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Supplemental Material

Suicide and Transportation Noise: A Prospective Cohort Study from Switzerland

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Supplement Table S1 – Study Population Selection

Description	N	% total	% dropped	Notes
Baseline (in cohort 04.12.2000)	7’280’246	100	0	Full population (original sample)
Not matched between old and new SNC	6’680’907	91.8	*8.2*	Inconsistent data: Mismatch in probabilistic linkage 2000-2010 (lost)
Keep persons 15+	5’512’145	100	*15.9*	Starting point (24.3% dropped from full population baseline)
Exclude those who die or emigrate before 01.01.2001 (in the 4 weeks since census start)	5’505’715	99.9	0.1	
Exclude invalid xy coordinates & household ID	5’359’204	97.2	2.7	
Exclude housing type = hotels, hospitals, old persons homes	5’212’487	94.6	2.7	
Exclude imputed deaths in original SNC	5’212’487	94.6	0.0	
Exclude Education = child or unknown for those over 20 years	5’087’501	92.3	2.4	
Exclude unknown Local-SEP index	5’084’838	92.2	0.1	

Supplemental Table S2 – Estimated HR per 10dB Lden / 10µg/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

	Model 0	Model 1	Model 2	Model 3 (Main Model)
Road traffic	1.058 (1.034, 1.082)	1.039 (1.015, 1.063)	1.037 (1.013, 1.061)	1.040 (1.015, 1.065)
Railway	1.017 (0.999, 1.034)	1.021 (1.004, 1.039)	1.021 (1.003, 1.039)	1.022 (1.004, 1.041)
Aircraft	0.978 (0.954, 1.003)	1.003 (0.976, 1.029)	0.993 (0.962, 1.025)	0.997 (0.965, 1.029)
$PM_{2.5}$				0.900 (0.811, 0.998)
NDVI				0.999 (0.978, 1.02)

Model 0= road traffic, railway or aircraft noise (other two noise sources included as adjustment), age as timescale, sex as strata
Model 1= Model 0 + individual level covariates (mother tongue, nationality, civil status, education, urbanization, local-SEP)
Model 2= Model 1 + area level covariates (community and regional-SEP and unemployment rate)
Model 3 = Model 2 + air pollution ($PM_{2.5}$) + greenness in a 500m buffer around residence (NDVI)

Supplemental Table S3 –HR per 10dB Lden / 10µg/m³ $PM_{2.5}$ / 0.1 NDVI (95% confidence interval) for the association death by specified suicide category, main model (M3)

	All intentional self-harm (*ICD-10: X60-84, excluding X61.8, X61.9 and X81-82*)					
	All (N=11'265)	**Male (N=8476)**	**Female (N=2789)**	**Age 15-30 (N= 1508)**	**Age >30-65 (N=7240)**	**Age >65 (N=2517)**
Road traffic	1.040 (1.015, 1.065)	1.034 (1.006, 1.063)	1.058 (1.007, 1.112)	1.079 (1.011, 1.152)	1.050 (1.019, 1.082)	0.994 (0.944, 1.047)
Railway	1.022 (1.004, 1.041)	1.021 (1.000, 1.043)	1.028 (0.992, 1.066)	0.982 (0.934, 1.032)	1.027 (1.004, 1.051)	1.037 (0.998, 1.077)
Aircraft	0.997 (0.965, 1.029)	0.995 (0.959, 1.032)	1.005 (0.943, 1.071)	0.983 (0.901, 1.072)	1.015 (0.976, 1.056)	0.95 (0.887, 1.017)
$PM_{2.5}$	0.900 (0.811, 0.998)	0.899 (0.798, 1.012)	0.918 (0.740, 1.137)	0.978 (0.734, 1.303)	0.882 (0.776, 1.002)	0.915 (0.729, 1.149)
NDVI	0.999 (0.978, 1.020)	1.016 (0.992, 1.041)	0.946 (0.908, 0.986)	1.002 (0.948, 1.058)	0.986 (0.961, 1.012)	1.036 (0.991, 1.084)
	Poisoning (X60-69)					
	All (N=1176)	**Male (N=676)**	**Female (N=500)**	**Age 15-30 (N= 168)**	**Age >30-65 (N=834)**	**Age >65 (N=174)**
Road traffic	1.106 (1.025, 1.193)	1.106 (1.002, 1.221)	1.104 (0.982, 1.241)	1.165 (0.956, 1.421)	1.127 (1.030, 1.232)	0.965 (0.789, 1.179)
Railway	1.053 (0.997, 1.111)	1.050 (0.978, 1.127)	1.059 (0.975, 1.15)	1.018 (0.883, 1.173)	1.062 (0.996, 1.132)	1.045 (0.907, 1.205)
Aircraft	0.994 (0.902, 1.094)	1.038 (0.916, 1.177)	0.932 (0.801, 1.084)	1.085 (0.848, 1.388)	0.993 (0.885, 1.115)	0.912 (0.708, 1.174)
$PM_{2.5}$	0.943 (0.671, 1.324)	1.067 (0.689, 1.653)	0.787 (0.459, 1.349)	0.956 (0.394, 2.323)	0.991 (0.663, 1.480)	0.742 (0.297, 1.854)
NDVI	0.923 (0.868, 0.982)	0.961 (0.886, 1.044)	0.874 (0.795, 0.96)	0.900 (0.766, 1.057)	0.931 (0.865, 1.002)	0.904 (0.769, 1.064)
	Hanging (X70)					
	All (N=3755)	**Male (N=2922)**	**Female (N=833)**	**Age 15-30 (N= 471)**	**Age >30-65 (N=2561)**	**Age >65 (N=723)**
Road traffic	1.060 (1.017, 1.105)	1.062 (1.013, 1.113)	1.055 (0.964, 1.154)	1.144 (1.019, 1.285)	1.073 (1.020, 1.128)	0.970 (0.883, 1.066)
Railway	1.006 (0.974, 1.039)	1.016 (0.980, 1.053)	0.970 (0.905, 1.04)	0.940 (0.857, 1.031)	1.022 (0.984, 1.062)	0.993 (0.922, 1.070)
Aircraft	0.970 (0.917, 1.027)	0.956 (0.896, 1.019)	1.017 (0.906, 1.142)	0.923 (0.785, 1.086)	1.019 (0.954, 1.089)	0.823 (0.714, 0.949)
$PM_{2.5}$	0.913 (0.767, 1.086)	0.850 (0.699, 1.033)	1.205 (0.819, 1.771)	0.961 (0.581, 1.590)	0.931 (0.754, 1.149)	0.847 (0.572, 1.254)
NDVI	1.042 (1.005, 1.081)	1.055 (1.012, 1.098)	0.999 (0.924, 1.080)	1.099 (0.994, 1.214)	1.026 (0.982, 1.072)	1.063 (0.977, 1.156)
	Guns (X72-75)					
	All (N=3236)	**Male (N=3106)**	**Female (N=130)**	**Age 15-30 (N= 455)**	**Age >30-65 (N=1985)**	**Age >65 (N=796)**
Road traffic	1.009 (0.964, 1.055)	1.001 (0.956, 1.048)	1.220 (0.972, 1.532)	1.042 (0.925, 1.174)	1.018 (0.962, 1.078)	0.970 (0.885, 1.063)
Railway	1.015 (0.980, 1.051)	1.012 (0.977, 1.049)	1.072 (0.912, 1.259)	0.994 (0.908, 1.089)	1.012 (0.968, 1.058)	1.040 (0.970, 1.115)
Aircraft	0.991 (0.935, 1.051)	0.986 (0.929, 1.048)	1.100 (0.836, 1.447)	0.959 (0.819, 1.124)	1.001 (0.929, 1.079)	0.979 (0.870, 1.102)
$PM_{2.5}$	0.906 (0.745, 1.101)	0.891 (0.730, 1.087)	1.404 (0.515, 3.824)	0.957 (0.568, 1.612)	0.943 (0.739, 1.204)	0.781 (0.515, 1.184)
NDVI	1.048 (1.007, 1.091)	1.050 (1.007, 1.094)	1.005 (0.825, 1.225)	0.963 (0.868, 1.068)	1.036 (0.984, 1.090)	1.141 (1.050, 1.241)
	Jumping (X80)					
	All (N=1651)	**Male (N=949)**	**Female (N=702)**	**Age 15-30 (N= 281)**	**Age >30-65 (N=939)**	**Age >65 (N=431)**

