APPENDICES

EPA HOSPITAL ADMISSIONS STUDY

APPENDIX A
DESCRIPTIVE STATISTICS

A1 POLLUTANTS

A2 METEOROLOGY

A3 HEALTH OUTCOMES

APPENDIX A1: POLLUTANTS

Table A1.1 Site-specific pollutant concentrations, Melbourne Statistical Division, July 1994-December 1997

Site		O_3 (ppb)			bsp ($10^{-4}m^{-1}$)		NO_2 (ppb)		CO (ppm)	
		8-hour	4-hour	1-hour	24-hour	1-hour	24-hour	1-hour	8-hour	1-hour
Alphington	Mean	18.83	22.05	24.23	0.28	0.72	13.63	25.47	1.06	1.68
	SD	9.35	10.28	11.32	0.29	0.72	4.81	8.41	0.99	1.43
	Min	2.00	4.00	5.00	0.00	0.07	1.00	4.00	0.00	0.00
	Max	67.00	78.00	99.00	2.43	5.49	33.00	65.00	8.90	11.50
Dandenong	Mean	22.19	25.01	26.69	0.26	0.58	11.93	23.28		
	SD	9.11	9.89	10.97	0.24	0.50	5.41	8.50		
	Min	1.00	3.00	2.00	0.00	0.00	1.00	3.00		
	Max	78.00	92.00	107.00	2.14	3.64	31.00	77.00		
Footscray	Mean	22.28	25.30	25.39	0.25	0.55	13.11	25.76	0.68	1.13
	SD	8.92	10.20	12.01	0.23	0.47	5.84	10.73	0.56	1.00
	Min	1.00	2.00	0.00	0.02	0.04	2.00	4.00	0.10	0.10
	Max	78.00	95.00	105.00	2.06	3.34	38.00	88.00	3.90	6.90
Point Cook	Mean	24.47	26.74	29.00	0.15	0.36	6.06	16.22		
	SD	9.31	10.72	12.15	0.19	0.41	4.89	10.39		
	Min	2.00	3.00	3.00	0.00	0.01	0.00	0.00		
	Max	98.00	113.00	126.00	2.06	3.23	39.00	74.00		
Paisley	Mean	22.82	25.56	28.08	0.21	0.49	10.33	22.40		
	SD	9.49	10.95	12.60	0.23	0.49	6.35	11.42		
	Min	1.00	2.00	0.00	0.00	0.02	0.00	0.00		
	Max	96.00	111.00	120.00	2.20	3.57	39.00	71.00		
Brighton	Mean	22.61	25.54	27.19						
	SD	9.57	10.92	12.29						
	Min	3.00	3.00	4.00						
	Max	85.00	97.00	112.00						
Box Hill	Mean	19.67	22.85	24.55	0.26	0.63	12.95	24.30	0.88	1.46
	SD	9.37	10.14	10.95	0.24	0.63	4.63	8.08	0.85	1.29
	Min	2.00	4.00	6.00	0.01	0.04	3.00	4.00	0.00	0.00
	Max	73.00	87.00	107.00	1.99	4.36	33.00	73.00	6.50	8.70

Table A1.2 Inter-site correlation coefficients: average 8-hour ozone*

	Dandenong	Footscray	Pt Cook	Paisley	Brighton	Box Hill
Alphington	0.86	0.90	0.79	0.80	0.86	0.94
Dandenong		0.92	0.81	0.87	0.92	0.90
Footscray			0.84	0.91	0.93	0.90
Pt Cook				0.89	0.88	0.74
Paisley					0.92	0.80
Brighton						0.83

* all coefficients significant at p=0.0001

Table A1.3 Inter-site correlation coefficients: average 4-hour ozone*

	Dandenong	Footscray	Pt Cook	Paisley	Brighton	Box Hill
Alphington	0.85	0.90	0.80	0.82	0.87	0.94
Dandenong		0.90	0.82	0.88	0.92	0.90
Footscray			0.86	0.93	0.93	0.89
Pt Cook				0.90	0.89	0.76
Paisley					0.93	0.81
Brighton						0.85

* all coefficients significant at p=0.0001

Table A1.4 Inter-site correlation coefficients: maximum 1-hour ozone*

	Dandenong	Footscray	Pt Cook	Paisley	Brighton	Box Hill
Alphington	0.83	0.86	0.80	0.81	0.86	0.93
Dandenong		0.86	0.81	0.86	0.90	0.89
Footscray			0.79	0.86	0.91	0.85
Pt Cook				0.89	0.88	0.77
Paisley					0.92	0.81
Brighton						0.85

