



APPENDIX AVAILABLE ON THE HEI WEB SITE

Research Report 171

Multicity Study of Air Pollution and Mortality in Latin America

Isabelle Romieu et al.

Appendix I. Time Series Analysis and Meta-Analysis Tables

Note: Appendices Available on the Web may appear in a different order than in the original Investigators' Report, and some remnants of their original names may be apparent. HEI has not changed the content of these documents, only the letter identifier.*

Appendix G was originally Appendix I
Appendix H was originally Appendix II
Appendix I was originally Appendix III
Appendix J was originally Appendix IV

*Edited tables were moved from the Investigators' Report to Appendix G with the investigators' approval.

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**Multi-city study of air pollution and health effects in Latin America
ESCALA**

Appendix I

Final report review

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1 RESULTS

1.1 Time series analysis

1.1.1 Single lag model (SLM)

Table 1. Percent change in daily mortality categories and 95% CIs per 10- $\mu\text{g}/\text{m}^3$ increment in PM_{10} (SLM). All year

Causes	Age group	Lags	Sao Paulo		Brazil Rio de Janeiro		Porto Alegre		Santiago		Chile Concepción		Temuco		Mexico City		Mexico Monterrey		Toluca		
			%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	
All																					
Causes	All Ages	0	0.33	(-0.3, 1.0)	0.35	(-0.6, 1.3)	0.47	(-0.4, 1.3)	0.19	(-0.1, 0.5)	0.02	(-0.8, 0.9)	-0.03	(-0.8, -0.7)	0.30	(-0.2, 0.8)	0.39	(0.2, 1.0)	0.54	(0.3, 1.3)	
		1	0.49	(0.3, 0.7)	0.57	(0.2, 0.9)	0.35	(-0.4, 1.2)	0.30	(0.1, 0.6)	-0.29	(-1.2, 0.6)	0.17	(-0.6, -1.0)	0.52	(0.1, 0.9)	0.52	(0.3, 0.9)	0.62	(0.0, 1.4)	
		2	0.31	(-0.1, 0.6)	0.32	(-0.3, 0.8)	0.24	(-0.4, 1.1)	0.16	(-0.1, 0.3)	-0.10	(-0.9, 0.7)	0.41	(-0.3, -1.1)	0.35	(0.1, 0.6)	0.38	(0.0, 0.6)	0.59	(0.0, 1.3)	
		3	-0.09	(-0.3, 0.2)	-0.23	(-0.7, 0.1)	0.21	(-0.9, 1.2)	0.05	(-0.2, 0.3)	0.23	(-0.6, 1.0)	0.21	(-0.5, -0.9)	0.16	(-0.2, 0.5)	0.06	(-0.2, 0.4)	0.48	(0.2, 1.2)	
CPM	All Ages	0	0.39	(-0.3, 1.1)	0.46	(-0.9, 1.7)	0.83	(-1.5, 3.4)	0.32	(0.0, 0.7)	0.07	(-1.2, 1.3)	0.31	(-0.9, -1.5)	0.30	(-0.3, 0.9)	0.36	(-0.4, 1.1)	0.51	(-0.7, 1.6)	
		1	0.50	(0.2, 0.8)	0.90	(0.4, 1.4)	-0.09	(-1.3, 1.1)	0.42	(0.1, 0.8)	-0.49	(-1.8, 0.8)	0.89	(-0.4, -2.2)	0.48	(0.0, 1.0)	0.52	(0.1, 1.1)	0.64	(-0.2, 1.6)	
		2	0.38	(0.0, 0.7)	0.43	(-0.5, 1.2)	0.08	(-1.4, 2.0)	0.28	(0.1, 0.6)	0.10	(-1.1, 1.3)	1.04	(-0.1, -2.2)	0.30	(0.0, 0.6)	0.43	(0.0, 0.8)	0.54	(-0.2, 1.5)	
		3	-0.01	(-0.3, 0.4)	-0.43	(-1.2, 0.2)	0.95	(-1.2, 3.0)	0.19	(-0.2, 0.6)	0.47	(-0.7, 1.7)	0.63	(-0.5, -1.8)	0.13	(-0.4, 0.6)	0.10	(-0.4, 0.6)	0.38	(-0.9, 1.4)	
	>65 yr	0	0.28	(-0.5, 1.1)	0.75	(-0.7, 2.2)	1.29	(-1.0, 3.9)	0.34	(-0.1, 0.8)	0.65	(-0.8, 2.1)	0.52	(-0.8, -1.8)	0.33	(-0.3, 1.0)	0.50	(-0.5, 1.2)	0.35	(-1.0, 1.5)	
		1	0.49	(0.1, 1.0)	1.28	(0.7, 2.0)	0.30	(-1.0, 1.9)	0.49	(0.1, 1.0)	-0.32	(-1.8, 1.2)	0.79	(-0.6, -2.2)	0.55	(0.0, 1.2)	0.63	(0.0, 1.3)	0.37	(-0.8, 1.7)	
		2	0.41	(0.0, 0.7)	0.67	(-0.4, 1.5)	0.48	(-1.4, 2.9)	0.39	(0.1, 0.8)	-0.21	(-1.6, 1.2)	1.22	(0.0, -2.5)	0.34	(0.0, 0.8)	0.56	(0.0, 1.2)	0.64	(-0.4, 2.0)	
		3	0.04	(-0.4, 0.5)	-0.35	(-1.3, 0.5)	1.37	(-1.2, 3.8)	0.30	(-0.1, 0.6)	0.13	(-1.2, 1.5)	0.71	(-0.5, -1.9)	0.21	(-0.4, 0.7)	0.03	(-0.8, 0.9)	0.77	(-0.4, 2.1)	
	RSP	All Ages	0	0.56	(-0.5, 1.6)	1.26	(0.1, 2.4)	1.32	(-3.0, 6.1)	0.42	(-0.1, 0.9)	2.18	(-0.3, 4.8)	1.20	(-1.0, -3.4)	0.32	(-0.6, 1.2)	0.48	(-1.3, 1.7)	0.24	(-1.1, 2.0)
			1	0.63	(0.1, 1.2)	1.15	(0.0, 2.1)	0.55	(-1.7, 3.3)	0.49	(0.1, 1.1)	1.32	(-1.3, 4.0)	1.09	(-1.2, -3.5)	0.58	(-0.2, 1.5)	0.92	(-0.2, 2.0)	0.00	(-1.0, 1.0)
			2	0.42	(-0.2, 0.9)	0.55	(-0.4, 1.6)	0.38	(-2.3, 3.9)	0.20	(-0.3, 0.7)	0.73	(-1.7, 3.2)	2.40	(0.4, -4.5)	0.37	(-0.1, 1.0)	0.51	(-0.4, 1.5)	-0.02	(-1.0, 1.1)
			3	0.02	(-0.6, 0.6)	0.06	(-2.1, 1.9)	1.77	(-2.3, 5.6)	0.15	(-0.6, 0.8)	0.35	(-2.0, 2.7)	2.82	(0.9, -4.8)	0.21	(-0.5, 0.9)	-0.33	(-2.0, 0.9)	0.09	(-1.7, 1.6)
>65 yr		0	0.60	(-0.7, 2.0)	1.61	(0.1, 2.9)	0.73	(-3.5, 5.5)	0.42	(-0.1, 1.0)	3.45	(0.6, 6.3)	1.43	(-1.1, -4.0)	0.37	(-0.4, 1.1)	-0.02	(-1.8, 1.2)	1.23	(-0.5, 3.5)	
		1	0.80	(0.1, 1.6)	1.50	(0.0, 2.7)	0.42	(-2.0, 3.6)	0.64	(0.1, 1.4)	2.66	(-0.3, 5.7)	1.12	(-1.6, -3.9)	0.64	(-0.2, 1.6)	0.40	(-0.7, 1.5)	0.49	(-1.3, 2.2)	
		2	0.66	(-0.1, 1.2)	0.51	(-0.9, 1.6)	0.09	(-2.5, 3.6)	0.27	(-0.3, 0.7)	0.54	(-2.1, 3.3)	2.78	(0.5, -5.2)	0.28	(-0.4, 0.9)	0.27	(-0.7, 1.3)	0.50	(-1.5, 2.5)	
		3	0.14	(-0.5, 0.9)	-0.36	(-2.9, 1.9)	1.11	(-3.0, 4.9)	0.14	(-0.7, 0.9)	0.29	(-2.3, 2.9)	2.84	(0.6, -5.1)	0.22	(-0.8, 1.1)	-0.62	(-2.5, 0.8)	1.04	(-1.5, 2.8)	

(continue)

Causes	Age group	Lags	Brazil						Chile				Mexico								
			Sao Paulo		Rio de Janeiro		Porto Alegre		Santiago		Concepción		Temuco		Mexico City		Monterrey		Toluca		
			%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	
CVD	All Ages	0	0.27	(-0.4, 0.9)	0.12	(-1.5, 1.7)	0.72	(-1.4, 3.0)	0.15	(-0.2, 0.7)	-0.42	(-1.9, 1.1)	-0.17	(-1.5, -1.2)	0.19	(-0.3, 0.7)	0.24	(-0.9, 1.1)	0.50	(-1.2, 2.0)	
		1	0.42	(0.1, 0.9)	0.82	(0.2, 1.5)	-0.17	(-1.5, 1.2)	0.36	(0.0, 0.8)	-0.84	(-2.4, 0.7)	0.57	(-0.9, -2.0)	0.36	(0.0, 0.8)	0.46	(0.0, 1.0)	0.88	(-0.2, 2.2)	
		2	0.40	(0.0, 0.7)	0.36	(-0.8, 1.3)	0.25	(-1.4, 2.4)	0.29	(0.0, 0.6)	0.01	(-1.4, 1.4)	0.48	(-0.8, -1.8)	0.20	(-0.2, 0.5)	0.42	(-0.2, 1.1)	0.74	(-0.1, 1.8)	
	>65 yr	0	0.10	(-0.3, 0.6)	-0.61	(-1.4, 0.3)	0.94	(-1.1, 2.8)	0.02	(-0.2, 0.5)	0.58	(-0.8, 2.0)	-0.15	(-1.4, -1.1)	0.01	(-0.5, 0.5)	0.02	(-0.8, 0.8)	0.41	(-1.0, 1.6)	
		1	0.22	(-0.6, 1.0)	0.28	(-1.5, 2.0)	1.52	(-0.9, 4.2)	0.25	(-0.4, 0.9)	-0.24	(-1.8, 1.4)	0.21	(-1.4, -1.9)	0.18	(-0.5, 0.8)	0.42	(-0.7, 1.2)	0.35	(-1.7, 2.1)	
		2	0.46	(0.0, 1.0)	1.09	(0.4, 2.0)	0.32	(-1.2, 2.2)	0.45	(0.0, 1.1)	-1.22	(-2.9, 0.5)	0.87	(-0.8, -2.6)	0.39	(-0.1, 1.0)	0.45	(-0.2, 1.2)	0.67	(-0.8, 2.3)	
	CVE	All Ages	0	0.45	(-0.5, 1.4)	0.34	(-1.8, 2.3)	1.15	(-2.1, 4.8)	0.54	(-0.2, 1.2)	-0.84	(-3.2, 1.6)	0.06	(-2.1, -2.3)	0.07	(-1.2, 1.3)	1.29	(-0.6, 2.5)	0.18	(-2.3, 2.1)
			1	0.60	(0.0, 1.3)	1.02	(-0.1, 2.1)	0.10	(-2.2, 2.9)	0.59	(0.1, 1.3)	-0.96	(-3.4, 1.6)	1.60	(-0.6, -3.9)	0.68	(-0.2, 1.6)	1.52	(0.4, 2.9)	-0.08	(-2.2, 2.0)
			2	0.39	(-0.4, 0.9)	0.29	(-1.4, 1.7)	0.81	(-2.1, 4.6)	0.45	(0.0, 1.1)	0.16	(-2.1, 2.5)	1.13	(-0.9, -3.2)	0.59	(-0.2, 1.2)	1.01	(0.1, 2.1)	0.49	(-1.4, 2.4)
>65 yr		0	0.05	(-0.7, 0.7)	-0.80	(-2.2, 0.3)	1.96	(-1.2, 4.9)	0.23	(-0.6, 1.0)	2.10	(-0.2, 4.4)	-0.30	(-2.3, -1.8)	0.20	(-0.6, 1.1)	-0.13	(-2.7, 1.6)	1.51	(-0.3, 4.5)	
		1	0.45	(-0.6, 1.4)	0.82	(-1.7, 3.2)	1.72	(-1.6, 5.5)	0.30	(-0.4, 0.9)	0.35	(-2.2, 3.0)	1.32	(-1.0, -3.7)	0.02	(-1.6, 1.6)	1.46	(-0.3, 3.3)	0.10	(-2.6, 2.6)	
		2	0.56	(-0.3, 1.4)	1.43	(0.1, 2.8)	0.54	(-2.3, 4.0)	0.31	(-0.3, 1.1)	-1.92	(-4.5, 0.8)	2.37	(0.0, -4.8)	0.70	(-0.4, 1.9)	1.38	(-0.1, 3.0)	-0.38	(-3.1, 2.3)	
COPD		All Ages	0	0.25	(-0.7, 1.0)	0.70	(-1.1, 2.1)	1.20	(-2.2, 5.6)	0.28	(-0.2, 1.0)	-0.46	(-2.9, 2.1)	2.04	(-0.1, -4.3)	0.71	(-0.1, 1.5)	0.91	(-0.2, 2.1)	0.44	(-1.9, 2.9)
			1	-0.07	(-1.0, 0.7)	-0.58	(-2.4, 0.9)	2.53	(-1.3, 6.0)	0.22	(-0.6, 0.9)	1.75	(-0.7, 4.2)	-0.03	(-2.3, -2.2)	0.30	(-0.7, 1.5)	0.02	(-2.6, 1.8)	2.15	(-0.3, 6.0)
			3	0.63	(-0.7, 2.0)	1.38	(-1.0, 3.5)	1.96	(0.7, 11.9)	0.33	(-0.7, 1.3)	1.99	(-2.8, 7.0)	1.23	(-2.7, -5.3)	0.21	(-0.8, 1.2)	0.09	(-3.1, 2.6)	0.47	(-1.8, 3.6)
	>65 yr	0	0.75	(-0.1, 1.9)	0.77	(-1.5, 2.8)	3.37	(-5.5, 18.2)	0.45	(-0.4, 1.5)	4.34	(-0.7, 9.7)	5.03	(0.9, -9.3)	0.18	(-0.6, 1.1)	1.07	(-1.2, 3.3)	-0.12	(-1.9, 1.7)	
		1	0.43	(-0.5, 1.3)	0.47	(-1.4, 2.2)	0.78	(-9.1, 13.9)	0.28	(-0.6, 1.1)	3.92	(-0.7, 8.7)	4.56	(1.1, -8.1)	0.24	(-0.5, 1.2)	0.78	(-0.8, 2.2)	-0.26	(-1.9, 1.7)	
		2	0.08	(-1.2, 1.2)	-0.03	(-2.9, 2.3)	-2.42	(-15.1, 6.4)	0.18	(-0.9, 1.1)	-0.30	(-4.7, 4.3)	6.38	(3.2, -9.7)	0.21	(-0.7, 1.1)	0.30	(-2.1, 2.1)	-0.12	(-3.2, 2.3)	
	>65 yr	0	0.78	(-0.7, 2.3)	2.21	(-0.2, 4.7)	1.43	(-3.4, 7.0)	0.28	(-0.8, 1.3)	2.78	(-2.3, 8.1)	1.38	(-2.7, -5.6)	0.09	(-0.9, 1.1)	-0.45	(-2.9, 1.2)	0.33	(-2.0, 3.4)	
		1	0.79	(-0.4, 2.0)	1.48	(-1.1, 3.7)	0.53	(-3.0, 4.2)	0.44	(-0.4, 1.7)	5.76	(0.4, 11.4)	2.93	(-1.4, -7.5)	0.06	(-0.8, 1.1)	0.08	(-1.4, 1.6)	-0.03	(-2.1, 2.0)	
		2	0.52	(-0.5, 1.5)	0.47	(-1.7, 2.5)	0.69	(-2.6, 5.3)	0.41	(-0.4, 1.5)	4.30	(-0.5, 9.4)	2.70	(-1.0, -6.6)	0.10	(-0.7, 1.1)	-0.31	(-1.9, 1.4)	-0.19	(-2.0, 1.7)	
	3	0.18	(-1.2, 1.4)	-0.43	(-4.4, 2.9)	1.35	(-3.6, 6.0)	0.42	(-0.7, 1.4)	0.20	(-4.4, 5.0)	5.62	(2.2, -9.1)	0.22	(-0.8, 1.2)	-0.62	(-2.9, 1.6)	-0.39	(-3.6, 2.3)		

