we would be concerned that subjects admitted with acute bronchitis, community-acquired pneumonia, or smoking-related chronic obstructive lung disease may be misclassified as patients with asthma or vice versa. In our own study, we attempted to address this deficiency by assessing overall admissions due to respiratory disease as a primary outcome, with individual respiratory diagnoses as prespecified secondary outcomes.[2] We identified a significant reduction in respiratory admissions as a whole, with a corresponding rather dramatic diminution of admissions classified as being due to asthma.

Prior studies from the USA[4] suggest that administrative data may be highly specific, but insensitive for a diagnosis of asthma, while a UK-based study[5] found asthma admissions to be misclassified in 9–14% of cases. Thus, what evidence is available suggests that substantial misclassification bias is a genuine risk in studies such as this.

The authors are to be congratulated on a thorough and otherwise highly robust interrogation of the effects of antitobacco legislation on respiratory health, but we feel that this important limitation should at the very least be acknowledged, and ideally—if the authors have supporting data—refuted.

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Asthma admissions, smoking bans and administrative databases

We read with great interest the recent paper by Sims *et al*,[1] wherein they identified a clinically and statistically significant reduction in admissions with asthma following the implementation of a workplace smoking ban in the UK, independent of prevailing temporal trends and other measureable confounding factors. We welcome this important addition to the evidence base in this area, and endorse the authors' view that this work addresses important deficiencies in previously published data from our group and others.[2 3]

However, we were surprised that an important limitation of any study using administrative databases for clinicoepidemiological research was not addressed—that of misclassification bias. In particular,

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