* all coefficients significant at p=0.0001

Table A1.5 Inter-site correlation coefficients: average 24-hour bsp*

	Dandenong	Footscray	Pt Cook	Paisley	Box Hill
Alphington	0.89	0.87	0.76	0.83	0.92
Dandenong		0.91	0.86	0.90	0.89
Footscray			0.92	0.95	0.86
Pt Cook				0.93	0.77
Paisley					0.81

* all coefficients significant at p=0.0001

Table A1.6 Inter-site correlation coefficients: maximum 1-hour bsp*

	Dandenong	Footscray	Pt Cook	Paisley	Box Hill
Alphington	0.77	0.73	0.63	0.71	0.85
Dandenong		0.81	0.77	0.79	0.82
Footscray			0.82	0.87	0.74
Pt Cook				0.82	0.64
Paisley					0.71

* all coefficients significant at p=0.0001

Table A1.7 Inter-site correlation coefficients: average 24-hour nitrogen dioxide*

	Dandenong	Footscray	Pt Cook	Paisley	Box Hill
Alphington	0.66	0.73	0.39	0.55	0.83
Dandenong		0.83	0.72	0.83	0.71
Footscray			0.72	0.82	0.73
Pt Cook				0.87	0.37
Paisley					0.52

* all coefficients significant at p=0.0001

Table A1.8 Inter-site correlation coefficients: maximum 1-hour nitrogen dioxide*

	Dandenong	Footscray	Pt Cook	Paisley	Box Hill
Alphington	0.64	0.72	0.52	0.69	0.81
Dandenong		0.71	0.66	0.75	0.72
Footscray			0.70	0.83	0.73
Pt Cook				0.80	0.52
Paisley					0.70

* all coefficients significant at p=0.0001

Table A1.9 Inter-site correlation coefficients: average 8-hour carbon monoxide*

	Parl. Place	Footscray	Box Hill
Alphington	0.83	0.79	0.90
Parl. Place		0.84	0.79
Footscray			0.74

* all coefficients significant at p=0.0001

Table A1.10 Inter-site correlation coefficients: maximum 1-hour carbon monoxide*

	Parl. Place	Footscray	Box Hill
Alphington	0.78	0.76	0.87
Parl. Place		0.79	0.75
Footscray			0.72

* all coefficients significant at p=0.0001

Table A1.11 Site-specific correlation coefficients: Alphington*

	4 hour O_3	1 hour O_3	24 hour NO_2	1 hour NO_2	24 hour bsp	1 hour bsp	8 hour CO	1 hour CO
8 hour O_3	0.97	0.94	-0.07[a]	0.18	-0.23	-0.26	-0.26	-0.25
4 hour O_3		0.98	0.03[ns]	0.26	-0.16	-0.19	-0.19	-0.18
1 hour O_3			0.08[a]	0.29	-0.12[c]	-0.16	-0.15	-0.14
24 hour NO_2				0.82	0.55	0.52	0.58	0.59
1 hour NO_2					0.50	0.48	0.52	0.52
24 hour bsp						0.89	0.76	0.72
1 hour bsp							0.80	0.78
8 hour CO								0.94

* all coefficients significant at p=0.0001 unless indicated
[a] significant at p<0.05
[b] significant at p<0.01
[c] Significant at p<0.001
[ns] not significant

Table A1.12 Site-specific correlation coefficients: Dandenong*

	4 hour O_3	1 hour O_3	24 hour NO_2	1 hour NO_2	24 hour bsp	1 hour bsp
8 hour O_3	0.97	0.94	-0.18	0.03[ns]	-0.18	-0.18
4 hour O_3		0.99	-0.07[a]	0.11	-0.11[c]	-0.10[c]
1 hour O_3			-0.01[ns]	0.16	-0.06[a]	-0.06[a]
24 hour NO_2				0.85	0.55	0.56
1 hour NO_2					0.45	0.46
24 hour bsp						0.91

* all coefficients significant at p=0.0001 unless indicated
[a] significant at p<0.05
[b] significant at p<0.01
[c] Significant at p<0.001
[ns] not significant

Table A1.13 Site-specific correlation coefficients: Footscray*

	4 hour O_3	1 hour O_3	24 hour NO_2	1 hour NO_2	24 hour bsp	1 hour bsp	8 hour CO	1 hour CO
8 hour O_3	0.97	0.90	-0.04[ns]	0.19	-0.14	-0.12	-0.23	-0.19
4 hour O_3		0.94	0.06[a]	0.26	-0.05[ns]	-0.03[ns]	-0.14	-0.11
1 hour O_3			0.13	0.30	-0.01[ns]	0.001[ns]	-0.09[b]	-0.07[a]
24 hour NO_2				0.87	0.63	0.63	0.74	0.72
1 hour NO_2					0.53	0.56	0.62	0.63
24 hour bsp						0.90	0.68	0.58
1 hour bsp							0.75	0.69
8 hour CO								0.94