CPM= Cardiopulmonary causes; RSP= Respiratory causes; CVD= Cardiovascular causes; CVE= Cerebrovascular/stroke causes; LRI= Lower Respiratory Infections; COPD= Chronic Obstructive Pulmonary Diseases.

Table 2. Percent change in daily mortality categories and 95% CIs per 10- $\mu\text{g}/\text{m}^3$ increment in O_3 (SLM). All year

Cause	AgeGroup	Lags	Brazil		Chile		MexicoCity		Mexico		Toluca			
			SaoPaulo	RiodeJaneiro	Santiago			Monterrey						
			(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)		
AllCauses	All Ages	0	0.23	(0.1, 0.4)	-0.05	(-0.2, 0.1)	0.73	(0.5, 0.9)	0.14	(0.1, 0.2)	0.10	(-0.1, 0.3)	0.22	(-0.2, 0.7)
		1	0.17	(0.0, 0.3)	0.08	(-0.1, 0.2)	0.08	(-0.2, 0.4)	0.17	(0.1, 0.2)	0.14	(-0.1, 0.4)	-0.58	(-1.0, -0.1)
		2	-0.08	(-0.2, 0.1)	0.18	(0.1, 0.4)	-0.03	(-0.2, 0.2)	0.09	(0.0, 0.2)	0.20	(0.0, 0.4)	-0.34	(-0.8, 0.1)
		3	-0.09	(-0.2, 0.0)	0.01	(0.2, 0.5)	-0.14	(-0.3, 0.1)	0.00	(-0.1, 0.1)	0.68	(0.4, 0.9)	-0.40	(-0.8, 0.0)
CPM	All Ages	0	0.22	(0.0, 0.4)	0.01	(-0.2, 0.2)	1.02	(0.7, 1.3)	0.14	(0.0, 0.3)	0.10	(-0.2, 0.4)	0.27	(-0.4, 1.0)
		1	0.10	(-0.1, 0.3)	0.01	(-0.2, 0.3)	0.19	(-0.3, 0.6)	0.17	(0.1, 0.3)	0.13	(-0.2, 0.5)	-0.58	(-1.3, 0.2)
		2	-0.08	(-0.3, 0.1)	0.24	(0.0, 0.5)	-0.06	(-0.4, 0.3)	0.09	(0.0, 0.2)	0.16	(-0.2, 0.5)	-0.39	(-1.1, 0.3)
		3	0.02	(-0.2, 0.2)	0.11	(-0.1, 0.3)	0.00	(-0.3, 0.3)	-0.01	(-0.1, 0.1)	0.64	(0.3, 1.0)	-0.47	(-1.1, 0.2)
	>65 yr	0	0.19	(-0.1, 0.4)	-0.01	(-0.3, 0.3)	1.12	(0.8, 1.5)	0.15	(0.0, 0.3)	0.06	(-0.3, 0.5)	0.37	(-0.5, 1.2)
		1	0.14	(-0.1, 0.4)	0.03	(-0.3, 0.3)	0.47	(0.0, 1.0)	0.26	(0.1, 0.4)	0.06	(-0.3, 0.5)	-0.82	(-1.7, 0.1)
		2	-0.02	(-0.3, 0.2)	0.25	(0.0, 0.5)	0.00	(-0.4, 0.4)	0.13	(0.0, 0.3)	0.21	(-0.2, 0.6)	0.01	(-0.8, 0.9)
RSP	All Ages	3	0.05	(-0.2, 0.3)	0.23	(0.0, 0.5)	0.15	(-0.2, 0.5)	0.02	(-0.1, 0.1)	0.85	(0.4, 1.3)	-0.07	(-0.9, 0.8)
		0	0.27	(-0.2, 0.7)	-0.34	(-0.8, 0.2)	0.75	(0.2, 1.3)	0.22	(0.0, 0.4)	0.07	(-0.7, 0.8)	0.03	(-1.0, 1.1)
		1	0.26	(-0.2, 0.7)	-0.25	(-0.7, 0.2)	0.14	(-0.7, 1.0)	0.22	(0.0, 0.4)	-0.24	(-1.0, 0.5)	-0.64	(-1.8, 0.5)
		2	-0.15	(-0.6, 0.3)	0.30	(-0.1, 0.7)	-0.80	(-1.4, -0.2)	0.01	(-0.2, 0.2)	-0.15	(-0.9, 0.6)	-0.29	(-1.4, 0.8)
	>65 yr	3	0.05	(-0.3, 0.4)	0.44	(0.1, 0.8)	-0.21	(-0.8, 0.4)	-0.07	(-0.3, 0.1)	0.37	(-0.4, 1.1)	-0.55	(-1.6, 0.5)
		0	0.34	(-0.2, 0.9)	-0.31	(-0.9, 0.3)	0.73	(0.1, 1.4)	0.11	(-0.1, 0.4)	-0.05	(-0.9, 0.8)	-0.13	(-1.6, 1.3)
		1	0.31	(-0.2, 0.8)	-0.21	(-0.8, 0.3)	0.03	(-0.8, 0.9)	0.20	(-0.1, 0.5)	-0.61	(-1.4, 0.2)	-1.61	(-3.1, -0.1)
		2	0.06	(-0.4, 0.6)	0.08	(-0.4, 0.6)	-1.01	(-1.7, -0.3)	0.02	(-0.2, 0.3)	-0.52	(-1.4, 0.3)	-0.17	(-1.6, 1.3)
		3	-0.01	(-0.5, 0.4)	0.35	(-0.1, 0.8)	-0.38	(-1.0, 0.2)	-0.10	(-0.3, 0.2)	0.40	(-0.5, 1.3)	-0.21	(-1.6, 1.2)

(continue)

Cause	AgeGroup	Lags	Brazil		Chile		MexicoCity		Mexico		Toluca	
			SaoPaulo	RiodeJaneiro	Santiago			Monterrey				
			(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)			
CVD	All Ages	0	0.20 (0.0, 0.4)	0.13 (-0.2, 0.4)	1.10 (0.7, 1.5)	0.08 (0.0, 0.2)	0.09 (-0.3, 0.5)	0.45 (-0.4, 1.3)				
		1	0.12 (-0.1, 0.4)	0.10 (-0.2, 0.4)	0.20 (-0.3, 0.7)	0.11 (0.0, 0.2)	0.24 (-0.2, 0.6)	-0.25 (-1.2, 0.7)				
		2	-0.01 (-0.3, 0.3)	0.19 (-0.1, 0.5)	0.22 (-0.2, 0.6)	0.08 (-0.1, 0.2)	0.23 (-0.2, 0.6)	-0.22 (-1.1, 0.7)				
		3	0.05 (-0.2, 0.3)	-0.03 (-0.3, 0.3)	0.06 (-0.3, 0.4)	-0.02 (-0.1, 0.1)	0.68 (0.3, 1.1)	-0.21 (-1.1, 0.6)				
	>65 yr	0	0.16 (-0.1, 0.5)	0.07 (-0.3, 0.4)	1.09 (0.7, 1.5)	0.10 (0.0, 0.2)	0.06 (-0.4, 0.5)	0.35 (-0.7, 1.4)				
		1	0.14 (-0.2, 0.5)	0.04 (-0.3, 0.4)	0.58 (0.0, 1.1)	0.22 (0.1, 0.4)	0.23 (-0.2, 0.7)	-0.38 (-1.5, 0.7)				
		2	0.04 (-0.3, 0.3)	0.19 (-0.1, 0.5)	0.29 (-0.1, 0.7)	0.10 (-0.1, 0.3)	0.37 (-0.1, 0.8)	0.12 (-0.9, 1.2)				
		3	0.10 (-0.2, 0.4)	0.07 (-0.3, 0.4)	0.16 (-0.2, 0.6)	0.00 (-0.2, 0.1)	0.89 (0.4, 1.4)	0.00 (-1.0, 1.0)				
	CVE	All Ages	0	0.09 (-0.4, 0.6)	-0.20 (-0.7, 0.3)	0.65 (0.1, 1.2)	0.14 (-0.1, 0.4)	-0.29 (-1.1, 0.5)	0.19 (-1.4, 1.8)			
			1	-0.18 (-0.7, 0.3)	-0.31 (-0.9, 0.2)	-0.88 (-1.7, -0.1)	0.14 (-0.1, 0.4)	0.07 (-0.7, 0.8)	-0.25 (-1.9, 1.5)			
			2	-0.04 (-0.5, 0.4)	0.16 (-0.3, 0.7)	-0.49 (-1.1, 0.1)	0.20 (-0.1, -0.5)	0.15 (-0.6, 0.9)	0.19 (-1.4, 1.8)			
			3	0.06 (-0.4, 0.5)	-0.19 (-0.7, 0.3)	-0.53 (-1.1, 0.0)	0.06 (-0.2, 0.3)	1.08 (0.3, 1.9)	0.52 (-1.0, 2.1)			
>65 yr		0	0.23 (-0.3, 0.8)	-0.75 (-1.5, 0.0)	1.26 (0.5, 2.0)	0.16 (-0.1, 0.5)	-0.41 (-1.3, 0.5)	-0.04 (-1.9, 1.9)				
		1	-0.27 (-0.9, 0.4)	-0.89 (-1.7, -0.1)	-0.16 (-1.1, 0.8)	0.30 (0.0, 0.6)	0.06 (-0.8, 1.0)	-0.25 (-2.2, 1.8)				
		2	-0.10 (-0.7, 0.5)	0.25 (-0.3, 0.8)	0.34 (-0.4, 1.1)	0.32 (0.0, 0.6)	0.37 (-0.5, 1.3)	0.26 (-1.6, 2.2)				
		3	-0.01 (-0.5, 0.5)	-0.02 (-0.6, 0.6)	0.14 (-0.5, 0.8)	0.05 (-0.3, 0.3)	1.27 (0.4, 2.2)	0.53 (-1.3, 2.4)				
COPD		All Ages	0	0.32 (-0.4, 1.1)	0.36 (-0.5, 1.2)	0.66 (-0.4, 1.8)	0.03 (-0.3, 0.3)	0.46 (-0.6, 1.5)	0.76 (-1.1, 2.7)			
			1	0.62 (-0.1, 1.3)	0.07 (-0.8, 1.0)	0.06 (-1.4, 1.5)	0.03 (-0.3, 0.4)	0.15 (-0.9, 1.2)	-0.72 (-2.7, 1.2)			
			2	-0.04 (-0.7, 0.7)	-0.66 (-1.7, 0.4)	-0.67 (-1.8, 0.5)	-0.06 (-0.4, 0.3)	-0.04 (-1.1, 1.0)	-0.60 (-2.4, 1.3)			
			3	0.50 (-0.2, 1.2)	0.38 (-0.4, 1.2)	0.20 (-0.8, 1.2)	-0.09 (-0.4, 0.2)	0.53 (-0.5, 1.6)	-0.45 (-2.2, 1.3)			
	>65 yr	0	0.48 (-0.3, 1.3)	0.37 (-0.5, 1.3)	0.86 (-0.3, 2.0)	-0.02 (-0.4, 0.3)	0.33 (-0.8, 1.5)	1.01 (-1.0, 3.1)				
		1	0.42 (-0.5, 1.3)	0.18 (-0.8, 1.1)	0.41 (-1.2, 2.0)	0.00 (-0.4, 0.3)	-0.60 (-1.7, 0.6)	-1.15 (-3.2, 1.0)				
		2	-0.07 (-0.9, 0.7)	-0.75 (-2.0, 0.5)	-0.48 (-1.7, 0.8)	0.03 (-0.3, 0.4)	-0.89 (-2.0, 0.3)	-0.78 (-2.8, 1.2)				
		3	0.63 (-0.1, 1.4)	0.18 (-0.7, 1.1)	0.48 (-0.6, 1.6)	0.02 (-0.3, 0.4)	-0.06 (-1.2, 1.1)	-0.07 (-2.0, 1.9)				