Road traffic	1.046 (0.981, 1.115)	1.026 (0.943, 1.116)	1.073 (0.972, 1.184)	0.994 (0.853, 1.159)	1.049 (0.964, 1.142)	1.080 (0.951, 1.227)
Railway	1.002 (0.956, 1.050)	1.005 (0.945, 1.068)	0.998 (0.928, 1.073)	1.011 (0.904, 1.131)	0.970 (0.910, 1.034)	1.067 (0.978, 1.165)
Aircraft	1.057 (0.974, 1.147)	1.065 (0.957, 1.185)	1.044 (0.918, 1.186)	0.952 (0.777, 1.166)	1.029 (0.921, 1.151)	1.167 (1.002, 1.360)
$PM_{2.5}$	0.783 (0.592, 1.037)	0.937 (0.647, 1.357)	0.621 (0.404, 0.955)	0.929 (0.477, 1.810)	0.573 (0.398, 0.826)	1.587 (0.894, 2.819)
NDVI	0.921 (0.874, 0.969)	0.903 (0.844, 0.967)	0.946 (0.874, 1.024)	0.967 (0.856, 1.094)	0.902 (0.843, 0.966)	0.928 (0.836, 1.030)

Results from main model (M3) including noise exposures (road traffic noise, railway noise and aircraft noise, as Lden), $PM_{2.5}$ exposure, NDVI, age as timescale, sex as strata, individual level covariates (civil status, education, mother tongue, nationality, urbanization, local-SEP) and area-SEP and unemployment rate.

Supplemental 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)

	All intentional self-harm (ICD-10: X60-84, excluding X61.8, X61.9 and X81-82) **(N=11'265)**	**Poisoning (X60-69)** **All (N=1176)**	**Hanging (X70)** **All (N=3755)**	**Firearms (X72-75)** **All (N=3236)**	**Jumping (X80)** **All (N=1651)**
Model 4a: Intermittency Ratio at night					
Q2 *(58.0 – 74.6)*	1.000 (0.949, 1.054)	0.911 (0.777, 1.067)	1.002 (0.914, 1.099)	1.019 (0.922, 1.126)	0.996 (0.871, 1.139)
Q3 *(74.7 – 85.1)*	0.994 (0.942, 1.048)	0.782 (0.661, 0.925)	1.016 (0.926, 1.114)	1.007 (0.911, 1.114)	1.003 (0.875, 1.150)
Q4 *(85.2 – 100)*	0.964 (0.912, 1.019)	0.932 (0.788, 1.103)	0.946 (0.859, 1.042)	1.007 (0.908, 1.116)	0.891 (0.768, 1.032)
Model 4b: Number of Events at night					
Q2 *(52.6-110.3)*	1.004 (0.952, 1.058)	0.881 (0.744, 1.043)	1.028 (0.937, 1.128)	1.013 (0.921, 1.114)	1.047 (0.910, 1.206)
Q3 *(110.4 – 220.1)*	0.978 (0.925, 1.034)	0.878 (0.737, 1.047)	1.034 (0.938, 1.139)	0.937 (0.845, 1.038)	1.003 (0.866, 1.163)
Q4 *(220.1 – 13110.2)*	0.987 (0.923, 1.056)	0.915 (0.744, 1.126)	1.131 (1.006, 1.270)	0.957 (0.844, 1.086)	0.823 (0.688, 0.985)

M4a: quartiles of night-time intermittency ratio (IR) from all transportation sources combined as exposure (Q1 (0 – 57.9) as reference), Lden from Road Traffic, Railway and Aircraft Noise, $PM_{2.5}$ exposure, NDVI, age as timescale, sex as strata, individual level covariates (civil status, education, mother tongue, nationality, urbanization, local-SEP) and area-SEP and unemployment rate.
M4b: quartiles of night-time number of noise events from all sources combined as exposure (Q1 (0 – 52.5) as reference), Lden from Road Traffic, Railway and Aircraft Noise, $PM_{2.5}$ exposure, NDVI, age as timescale, sex as strata, individual level covariates (civil status, education, mother tongue, nationality, urbanization, local-SEP) and area-SEP and unemployment rate.

Supplemental 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

PM2.5 Quartiles	Road Traffic Noise Quartiles			
	Q1 *35-48.8 dB L_{den}*	**Q2** *48.8 – 53.9 dB L_{den}*	**Q3** *53.9 – 60.2 dB L_{den}*	**Q4** *60.2 – 88.2 dB L_{den}*
Q1 *0.4 – 14.8 µg/m3*	1 (=reference)	1.084 (0.988, 1.190)	0.990 (0.895, 1.096)	1.034 (0.930, 1.148)
Q2 *14.8 – 16.2 µg/m3*	0.906 (0.821, 1.000)	1.035 (0.901, 1.190)	1.160 (1.002, 1.341)	1.113 (0.957, 1.295)
Q3 *16.2 - 17.4 µg/m3*	0.971 (0.873, 1.080)	0.938 (0.812, 1.083)	1.104 (0.953, 1.279)	1.001 (0.860, 1.165)
Q4 *17.4 – 28.0 µg/m3*	0.914 (0.803, 1.042)	0.978 (0.830, 1.152)	1.082 (0.919, 1.273)	1.141 (0.972, 1.341)

Categorical exposure model: Adjusted for railway and aircraft noise, NDVI, age as timescale, sex as strata, individual level covariates (civil status, education, mother tongue, nationality, urbanization, local-SEP) and area-SEP and unemployment rate.

Supplemental Table S6 – Effect modification by Local SEP-Index, HR per 10dB Lden / 10µg/m³ $PM^{2.5}$ / 0.1 NDVI (95% confidence interval)

	Local SEP-Index			
	Q1 *(0 – 55.96)* **(N=2908)**	**Q2** *(55.97 – 63.15)* **(N=2884)**	**Q3** *(63.16 – 70.42)* **(N=2831)**	**Q4** *(70.43 – 100)* **(N=2642)**
Road traffic	1.020 (0.974, 1.069)	1.085 (1.035, 1.138)	1.015 (0.967, 1.066)	1.040 (0.987, 1.095)
Railway	1.020 (0.986, 1.055)	1.015 (0.980, 1.052)	1.033 (0.996, 1.071)	1.026 (0.985, 1.069)
Aircraft	1.031 (0.963, 1.103)	0.994 (0.928, 1.065)	0.997 (0.936, 1.062)	0.974 (0.918, 1.034)
$PM_{2.5}$	0.908 (0.765, 1.077)	0.911 (0.754, 1.101)	0.980 (0.781, 1.229)	0.782 (0.568, 1.078)
NDVI	1.009 (0.970, 1.050)	1.020 (0.979, 1.063)	0.976 (0.936, 1.018)	0.983 (0.941, 1.027)

Stratified analysis by Local SEP-Index Quartiles using the main model (M3) including noise exposures (road traffic noise, railway noise and aircraft noise, as Lden), $PM_{2.5}$ exposure, NDVI, age as timescale, sex as strata, individual level covariates (civil status, education, mother tongue, nationality, urbanization) and area-SEP and unemployment rate.

