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## **Supplemental Material**

### **Analysis of Environmental Chemical Mixtures and Non-Hodgkin Lymphoma Risk in the NCI-SEER NHL Study**

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**Table S1.** Association between individual chemicals in carpet dust and non-Hodgkin lymphoma for all study sites combined.

<b>Chemical</b>	<b>Odds Ratio<sup>a</sup> (95% CI)</b>	<b>p-value</b>
PCB 105	1.20 (0.87, 1.67)	0.27
PCB 138	1.20 (0.86, 1.68)	0.29
PCB 153	1.31 (0.93, 1.84)	0.12
PCB 170	1.37 (0.98, 1.91)	0.07
PCB 180	1.55 (1.11, 2.17)	0.01
benz(a)anthracene	0.86 (0.57, 1.29)	0.47
benzo(b)fluoranthene	0.83 (0.55, 1.25)	0.37
benzo(k)fluoranthene	0.96 (0.64, 1.43)	0.83
benzo(a)pyrene	0.96 (0.64, 1.44)	0.84
chrysene	0.79 (0.53, 1.17)	0.24
dibenz(ah)anthracene	0.91 (0.61, 1.37)	0.66
indeno(1,2,3- <i>cd</i> )pyrene	0.79 (0.52, 1.19)	0.26
α-chlordane	1.40 (0.99, 1.98)	0.06
γ-chlordane	1.35 (0.95, 1.92)	0.09
carbaryl	1.07 (0.77, 1.49)	0.69
chlorpyrifos	0.73 (0.52, 1.02)	0.06
<i>cis</i> -permethrin	0.95 (0.67, 1.34)	0.76
<i>trans</i> -permethrin	0.98 (0.69, 1.39)	0.90
2,4-D	0.70 (0.48, 1.03)	0.07
DDE	1.26 (0.90, 1.76)	0.19
DDT	1.03 (0.73, 1.44)	0.87
diazinon	0.79 (0.56, 1.10)	0.16
dicamba	0.74 (0.53, 1.04)	0.08
methoxychlor	0.90 (0.64, 1.27)	0.55
<i>o</i> -phenylphenol	1.00 (0.71, 1.41)	0.99
pentachlorophenol	1.02 (0.72, 1.45)	0.92
propoxur	1.27 (0.90, 1.79)	0.18

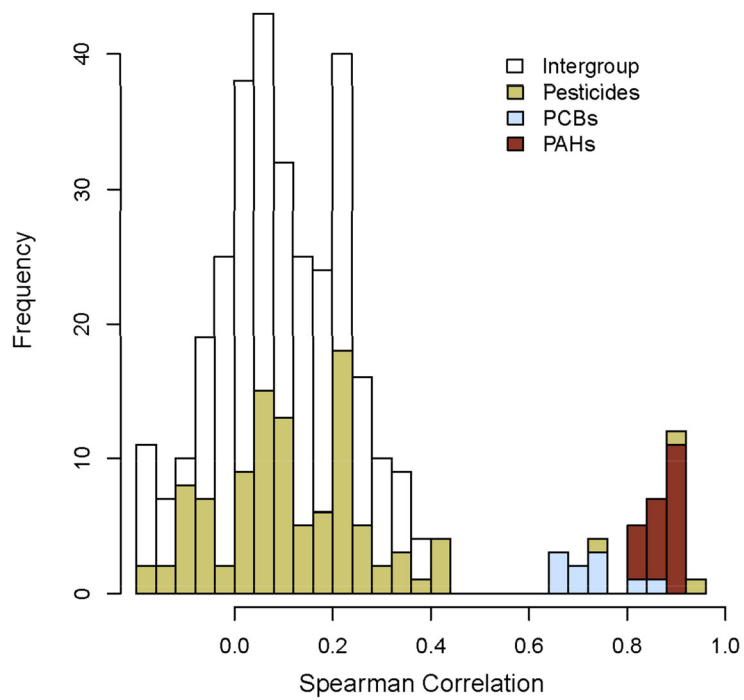
<sup>a</sup>Estimated odds ratios compare the fourth vs. first exposure quartile; quartile cut points were based on the distribution of cases and controls combined. Models were adjusted for gender, race, education, age, and study site.