CPM= Cardiopulmonary causes; RESP= Respiratory causes; CVD= Cardiovascular causes; CVE= Cerebrovascular/stroke causes; LRI= Lower Respiratory Infections; COPD= Chronic

Obstructive Pulmonary Diseases.

Table 3. Percent change in daily mortality categories and 95% CIs per 10- $\mu\text{g}/\text{m}^3$ increment in O_3 (SLM).COLD season.

Cause	AgeGroup	Lags	Brazil		Chile		Mexico		Toluca					
			SaoPaulo	RiodeJaneiro	Santiago	MexicoCity	Monterrey							
			(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)						
AllCauses	All ages	0	-0.31	(-0.6, 0.0)	-0.14	(-0.9, 0.6)	0.55	(0.2, 0.9)	0.12	(0.0, 0.2)	0.04	(-0.2, 0.3)	0.68	(0.1, 1.2)
		1	-0.36	(-0.6, -0.1)	0.42	(-0.3, 1.2)	0.36	(-0.1, 0.8)	0.23	(0.1, 0.3)	-0.11	(-0.4, 0.2)	-0.50	(-1.1, 0.1)
		2	-0.27	(-0.5, 0.0)	-0.27	(-1.0, 0.5)	-0.03	(-0.3, 0.3)	0.09	(0.0, 0.2)	-0.07	(-0.3, 0.2)	-0.16	(-0.7, 0.4)
		3	-0.11	(-0.4, 0.2)	-0.08	(-0.8, 0.6)	-0.19	(-0.5, 0.1)	-0.06	(-0.1, 0.0)	0.60	(0.3, 0.9)	-0.33	(-0.8, 0.2)
CPM	All Ages	0	-0.08	(-0.5, 0.3)	-0.49	(-1.6, 0.6)	0.81	(0.4, 1.2)	0.11	(0.0, 0.2)	0.04	(-0.2, 0.2)	0.53	(-0.3, 1.4)
		1	-0.17	(-0.6, 0.2)	0.15	(-1.0, 1.3)	0.53	(-0.1, 1.2)	0.21	(0.1, 0.4)	0.11	(-0.1, 0.3)	-0.66	(-1.6, 0.3)
		2	-0.17	(-0.6, 0.2)	0.03	(-1.1, 1.1)	-0.09	(-0.6, 0.4)	0.07	(-0.1, 0.2)	0.17	(0.0, 0.4)	-0.47	(-1.3, 0.4)
		3	-0.02	(-0.4, 0.4)	-0.56	(-1.7, 0.5)	-0.13	(-0.6, 0.3)	-0.07	(-0.2, 0.1)	0.13	(-0.1, 0.3)	-0.44	(-1.3, 0.4)
	>65 yr	0	-0.15	(-0.6, 0.3)	-1.12	(-2.4, 0.2)	0.87	(0.4, 1.4)	0.05	(-0.1, 0.2)	-0.03	(-0.5, 0.5)	0.42	(-0.7, 1.5)
		1	-0.16	(-0.7, 0.3)	-0.55	(-1.9, 0.8)	0.75	(0.0, 1.5)	0.25	(0.1, 0.4)	-0.15	(-0.6, 0.3)	-1.05	(-2.2, 0.1)
		2	-0.43	(-0.9, 0.1)	0.08	(-1.2, 1.4)	-0.12	(-0.6, 0.4)	0.09	(-0.1, 0.3)	0.00	(-0.5, 0.5)	-0.35	(-1.4, 0.7)
		3	-0.24	(-0.7, 0.2)	0.11	(-1.2, 1.4)	0.03	(-0.4, 0.5)	-0.05	(-0.2, 0.1)	0.67	(0.2, 1.2)	-0.01	(-1.0, 1.0)
RSP	All Ages	0	0.16	(-0.6, 1.0)	-1.28	(-3.4, 0.9)	0.49	(-0.3, 1.3)	0.18	(0.0, 0.4)	0.14	(-0.7, 1.0)	0.53	(-0.8, 1.9)
		1	-0.21	(-1.0, 0.6)	-0.68	(-2.8, 1.5)	0.50	(-0.6, 1.6)	0.09	(0.1, 0.5)	-0.43	(-1.3, 0.5)	-0.88	(-2.3, 0.6)
		2	-0.65	(-1.4, 0.1)	0.19	(-1.9, 2.4)	-0.78	(-1.6, 0.0)	0.01	(-0.3, 0.1)	-0.44	(-1.3, 0.5)	0.20	(-1.1, 1.5)
		3	0.01	(-0.8, 0.8)	-0.66	(-2.8, 1.5)	-0.39	(-1.1, 0.4)	0.31	(-0.5, -0.1)	0.11	(-0.8, 1.0)	-0.64	(-1.9, 0.6)
	>65 yr	0	-0.21	(-1.2, 0.8)	-1.67	(-4.1, 0.9)	0.53	(-0.3, 1.4)	0.02	(-0.3, 0.3)	0.20	(-0.8, 1.2)	0.86	(-1.1, 2.8)
		1	-0.36	(-1.3, 0.6)	-0.94	(-3.4, 1.6)	0.65	(-0.6, 1.9)	0.22	(-0.1, 0.5)	-0.66	(-1.7, 0.4)	-1.23	(-3.2, 0.8)
		2	-0.92	(-1.9, 0.1)	-0.29	(-2.8, 2.2)	-0.87	(-1.7, 0.0)	0.05	(-0.3, 0.4)	-0.58	(-1.6, 0.4)	0.64	(-1.3, 2.6)
		3	-0.32	(-1.3, 0.7)	-0.49	(-2.9, 2.0)	-0.49	(-1.3, 0.3)	-0.28	(-0.6, 0.0)	0.21	(-0.8, 1.3)	0.37	(-1.4, 2.2)

(continue)

Cause	AgeGroup	Lags	Chile		Chile		Mexico		Mexico		Toluca			
			SaoPaulo	RiodeJaneiro	Santiago	MexicoCity	Monterrey							
			(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)				
CVD	All Ages	0	-0.21	(-0.7, 0.2)	-0.30	(-1.6, 1.0)	0.84	(0.3, 1.3)	0.07	(-0.1, 0.2)	-0.05	(-0.5, 0.4)	0.52	(-0.6, 1.7)
		1	-0.23	(-0.7, 0.2)	0.48	(-0.8, 1.8)	0.55	(-0.2, 1.3)	0.16	(0.0, 0.3)	-0.05	(-0.5, -0.4)	-0.50	(-1.7, 0.7)
		2	-0.15	(-0.6, 0.3)	-0.04	(-1.3, 1.3)	0.13	(-0.4, 0.7)	0.12	(0.0, 0.3)	-0.02	(-0.5, 0.5)	-0.90	(-2.0, 0.2)
		3	-0.13	(-0.6, 0.3)	-0.61	(-1.9, 0.7)	-0.11	(-0.6, 0.4)	0.01	(-0.1, 0.2)	0.66	(0.1, 1.2)	-0.27	(-1.3, 0.8)
	>65 yr	0	0.01	(-0.6, 0.6)	-0.95	(-2.5, 0.6)	0.77	(0.2, 1.3)	0.13	(0.0, 0.3)	-0.14	(-0.7, 0.4)	0.79	(-0.5, 2.1)
		1	0.06	(-0.5, 0.6)	-0.27	(-1.8, 1.3)	0.46	(-0.4, 1.3)	0.33	(0.2, 0.5)	0.01	(-0.6, 0.6)	-0.08	(-1.4, 1.3)
		2	-0.14	(-0.7, 0.4)	0.35	(-1.2, 1.9)	0.01	(-0.6, 0.6)	0.19	(0.0, 0.4)	0.21	(-0.4, 0.8)	-0.32	(-1.7, 1.1)
		3	-0.17	(-0.7, 0.4)	0.43	(-1.1, 2.0)	0.03	(-0.5, 0.6)	0.12	(-0.1, 0.3)	0.98	(0.4, 1.6)	0.24	(-1.1, 1.6)
CVE	All Ages	0	-0.91	(-1.8, 0.0)	-0.16	(-2.5, 2.2)	0.63	(-0.2, 1.5)	0.09	(-0.2, 0.4)	0.12	(-0.9, 1.1)	2.38	(0.3, 4.6)
		1	-0.24	(-1.1, 0.7)	1.54	(-0.8, 3.9)	-0.49	(-1.7, 0.7)	0.16	(-0.2, 0.5)	0.21	(-0.8, 1.2)	1.30	(-0.9, 3.5)
		2	-0.10	(-1.0, 0.8)	0.27	(-2.0, 2.6)	0.15	(-0.8, 1.1)	0.23	(-0.1, 0.6)	0.16	(-0.8, 1.2)	1.91	(-0.3, 4.2)
		3	-0.18	(-1.1, 0.7)	-2.09	(-4.3, 0.2)	-0.14	(-1.0, 0.7)	-0.02	(-0.3, 0.3)	1.98	(1.0, 3.0)	1.97	(-0.2, 4.2)
	>65 yr	0	-0.75	(-1.8, 0.4)	-1.17	(-3.9, 1.7)	0.24	(-0.7, 1.2)	0.27	(-0.1, 0.6)	-0.01	(-1.1, 1.1)	1.91	(-0.6, 4.5)
		1	-0.03	(-1.1, 1.1)	0.91	(-1.8, 3.7)	-1.16	(-2.6, 0.3)	0.49	(0.1, 0.9)	0.21	(-0.9, 1.3)	1.12	(-1.5, 3.8)
		2	-0.10	(-1.2, 1.0)	0.90	(-1.8, 3.7)	0.27	(-0.8, 1.3)	0.57	(0.2, 0.9)	0.25	(-0.9, 1.4)	1.86	(-0.8, 4.6)
		3	-0.54	(-1.6, 0.6)	-1.54	(-4.2, 1.2)	0.04	(-0.9, 1.0)	0.23	(-0.1, 0.6)	1.58	(0.4, 2.8)	2.01	(-0.6, 4.7)
COPD	All Ages	0	0.37	(-1.0, 1.7)	-0.97	(-5.1, 3.3)	0.69	(-0.7, 2.1)	0.12	(-0.2, 0.5)	0.69	(-0.6, 2.0)	2.21	(-0.1, 4.6)
		1	-0.87	(-2.2, 0.5)	1.10	(-2.9, 5.3)	0.87	(-1.1, 2.9)	0.16	(-0.2, 0.5)	-0.10	(-1.4, 1.2)	-0.37	(-2.7, 2.0)
		2	-0.36	(-1.7, 1.0)	3.67	(-0.4, 7.9)	-0.04	(-1.5, 1.5)	0.12	(-0.2, 0.5)	-0.61	(-1.9, 0.7)	0.87	(-1.5, 3.3)
		3	0.33	(-1.0, 1.7)	-2.34	(-6.3, 1.8)	0.25	(-1.1, 1.6)	-0.11	(-0.5, 0.3)	0.24	(-1.1, 1.6)	0.45	(-1.9, 2.9)
	>65 yr	0	0.62	(-0.9, 2.1)	-1.14	(-5.7, 3.6)	1.07	(-0.5, 2.6)	0.04	(-0.3, 0.4)	0.85	(-0.5, 2.2)	1.55	(-1.0, 4.1)
		1	-1.17	(-2.7, 0.3)	2.10	(-2.4, 6.8)	1.26	(-0.9, 3.5)	0.16	(-0.2, 0.5)	-0.40	(-1.8, 1.0)	-1.54	(-4.2, 1.2)
		2	-0.53	(-2.0, 1.0)	2.69	(-1.8, 7.4)	0.03	(-1.6, 1.7)	0.21	(-0.2, 0.6)	-1.05	(-2.4, 0.3)	-0.89	(-3.3, 1.6)
		3	-0.03	(-1.5, 1.5)	-3.56	(-8.0, 1.1)	0.46	(-1.0, 2.0)	0.01	(-0.4, 0.4)	-0.14	(-1.6, 1.3)	-0.54	(-2.9, 1.9)