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

	Civil Status	
	Single / Divorced / Widowed (N=5622)	**Married (N=5643)**
Road traffic	1.048 (1.013, 1.084)	1.033 (0.998, 1.069)
Railway	1.017 (0.992, 1.044)	1.028 (1.001, 1.055)
Aircraft	0.993 (0.949, 1.040)	1.000 (0.956, 1.045)
$PM_{2.5}$	0.957 (0.823, 1.113)	0.850 (0.737, 0.982)
NDVI	0.997 (0.970, 1.026)	1.007 (0.976, 1.038)

Stratified analysis by civil status (single, divorced or widowed vs. married) using the main model (M3) including noise exposures (road traffic noise, railway noise and aircraft noise, as Lden), $PM_{2.5}$ exposure, NDVI, age as timescale, sex as strata, individual level covariates (education, mother tongue, nationality, urbanization, local-SEP) and area-SEP and unemployment rate.

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

	Urbanization		
	Urban (N=3406)	**Peri-Urban (N=4643)**	**Rural (N=3216)**
Road traffic	1.050 (1.004, 1.098)	1.045 (1.005, 1.087)	1.022 (0.979, 1.066)
Railway	1.018 (0.986, 1.051)	1.043 (1.014, 1.072)	1.009 (0.972, 1.048)
Aircraft	0.975 (0.908, 1.047)	1.025 (0.983, 1.068)	0.962 (0.882, 1.049)
$PM_{2.5}$	1.210 (0.966, 1.516)	0.884 (0.741, 1.055)	0.856 (0.727, 1.008)
NDVI	0.942 (0.912, 0.973)	1.010 (0.974, 1.048)	1.072 (1.027, 1.119)

Stratified analysis by degree of urban (urban, peri-urban, rural) using the main model (M3) including noise exposures (road traffic noise, railway noise and aircraft noise, as Lden), $PM_{2.5}$ exposure, NDVI, age as timescale, sex as strata, individual level covariates (education, mother tongue, nationality, local-SEP) and area-SEP and unemployment rate.

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Supplemental Table S9a-c – 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

Supplemental Table S9a – Road traffic noise

	35dB	40dB	50dB	60dB	70dB	75dB
HR	1.084	1.038	1.002	1.075	1.133	1.150
(95% CI)	(0.986, 1.192)	(0.987, 1.091)	(0.979, 1.025)	(1.047, 1.104)	(1.068, 1.201)	(1.021, 1.294)

Supplemental Table S9b – Railway noise

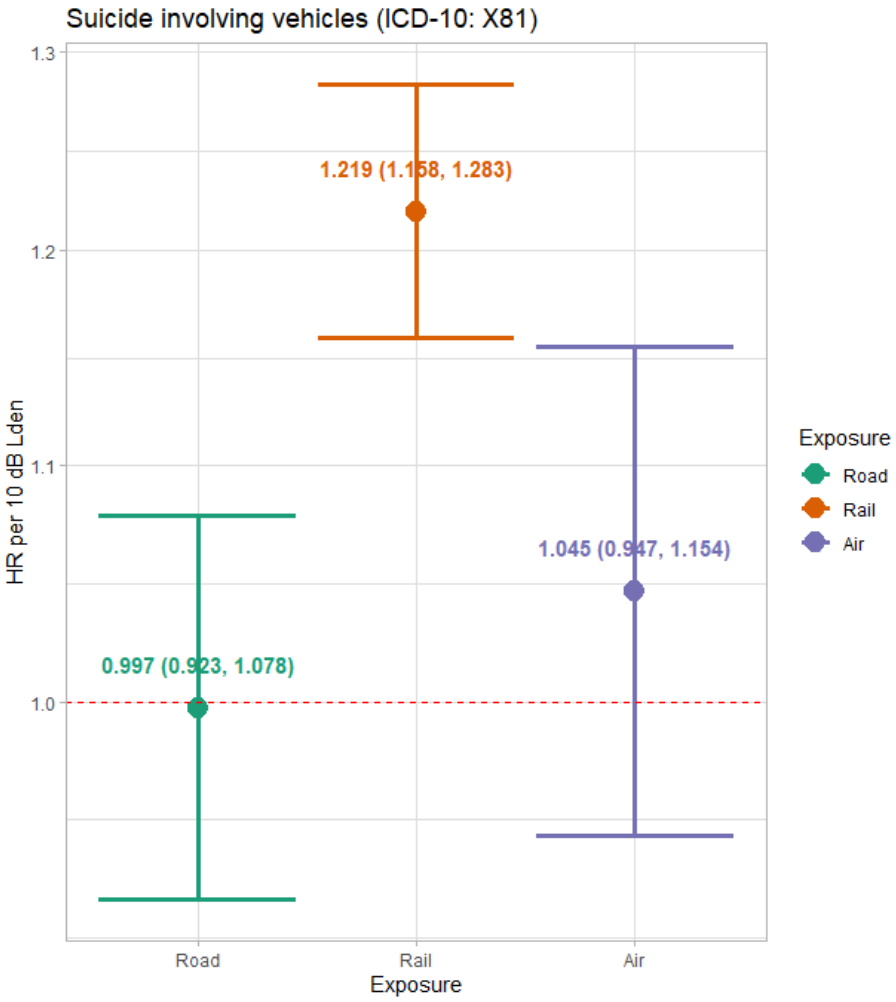
	30dB	40dB	50dB	60dB	70dB	80dB
HR	1.000	1.019	1.041	1.067	1.097	1.129
(95% CI)	(0.982, 1.018)	(0.997, 1.041)	(1.009, 1.075)	(1.025, 1.111)	(1.011, 1.189)	(0.976, 1.304)

Supplemental Table S9c – Aircraft noise

	30dB	35dB	40dB	45dB	50dB	55dB
HR	1.045	1.014	1.001	1.004	1.021	1.051
(95% CI)	(1.027, 1.063)	(0.991, 1.037)	(0.962, 1.041)	(0.960, 1.049)	(0.972, 1.073)	(0.980, 1.127)

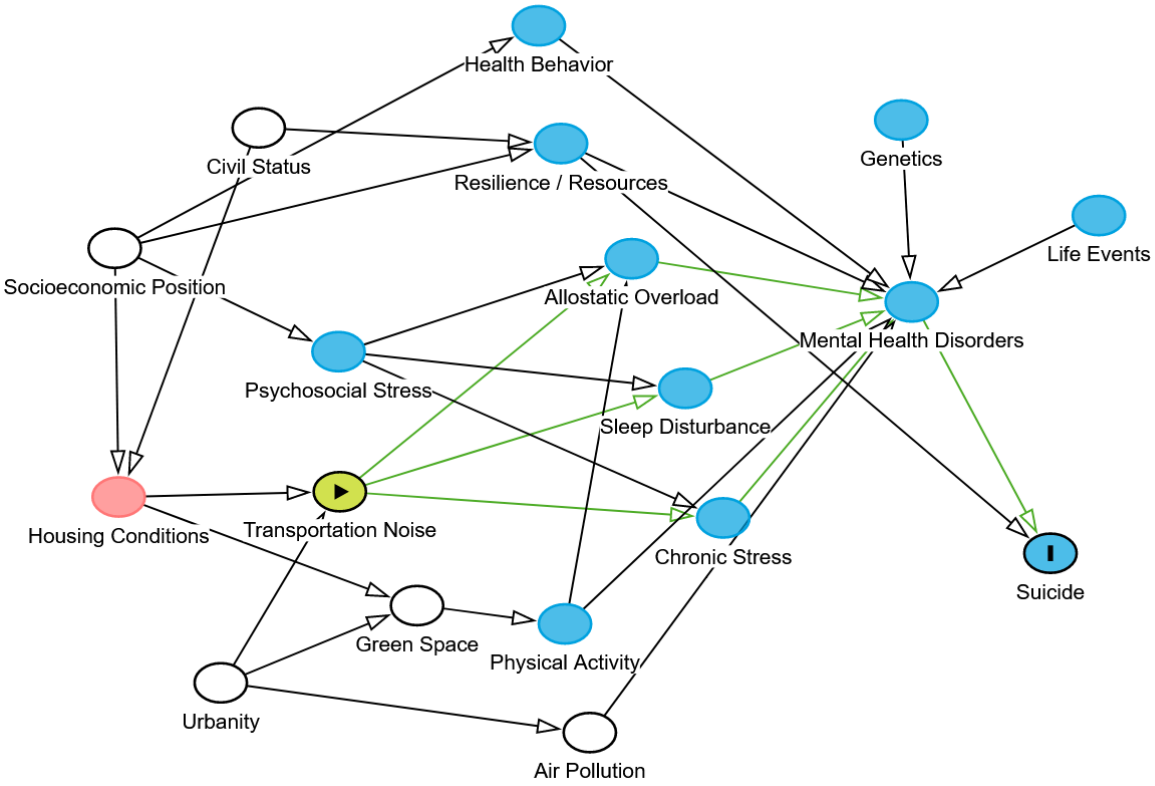
Numerical values of exposure-response relationship for the association between road traffic, railway or aircraft noise (Lden, dB) and mortality from all intentional self-harm (ICD-10: X60-84, excl. ICD-10 X61.8, X61.9, X81-82) calculated using natural splines (3 df, knots placed at tertiles of noise distribution). Results from main model (M3) including noise exposures (road traffic noise, railway noise and aircraft noise), $PM_{2.5}$ exposure, greenness (NDVI) within 500m around the residence, age as timescale, sex as strata, individual sociodemographic covariates (civil status, education, mother tongue, nationality, urbanization, local-SEP) and area-SEP and unemployment rate were used as base.
As reference for HR calculation (HR=1.000) minimum risk noise levels were used (Road traffic noise: 48.2dB, Railway noise: 30dB, Aircraft noise: 41.4dB)

