hotels, say the authors, but their findings "suggest that it is time to abandon smoke-free exemptions for hotels," they write.

New hotels should operate total smoking bans to protect not only their guests, but also their employees, say the authors. In the meantime, they advise: "Guests who wish to protect themselves from exposure to [tobacco smoke](#) should avoid hotels that permit [smoking](#) and instead stay in completely smoke-free hotels."

More information: www.tc.bmj.com/lookup/doi/10.1136/tobaccocontrol-2012-050824

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