CPM = Cardiopulmonary causes; RSP = Respiratory causes; CVD = Cardiovascular causes; CVE = Cerebrovascular/stroke causes; LRI = Lower Respiratory Infections; COPD = Chronic Obstructive Pulmonary Diseases.

Table 4. Percent change in daily mortality categories and 95% CIs per 10- $\mu\text{g}/\text{m}^3$ increment in O_3 (SLM). WARM season.

Cause	AgeGroup	Lags	Brazil			Chile			Mexico							
			SaoPaulo	RiodeJaneiro	PortoAlegre	Santiago	MexicoCity	Monterrey	Toluca							
			(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)						
AllCauses	All Ages	0	0.06	(-0.2, 0.3)	0.17	(0.0, 0.3)	-2.31	(-9.7, 5.6)	0.85	(0.6, 1.2)	0.18	(0.0, 0.3)	-0.02	(-0.4, 0.4)	0.09	(-0.7, 0.8)
		1	0.00	(-0.2, 0.2)	-0.01	(-0.2, 0.2)	1.50	(-6.1, 9.8)	-0.18	(-0.6, 0.3)	0.07	(-0.1, 0.2)	0.54	(0.1, 0.9)	0.08	(-0.7, 0.9)
		2	-0.10	(-0.3, 0.1)	-0.03	(-0.2, 0.1)	0.37	(-6.7, 8.0)	-0.02	(-0.4, 0.3)	-0.04	(-0.2, 0.1)	0.61	(0.2, 1.0)	0.08	(-0.7, 0.9)
		3	-0.10	(-0.3, 0.1)	-0.08	(-0.2, 0.1)	-1.05	(-8.0, 6.4)	-0.08	(-0.4, 0.2)	-0.04	(-0.2, 0.1)	0.80	(0.4, 1.2)	-0.04	(-0.8, 0.7)
CPM	All Ages	0	0.14	(-0.2, 0.5)	0.23	(0.0, 0.5)	-1.80	(-14.1, 12.3)	1.33	(0.8, 1.8)	0.20	(0.0, 0.4)	0.00	(-0.6, 0.6)	0.31	(-0.9, 1.5)
		1	0.03	(-0.3, 0.4)	-0.10	(-0.4, 0.1)	8.11	(-5.7, 23.9)	0.02	(-0.7, 0.7)	0.14	(-0.1, 0.3)	0.50	(-0.1, 1.1)	0.37	(-0.9, 1.6)
		2	0.07	(-0.3, 0.4)	-0.21	(-0.5, 0.1)	-3.74	(-15.3, 9.5)	-0.02	(-0.5, 0.5)	0.03	(-0.2, 0.2)	0.58	(0.0, 1.2)	0.34	(-0.8, 1.5)
		3	-0.01	(-0.3, 0.3)	-0.23	(-0.5, 0.0)	0.23	(-11.9, 14.1)	0.12	(-0.4, 0.6)	-0.01	(-0.2, 0.2)	0.83	(0.2, 1.5)	-0.13	(-1.2, 0.9)
	>65 yr	0	0.26	(-0.2, 0.7)	0.19	(-0.1, 0.5)	2.04	(-11.6, 17.7)	1.07	(0.5, 1.6)	0.17	(-0.1, 0.4)	-0.03	(-0.8, 0.7)	0.52	(-1.0, 2.1)
		1	0.18	(-0.2, 0.6)	-0.13	(-0.4, 0.2)	15.45	(0.1, 33.2)	-0.24	(-1.0, 0.5)	0.16	(-0.1, 0.4)	0.31	(-0.4, 1.1)	0.10	(-1.5, 1.7)
		2	0.21	(-0.2, 0.6)	-0.34	(-0.7, 0.0)	4.24	(-8.7, 19.1)	-0.22	(-0.8, 0.4)	-0.04	(-0.3, 0.2)	0.51	(-0.2, 1.3)	1.08	(-0.4, 2.6)
RSP	All Ages	0	-0.04	(-0.7, 0.7)	0.23	(-0.2, 0.7)	5.32	(-19.2, 37.3)	0.89	(-0.1, 1.8)	0.36	(0.0, 0.8)	0.15	(-1.2, 1.5)	0.01	(-2.0, 2.1)
		1	-0.22	(-0.9, 0.5)	-0.42	(-1.0, 0.1)	2.60	(-21.3, 33.8)	-0.98	(-2.3, 0.4)	0.06	(-0.3, 0.5)	0.60	(-0.7, 1.9)	0.70	(-1.5, 3.0)
		2	-0.25	(-0.9, 0.4)	-0.42	(-1.0, 0.1)	-6.64	(-27.4, 20.0)	-0.71	(-1.7, 0.3)	-0.20	(-0.6, 0.2)	0.88	(-0.4, 2.2)	-0.83	(-2.8, 1.2)
		3	-0.41	(-1.1, 0.3)	-0.02	(-0.5, 0.4)	-11.68	(-31.1, 13.2)	0.34	(-0.6, 1.3)	0.07	(-0.3, 0.5)	1.46	(0.1, 2.8)	0.22	(-1.6, 2.1)
	>65 yr	0	0.06	(-0.8, 0.9)	0.38	(-0.1, 0.9)	-2.10	(-27.8, 32.8)	0.46	(-0.5, 1.5)	0.32	(-0.2, 0.8)	-0.19	(-1.7, 1.4)	0.69	(-2.2, 3.6)
		1	0.04	(-0.8, 0.9)	-0.36	(-1.0, 0.2)	0.05	(-26.3, 35.8)	-1.73	(-3.1, -0.3)	0.15	(-0.3, 0.7)	0.02	(-1.5, 1.6)	-0.09	(-3.0, 2.9)
		2	0.29	(-0.5, 1.1)	-0.70	(-1.4, 0.0)	-16.95	(-38.2, 11.6)	-1.44	(-2.5, -0.4)	-0.21	(-0.7, 0.3)	0.03	(-1.5, 1.6)	0.28	(-2.5, 3.1)
		3	0.23	(-0.6, 1.1)	0.20	(-0.3, 0.7)	-16.18	(-37.4, 12.2)	-0.34	(-1.3, 0.7)	0.29	(-0.2, 0.8)	1.28	(-0.3, 2.9)	1.06	(-1.5, -3.7)

(continue)

Cause	AgeGroup	Lags	Brazil			Chile			Mexico		
			SaoPaulo	RiodeJaneiro	PortoAlegre	Santiago	MexicoCity	Monterrey	Toluca		
			(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)	(95CI)		
CVD	All Ages	0	0.13 (-0.2, 0.5)	0.23 (0.0, 0.5)	-4.94 (-18.2, 10.5)	1.48 (0.9, 2.0)	0.05 (-0.2, 0.3)	0.05 (-0.6, 0.7)	0.38 (-1.1, 1.9)		
		1	0.06 (-0.3, 0.4)	0.00 (-0.3, 0.3)	8.45 (-7.0, 26.5)	0.36 (-0.5, 1.2)	0.06 (-0.2, 0.3)	0.57 (-0.1, 1.3)	0.04 (-1.5, 1.6)		
		2	0.12 (-0.2, 0.5)	-0.12 (-0.4, 0.2)	-3.48 (-16.6, 11.6)	0.21 (-0.4, 0.8)	-0.01 (-0.2, 0.2)	0.62 (-0.1, 1.3)	0.86 (-0.6, 2.3)		
	>65 yr	0	0.31 (-0.2, 0.8)	0.12 (-0.2, 0.4)	0.99 (-14.1, 18.7)	1.30 (0.7, 1.9)	0.11 (-0.2, 0.4)	0.54 (-0.3, 1.3)	0.30 (-1.4, 2.0)		
		1	0.21 (-0.3, 0.7)	0.01 (-0.3, 0.3)	18.67 (0.9, 39.5)	0.30 (-0.6, 1.2)	0.18 (-0.1, 0.5)	0.91 (0.1, 1.7)	0.11 (-1.7, 1.9)		
		2	0.17 (-0.3, 0.6)	-0.13 (-0.5, 0.2)	9.60 (-5.6, 27.3)	0.22 (-0.4, 0.9)	0.05 (-0.2, 0.3)	1.14 (0.3, 1.9)	1.06 (-0.6, 2.7)		
		3	0.03 (-0.4, 0.5)	-0.31 (-0.7, 0.1)	11.25 (-4.3, 29.4)	0.06 (-0.5, 0.7)	-0.16 (-0.4, 0.1)	1.46 (0.7, 2.3)	-0.31 (-1.8, 1.2)		
CVE	All Ages	0	0.24 (-0.5, 1.0)	0.26 (-0.2, 0.7)	-11.74 (-30.3, 11.7)	1.82 (0.9, 2.8)	0.07 (-0.4, 0.5)	-0.01 (-1.4, 1.4)	-0.34 (-3.1, 2.5)		
		1	0.36 (-0.4, 1.1)	0.20 (-0.3, 0.7)	-4.33 (-24.4, 21.1)	0.10 (-1.3, 1.5)	-0.04 (-0.5, 0.4)	1.08 (-0.3, 2.5)	0.04 (-2.8, 3.0)		
		2	-0.17 (-0.9, 0.5)	0.04 (-0.5, 0.5)	-3.41 (-22.6, 20.6)	-0.60 (-1.6, 0.4)	-0.05 (-0.5, 0.4)	1.37 (0.0, 2.8)	0.76 (-2.0, 3.6)		
	>65 yr	3	-0.21 (-0.9, 0.5)	-0.27 (-0.8, 0.3)	20.91 (-2.7, 50.3)	-0.63 (-1.6, 0.3)	0.13 (-0.3, 0.6)	1.17 (-0.2, 2.6)	0.70 (-1.8, 3.3)		
		0	0.38 (-0.5, 1.3)	0.11 (-0.5, 0.7)	-9.21 (-30.5, 18.6)	2.27 (1.2, 3.4)	0.11 (-0.4, 0.6)	-0.19 (-1.8, 1.4)	-0.72 (-3.8, 2.4)		
		1	0.36 (-0.5, 1.3)	0.19 (-0.4, 0.8)	-5.10 (-27.6, 24.4)	1.23 (-0.3, 2.8)	0.16 (-0.4, 0.7)	0.80 (-0.8, 2.4)	-0.04 (-3.4, 3.4)		
		2	-0.52 (-1.4, 0.4)	0.07 (-0.6, 0.7)	-0.63 (-23.0, 28.3)	-0.02 (-1.2, 1.2)	0.03 (-0.5, 0.6)	1.28 (-0.3, 2.9)	0.45 (-2.6, 3.6)		
COPD	All Ages	3	-0.24 (-1.1, 0.7)	-0.25 (-0.9, 0.4)	14.12 (-11.1, 46.5)	-0.14 (-1.2, 0.9)	-0.13 (-0.7, 0.4)	1.39 (-0.2, 3.0)	0.26 (-2.6, 3.2)		
		0	-0.04 (-1.2, 1.1)	0.39 (-0.4, 1.2)	2.62 (-27.5, 45.3)	0.08 (-1.6, 1.8)	0.27 (-0.3, 0.9)	-1.27 (-3.3, 0.8)	0.40 (-2.9, 3.8)		
		1	0.30 (-0.8, 1.5)	-0.80 (-2.1, 0.5)	10.34 (-22.3, 56.8)	0.17 (-2.2, 2.6)	0.21 (-0.4, 0.8)	-0.30 (-2.3, 1.7)	1.70 (-2.0, 5.5)		
	>65 yr	2	-0.19 (-1.3, 1.0)	-0.38 (-1.5, 0.8)	-6.91 (-33.0, 29.4)	-0.32 (-2.1, 1.5)	-0.20 (-0.8, 0.4)	0.06 (-1.9, 2.1)	-0.02 (-3.2, 3.3)		
		3	-0.46 (-1.6, 0.7)	0.77 (0.0, 1.5)	-17.23 (-39.9, 14.1)	0.09 (-1.6, 1.8)	0.29 (-0.3, 0.9)	-0.17 (-2.2, 1.9)	1.04 (-2.0, 4.2)		
		0	-0.27 (-1.6, 1.0)	0.39 (-0.5, 1.3)	7.71 (-26.8, 58.4)	-0.18 (-1.9, 1.6)	0.31 (-0.3, 1.0)	-1.20 (-3.3, 1.0)	0.72 (-2.9, 4.4)		
		1	0.45 (-0.8, 1.7)	-0.69 (-2.0, 0.7)	27.62 (-13.9, 89.1)	0.01 (-2.5, 2.6)	0.10 (-0.6, 0.8)	-1.14 (-3.3, 1.0)	0.66 (-3.2, 4.7)		
2	-0.22 (-1.5, 1.1)	-0.54 (-1.9, 0.8)	-3.53 (-33.5, 40.0)	-0.45 (-2.4, 1.5)	0.05 (-0.6, 0.7)	-0.92 (-3.0, 1.3)	0.56 (-2.9, 4.2)				
3	-0.43 (-1.7, 0.9)	0.97 (0.2, 1.7)	-21.72 (-45.6, 12.6)	0.02 (-1.7, 1.8)	0.45 (-0.2, 1.1)	-0.50 (-2.6, 1.7)	1.94 (-1.4, 5.4)				