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



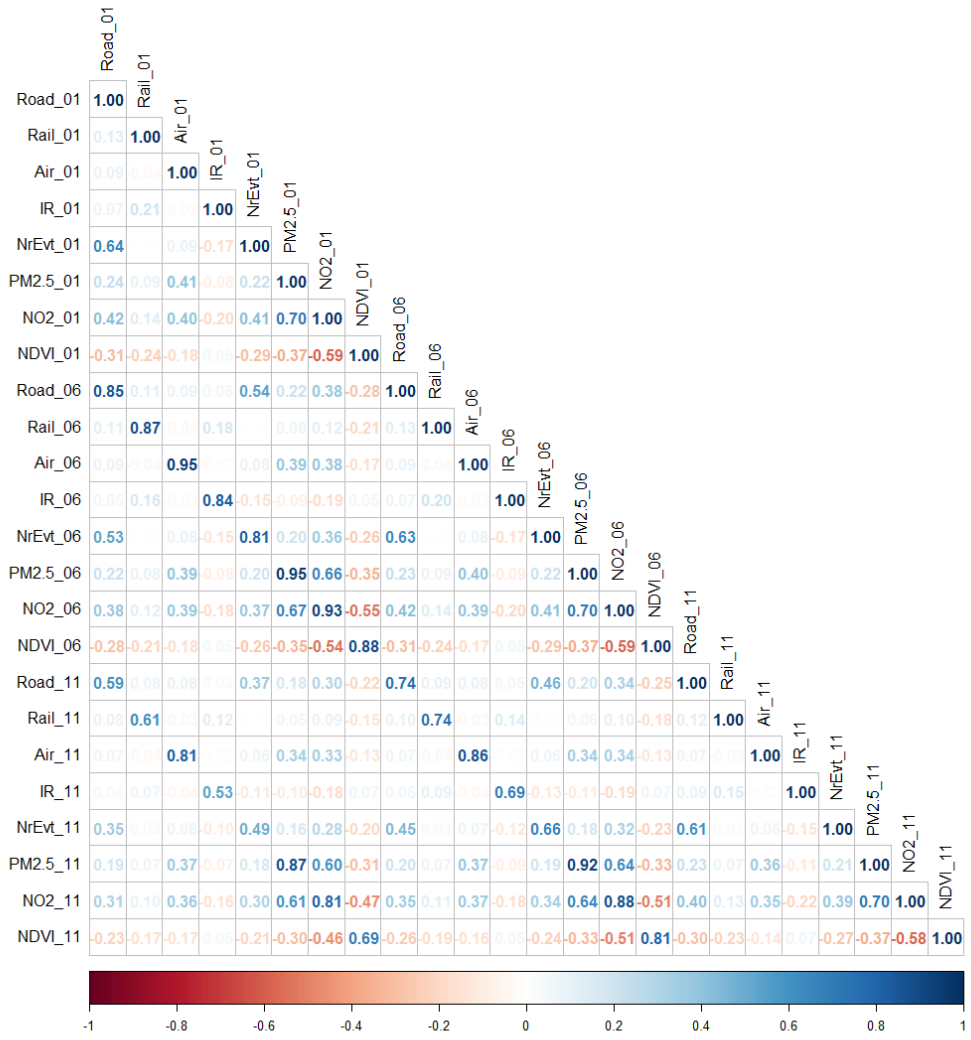
Results from preliminary analysis of an association of suicides involving vehicles and the three different noise sources using Model 3
Model 3 = Lden road traffic, railway or aircraft noise (other two noise sources included as adjustment), $PM_{2.5}$, NDVI, age as a timescale, sex as strata + individual level covariates (mother tongue, nationality, civil status, education, urbanization, local-SEP) + area level covariates (community and regional-SEP and unemployment rate) Dots mark HR per 10dB source-specific Lden, whiskers the corresponding 95%CI

Supplemental Figure S2 – Directed Acyclic Graph



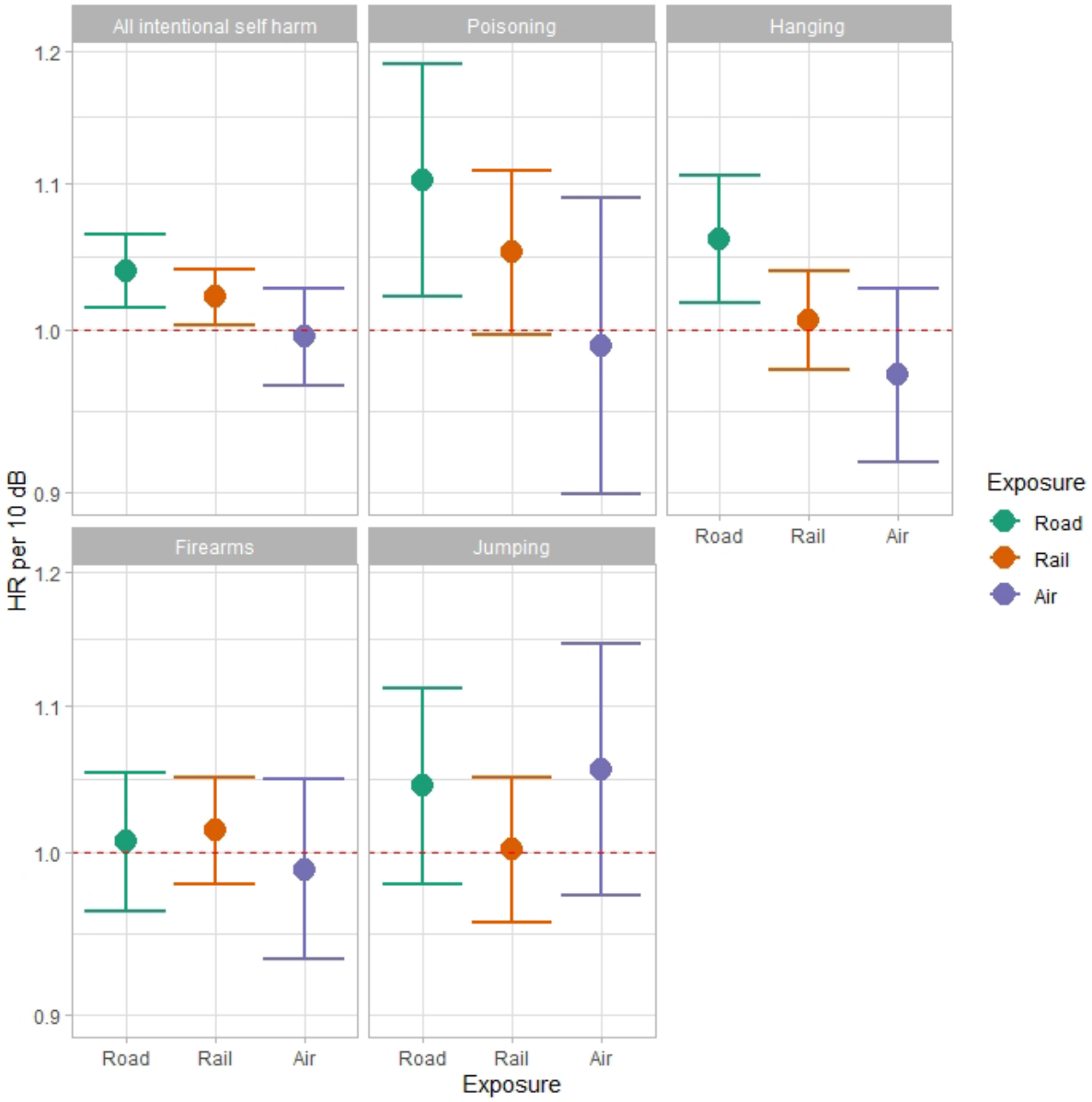
DAG (Directed Acyclic Graph) for the association between transportation noise exposure and suicide. Nodes indicate factors/variables, arrows a causal effect of one variable on the other. Green arrows indicate the causal pathway. Red arrows would indicate confounding paths (here, none). Blue nodes indicate unmeasured covariates which are no confounders. White nodes indicate controlled for confounders. Red node indicates an unmeasured, potential confounder (which here is indirectly controlled for).