* all coefficients significant at p=0.0001 unless indicated
[a] significant at p<0.05
[b] significant at p<0.01
[c] Significant at p<0.001
[ns] not significant

Table A1.14 Site-specific correlation coefficients: Point Cook*

	4 hour O_3	1 hour O_3	24 hour NO_2	1 hour NO_2	24 hour bsp	1 hour bsp
8 hour O_3	0.98	0.92	-0.05[ns]	0.10[b]	0.03[ns]	0.07[a]
4 hour O_3		0.96	0.08[a]	0.21	0.11[c]	0.14
1 hour O_3			0.12[c]	0.23	0.14	0.18
24 hour NO_2				0.88	0.63	0.67
1 hour NO_2					0.54	0.61
24 hour bsp						0.92

* all coefficients significant at p=0.0001 unless indicated
[a] significant at p<0.05
[b] significant at p<0.01
[c] Significant at p<0.001
[ns] not significant

Table A1.15 Site-specific correlation coefficients: Paisley*

	4 hour O_3	1 hour O_3	24 hour NO_2	1 hour NO_2	24 hour bsp	1 hour bsp
8 hour O_3	0.97	0.92	-0.03[ns]	0.22	-0.06[a]	-0.04[ns]
4 hour O_3		0.97	0.07[a]	0.29	0.02[ns]	0.04[ns]
1 hour O_3			0.11[c]	0.31	0.06[a]	0.08[b]
24 hour NO_2				0.87	0.62	0.62
1 hour NO_2					0.54	0.59
24 hour bsp						0.89

* all coefficients significant at p=0.0001 unless indicated
[a] significant at p<0.05
[b] significant at p<0.01
[c] Significant at p<0.001
[ns] not significant

Table A1.16 Site-specific correlation coefficients: Brighton*

	4 hour O_3	1 hour O_3
8 hour O_3	0.97	0.92
4 hour O_3		0.97

* all coefficients significant at p=0.0001

Table A1.17 Site-specific correlation coefficients: Box Hill*

	4 hour O_3	1 hour O_3	24 hour NO_2	1 hour NO_2	24 hour bsp	1 hour bsp	8 hour CO	1 hour CO
8 hour O_3	0.98	0.95	-0.16	0.17	-0.20	-0.25	-0.27	-0.25
4 hour O_3		0.99	-0.06[a]	0.25	-0.11	-0.19	-0.19	-0.18
1 hour O_3			-0.02[ns]	0.26	-0.08[b]	-0.15	-0.17	-0.16
24 hour NO_2				0.81	0.53	0.52	0.62	0.62
1 hour NO_2					0.45	0.43	0.51	0.53
24 hour bsp						0.89	0.72	0.68
1 hour bsp							0.78	0.75
8 hour CO								0.93

* all coefficients significant at p=0.0001 unless indicated
[a] significant at p<0.05
[b] significant at p<0.01
[c] Significant at p<0.001
[ns] not significant

Table A1.18 Mean daily pollutant concentrations (network average), Melbourne, July 1994 – December 1997

	Whole study period				Cool season[a]				Warm season[b]			
	Mean	SD	Min	Max	Mean	SD	Min	Max	Mean	SD	Min	Max
O_3 (ppb)												
8 hour	21.79	8.89	0.99	77.57	19.57	6.07	0.99	56.14	25.07	11.13	11.14	77.57
4 hour	24.65	9.99	2.01	87.86	22.28	6.10	2.01	63.00	28.18	13.13	11.57	87.86
1 hour	26.35	11.11	2.00	97.57	23.66	6.07	2.00	67.57	30.35	15.02	10.73	97.57
bsp ($10^{-4}m^{-1}$)												
24 hour	0.24	0.23	0.03	2.00	0.27	0.27	0.03	2.00	0.19	0.13	0.03	1.25
1 hour	0.55	0.48	0.07	3.26	0.66	0.54	0.07	3.26	0.40	0.31	0.08	2.73
NO_2 (ppb)												
24 hour	11.35	4.62	2.47	27.29	13.03	4.34	2.87	27.29	8.85	3.83	2.47	24.67
1 hour	22.90	8.39	5.17	64.29	25.12	7.28	6.50	64.29	19.6	8.83	5.17	52.15
CO (ppm)												
8 hour	0.92	0.75	0.10	5.68	1.15	0.86	0.10	5.68	0.58	0.32	0.10	2.35
1 hour	1.51	1.19	0.17	9.33	1.88	1.33	0.20	9.33	0.95	0.60	0.17	3.57

a April – October
b November - March

Table A1.19 Network average correlation coefficients, Melbourne, July 1994-December 1997*