CP = Cardiopulmonary causes; RSP = Respiratory causes; CVD = Cardiovascular causes; CVE = Cerebrovascular/stroke causes; LRI = Lower Respiratory Infections; COPD = Chronic Obstructive Pulmonary Diseases.

--- Time series analyses not conducted since small number of deaths

Table 5. Percent change in children daily mortality categories and 95% CIs per 10µg/m³ increment in PM₁₀ (SLM). All year

Cause	Age Group	Lag	Sao Paulo		Santiago		Mexico City	
			%	(95% CI)	%	(95% CI)	%	(95% CI)
RSP	<1 yrs	0	-1.77	(-4.32,0.86)	1.99	(-0.64,4.69)	0.45	(-1.10,2.02)
		1	-2.67	(-5.42,0.16)	3.66	(0.95,6.45)	0.76	(-0.76,2.30)
		2	-1.19	(-3.70,1.39)	2.44	(-0.19,5.14)	0.67	(-0.78,2.14)
		3	-1.34	(-3.57,0.94)	2.58	(-0.03,5.26)	-0.08	(-1.50,1.36)
	1-5 yrs	0	-1.48	(-5.36,2.55)	1.14	(-3.72,6.25)	-0.41	(-4.48,3.83)
		1	-1.15	(-5.53,3.43)	3.01	(-1.89,8.16)	0.25	(-3.76,4.44)
		2	-2.78	(-7.39,2.05)	4.22	(-0.62,9.28)	-0.87	(-4.70,3.11)
		3	-0.63	(-4.60,3.51)	2.28	(-2.55,7.34)	0.09	(-3.70,4.03)
LRI	<1 yrs	0	-1.46	(-4.31,1.48)	-0.79	(-4.11,2.65)	0.63	(-1.04,2.34)
		1	-1.94	(-5.05,1.27)	-0.48	(-4.24,3.43)	1.11	(-0.54,2.79)
		2	-0.09	(-2.97,2.88)	-1.86	(-5.21,1.61)	1.00	(-0.58,2.60)
		3	-0.48	(-3.05,2.15)	-0.57	(-3.70,2.66)	0.52	(-1.03,2.10)
	1-14 yrs	0	-0.48	(-4.86,4.10)	1.50	(-3.18,6.41)	0.99	(-3.00,5.15)
		1	0.95	(-3.16,5.23)	4.61	(-0.10,9.54)	2.78	(-1.06,6.78)
		2	0.99	(-2.67,4.78)	6.46	(1.80,11.33)	0.85	(-2.69,4.53)
		3	1.86	(-1.62,5.47)	5.51	(0.79,10.44)	2.84	(-0.65,6.44)

RSP= Respiratory causes; LRI= Lower Respiratory Infections

Table 6. Percent change in children daily mortality categories in children and 95% CIs per 10 $\mu\text{g}/\text{m}^3$ increment in O₃ (SLM). All year

Cause	Age Group	Lag	Sao Paulo		Santiago		Mexico City	
			%	(95% CI)	%	(95% CI)	%	(95% CI)
RSP	<1 yrs	0	-1.02	(-3.01,1.00)	-4.57	(-8.26,-0.73)	0.52	(-0.08,1.12)
		1	-1.07	(-3.23,1.15)	-2.29	(-7.50,3.21)	-0.11	(-0.73,0.51)
		2	0.28	(-1.87,2.48)	-6.04	(-9.93,-1.99)	0.01	(-0.60,0.62)
		3	1.31	(-0.62,3.28)	-6.26	(-9.66,-2.72)	-0.23	(-0.82,0.37)
	1-5 yrs	0	1.43	(-1.56,4.52)	-6.83	(-13.47,0.31)	0.12	(-1.45,1.72)
		1	1.15	(-2.10,4.50)	-11.43	(-19.77,-2.22)	0.27	(-1.37,1.94)
		2	-2.59	(-6.24,1.21)	-4.43	(-11.76,3.52)	0.54	(-1.10,2.20)
LRI	<1 yrs	3	1.14	(-2.09,4.47)	-6.87	(-13.16,-0.11)	1.42	(-0.19,3.06)
		0	-0.42	(-2.65,1.87)	-0.21	(-4.80,4.60)	0.62	(-0.03,1.27)
		1	-0.90	(-3.35,1.62)	-0.75	(-6.75,5.63)	0.40	(-0.27,1.08)
		2	1.04	(-1.42,3.56)	-3.86	(-8.48,0.98)	0.40	(-0.26,1.07)
	1-14 yrs	3	2.54	(0.32,4.81)	-3.89	(-8.10,0.51)	0.12	(-0.52,0.77)
		0	-0.31	(-3.49,2.97)	-8.07	(-14.37,-1.31)	-0.07	(-1.68,1.57)
		1	-1.12	(-4.56,2.43)	-10.81	(-18.99,-1.80)	0.07	(-1.61,1.78)
		2	-1.84	(-5.04,1.46)	-4.62	(-11.77,3.11)	0.60	(-1.07,2.30)
		3	0.73	(-2.29,3.85)	-7.51	(-13.65,-0.94)	2.17	(0.50,3.86)
		0						

RSP= Respiratory causes; LRI= Lower Respiratory Infections

Table 7. Percent change in children daily mortality categories in children and 95% CIs per 10µg/m³ increment in O₃ (SLM).COLD season.

Cause	Age Group	Lag	Sao Paulo		Santiago		Mexico City	
			%	(95% CI)	%	(95% CI)	%	(95 %CI)
RSP	<1 yrs	0	0.53	(-2.70, 3.87)	-4.18	(-8.49, 0.34)	0.46	(-0.20, 1.13)
		1	-0.88	(-4.13, 2.47)	-5.41	(-11.39, 0.98)	0.50	(-0.25, 1.25)
		2	0.91	(-2.36, 4.29)	-6.60	(-11.15, -1.81)	-0.04	(-0.73, 0.65)
		3	1.51	(-1.75, 4.87)	-5.98	(-10.07, -1.71)	-0.25	(-0.89, 0.41)
	1-5 yrs	0	4.58	(-1.74, 11.31)	-4.32	(-12.42, 4.53)	0.82	(-1.01, 2.69)
		1	2.91	(-3.29, 9.49)	-8.20	(-18.89, 3.89)	0.92	(-0.99, 2.85)
		2	1.85	(-4.44, 8.57)	-2.90	(-11.65, 6.73)	0.43	(-1.46, 2.36)
		3	1.01	(-5.27, 7.70)	-3.47	(-11.36, 5.11)	1.01	(-0.80, 2.84)
LRI	<1 yrs	0	1.05	(-2.48, 4.70)	2.34	(-3.05, 8.03)	0.43	(-0.29, 1.15)
		1	-2.37	(-5.85, 1.23)	2.70	(-4.86, 10.88)	0.79	(-0.02, 1.61)
		2	0.07	(-3.49, 3.77)	-2.58	(-7.92, 3.06)	0.11	(-0.63, 0.87)
		3	0.91	(-2.62, 4.58)	-3.51	(-8.24, 1.46)	0.02	(-0.68, 0.73)
	1-14 yrs	0	5.93	(-0.41, 12.67)	-5.62	(-13.13, 2.53)	0.86	(-1.00, 2.75)
		1	2.21	(-4.00, 8.81)	-7.93	(-18.00, 3.37)	1.12	(-0.90, 3.18)
		2	1.02	(-5.16, 7.60)	-4.95	(-13.12, 3.99)	0.71	(-1.20, 2.65)
		3	1.31	(-4.91, 7.93)	-4.59	(-12.13, 3.61)	1.54	(-0.31, 3.42)

RSP = Respiratory causes; LRI = Lower Respiratory Infections

Table 8. Percent change in children daily mortality categories and 95% CIs per 10µg/m3 increment in O₃ (SLM). WARM season.

Cause	Age Group	Lag	Sao Paulo		Santiago		Mexico City	
			%	(95% CI)	%	(95 %CI)	%	(95% CI)
RSP	<1 yrs	0	-0.75	(-4.12, 2.75)	-2.51	(-24.79, 26.38)	1.64	(0.27, 3.02)
		1	-3.71	(-7.02, -0.28)	22.07	(-4.11, 55.41)	-0.95	(-2.30, 0.41)
		2	-6.26	(-9.54, -2.86)	15.79	(-10.07, 49.10)	0.06	(-1.37, 1.51)
		3	-4.82	(-8.11, -1.41)	11.21	(-13.23, 42.53)	-0.96	(-2.37, 0.46)
	1-5 yrs	0	-1.04	(-6.40, 4.63)	5.33	(-26.01, 49.95)	-1.02	(-4.62, 2.72)
		1	1.65	(-3.72, 7.31)	-7.48	(-35.57, 32.84)	1.28	(-2.62, 5.33)
		2	5.75	(0.41, 11.36)	-9.89	(-37.52, 29.95)	2.84	(-1.11, 6.95)
		3	5.35	(0.06, 10.93)	-11.78	(-38.87, 27.31)	3.09	(-0.75, 7.08)
LRI	<1 yrs	0	-1.45	(-5.23, 2.48)	-9.18	(-32.64, 22.46)	1.87	(0.34, 3.42)
		1	-4.56	(-8.25, -0.73)	7.18	(-20.72, 44.91)	-0.20	(-1.77, 1.40)
		2	-7.88	(-11.53, -4.08)	4.54	(-22.67, 41.33)	0.18	(-1.39, 1.78)
		3	-4.73	(-8.41, -0.91)	-1.35	(-27.09, 33.49)	-1.40	(-2.91, 0.15)
	1-14 yrs	0	-2.07	(-7.57, 3.76)	-1.27	(-30.82, 40.90)	-2.05	(-5.39, 1.42)
		1	-0.23	(-5.68, 5.52)	-9.92	(-37.16, 29.13)	-1.95	(-5.53, 1.77)
		2	1.49	(-3.95, 7.24)	-10.17	(-37.25, 28.59)	-0.96	(-4.53, 2.75)
		3	0.95	(-4.55, 6.76)	-9.38	(-37.01, 30.37)	3.65	(0.02, 7.41)

RSP = Respiratory causes; LRI = Lower Respiratory Infections

--- Time series analyses not conducted since small number of deaths

1.1.2 DLM 0-3 by SEP

Table 9. Percent change in daily mortality categories and 95% CIs per 10- $\mu\text{g}/\text{m}^3$ increment in PM_{10} and O_3 (DLM overall effect, lag0-lag3), by socioeconomic position (Mexico City).