**Table S2.** Association between individual chemicals in carpet dust and non-Hodgkin lymphoma by study site.

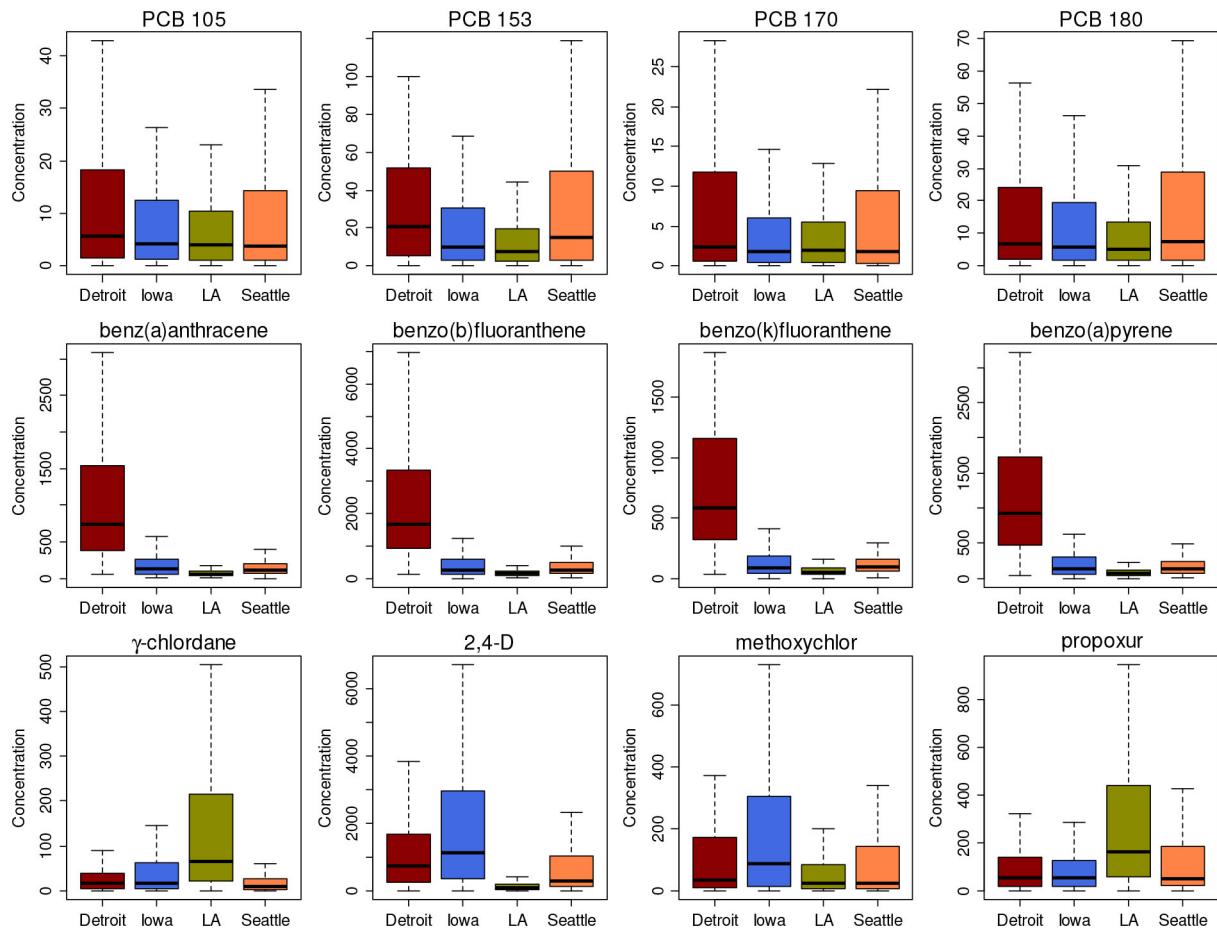
Chemical	Detroit		Iowa		Los Angeles		Seattle	
	OR <sup>a</sup> (95% CI)	<i>p</i>	OR <sup>a</sup> (95% CI)	<i>p</i>	OR <sup>a</sup> (95% CI)	<i>p</i>	OR <sup>a</sup> (95% CI)	<i>p</i>
PCB 105	1.41 (0.61, 3.24)	0.42	1.25 (0.67, 2.32)	0.49	1.20 (0.62, 2.35)	0.59	1.13 (0.62, 2.08)	0.69
PCB 138	1.14 (0.49, 2.68)	0.76	1.24 (0.67, 2.32)	0.49	1.27 (0.65, 2.48)	0.48	1.17 (0.64, 2.16)	0.61
PCB 153	1.27 (0.54, 3.01)	0.59	1.24 (0.66, 2.32)	0.50	1.61 (0.82, 3.16)	0.17	1.25 (0.67, 2.31)	0.48
PCB 170	2.27 (0.95, 5.39)	0.06	1.07 (0.58, 2.00)	0.82	1.27 (0.65, 2.48)	0.49	1.17 (0.63, 2.15)	0.63
PCB 180	2.87 (1.19, 6.91)	0.02	1.23 (0.65, 2.32)	0.52	1.21 (0.62, 2.36)	0.58	1.53 (0.82, 2.85)	0.18
benz(a)anthracene	0.64 (0.26, 1.58)	0.33	0.86 (0.46, 1.59)	0.63	0.88 (0.46, 1.70)	0.71	1.13 (0.61, 2.06)	0.70
benzo(b)fluoranthene	0.73 (0.30, 1.76)	0.48	0.89 (0.48, 1.65)	0.72	1.66 (0.85, 3.25)	0.13	0.93 (0.51, 1.71)	0.81
benzo(k)fluoranthene	0.79 (0.33, 1.91)	0.60	0.94 (0.51, 1.73)	0.83	2.05 (1.04, 4.04)	0.04	1.11 (0.61, 2.03)	0.73
benzo(a)pyrene	0.88 (0.37, 2.13)	0.78	1.05 (0.57, 1.94)	0.88	0.84 (0.43, 1.65)	0.62	1.00 (0.54, 1.83)	0.99
Chrysene	0.71 (0.29, 1.70)	0.44	0.88 (0.48, 1.62)	0.68	1.04 (0.54, 2.00)	0.91	1.22 (0.66, 2.23)	0.53
dibenz(ah)anthracene	0.74 (0.31, 1.79)	0.51	1.17 (0.64, 2.17)	0.61	1.27 (0.65, 2.47)	0.48	1.09 (0.59, 1.98)	0.79
indeno(1,2,3- <i>cd</i> )-pyrene	0.90 (0.37, 2.18)	0.82	1.18 (0.63, 2.18)	0.60	0.93 (0.48, 1.82)	0.84	1.01 (0.55, 1.85)	0.97