Supplemental Figure S3 – Correlation Matrix



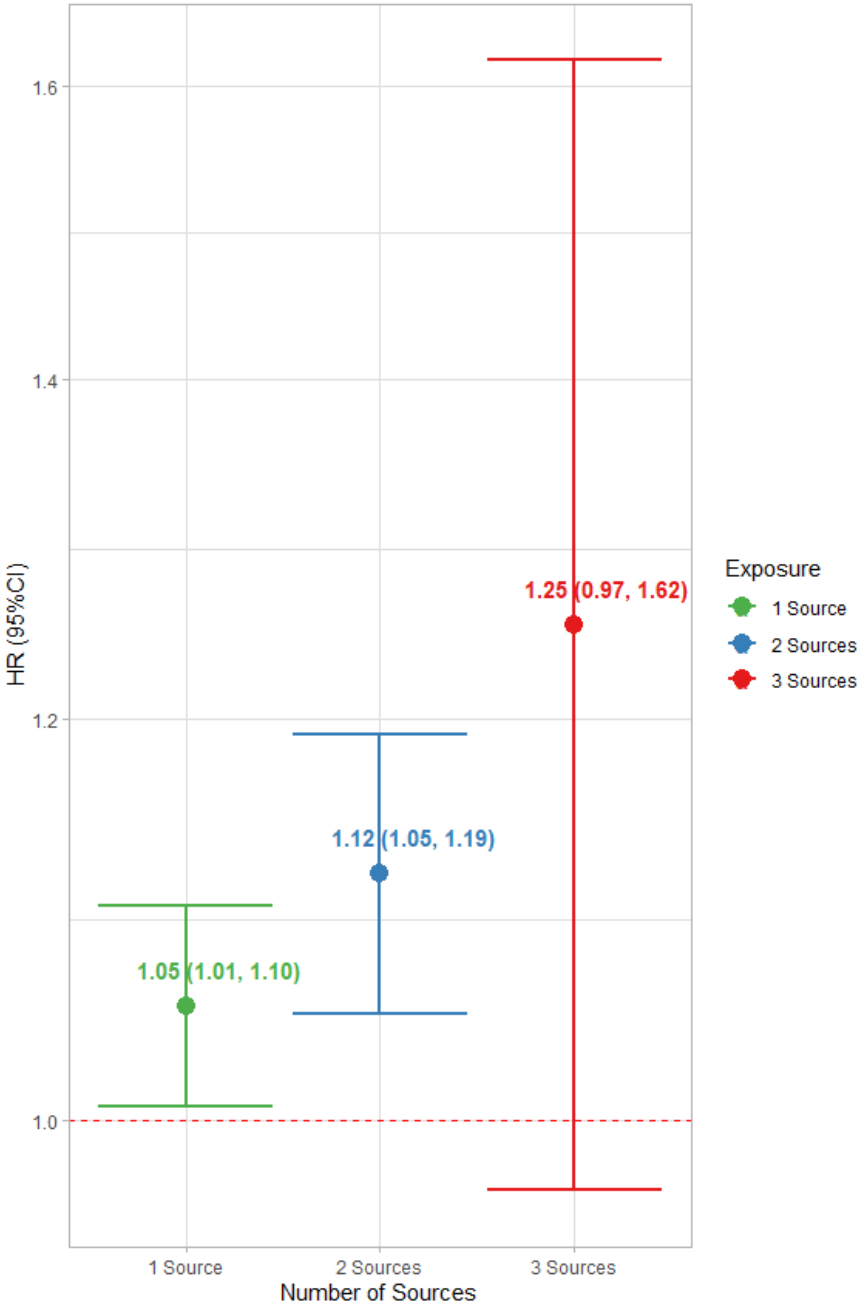
Numbers indicate Pearson coefficient.
Notes: Road = road traffic noise (L_{den} [dB]), Rail = railway noise (L_{den} [dB]), Air = aircraft noise (L_{den} [dB]), IR = Intermittency ratio at night, NrEv = number of noise events at night, NDVI = normalized difference vegetation index, PM2.5 = PM2.5 [$\mu g/m^3$], NO2 = NO_2 [$\mu g/m^3$], 01, 06 and 11 respectively refer to years 2001, 2006 and 2011

