

**Coarse and fine, but not ultrafine particles in urban air trigger asthma  
hospitalization in children.**

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**Table E1.** Correlation matrix showing the mutual correlations between pollutants and meteorological conditions during May 2001 to December 2008. DP is dew point, WS is wind speed and GR is global radiation.

<b>Correlation</b>	NO <sub>x</sub>	NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	UFPs	DP	WS	GR
NO <sub>x</sub>	1	0.93	0.37	0.28	0.45	-0.14	-0.47	-0.22
NO <sub>2</sub>		1	0.43	0.33	0.51	-0.13	-0.50	-0.20
PM <sub>10</sub>			1	0.85	0.40	0.11	-0.18	0.01
PM <sub>2.5</sub>				1	0.26	-0.02	-0.16	-0.05
UFPs					1	-0.01	-0.38	0.16
DP						1	-0.13	0.43
WS							1	-0.25
GR								1

**Table E2.** The yearly distribution of air pollution levels and meteorological conditions in urban background in Copenhagen during May 2001 to December 2008

	2001	2002	2003	<u>Mean (SD)</u> 2004	2005	2006	2007	2008
NO <sub>x</sub>	14.85(8.89)	13.58(8.06)	15.66(9.21)	14.88(7.84)	14.9(8.05)	15.87(7.89)	13.05(7.6)	12.98(6.68)
NO <sub>2</sub>	11.33(4.6)	10.63(4.95)	12.27(5.66)	11.51(4.87)	11.72(5.07)	12.83(4.99)	10.01(4.35)	10.34(4.28)
PM <sub>10</sub>	24.85(13.03)	30.06(15.95)	30.5(16.11)	24(9.46)	25.69(12.02)	27.16(12.05)	24.18(10.7)	21.36(8.44)
PM <sub>2.5</sub>			10.14(4.57)	9.71(4.48)	10.73(6.09)	11.7(6.53)	10.06(5.48)	9.54(3.96)
UFP	8743.27(3244.44)	7600.48(3044.97)	9739.51(4763.64)	7358.38(2817.19)	5805.36(2992.58)	5071.17(2052.06)	5703.79(2588.12)	4741.38(2186.88)
Dew point	7.87(5.74)	5.43(6.16)	4.52(6.6)	4.72(5.87)	4.65(6.18)	5.46(6.61)	5.3(5.26)	4.27(4.88)
Wind speed	3.98(1.35)	4.15(1.43)	4.06(1.44)	4.18(1.43)	4.07(1.55)	3.92(1.3)	4.27(1.6)	4.35(1.69)
Global radiation	132.88(103.23)	119.16(98.7)	117.83(95.89)	113.93(92.72)	119.92(94.96)	116.62(101.73)	111.05(93.62)	108.05(100.88)

**Table E3.** The change in the rate of hospitalizations for asthma among children, in the city of Copenhagen, with an interquartile range (IQR) increase in pollutant levels, adjusted for dew point and global radiation.

Air pollutant	n	OR (95 % CI)	p-value
NO <sub>x</sub>	8208	1.07 (1.03-1.11)	<0.01
NO <sub>2</sub>	8208	1.07 (1.02-1.11)	<0.01
PM <sub>10</sub>	8208	1.07 (1.03-1.11)	<0.01
PM <sub>2.5</sub>	6329	1.08 (1.04-1.13)	<0.01
UFPs	7004	1.06 (0.99-1.13)	0.09

**Table E4.** Results from generalized additive models using moving average of 5 days. The change in the rate of hospitalizations for asthma among children, in the city of Copenhagen, with an interquartile range (IQR) increase in pollutant levels, adjusted for dew point, global, day of the week and time trend.

Air pollutant	n	OR (95 % CI)	p-value
NO <sub>x</sub>	7893	1.10 (1.05-1.16)	<0.01
NO <sub>2</sub>	7893	1.10 (1.04-1.16)	<0.01
PM <sub>10</sub>	7720	1.08 (1.03-1.12)	<0.01
PM <sub>2.5</sub>	5949	1.08 (1.03-1.12)	<0.01
UFPs	5938	1.04 (0.98-1.10)	0.25