



ADDITIONAL MATERIALS

Research Report 229

Accounting for Mobility in Air Pollution Exposure Estimates in Studies on Long-Term Health Effects

Kees de Hoogh et al.

Additional Materials: Chapter 6

The Additional Materials were reviewed by the HEI Improved Exposure Assessment Studies Review Panel. They have not been fully edited or formatted by HEI.

Correspondence may be addressed to Dr. Kees de Hoogh, Swiss Tropical and Public Health Institute, Kreuzstrasse 2, CH-4123, Allschwil, Switzerland; email: c.dehoogh@swisstph.ch.

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Table S6.1 Effect estimates from the current EPIC-NL study and previous analyses in the same cohort. Brunekreef (2021) and Wolf (2021) used the same analytical dataset but with a different exposure model. HR per 5 and 10 $\mu\text{g}/\text{m}^3$ for $\text{PM}_{2.5}$ and NO_2 , respectively, for the ELAPSE and Downward papers. In the Wolf paper, only individual cohort analyses (EPIC-NL MORGEN and EPIC-NL Prospect) were performed as sensitivity analysis. IQR was 0.6 and 6.86 for $\text{PM}_{2.5}$ and NO_2 , respectively, in the current study.

Exposure	Outcome	HR (95% CI) per IQR (current study)	HR (95% CI) for fixed increments Downward, 2018	HR (95% CI) for fixed increments Brunekreef, 2021	HR (95% CI) for fixed increments: from MORGEN and PROSPECT, respectively Wolf, 2021
NO_2	Natural mortality	0.95 (0.89 – 1.01)		1.01 (0.94, 1.08)	
$\text{PM}_{2.5}$		1.05 (0.99 – 1.12)		1.10 (0.88, 1.30)	
NO_2	Stroke incidence	0.91 (0.79 – 1.03)	1.13 (0.69, 1.83)		0.99 (0.80, 1.24) and 1.05 (0.88, 1.25)
$\text{PM}_{2.5}$		0.94 (0.84 – 1.06)	1.00 (0.90, 1.11)		0.65 (0.37, 1.17) and 0.82 (0.45, 1.52)
NO_2	Coronary events	1.04 (0.97 – 1.12)	1.04 (0.97, 1.12)		1.03 (0.93, 1.14) and 1.13 (1.03, 1.27)
$\text{PM}_{2.5}$		0.92 (0.86 – 0.98)	0.80 (0.55, 1.55)		0.82 (0.61, 1.10) and 1.42 (0.95, 2.12)