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



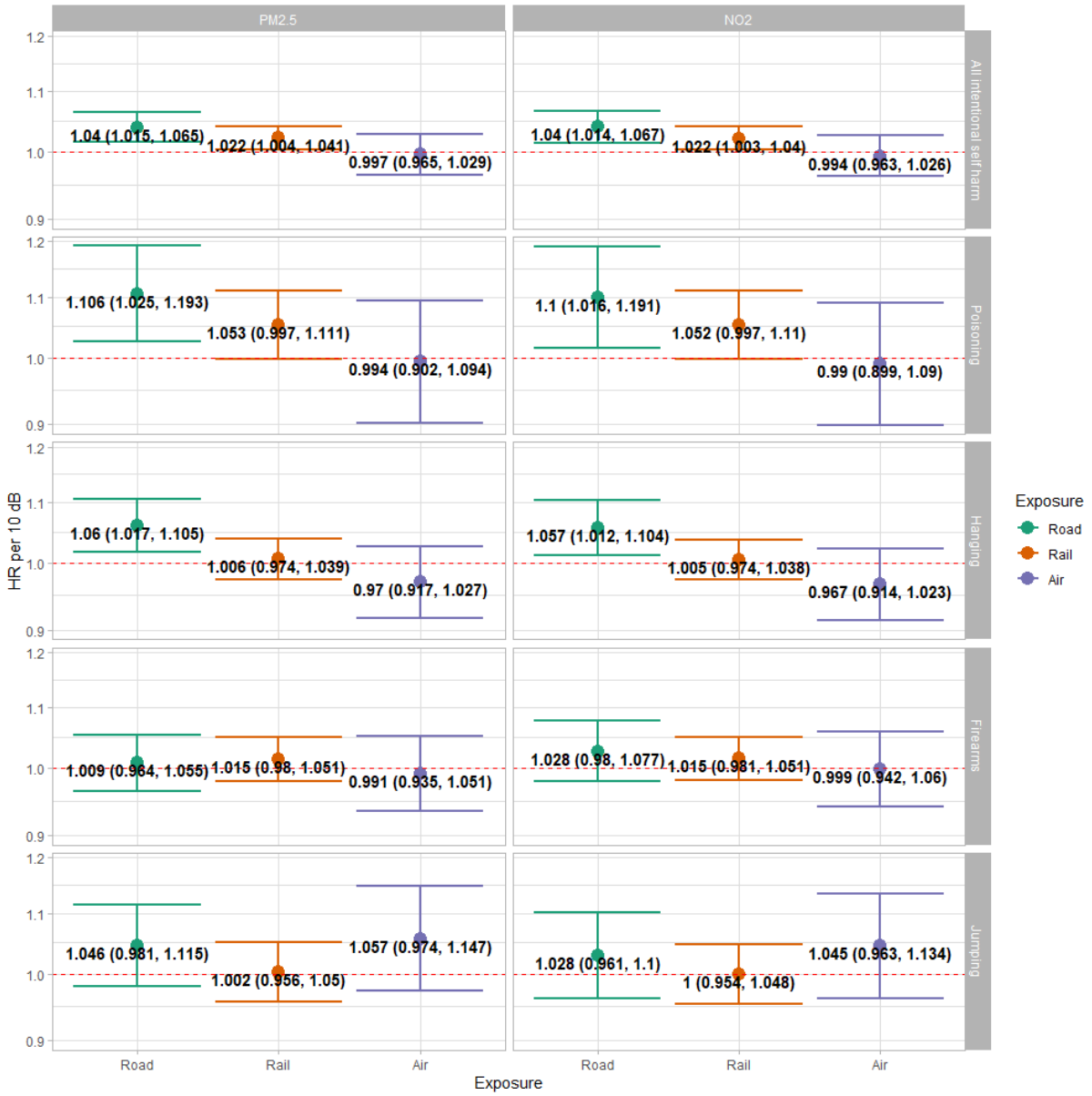
Results from main model (M3): Lden road traffic, railway or aircraft noise (other two noise sources included as adjustment), $PM_{2.5}$, NDVI, age as a timescale, sex as strata + individual level covariates (mother tongue, nationality, civil status, education, urbanization, local-SEP) + area level covariates (community and regional-SEP and unemployment rate). Dots mark HR per 10dB source-specific Lden, whiskers the corresponding 95% CI. The numerical values of the results displayed in this figure can be found in Table 3.

Supplemental 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



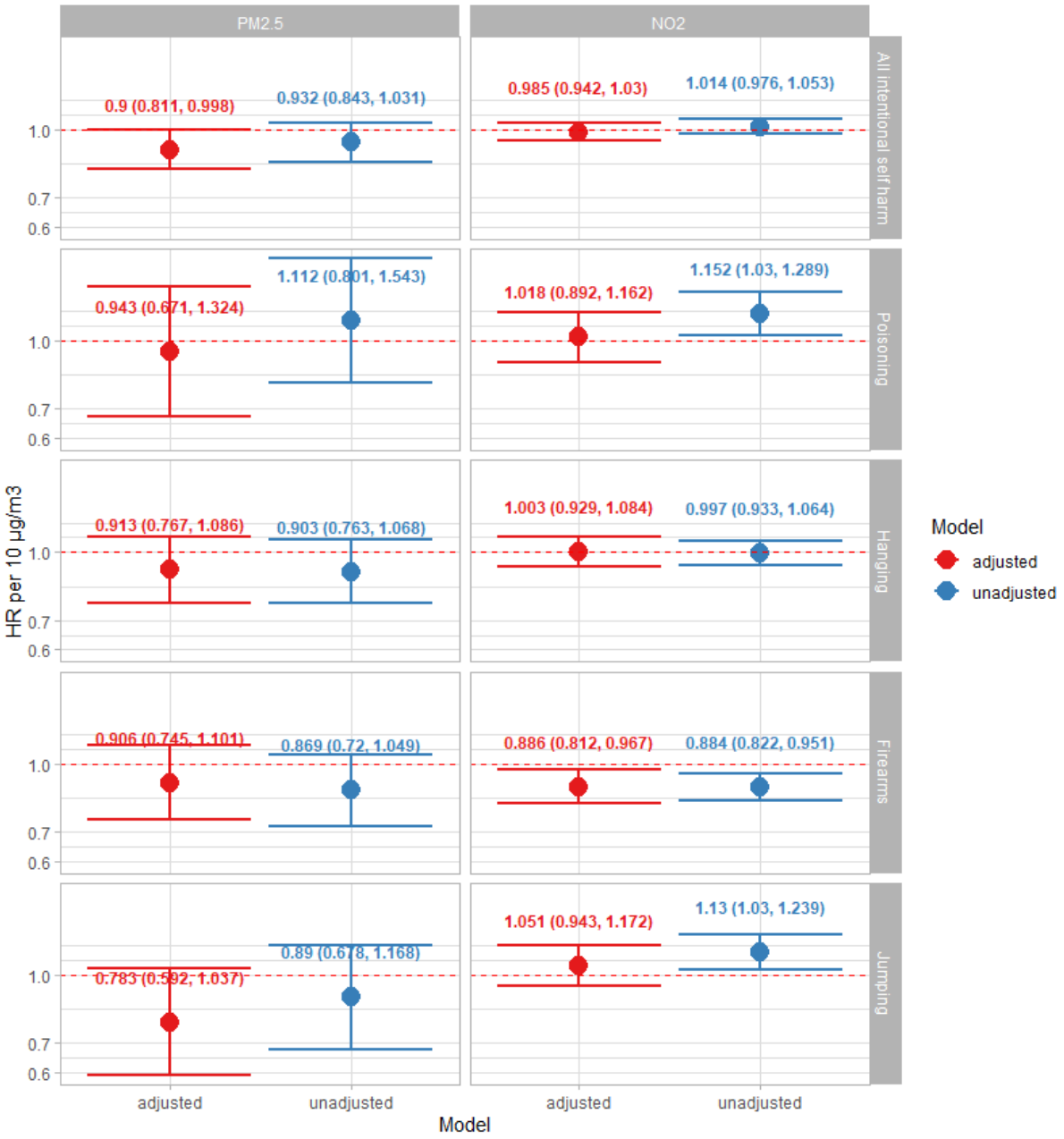
Categorical exposure to either one, two or three different noise sources >50dB Lden (all three transportation noise sources [road traffic, railway and aircraft noise] <50dB Lden as Reference). Adjusted for $PM_{2.5}$, NDVI, age as a timescale, sex as strata + individual level covariates (mother tongue, nationality, civil status, education, urbanization, local-SEP) + area level covariates (community and regional-SEP and unemployment rate). Dots mark HR, whiskers the corresponding 95% CI

Supplemental Figure S6 – Sensitivity Analysis comparing models adjusting for $PM_{2.5}$ (=Model 3) versus NO_2 (=Model 3b)



