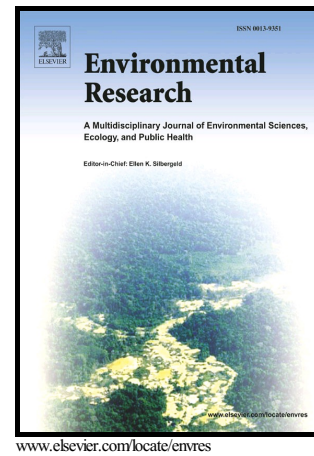


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PII: S0013-9351(18)30444-4  
DOI: <https://doi.org/10.1016/j.envres.2018.08.011>  
Reference: YENRS8034

To appear in: *Environmental Research*

Received date: 15 May 2018  
Revised date: 29 June 2018  
Accepted date: 6 August 2018

Cite this article as: Hang Qiu, Haiyan Yu, Liya Wang, Xiaojuan Zhu, Mengdie Chen, Li Zhou, Ren Deng, Yanlong Zhang, Xiaorong Pu and Jingping Pan, The burden of overall and cause-specific respiratory morbidity due to ambient air pollution in Sichuan Basin, China: A multi-city time-series analysis, *Environmental Research*, <https://doi.org/10.1016/j.envres.2018.08.011>

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# The burden of overall and cause-specific respiratory morbidity due to ambient air pollution in Sichuan Basin, China: A multi-city time-series analysis

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## ABSTRACT

Few studies have investigated the respiratory morbidity burden due to ambient air pollution in China, especially in a multi-city setting. This study aimed to estimate the short-term effects of ambient air pollutants (PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub> and SO<sub>2</sub>) on hospital admissions (HAs) for overall and cause-specific respiratory diseases, as well as the associated burden in 17 cities of Sichuan Basin, China during 2015-2016. Firstly, city-specific effect estimates for each pollutant on respiratory HAs were obtained using generalized additive model with quasi-Poisson link, and then random- or fixed-effects meta-analysis was applied to pool the effect estimates at the regional level. Subgroup analyses by sex, age, season and region were also performed. A total

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<sup>1</sup> These authors contributed equally to this work.

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