

## PM<sub>2.5</sub> pollution and respiratory diseases in Beijing

In this research, PM<sub>2.5</sub> was monitored from the year 2007 to 2012, and the hospital data about respiratory diseases during the same period was gathered and calculated. Then the correlation between respiratory health and fine particles was studied by spatial analysis and grey correlation analysis. The results showed that PM<sub>2.5</sub> pollution was mainly distributed in the Zizhuyuan sub-district office. There was a certain association between respiratory health and PM<sub>2.5</sub>. Outpatients with respiratory system disease in this study area were mostly located in the southeastern regions (Balizhuang sub-district office, Ganjiakou sub-district office, Wanshoulu sub-district office, and Yongdinglu sub-district office) and east-central regions (Zizhuyuan sub-district office and Shuangyushu sub-district office) of the study area. Correspondingly, PM<sub>2.5</sub> concentrations in these regions were higher than those in any other regions. Grey correlation analysis results showed that the correlation degree of PM<sub>2.5</sub> concentration with the number of outpatients is high, and the smaller fine particles had more obvious effects on respiratory system disease than larger particles.

The paper is an environmental health study that demonstrates how serious PM<sub>2.5</sub> pollution in Beijing is and its possible correlation with hospital admissions for respiratory diseases. The finding is consistent with the results of previous research. This research reveals the serious conditions of PM<sub>2.5</sub> pollution and its environmental health effect in Beijing, China.

### Publication

[Fine Particulate Matter Pollution and Hospital Admissions for Respiratory Diseases in Beijing, China.](#)

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