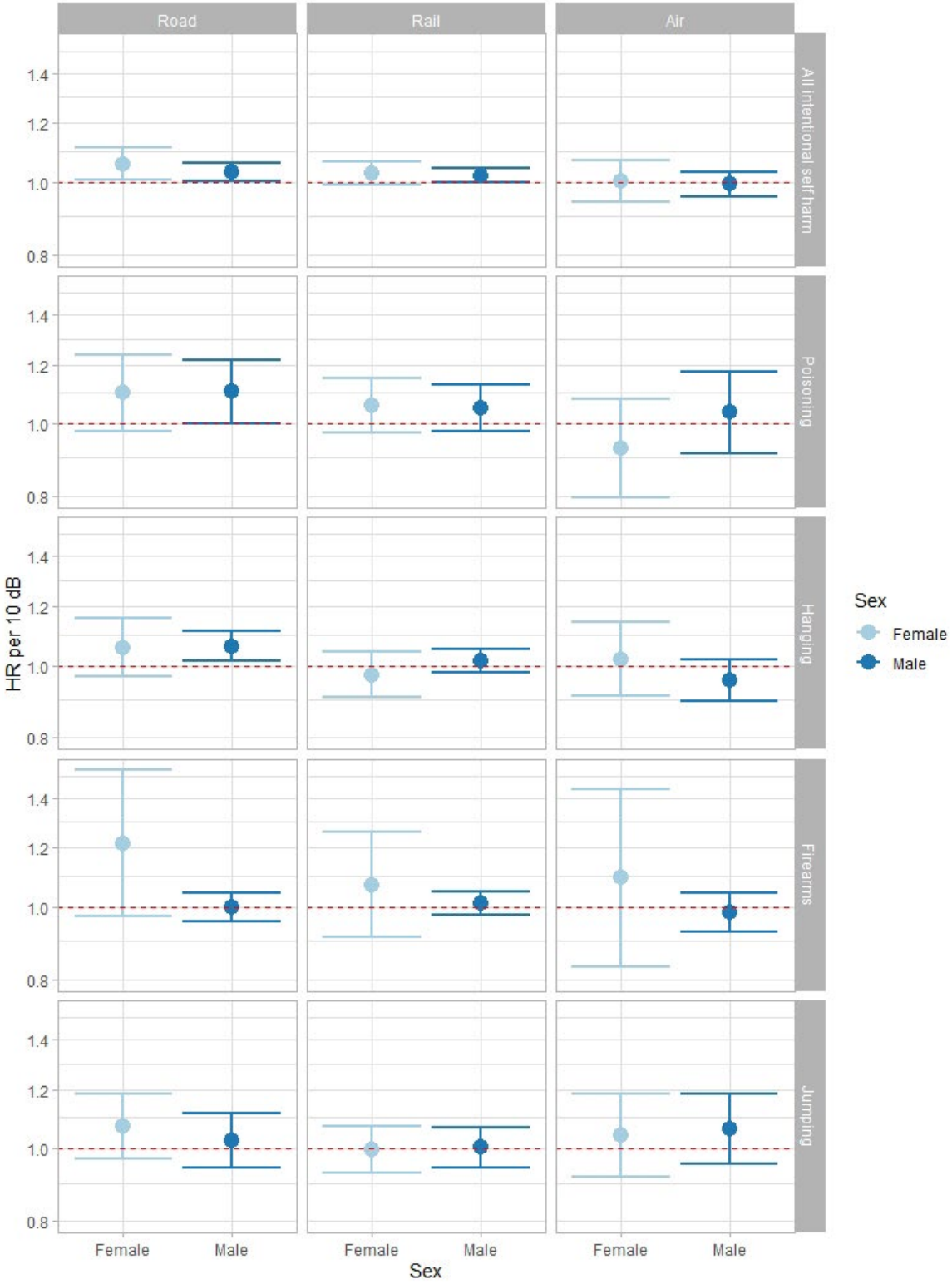
Model 3 (main model) = road traffic, railway or aircraft noise (other two noise sources included as adjustment), $PM_{2.5}$, NDVI, age as a timescale, sex as strata + individual level covariates (mother tongue, nationality, civil status, education, urbanization, local-SEP) + area level covariates (community and regional-SEP and unemployment rate)
Model 3b= same as Model 3, adjusting for NO_2 instead of $PM_{2.5}$
Dots mark HR per 10dB source-specific Lden, whiskers the corresponding 95% CI. Numerical values are indicated below the dots.

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



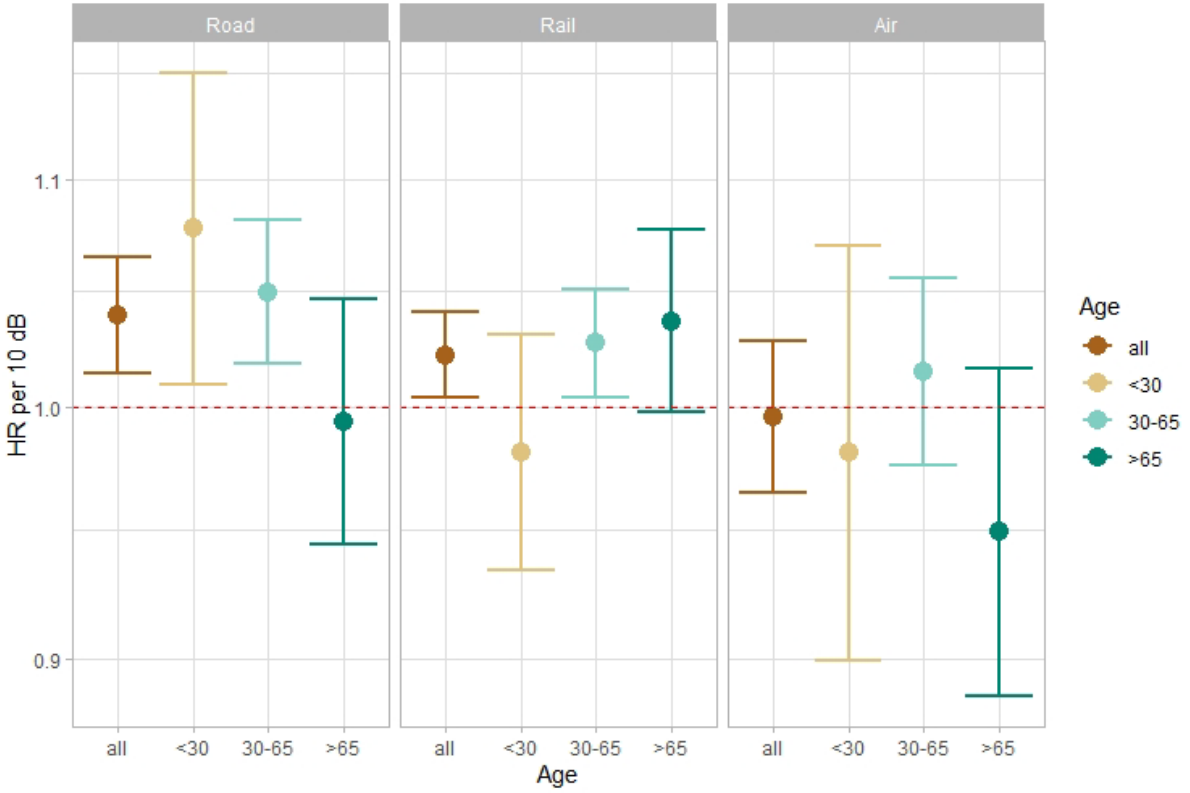
adjusted = air pollution (either $PM_{2.5}$ or NO_2) adjusted for road traffic, railway and aircraft noise Lden, NDVI, age as timescale, sex as strata + individual level covariates (mother tongue, nationality, civil status, education, urbanization, local-SEP) + area level covariates (community and regional-SEP and unemployment rate) unadjusted= same as adjusted, but without noise exposure and NDVI variables. Dots mark HR per 10 µg/m^3 $PM_{2.5}$/NO_2, whiskers the corresponding 95% CI.

