Environ Health Perspect

DOI: 10.1289/EHP11587

Note to readers with disabilities: *EHP* strives to ensure that all journal content is accessible to all readers. However, some figures and Supplemental Material published in *EHP* articles may not conform to <u>508 standards</u> due to the complexity of the information being presented. If you need assistance accessing journal content, please contact <u>ehp508@niehs.nih.gov</u>. Our staff will work with you to assess and meet your accessibility needs within 3 working days.

Supplemental Material

Suicide and Transportation Noise: A Prospective Cohort Study from Switzerland

Benedikt Wicki, Beat Schäffer, Jean Marc Wunderli, Thomas J. Müller, Charlotte Pervilhac, Martin Röösli, and Danielle Vienneau

Table of Contents

Table S1. Study Population Selection.

Table S2. Estimated HR per 10dB Lden / $10\mu g/m^3 PM_{2.5} / 0.1 NDVI (95\% confidence interval) for death by all intentional self-harm (ICD-10: X60-84, excluding X61.8, X61.9 and X81-82) from the different models.$

Table S3. HR per 10dB Lden / $10\mu g/m^3 PM_{2.5} / 0.1 NDVI (95\% confidence interval) for the association death by specified suicide category, main model (M3).$

Table S4. Association between eventfulness of noise at night and death from different methods of suicide. Model 4a and 4b, HR per quartile of night-time Intermittency Ratio and number of noise events (Lowest quartile as reference group).

Table S5. HR (95% confidence interval) for road traffic noise and PM_{2.5} for death by all intentional self-harm (ICD-10: X60-84, excluding X61.8, X61.9 and X81-82) in categorical (quartiles) exposure models.

Table S6. Effect modification by Local SEP-Index, HR per 10dB Lden / $10\mu g/m^3 PM^{2.5} / 0.1$ NDVI (95% confidence interval).

Table S7. Effect modification by civil status, HR per 10dB Lden / $10\mu g/m^3$ PM_{2.5} / 0.1 NDVI (95% confidence interval).

Table S8. Effect modification by urbanization, HR per 10dB Lden / $10\mu g/m^3 PM_{2.5} / 0.1 NDVI$ (95% confidence interval).

Table S9. HR and 95% Confidence interval at certain values of the exposure-response relationship for the association between transportation noise sources (Lden [dB]) and mortality from intentional self-harm (ICD-10: X60-84, excl. ICD-10 X61.8, X61.9, X81-82) displayed in Figure 2 in the main article.

Figure S1. HR and 95% CI for death by suicide involving vehicles per 10dB source-specific Lden.

Figure S2. Directed Acyclic Graph.

Figure S3. Correlation Matrix.

Figure S4. HR and 95% CI for death by specified suicide category per 10dB source-specific Lden.

Figure S5. HR and 95% CI for death by intentional self-harm per exposure to the number of transportation noise sources with exposure >50dB Lden.

Figure S6. Sensitivity Analysis comparing models adjusting for PM_{2.5} (=Model 3) versus NO₂ (=Model 3b).

Figure S7. Association between air pollution and suicide, adjusted vs. unadjusted for source-specific transportation noise and greenspace.

Figure S8. Effect modification by sex: HR and 95% CI for death by specified suicide category per 10dB source-specific Lden.

Figure S9. Effect modification by age: HR and 95% CI for death by all intentional self-harm per 10dB source-specific Lden.

Figure S10. Effect modification by local-SEP category: HR and 95% CI for death by all intentional self-harm per 10dB source-specific Lden.

Figure S11. Effect modification by degree of urban: HR and 95% CI for death by all intentional self-harm per 10dB source-specific Lden / 10μ g/m3 PM2.5 / 0.1 NDVI.