ACADEMIE ROYALE DES SCIENCES D'OUTRE-MER KONINKLIJKE ACADEMIE VOOR OVERZEESE WETENSCHAPPEN

Classe des Sciences naturelles et médicales Klasse voor Natuur- en Geneeskundige Wetenschappen

17.V.2022

Air Pollution in Mongolia

by

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KEYWORDS. — Air Quality; Respiratory Disease; Cardiovascular Disease; PM2.5; PM10; Chemical Components; Mongolia.

SUMMARY. — Many interventions have been taken to reduce outdoor air pollution, especially the particulate matter in Ulaanbaatar which is one of the most polluted cities in the world mainly during wintertime. In this study, the effects of short-term exposure to PM2.5 and its chemical composition were compared on daily morbidity before and after the intervention in Ulaanbaatar. Mass concentration and chemical composition (thirty-three elements) of PM2.5 were measured in the 9th Khoroo Sukhbaatar district in Ulaanbaatar, before (2008-2009) and after (2012-2013) the intervention. Data on hospital admissions for respiratory (ICD-10 J00-J99) and cardiovascular (I10-I99) disease were collected from the 9th Khoroo family health centre during the same period. A case-crossover design was used to assess the risk of hospital admission in relation to the concentration and chemical composition of ambient PM2.5 on the same day. The total number of hospital admissions for respiratory and cardiovascular disease fell by 15 %.

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