Supplementary

Hvidtfeldt, UA et al. Residential exposure to PM$_{2.5}$ components and risk of childhood non-Hodgkin Lymphoma in Denmark: A nationwide register-based case-control study

Figure S1 Exposure distributions of each sub component of PM$_{2.5}$ among controls (N=609) for the period from birth to index-date (µg/m^3)

Figure S2 Population weighted mean PM$_{2.5}$ (µg/m^3) concentrations over Denmark for the period 1979-2019, calculated with the DEHM/UBM model system on a 1 km x 1 km resolution.

Table S1 Associations between PM$_{2.5}$ components from birth to index-date and risk of NHL diagnosed in Denmark 1987–2013 with further adjustment for area level socioeconomic variables among the sub-population with this information

Table S2 Spearman correlation coefficients between PM$_{2.5}$ mass and sub components from birth to index-date among controls

Table S3 Spearman correlation coefficients between SIA particles and the three sub components from birth to index-date among controls

Figure S1. Exposure distributions of each sub component of PM$_{2.5}$ among controls (N=609) for the period from birth to index-date ($\mu g/m^3$).
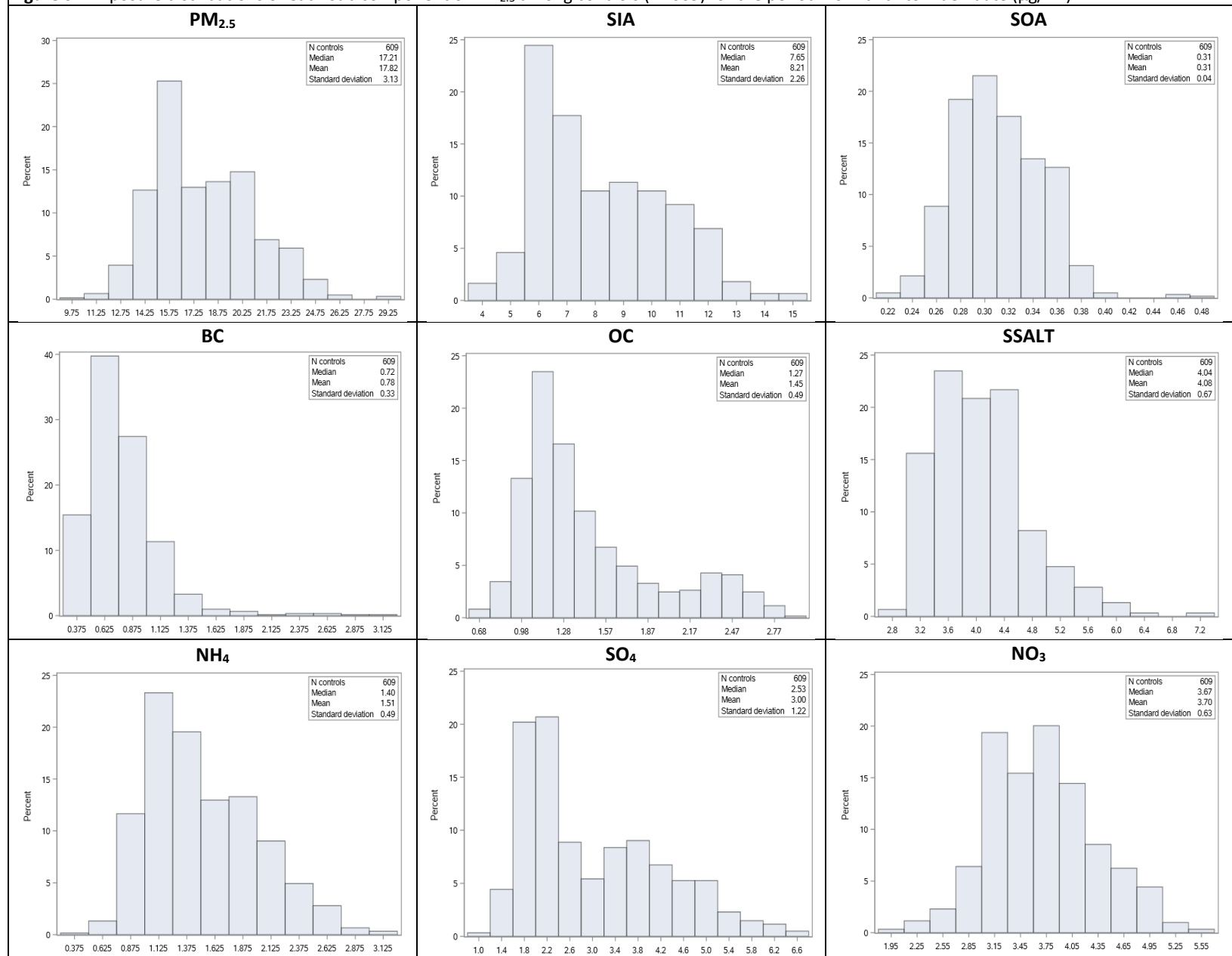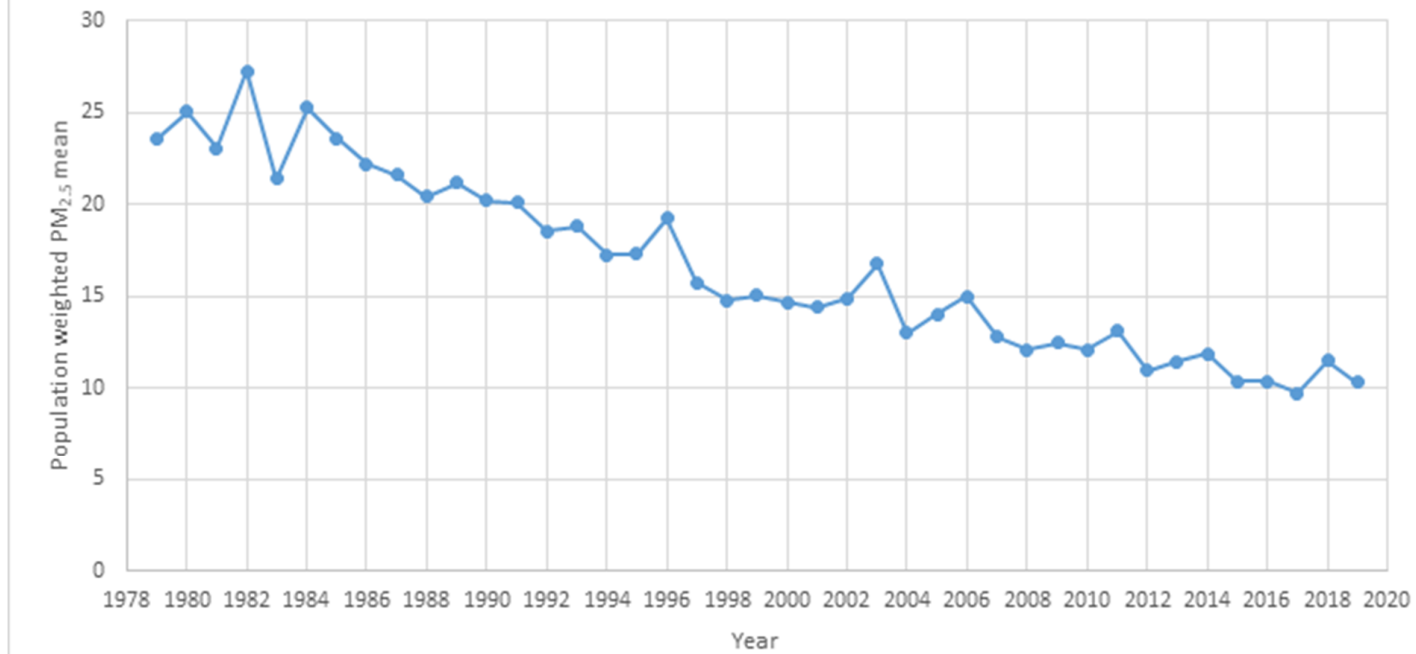
Figure S2. Population weighted mean PM$_{2.5}$ (μg/m^3) concentrations over Denmark for the period 1979-2019, calculated with the DEHM/UBM model system* on a 1 km x 1 km resolution