	Socioeconomic Position					
	Low	PM ₁₀ Medium	High	Low	O ₃ Medium	High
All causes	0.02 (-0.19, 0.24)	1.09 (0.86, 1.33)	0.30 (0.04, 0.56)	-0.10 (-0.21, 0.01)	0.29 (0.21, 0.37)	0.05 (-0.02, 0.13)
CPM, all ages	-0.09 (-0.43, 0.24)	1.05 (0.69, 1.42)	0.38 (-0.01, 0.78)	-0.13 (-0.30, 0.02)	0.29 (0.17, 0.41)	0.08 (-0.03, 0.21)
CPM, > 65 yr	-0.13 (-0.53, 0.26)	1.28 (0.86, 1.71)	0.33 (-0.10, 0.78)	-0.04 (-0.24, 0.15)	0.44 (0.30, 0.58)	0.16 (0.02, 0.30)
RSP	1.69 (1.11, 2.28)	1.08 (0.40, 1.77)	-0.9 (-1.67, -0.13)	0.61 (0.32, 0.90)	0.06 (-0.16, 0.29)	-0.17 (-0.41, 0.07)
RSP, > 65 yr	1.39 (0.64, 2.14)	1.83 (1.01, 2.66)	-0.95 (-1.84, -0.06)	0.47 (0.10, 0.83)	0.40 (0.01, 0.81)	-0.17 (-0.45, 0.11)
CVD, all ages	-0.56 (-0.95, -0.17)	0.99 (0.57, 1.42)	0.78 (0.33, 1.24)	-0.21 (-0.40, -0.02)	0.41 (0.27, 0.55)	0.24 (0.10, 0.38)
CVD, > 65 yr	-0.37 (-0.85, 0.09)	0.98 (0.49, 1.47)	0.76 (0.24, 1.28)	-0.04 (-0.27, 0.19)	0.51 (0.35, 0.67)	0.26 (0.11, 0.43)
CVE, all ages	0.65 (-0.14, 1.45)	2.38 (1.52, 3.25)	1.75 (0.78, 2.73)	0.15 (-0.23, 0.53)	1.04 (0.75, 1.32)	0.33 (0.04, 0.62)
CVE, > 65 yr	0.49 (-0.46, 1.46)	2.88 (1.88, 3.89)	2.02 (0.93, 3.13)	0.19 (-0.27, 0.65)	1.38 (1.04, 1.71)	0.33 (0.00, 0.66)
COPD all ages	1.71 (0.82, 2.62)	0.72 (-0.31, 1.76)	-0.76 (-1.95, 0.43)	0.77 (0.33, 1.21)	0.00 (-0.35, 0.34)	0.02 (-0.35, 0.39)
COPD, > 65 yr	1.49 (0.51, 2.48)	0.98 (-0.12, 2.11)	-0.56 (-1.80, 0.70)	0.86 (0.38, 1.34)	0.02 (-0.35, 0.40)	0.24 (-0.15, 0.64)

CPM = Cardiopulmonary causes; RSP = Respiratory causes; CVD = Cardiovascular causes; CVE = Cerebrovascular/stroke causes; LRI = Lower Respiratory

Infections; COPD = Chronic Obstructive Pulmonary Diseases.

Table 10. Percent change in daily mortality categories and 95% CIs per 10- $\mu\text{g}/\text{m}^3$ increment in PM_{10} and O_3 (DLM overall effect, lag0-lag3), by socioeconomic position (Sao Paulo).

	Socioeconomic Position					
	PM_{10}			O_3		
	Low	Medium	High	Low	Medium	High
All causes	0.71 (0.46, 0.96)	0.84 (0.58, 1.09)	1.40 (1.14, 1.67)	0.12 (-0.05, 0.29)	0.40 (0.22, 0.58)	0.05 (-0.14, 0.23)
CPM, all ages	1.11 (0.80, 1.42)	1.21 (0.89, 1.54)	2.06 (1.68, 2.44)	0.43 (0.21, 0.66)	0.94 (0.71, 1.18)	-0.05 (-0.31, 0.21)
CPM, > 65 yr	1.27 (0.83, 1.72)	0.58 (0.17, 0.99)	2.06 (1.64, 2.48)	0.34 (0.03, 0.65)	0.47 (0.18, 0.76)	0.47 (0.17, 0.76)
RSP	2.15 (1.49, 2.81)	1.23 (0.51, 1.95)	2.92 (2.22, 3.62)	1.56 (1.09, 2.03)	0.35 (-0.16, 0.86)	-0.51 (-1.00, -0.02)
RSP, > 65 yr	1.19 (0.32, 2.08)	1.52 (0.69, 2.36)	3.13 (2.37, 3.90)	1.76 (1.13, 2.39)	0.21 (-0.38, 0.80)	-0.43 (-0.95, 0.10)
CVD, all ages	0.94 (0.55, 1.33)	1.03 (0.61, 1.45)	1.36 (0.93, 1.80)	-0.24 (-0.51, 0.03)	0.77 (0.48, 1.07)	0.45 (0.15, 0.76)
CVD, > 65 yr	1.39 (0.85, 1.92)	0.01 (-0.51, 0.54)	1.63 (1.15, 2.12)	-0.33 (-0.69, 0.04)	0.59 (0.22, 0.97)	0.56 (0.22, 0.90)
CVE, all ages	1.58 (0.80, 2.36)	1.87 (1.01, 2.73)	0.90 (0.10, 1.71)	-0.48 (-1.01, 0.04)	1.33 (0.74, 1.92)	0.26 (-0.31, 0.84)
CVE, > 65 yr	2.37 (1.30, 3.45)	0.40 (-0.63, 1.44)	1.58 (0.68, 2.50)	-1.33 (-2.04, -0.61)	0.55 (-0.16, 1.27)	1.05 (0.41, 1.70)
COPD all ages	1.99 (0.78, 3.22)	2.70 (1.50, 3.90)	2.72 (1.38, 4.08)	2.16 (1.31, 3.02)	1.04 (0.21, 1.88)	-0.88 (-1.81, 0.05)
COPD, > 65 yr	2.13 (0.70, 3.59)	3.21 (1.91, 4.54)	2.79 (1.35, 4.25)	1.56 (0.58, 2.55)	1.20 (0.29, 2.12)	-0.67 (-1.66, 0.34)

CP = Cardiopulmonary causes; RSP = Respiratory causes; CVD = Cardiovascular causes; CEV = Cerebrovascular/stroke causes; LRI = Lower Respiratory Infections; COPD = Chronic Obstructive Pulmonary Diseases.

Table 11. Percent change in daily mortality categories and 95% CIs per 10- $\mu\text{g}/\text{m}^3$ increment in PM_{10} and O_3 (DLM overall, lag0-lag3), by socioeconomic position (Santiago).

effect	Socioeconomic Position					
	Low	PM ₁₀ Medium	High	Low	O ₃ Medium	High
All causes	0.53 (0.28,0.77)	0.50 (0.28,0.72)	0.50 (0.26,0.75)	0.58 (0.28,0.88)	0.42 (0.15,0.68)	0.74 (0.44,1.04)
CPM, all ages	0.69 (0.33,1.05)	0.61 (0.30,0.93)	0.75 (0.40,1.09)	1.25 (0.79,1.72)	0.53 (0.12,0.93)	0.77 (0.33,1.20)
CPM, > 65 yr	1.00 (0.59,1.42)	0.86 (0.50,1.22)	0.80 (0.43,1.17)	2.05 (1.51,2.59)	0.96 (0.50,1.41)	0.91 (0.44,1.38)
RSP	0.81 (0.20,1.43)	-0.04 (-0.59,0.51)	1.58 (0.98,2.19)	0.89 (0.06,1.72)	-1.79 (-2.52,-1.06)	1.19 (0.39,1.99)
RSP, > 65 yr	1.17 (0.48,1.88)	0.32 (-0.28,0.93)	1.50 (0.86,2.14)	1.31 (0.37,2.25)	-1.16 (-1.96,-0.35)	0.53 (-0.30,1.36)
CVD, all ages	0.96 (0.53,1.40)	1.04 (0.65,1.43)	0.23 (-0.18,0.65)	1.95 (1.40,2.50)	1.56 (1.09,2.05)	0.32 (-0.19,0.83)
CVD, > 65 yr	1.19 (0.69,1.70)	1.28 (0.85,1.71)	0.27 (-0.17,0.72)	2.19 (1.56,2.82)	1.54 (1.01,2.08)	0.61 (0.06,1.16)
CVE, all ages	1.08 (0.32,1.86)	1.80 (1.12,2.47)	-0.03 (-0.78,0.71)	0.15 (-0.72,1.04)	0.75 (-0.02,1.53)	-1.02 (-1.87,-0.16)
CVE, > 65 yr	0.68 (-0.23,1.59)	1.95 (1.18,2.72)	0.13 (-0.68,0.94)	3.05 (1.93,4.18)	2.18 (1.24,3.12)	-0.89 (-1.87,0.09)
COPD all ages	2.41 (1.18,3.65)	-0.46 (-1.55,0.64)	0.70 (-0.49,1.91)	3.03 (1.39,4.70)	-1.42 (-2.83,0.01)	1.50 (-0.04,3.06)
COPD, > 65 yr	3.03 (1.67,4.42)	-0.50 (-1.68,0.70)	1.20 (-0.06,2.48)	3.31 (1.52,5.13)	0.12 (-1.42,1.69)	2.86 (1.22,4.52)

CPM = Cardiopulmonary causes; RSP = Respiratory causes; CVD = Cardiovascular causes; CVE = Cerebrovascular/stroke causes; LRI = Lower Respiratory

Infections; COPD = Chronic Obstructive Pulmonary Diseases.

Table 12. Percent change in daily mortality categories and 95% CIs per 10- $\mu\text{g}/\text{m}^3$ increment in PM_{10} and O_3 (DLM overall effect, lag0-lag3), by socioeconomic position (Rio de Janeiro).

	Socioeconomic Position					
	PM_{10}			O_3		
	Low	Medium	High	Low	Medium	High
All causes	1.44 (1.04, 1.84)	0.08 (-0.34, 0.51)	0.94 (0.49, 1.40)	0.02 (-0.16, 0.20)	-0.15 (-0.34, 0.04)	-0.02 (-0.23, 0.19)
CPM, all ages	1.79 (1.18, 2.40)	0.34 (-0.34, 1.03)	1.80 (1.12, 2.49)	0.25 (-0.03, 0.54)	-0.16 (-0.46, 0.15)	0.53 (0.22, 0.83)
CPM, > 65 yr	2.33 (1.60, 3.07)	0.69 (-0.13, 1.52)	2.95 (2.12, 3.78)	0.14 (-0.20, 0.48)	-0.15 (-0.52, 0.22)	0.70 (0.34, 1.06)
RSP	2.56 (1.42, 3.71)	1.02 (-0.27, 2.34)	3.87 (2.56, 5.20)	0.60 (0.06, 1.15)	0.74 (0.16, 1.33)	-0.92 (-1.55, -0.29)
RSP, > 65 yr	2.90 (1.59, 4.23)	1.82 (0.31, 3.36)	4.54 (3.00, 6.10)	0.26 (-0.39, 0.90)	0.74 (0.06, 1.42)	-0.74 (-1.46, -0.03)
CVD, all ages	1.41 (0.70, 2.13)	0.19 (-0.58, 0.96)	0.95 (0.16, 1.74)	-0.09 (-0.43, 0.25)	-0.60 (-0.96, -0.24)	0.95 (0.61, 1.30)
CVD, > 65 yr	2.17 (1.32, 3.03)	0.30 (-0.64, 1.25)	0.80 (-0.19, 1.80)	-0.10 (-0.50, 0.29)	-0.70 (-1.14, -0.25)	1.20 (0.77, 1.64)
CVE, all ages	0.47 (-0.80, 1.76)	1.36 (0.02, 2.72)	-0.11 (-1.47, 1.27)	-1.32 (-2.00, -0.64)	-0.56 (-1.23, 0.12)	0.58 (-0.07, 1.24)
CVE, > 65 yr	2.10 (0.60, 3.61)	3.91 (2.28, 5.57)	1.62 (-0.08, 3.35)	-1.37 (-2.16, -0.57)	-0.51 (-1.33, 0.31)	-0.56 (-1.47, 0.36)
COPD all ages	2.44 (0.24, 4.68)	5.63 (3.11, 8.22)	0.55 (-1.97, 3.13)	-0.50 (-1.55, 0.56)	1.29 (0.28, 2.31)	-1.43 (-2.61, -0.24)
COPD, > 65 yr	2.62 (0.20, 5.09)	8.69 (5.85, 11.59)	4.62 (1.82, 7.50)	0.18 (-0.89, 1.27)	0.49 (-0.54, 1.53)	0.10 (-1.04, 1.25)

CPM = Cardiopulmonary causes; RSP = Respiratory causes; CVD = Cardiovascular causes; CVE = Cerebrovascular/stroke causes; LRI = Lower Respiratory

Infections; COPD = Chronic Obstructive Pulmonary Diseases.