α-chlordane	1.21 (0.53, 2.76)	0.65	2.18 (1.15, 4.14)	0.02	1.12 (0.58, 2.18)	0.73	0.92 (0.50, 1.68)	0.78
γ-chlordane	0.84 (0.37, 1.94)	0.69	2.25 (1.20, 4.24)	0.01	1.26 (0.65, 2.45)	0.49	0.89 (0.49, 1.63)	0.71
Carbaryl	1.59 (0.68, 3.74)	0.28	0.72 (0.38, 1.33)	0.29	1.16 (0.60, 2.23)	0.66	1.05 (0.57, 1.93)	0.88
Chlorpyrifos	0.82 (0.35, 1.93)	0.65	1.11 (0.60, 2.03)	0.74	0.69 (0.36, 1.34)	0.28	0.69 (0.38, 1.27)	0.23
<i>cis</i> -permethrin	1.60 (0.69, 3.72)	0.28	0.74 (0.40, 1.36)	0.33	1.10 (0.57, 2.11)	0.79	1.06 (0.58, 1.95)	0.85
<i>trans</i> -permethrin	1.19 (0.51, 2.78)	0.69	0.62 (0.33, 1.15)	0.13	0.86 (0.44, 1.65)	0.64	1.07 (0.58, 1.99)	0.82
2,4-D	1.11 (0.47, 2.66)	0.81	0.36 (0.19, 0.68)	< 0.01	1.05 (0.54, 2.04)	0.89	0.53 (0.29, 0.97)	0.04
DDE	0.82 (0.35, 1.94)	0.65	1.96 (1.05, 3.68)	0.04	1.45 (0.75, 2.82)	0.27	1.53 (0.83, 2.84)	0.17
DDT	0.97 (0.41, 2.28)	0.95	1.06 (0.57, 1.97)	0.86	1.13 (0.58, 2.17)	0.72	1.19 (0.64, 2.24)	0.58
Diazinon	0.84 (0.37, 1.92)	0.67	0.82 (0.44, 1.52)	0.53	0.53 (0.27, 1.04)	0.07	0.81 (0.44, 1.48)	0.49
Dicamba	1.07 (0.45, 2.54)	0.88	0.48 (0.26, 0.90)	0.02	0.93 (0.48, 1.81)	0.83	0.41 (0.22, 0.76)	< 0.01
Methoxychlor	1.92 (0.81, 4.57)	0.14	0.98 (0.53, 1.82)	0.95	0.68 (0.35, 1.33)	0.26	0.62 (0.33, 1.15)	0.13
<i>o</i> -phenylphenol	0.52 (0.22, 1.27)	0.15	1.58 (0.83, 3.00)	0.16	0.52 (0.26, 1.02)	0.06	1.03 (0.56, 1.89)	0.93
Pentachlorophenol	0.66 (0.27, 1.62)	0.36	1.24 (0.67, 2.30)	0.50	0.76 (0.39, 1.48)	0.42	1.45 (0.78, 2.73)	0.24
Propoxur	1.06 (0.45, 2.52)	0.89	2.02 (1.09, 3.78)	0.03	0.60 (0.30, 1.17)	0.13	1.53 (0.82, 2.85)	0.18