*Brandt, J.; Christensen, J.H.; Frohn, L.M.; Berkowicz, R. Air pollution forecasting from regional to urban street scale -implementation and validation for two cities in Denmark. *Phys. Chem. Earth, Parts A/B/C* **2003**, *28*, 335–344, doi:10.1016/S1474-7065(03)00054-8.

Table S1. Associations between $PM_{2.5}$ components from birth to index-date and risk of NHL diagnosed in Denmark 1987–2013 with further adjustment for area level socioeconomic variables among the sub-population with this information (cases/controls 165/594).

Pollutant	IQR	OR (95% CI)	
		Adjusted individual level[a]	Adjusted + neighborhood SES
$PM_{2.5}$	4.83	2.16 (1.13, 4.12)	2.04 (1.03, 4.06)
SIA	3.71	1.64 (0.63, 4.29)	1.84 (0.66, 5.14)
SOA	0.05	1.02 (0.75, 1.39)	0.86 (0.60, 1.24)
BC	0.39	1.25 (1.04, 1.50)	1.23 (1.00, 1.52)
OC	0.56	1.05 (0.85, 1.29)	0.90 (0.70, 1.16)
Sea salt	0.87	0.97 (0.75, 1.25)	1.07 (0.80, 1.43)

[a]Adjusted for age (by matching), sex (by matching), calendar year (by matching), parental age, birth weight, number of biological siblings, parental education, and parental disposable income.

Abbreviations: NHL, non-Hodgkin lymphoma; PM, particulate matter; SIA, secondary inorganic aerosols; SOA, secondary organic aerosols; BC/OC, black/organic carbon

Table S2. Spearman correlation coefficients between $PM_{2.5}$ mass and sub components from birth to index-date among controls (N = 609).

	$PM_{2.5}$	SIA	SOA	BC	OC
SIA	0.917	-	-	-	-
SOA	-0.022	-0.239	-	-	-
BC	0.454	0.147	0.560	-	-
OC	0.295	0.019	0.746	0.822	-
Sea salt	0.067	0.257	-0.831	-0.608	-0.672

Abbreviations: PM, particulate matter; SIA, secondary inorganic aerosols; SOA, secondary organic aerosols; BC/OC, black/organic carbon

Table S3. Spearman correlation coefficients between SIA particles and the three sub components from birth to index-date among controls (N = 609).

	SIA	NO_3	NH_4
NO_3	0.965	-	-
NH_4	0.970	0.945	-
SO_4	0.979	0.905	0.922

Abbreviations: SIA, secondary inorganic aerosols