1.2 Meta-analysis results

1.2.1 Distributed Lag Models, overall 0 - 3. PM₁₀

Table 13. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, for *all cause mortality in all ages*, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.78	0.08	0.79%	(0.64% , 0.94%)	21.20%	14.56%
	Rio de Janeiro	0.74	0.13	0.74%	(0.49% , 0.99%)	7.54%	12.69%
	Porto Alegre	0.87	0.30	0.88%	(0.28% , 1.48%)	1.36%	6.66%
Chile	Santiago	0.48	0.07	0.48%	(0.35% , 0.61%)	28.07%	14.86%
	Concepcion	-0.05	0.32	-0.05%	(-0.68% , 0.59%)	1.17%	6.09%
	Temuco	0.32	0.30	0.32%	(-0.26% , 0.91%)	1.41%	6.79%
Mexico	Mexico City	1.01	0.08	1.02%	(0.87% , 1.17%)	21.61%	14.59%
	Monterrey	1.01	0.09	1.01%	(0.83% , 1.20%)	14.68%	14.06%
	Toluca	1.25	0.20	1.26%	(0.85% , 1.66%)	2.96%	9.70%
Meta Estimates	Fixed Effects (9)	0.78	0.04	0.78%	(0.71% , 0.85%)	100.00%	100.00%
	Random Effects (9)	0.77	0.10	0.77%	(0.57% , 0.97%)		

Table 14. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, for *cardiopulmonary* mortality in all ages, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.93	0.11	0.93%	(0.71% , 1.15%)	22.68%	22.68%
	Rio de Janeiro	0.99	0.19	0.99%	(0.61% , 1.38%)	7.43%	7.43%
	Porto Alegre	1.28	0.47	1.29%	(0.37% , 2.22%)	1.29%	1.29%
Chile	Santiago	0.85	0.10	0.85%	(0.66% , 1.05%)	29.10%	29.10%
	Concepcion	0.09	0.51	0.09%	(-0.90% , 1.10%)	1.09%	1.09%
	Temuco	1.31	0.49	1.32%	(0.35% , 2.30%)	1.17%	1.17%
Mexico	Mexico City	0.94	0.12	0.95%	(0.72% , 1.18%)	20.47%	20.47%
	Monterrey	1.05	0.14	1.05%	(0.77% , 1.33%)	14.07%	14.07%
	Toluca	1.16	0.32	1.17%	(0.53% , 1.81%)	2.70%	2.70%
Meta Estimates	Fixed Effects (9)	0.94	0.05	0.94%	(0.84% , 1.05%)	100.00%	100.00%
	Random Effects (9)	0.94	0.05	0.94%	(0.84% , 1.05%)		

Table 15. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, *cardiopulmonary* mortality in 65 years old and over, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.87	0.13	0.88%	(0.61% , 1.14%)	20.86%	18.03%
	Rio de Janeiro	1.64	0.23	1.66%	(1.20% , 2.12%)	7.11%	11.89%
	Porto Alegre	2.50	0.53	2.53%	(1.47% , 3.60%)	1.35%	3.71%
Chile	Santiago	1.05	0.11	1.06%	(0.84% , 1.28%)	32.07%	19.89%
	Concepcion	0.24	0.58	0.24%	(-0.88% , 1.37%)	1.15%	3.23%
	Temuco	1.37	0.54	1.38%	(0.31% , 2.46%)	1.31%	3.60%
Mexico	Mexico City	1.13	0.14	1.14%	(0.87% , 1.41%)	19.91%	17.80%
	Monterrey	1.00	0.17	1.00%	(0.67% , 1.33%)	13.79%	15.86%
	Toluca	1.14	0.39	1.15%	(0.37% , 1.93%)	2.45%	5.99%
Meta Estimates	Fixed Effects (9)	1.08	0.06	1.09%	(0.97% , 1.21%)	100.00%	100.00%
	Random Effects (9)	1.14	0.11	1.15%	(0.93% , 1.37%)		

Table 16. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, for *respiratory* mortality in all ages, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	1.19	0.22	1.19%	(0.77% , 1.62%)	21.04%	16.60%
	Rio de Janeiro	2.12	0.36	2.14%	(1.41% , 2.87%)	7.39%	12.53%
	Porto Alegre	2.86	0.94	2.90%	(1.03% , 4.81%)	1.12%	4.02%
Chile	Santiago	0.90	0.17	0.90%	(0.56% , 1.25%)	32.40%	17.69%
	Concepcion	2.48	0.97	2.51%	(0.58% , 4.48%)	1.04%	3.79%
	Temuco	3.28	0.80	3.33%	(1.73% , 4.96%)	1.54%	5.15%
Mexico	Mexico City	1.14	0.22	1.15%	(0.72% , 1.58%)	20.47%	16.52%
	Monterrey	1.28	0.30	1.29%	(0.70% , 1.88%)	11.12%	14.35%
	Toluca	0.15	0.50	0.15%	(-0.84% , 1.14%)	3.88%	9.34%
Meta Estimates	Fixed Effects (9)	1.19	0.10	1.19%	(1.00% , 1.39%)	100.00%	100.00%
	Random Effects (9)	1.39	0.21	1.39%	(0.98% , 1.81%)		

Table 17. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, for *respiratory* mortality in 65 years old and over, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	1.50	0.26	1.52%	(1.00% , 2.03%)	22.69%	15.64%
	Rio de Janeiro	2.35	0.41	2.38%	(1.56% , 3.20%)	9.09%	13.50%
	Porto Alegre	1.68	1.07	1.69%	(-0.41% , 3.84%)	1.33%	5.77%
Chile	Santiago	1.01	0.19	1.01%	(0.64% , 1.39%)	42.29%	16.45%
	Concepcion	3.72	1.04	3.78%	(1.69% , 5.92%)	1.40%	5.98%
	Temuco	3.67	0.87	3.74%	(1.98% , 5.52%)	2.00%	7.45%
Mexico	Mexico City	1.48	0.60	1.49%	(0.31% , 2.68%)	4.25%	10.70%
	Monterrey	0.10	0.34	0.10%	(-0.56% , 0.76%)	13.42%	14.57%
	Toluca	1.48	0.65	1.49%	(0.20% , 2.80%)	3.53%	9.92%
Meta Estimates	Fixed Effects (9)	1.26	0.12	1.26%	(1.02% , 1.51%)	100.00%	100.00%
	Random Effects (9)	1.63	0.31	1.64%	(1.02% , 2.27%)		

Table 18. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, for *cardiovascular* mortality in all ages, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.87	0.12	0.87%	(0.63% , 1.11%)	25.18%	21.17%
	Rio de Janeiro	0.51	0.23	0.51%	(0.06% , 0.96%)	6.98%	10.39%
	Porto Alegre	1.21	0.54	1.22%	(0.16% , 2.29%)	1.28%	2.52%
Chile	Santiago	0.74	0.11	0.74%	(0.51% , 0.97%)	28.06%	22.07%
	Concepcion	-0.37	0.60	-0.37%	(-1.53% , 0.81%)	1.03%	2.05%
	Temuco	0.22	0.57	0.22%	(-0.90% , 1.34%)	1.14%	2.25%
Mexico	Mexico City	0.51	0.14	0.51%	(0.24% , 0.78%)	19.50%	18.97%
	Monterrey	0.81	0.16	0.81%	(0.50% , 1.13%)	14.60%	16.43%
	Toluca	1.41	0.41	1.42%	(0.61% , 2.23%)	2.22%	4.15%
Meta							
Estimates	Fixed Effects (9)	0.72	0.06	0.72%	(0.61% , 0.85%)	100.00%	100.00%
	Random Effects (9)	0.71	0.09	0.72%	(0.54% , 0.89%)		

Table 19. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, *cardiovascular* mortality in 65 years old and over, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.80	0.16	0.81%	(0.5% , 1.12%)	20.39%	16.95%
	Rio de Janeiro	0.95	0.26	0.95%	(0.43% , 1.48%)	7.27%	12.62%
	Porto Alegre	2.93	0.61	2.97%	(1.75% , 4.21%)	1.38%	4.67%
Chile	Santiago	0.99	0.13	1.00%	(0.75% , 1.25%)	31.90%	18.20%
	Concepcion	-0.83	0.66	-0.83%	(-2.11% , 0.47%)	1.16%	4.08%
	Temuco	0.38	0.66	0.38%	(-0.91% , 1.68%)	1.18%	4.13%
Mexico	Mexico City	0.63	0.16	0.63%	(0.31% , 0.95%)	19.99%	16.88%
	Monterrey	0.74	0.19	0.74%	(0.37% , 1.11%)	14.46%	15.72%
	Toluca	1.54	0.47	1.55%	(0.62% , 2.50%)	2.28%	6.75%
Meta Estimates	Fixed Effects (9)	0.85	0.07	0.86%	(0.71% , 1.00%)	100.00%	100.00%
	Random Effects (9)	0.88	0.15	0.88%	(0.59% , 1.18%)		

Table 20. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, for *Cerebrovascular/stroke* mortality in all ages, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	1.04	0.25	1.05%	(0.55% , 1.55%)	3.97%	14.29%
	Rio de Janeiro	0.72	0.39	0.73%	(-0.05% , 1.51%)	1.62%	12.57%
	Porto Alegre	2.60	0.92	2.63%	(0.79% , 4.50%)	0.29%	6.57%
Chile	Santiago	1.20	0.20	1.20%	(0.80% , 1.61%)	6.10%	14.77%
	Concepcion	0.21	0.95	0.21%	(-1.64% , 2.10%)	0.28%	6.32%
	Temuco	0.94	0.83	0.94%	(-0.68% , 2.59%)	0.37%	7.43%
Mexico	Mexico City	0.22	0.05	0.22%	(0.11% , 0.32%)	84.19%	15.69%
	Monterrey	2.25	0.31	2.28%	(1.67% , 2.89%)	2.68%	13.67%
	Toluca	0.90	0.70	0.90%	(-0.48% , 2.3%)	0.51%	8.69%
Meta Estimates	Fixed Effects (9)	0.39	0.05	0.39%	(0.29% , 0.48%)	100.00%	100.00%
	Random Effects (9)	1.09	0.31	1.10%	(0.48% , 1.71%)		

Table 21. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, *Cerebrovascular/stroke* mortality in 65 years old and over, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.82	0.29	0.82%	(0.25% , 1.40%)	20.83%	16.91%
	Rio de Janeiro	1.68	0.47	1.69%	(0.76% , 2.64%)	7.87%	12.16%
	Porto Alegre	3.83	1.03	3.91%	(1.82% , 6.03%)	1.64%	4.48%
Chile	Santiago	0.76	0.23	0.77%	(0.31% , 1.23%)	32.37%	18.46%
	Concepcion	0.03	1.01	0.03%	(-1.92% , 2.03%)	1.72%	4.66%
	Temuco	2.24	0.86	2.27%	(0.55% , 4.01%)	2.36%	5.92%
Mexico	Mexico City	1.05	0.32	1.05%	(0.41% , 1.70%)	16.69%	15.97%
	Monterrey	1.97	0.35	1.99%	(1.28% , 2.70%)	13.96%	15.14%
	Toluca	0.94	0.83	0.95%	(-0.67% , 2.60%)	2.56%	6.29%
Meta Estimates	Fixed Effects (9)	1.14	0.13	1.15%	(0.89% , 1.41%)	100.00%	100.00%
	Random Effects (9)	1.32	0.24	1.32%	(0.84% , 1.81%)		

Table 22. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, for *Chronic obstructive pulmonary* diseases mortality in all ages, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	1.42	0.38	1.43%	(0.69% , 2.18%)	24.03%	13.37%
	Rio de Janeiro	1.63	0.73	1.64%	(0.19% , 3.12%)	6.28%	11.42%
	Porto Alegre	4.22	1.24	4.31%	(1.81% , 6.87%)	2.21%	8.37%
Chile	Santiago	0.82	0.34	0.82%	(0.15% , 1.50%)	29.14%	13.52%
	Concepcion	3.82	1.38	3.89%	(1.12% , 6.75%)	1.77%	7.59%
	Temuco	8.04	1.02	8.37%	(6.22% , 10.56%)	3.25%	9.64%
Mexico	Mexico City	1.75	0.62	1.76%	(0.54% , 3.00%)	8.85%	12.12%
	Monterrey	2.46	0.41	2.49%	(1.66% , 3.33%)	19.66%	13.20%
	Toluca	-0.03	0.84	-0.03%	(-1.65% , 1.63%)	4.82%	10.78%
Meta Estimates	Fixed Effects (9)	1.74	0.18	1.76%	(1.39% , 2.12%)	100.00%	100.00%
	Random Effects (9)	2.44	0.56	2.47%	(1.36% , 3.59%)		