	4 hour O_3	1 hour O_3	24 hour NO_2	1 hour NO_2	24 hour bsp	1 hour bsp	8 hour CO	1 hour CO
8 hour O_3	0.98	0.96	-0.03[ns]	0.21	-0.13	-0.15	-0.25	-0.23
4 hour O_3		0.99	0.06[a]	0.29	0.06[a]	-0.07[a]	-0.17	-0.15
1 hour O_3			0.11	0.32	-0.01[ns]	-0.03[ns]	-0.13	-0.11
24 hour NO_2				0.90	0.64	0.69	0.75	0.77
1 hour NO_2					0.56	0.61	0.64	0.68
24 hour bsp						0.93	0.70	0.66
1 hour bsp							0.78	0.75
8 hour CO								0.96

* all coefficients significant at p=0.0001 unless indicated
[a] significant at p<0.05
[b] significant at p<0.01
[c] Significant at p<0.001
[ns] not significant

Table A1.20 Network average correlation coefficients*, Melbourne, July 1994-December 1997: Cool season[a]

	4 hour O_3	1 hour O_3	24 hour NO_2	1 hour NO_2	24 hour bsp	1 hour bsp	8 hour CO	1 hour CO
8 hour O_3	0.97	0.92	-0.41	-0.15	-0.45	-0.44	-0.47	-0.44
4 hour O_3		0.98	-0.26	-0.004[ns]	-0.37	-0.36	-0.36	-0.32
1 hour O_3			-0.17	0.08[a]	-0.30	-0.29	-0.29	-0.26
24 hour NO_2				0.89	0.68	0.71	0.73	0.75
1 hour NO_2					0.59	0.64	0.67	0.69
24 hour bsp						0.93	0.72	0.69
1 hour bsp							0.81	0.79
8 hour CO								0.96

* all coefficients significant at p=0.0001 unless indicated
[a] April - October
[a] significant at p<0.05
[b] significant at p<0.01
[c] Significant at p<0.001
[ns] not significant

Table A1.21 Network average correlation coefficients*, Melbourne, July 1994-December 1997: Warm season[a]

	4 hour O_3	1 hour O_3	24 hour NO_2	1 hour NO_2	24 hour bsp	1 hour bsp	8 hour CO	1 hour CO
8 hour O_3	0.99	0.97	0.61	0.68	0.48	0.41	0.37	0.34
4 hour O_3		0.99	0.63	0.69	0.50	0.44	0.39	0.36
1 hour O_3			0.64	0.69	0.51	0.44	0.40	0.36
24 hour NO_2				0.93	0.60	0.57	0.78	0.76
1 hour NO_2					0.56	0.55	0.72	0.72
24 hour bsp						0.92	0.48	0.41
1 hour bsp							0.47	0.41
8 hour CO								0.91

* all coefficients significant at p=0.001
[a] November - March

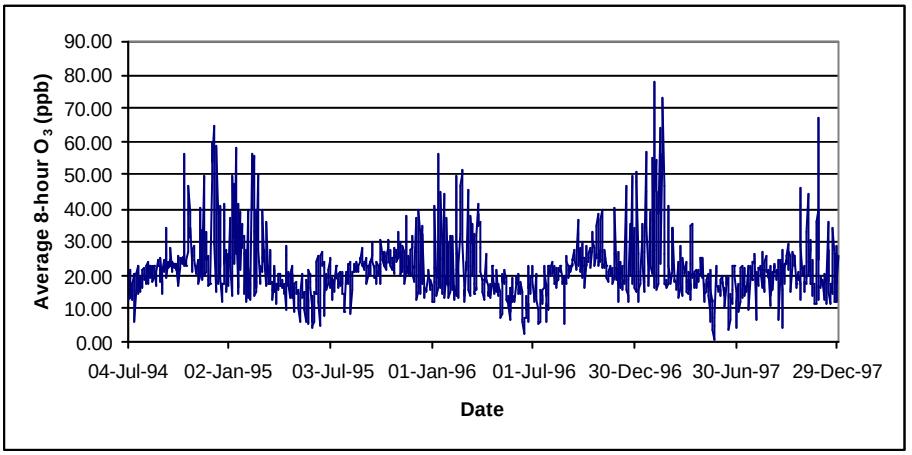

Figure A1.1 Time series: 8-hour ozone (network average), Melbourne, July 1994-December 1997