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



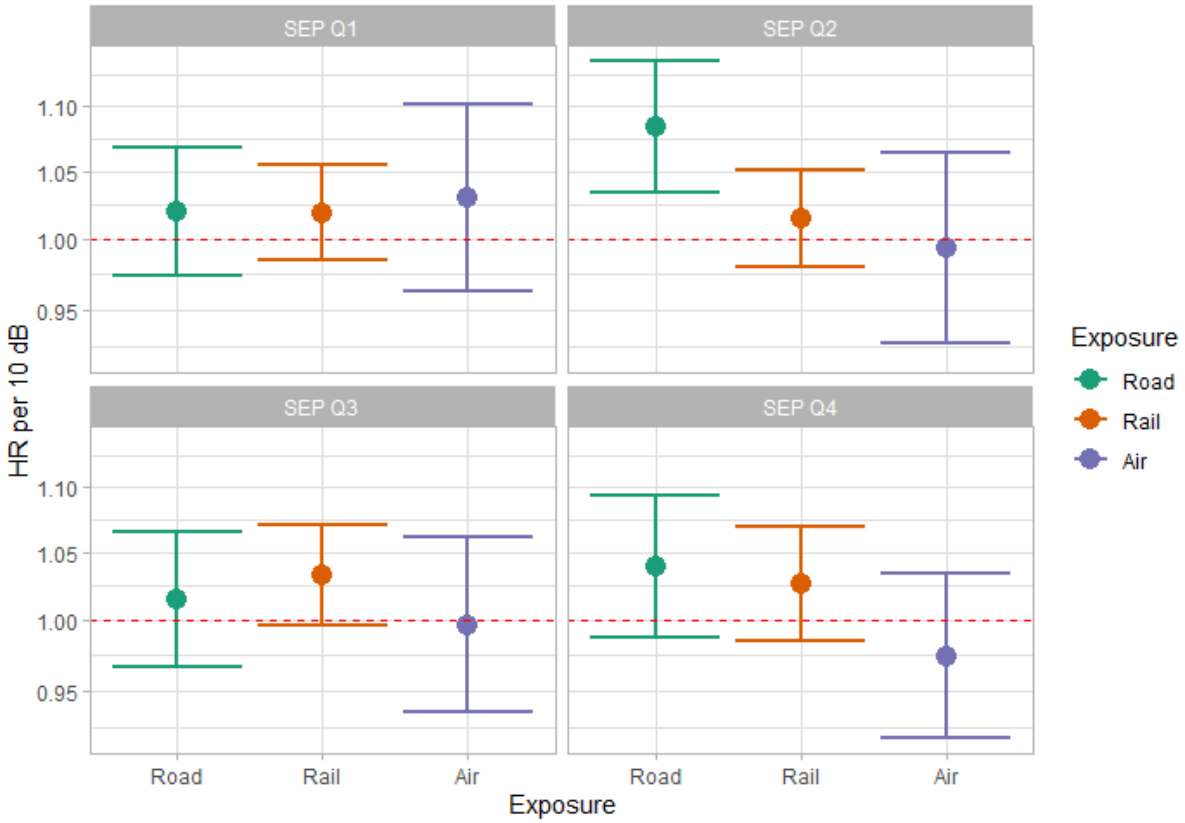
Model 3: road traffic, railway or aircraft noise (other two noise sources included as adjustment), $PM_{2.5}$, NDVI, age as a timescale, sex as strata + individual level covariates (mother tongue, nationality, civil status, education, urbanization, local-SEP) + area level covariates (community and regional-SEP and unemployment rate). Dots mark HR per 10dB source-specific Lden, whiskers the corresponding 95% CI.
The numerical values of the results displayed in this figure can be found in Table S3.

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



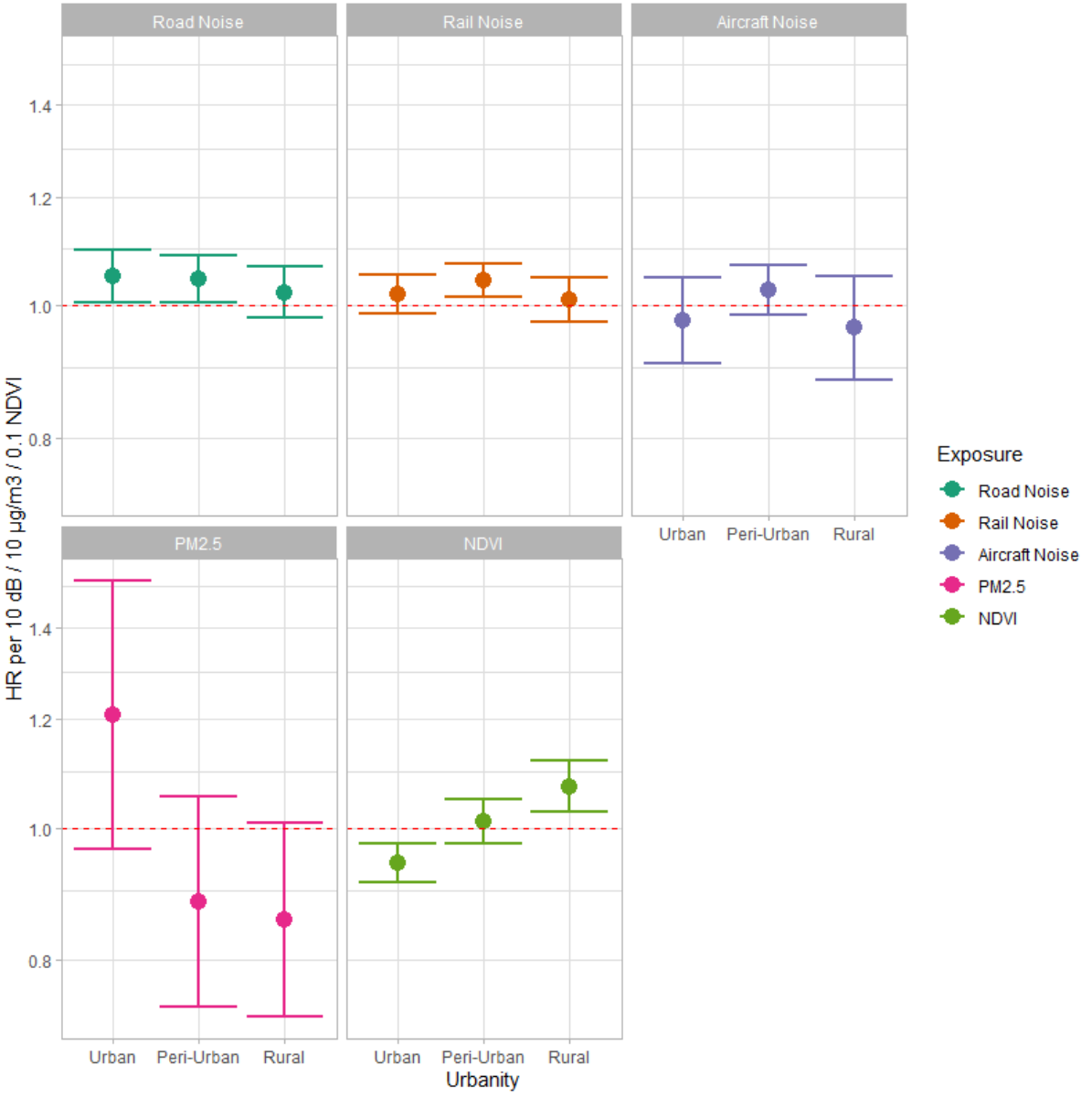
Model 3: road traffic, railway or aircraft noise (other two noise sources included as adjustment), $PM_{2.5}$, NDVI, age as a timescale, sex as strata + individual level covariates (mother tongue, nationality, civil status, education, urbanization, local-SEP) + area level covariates (community and regional-SEP and unemployment rate). Dots mark HR per 10dB source-specific Lden, whiskers the corresponding 95% CI.
The numerical values of the results displayed in this figure can be found in Table S3.

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



Model 3: Stratified analysis by SEP-Quartile using the main model (M3) including noise exposures (road traffic noise, railway noise and aircraft noise, as Lden), PM2.5 exposure, NDVI, age as timescale, sex as strata, individual level covariates (civil status, education, mother tongue, nationality, urbanization) and area-SEP and unemployment rate. Dots mark HR per 10dB source-specific Lden, whiskers the corresponding 95% CI.
The numerical values of the results displayed in this figure can be found in Table S6.

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



Model 3: Stratified analysis by degree of urbanization (urban, peri-urban, rural) using the main model (M3) including noise exposures (road traffic noise, railway noise and aircraft noise, as Lden), $PM_{2.5}$ exposure, NDVI, age as timescale, sex as strata, individual level covariates (education, mother tongue, nationality, local-SEP) and area-SEP and unemployment rate. Dots mark HR per 10dB source-specific Lden / 10 µg/m³ $PM_{2.5}$ / 0.1 NDVI, whiskers the corresponding 95%CI.
The numerical values of the results displayed in this figure can be found in Table S8.