Abbreviations: OR, odds ratio; *p*, *p*-value

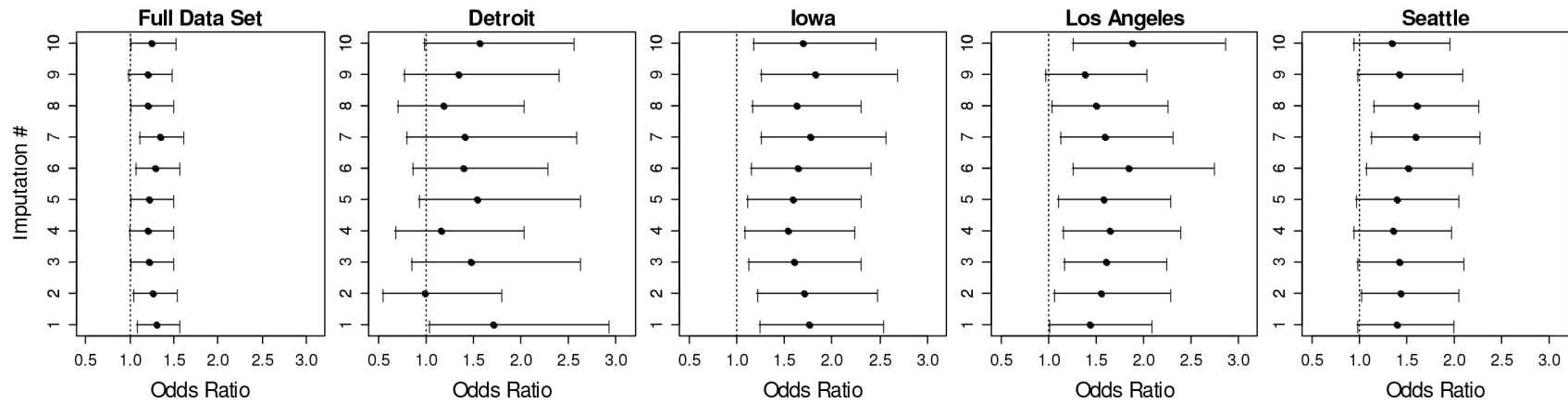
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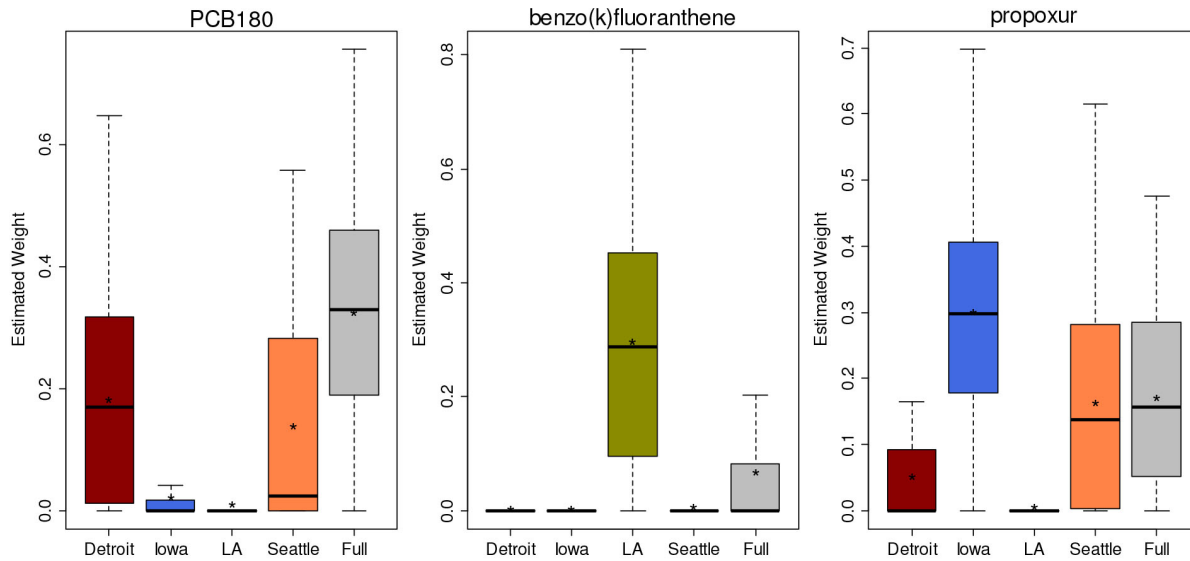
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**Figure S4.** Distribution of estimated weights for selected chemicals from the weighted quantile sum regression model of non-Hodgkin lymphoma in the study population and each study site. Boxes extend from the 25th to the 75th percentile, horizontal bars represent the median, and whiskers extend 1.5 times the length of the interquartile range (IQR) above and below the 75th and 25th percentiles, respectively. The asterisk denotes the mean weight.