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Supplemental Material

Long-Term Exposure to Transportation Noise and Ischemic Heart Disease: A Pooled Analysis of Nine Scandinavian Cohorts

Andrei Pyko, Nina Roswall, Mikael Ögren, Anna Oudin, Annika Rosengren, Charlotta Eriksson, David Segersson, Debora Rizzuto, Eva M. Andersson, Gunn Marit Aasvang, Gunnar Engström, Hrafnhildur Gudjonsdottir, Jeanette T. Jørgensen, Jenny Selander, Jesper H. Christensen, Jørgen Brandt, Karin Leander, Kim Overvad, Kristina Eneroth, Kristoffer Mattisson, Lars Barregard, Leo Stockfelt, Maria Albin, Mette K. Simonsen, Pekka Tiittanen, Peter Molnar, Petter Ljungman, Steen Solvang Jensen, Susanna Gustafsson, Timo Lanki, Youn-Hee Lim, Zorana J. Andersen, Mette Sørensen, and Göran Pershagen

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Figure S2. Distribution of road traffic and railway noise exposure during five years prior to the baseline in the study cohorts and overall (only levels of 40 dB L_{den} and above are displayed; X-axis – dB L_{den} , Y-axis – % of the population with noise exposure level 40 dB L_{den} and above).

Figure S3. Hazard ratios and 95 % confidence intervals for IHD excluding angina pectoris in relation to exposure to road traffic (A) and railway noise (B) per 10 dB L_{den} five years prior to the event in each of the included cohorts. Results are presented per cohort, adjusted for age (by design), sex (men/women), calendar year (in 5-y periods), educational level (low/medium/high), marital status (single/married), area-income (quartiles), and other noise sources indicator (yes/no: road, railway, and aircraft noise; for the three cohorts without aircraft noise information, all cohort members were assigned as no exposure).

Figure S4. Hazard Ratio (HR) and 95 % confidence interval for IHD excluding angina pectoris, in relation to aircraft noise during five years prior to the event. Cohort specific results are from separate analysis where a cohort indicator was included as an interaction term with the categorical aircraft noise variable (dB L_{den}), and adjusted for age (by design), cohort (strata), sex (men/women), calendar year (in 5-y periods), educational level (low/medium/high), marital status (single/married), area-income (quartiles), and other noise sources indicator (yes/no: road and railway noise). The analysis is conducted only among cohorts with aircraft noise exposure (thus excluding the MDC, PPS, and GOT-MONICA cohorts) with remaining 7821 cases of IHD without angina pectoris.

Figure S5. Hazard ratio and 95 % confidence interval for ischemic heart disease in relation to exposure to noise from road traffic (Left) and railways (Right) per 10 dB L_{den} during five years prior to the event according to covariates and air pollution exposure. P-values are Wald $p_{Interaction}$ terms. Results are presented according to strata of potential effect modifiers based on separate models with interaction terms between transportation noise and each potential modifier, adjusted for age (by design), cohort (strata), sex (men/women), calendar year (in 5-y periods), educational level (low/medium/high), marital status (single/married), area-income (quartiles), and other noise sources indicator (yes/no: road, railway, and aircraft noise; for the three cohorts without aircraft noise information, all cohort members were assigned as no exposure).

Figure S6. Hazard ratios and 95 % confidence interval for IHD excluding angina pectoris in relation to road traffic (Left) and railway (Right) noise exposure per 10 dB L_{den} during five years prior to the event for different adjustment models and leaving out of studies.

References

Additional File- Excel Document