Table 23. Weights and risk percent changes (%) by cities, and fixed and random combined effects (PM₁₀) obtained with DLM overall lag0-3, *Chronic obstructive pulmonary diseases* mortality in 65 years old and over, per 10 µg/m³ increase of PM₁₀ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	1.79	0.42	1.81%	(0.97% , 2.65%)	18.66%	12.99%
	Rio de Janeiro	2.55	0.79	2.58%	(1.00% , 4.19%)	5.26%	11.23%
	Porto Alegre	2.70	1.38	2.73%	(0.00% , 5.54%)	1.75%	8.15%
Chile	Santiago	1.00	0.37	1.00%	(0.27% , 1.74%)	24.13%	13.18%
	Concepcion	7.47	1.42	7.76%	(4.80% , 10.8%)	1.64%	7.93%
	Temuco	6.11	1.06	6.30%	(4.13% , 8.53%)	2.97%	9.80%
Mexico	Mexico City	0.28	0.36	0.28%	(-0.42% , 0.99%)	25.78%	13.22%
	Monterrey	-0.80	0.46	-0.80%	(-1.69% , 0.10%)	15.74%	12.85%
	Toluca	-0.16	0.90	-0.16%	(-1.91% , 1.62%)	4.07%	10.65%
Meta Estimates	Fixed Effects (9)	1.00	0.18	1.01%	(0.65% , 1.37%)	100.00%	100.00%
	Random Effects (9)	1.98	0.61	2.00%	(0.78% , 3.23%)		

1.2.2 Distributed Lag Models, overall 0 - 3. O₃

Table 24. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM overall lag0-3, for *all cause mortality in all ages*, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.21	0.05	0.21%	(0.10%, 0.31%)	14.9%	18.6%
	Rio de Janeiro	0.13	0.06	0.13%	(0.02%, 0.24%)	12.8%	18.5%
Chile	Santiago	-0.11	0.12	-0.11%	-(0.34%, 0.12%)	3.1%	14.9%
Mexico	Mexico City	0.22	0.03	0.22%	(0.17%, 0.27%)	62.3%	19.6%
	Monterrey	0.73	0.09	0.73%	(0.56%, 0.90%)	5.5%	16.8%
	Toluca	-0.47	0.17	-0.47%	-(0.80%, -0.13%)	1.4%	11.6%
Meta Estimates	Fixed Effects (6)	0.22	0.02	0.22%	(0.18%, 0.26%)	100%	100%
	Random Effects (6)	0.16	0.09	0.16%	-(0.02%, 0.33%)		

Table 25. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM overallag0-3, for *cardiopulmonary* mortality in all ages, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.22	0.08	0.22%	(0.06%, 0.37%)	12.3%	19.1%
	Rio de Janeiro	0.24	0.09	0.24%	(0.06%, 0.42%)	9.4%	17.6%
Chile	Santiago	0.16	0.05	0.16%	(0.06%, 0.27%)	26.0%	22.2%
Mexico	Mexico City	0.22	0.04	0.22%	(0.14%, 0.30%)	47.1%	23.9%
	Monterrey	0.69	0.13	0.69%	(0.42%, 0.95%)	4.2%	12.5%
	Toluca	-0.49	0.27	-0.49%	(-1.02%, 0.04%)	1.0%	4.8%
Meta Estimates	Fixed Effects (6)	0.22	0.03	0.22%	(0.16%, 0.27%)	100%	100%
	Random Effects (6)	0.23	0.07	0.23%	(0.11%, 0.36%)		

Table 26. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM overallag0-3, *cardiopulmonary* mortality in 65 years old and over, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.26	0.10	0.26%	(0.07%, 0.45%)	11.3%	18.5%
	Rio de Janeiro	0.38	0.11	0.38%	(0.17%, 0.59%)	9.0%	16.9%
Chile	Santiago	0.22	0.06	0.22%	(0.10%, 0.33%)	28.6%	24.1%
Mexico	Mexico City	0.31	0.05	0.31%	(0.22%, 0.41%)	46.0%	26.1%
	Monterrey	0.79	0.16	0.79%	(0.48%, 1.11%)	4.1%	11.0%
	Toluca	-0.20	0.34	-0.20%	(-0.85%, 0.46%)	0.9%	3.4%
Meta Estimates	Fixed Effects (6)	0.30	0.03	0.30%	(0.24%, 0.36%)	100%	100%
	Random Effects (6)	0.33	0.07	0.33%	(0.20%, 0.46%)		

Table 27. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM overall lag0-3, for *respiratory* mortality in all ages, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.35	0.16	0.35%	(0.04%, 0.66%)	11.0%	11.0%
	Rio de Janeiro	0.15	0.18	0.15%	-(0.20%, 0.49%)	9.0%	9.0%
Chile	Santiago	0.19	0.10	0.19%	(0.00%, 0.39%)	27.4%	27.4%
Mexico	Mexico City	0.22	0.08	0.22%	(0.07%, 0.37%)	47.7%	47.7%
	Monterrey	0.25	0.28	0.25%	-(0.31%, 0.81%)	3.5%	3.5%
	Toluca	-0.62	0.43	-0.62%	-(1.45%, 0.22%)	1.5%	1.5%
Meta Estimates	Fixed Effects (6)	0.21	0.05	0.21%	(0.10%, 0.31%)	100%	100%
	Random Effects (6)	0.21	0.05	0.21%	(0.10%, 0.31%)		

Table 28. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O3) obtained with DLM overallag0-3, for respiratory mortality in 65 years old and over, per 10 µg/m3 increase of O3 ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.42	0.19	0.43%	(0.05%, 0.80%)	10.1%	13.8%
	Rio de Janeiro	-0.02	0.20	-0.02%	-(0.42%, 0.37%)	9.0%	12.7%
Chile	Santiago	0.13	0.11	0.13%	-(0.08%, 0.34%)	33.2%	30.9%
Mexico	Mexico City	0.11	0.09	0.11%	-(0.07%, 0.29%)	43.1%	35.3%
	Monterrey	-0.09	0.33	-0.09%	-(0.73%, 0.55%)	3.4%	5.5%
	Toluca	-0.93	0.58	-0.93%	-(2.05%, 0.21%)	1.1%	1.8%
Meta Estimates	Fixed Effects (6)	0.12	0.06	0.12%	(0.00%, 0.24%)	100%	100%
	Random Effects (6)	0.11	0.08	0.11%	-(0.04%, 0.27%)		

Table 29. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM overallag0-3, for *cardiovascular* mortality in all ages, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.24	0.09	0.24%	(0.08%, 0.41%)	13.2%	19.6%
	Rio de Janeiro	0.23	0.11	0.23%	(0.03%, 0.44%)	8.7%	17.2%
Chile	Santiago	0.10	0.06	0.10%	-(0.01%, 0.21%)	29.4%	23.1%
Mexico	Mexico City	0.12	0.05	0.12%	(0.03%, 0.22%)	43.8%	24.2%
	Monterrey	0.76	0.15	0.77%	(0.46%, 1.07%)	4.1%	12.2%
	Toluca	-0.07	0.35	-0.07%	-(0.75%, 0.62%)	0.8%	3.7%
Meta Estimates	Fixed Effects (6)	0.17	0.03	0.17%	(0.11%, 0.23%)	100%	100%
	Random Effects (6)	0.23	0.07	0.23%	(0.09%, 0.37%)		

Table 30. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM overallag0-3, *cardiovascular* mortality in 65 years old and over, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.29	0.11	0.29%	(0.07%, 0.51%)	10.6%	18.4%
	Rio de Janeiro	0.28	0.12	0.28%	(0.03%, 0.52%)	8.7%	17.1%
Chile	Santiago	0.14	0.06	0.14%	(0.01%, 0.27%)	31.3%	24.1%
Mexico	Mexico City	0.22	0.05	0.22%	(0.11%, 0.32%)	44.5%	25.2%
	Monterrey	0.91	0.18	0.91%	(0.56%, 1.27%)	4.0%	11.7%
	Toluca	0.06	0.40	0.06%	(-0.74%, 0.85%)	0.8%	3.5%
Meta Estimates	Fixed Effects (6)	0.23	0.04	0.23%	(0.16%, 0.30%)	100%	100%
	Random Effects (6)	0.30	0.08	0.30%	(0.14%, 0.46%)		

Table 31. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM withlag0-3, for *Cerebrovascular/stroke* mortality in all ages, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	-0.02	0.17	-0.02%	-(0.36%, 0.32%)	10.4%	18.6%
	Rio de Janeiro	-0.35	0.20	-0.35%	-(0.74%, 0.04%)	8.1%	16.9%
Chile	Santiago	-0.10	0.09	-0.10%	-(0.27%, 0.07%)	42.9%	25.6%
Mexico	Mexico City	0.29	0.10	0.29%	(0.10%, 0.48%)	34.5%	24.9%
	Monterrey	0.59	0.31	0.59%	-(0.02%, 1.19%)	3.4%	10.6%
	Toluca	0.25	0.64	0.25%	-(1.00%, 1.51%)	0.8%	3.4%
Meta Estimates	Fixed Effects (6)	0.05	0.06	0.05%	-(0.06%, 0.16%)	100%	100%
	Random Effects (6)	0.05	0.13	0.05%	-(0.19%, 0.30%)		

Table 32. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM overall lag0-3, *Cerebrovascular/stroke* mortality in 65 years old and over, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	-0.04	0.20	-0.04%	-(0.43%, 0.35%)	12.2%	19.4%
	Rio de Janeiro	-1.00	0.26	-1.00%	-(1.50%, -0.49%)	7.2%	17.1%
Chile	Santiago	0.18	0.11	0.18%	-(0.05%, 0.41%)	36.7%	22.2%
Mexico	Mexico City	0.43	0.11	0.43%	(0.21%, 0.65%)	39.1%	22.3%
	Monterrey	0.68	0.35	0.68%	-(0.01%, 1.39%)	3.9%	13.7%
	Toluca	0.14	0.76	0.14%	-(1.34%, 1.65%)	0.8%	5.4%
Meta Estimates	Fixed Effects (6)	0.18	0.07	0.18%	(0.05%, 0.32%)	100%	100%
	Random Effects (6)	0.06	0.20	0.06%	-(0.33%, 0.45%)		

Table 33. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM overall lag0-3, for *Chronic obstructive pulmonary diseases* mortality in all ages, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	0.95	0.28	0.96%	(0.41%, 1.51%)	9.7%	17.7%
	Rio de Janeiro	0.31	0.32	0.31%	-(0.33%, 0.95%)	7.1%	15.4%
Chile	Santiago	0.00	0.18	0.00%	-(0.35%, 0.36%)	23.0%	23.2%
Mexico	Mexico City	-0.06	0.12	-0.06%	-(0.28%, 0.17%)	54.5%	26.7%
	Monterrey	0.73	0.41	0.73%	-(0.09%, 1.54%)	4.4%	11.9%
	Toluca	-0.35	0.74	-0.35%	-(1.79%, 1.11%)	1.4%	5.1%
Meta Estimates	Fixed Effects (6)	0.11	0.09	0.11%	-(0.06%, 0.28%)	100%	100%
	Random Effects (6)	0.27	0.18	0.27%	-(0.09%, 0.63%)		

Table 34. Weights and risk percent changes (%) by cities, and fixed and random combined effects (O₃) obtained with DLM overall lag0-3, *Chronic obstructive pulmonary* diseases mortality in 65 years old and over, per 10 µg/m³ increase of O₃ ambient levels.

Country	City	Beta(x1000)	SE(x1000)	RR(10)	(95% CI)	W(fixed)	W(Random)
Brazil	Sao Paulo	1.06	0.29	1.06%	(0.49%, 1.64%)	10.3%	17.9%
	Rio de Janeiro	0.23	0.35	0.23%	-(0.46%, 0.92%)	7.0%	14.7%
Chile	Santiago	0.21	0.20	0.21%	-(0.19%, 0.61%)	21.3%	23.5%
Mexico	Mexico City	0.01	0.13	0.01%	-(0.23%, 0.26%)	55.6%	28.7%
	Monterrey	-0.26	0.45	-0.26%	-(1.14%, 0.62%)	4.4%	10.9%
	Toluca	-0.22	0.80	-0.22%	-(1.78%, 1.36%)	1.4%	4.4%
Meta Estimates	Fixed Effects (6)	0.16	0.09	0.16%	-(0.02%, 0.35%)	100%	100%
	Random Effects (6)	0.24	0.18	0.24%	-(0.12%, 0.59%)		