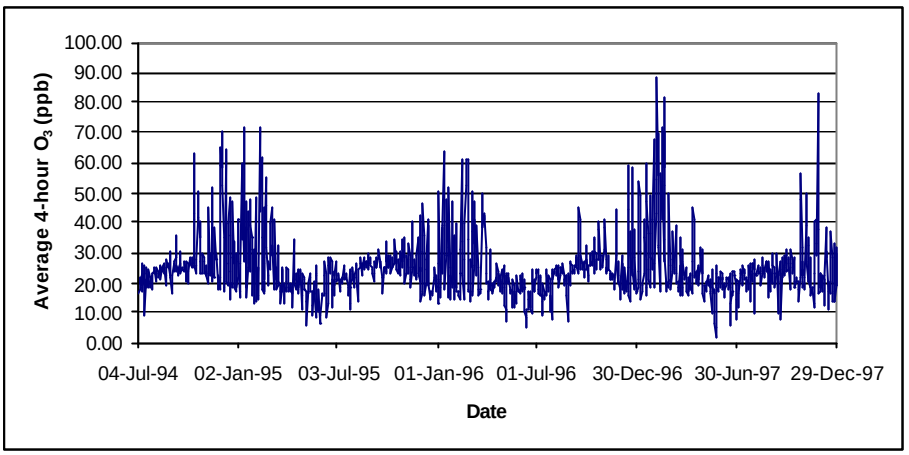

Figure A1.2 Time series: 4-hour ozone (network average), Melbourne, July 1994-December 1997

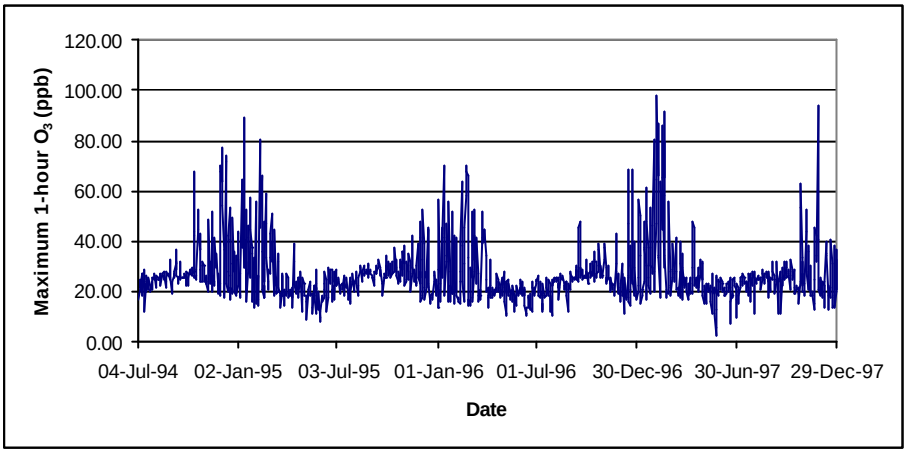

Figure A1.3 Time series: 1-hour ozone (network average), Melbourne, July 1994-December 1997

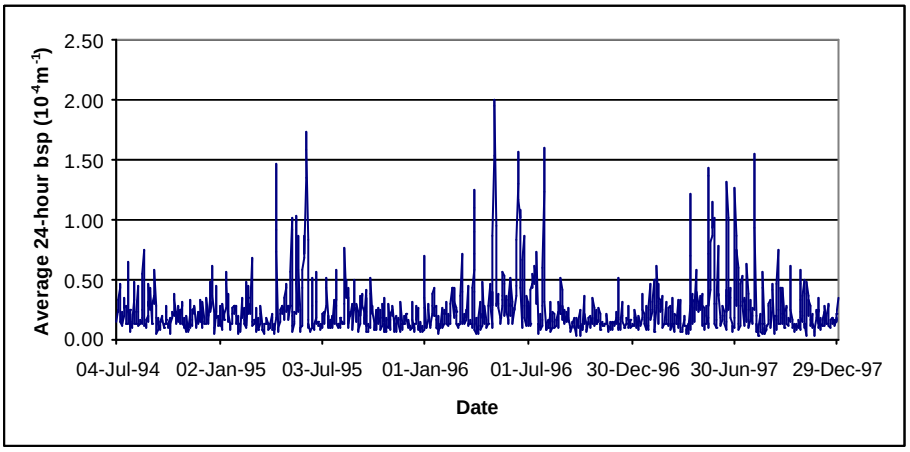

Figure A1.4 Time series: 24-hour bsp (network average), Melbourne, July 1994-December 1997

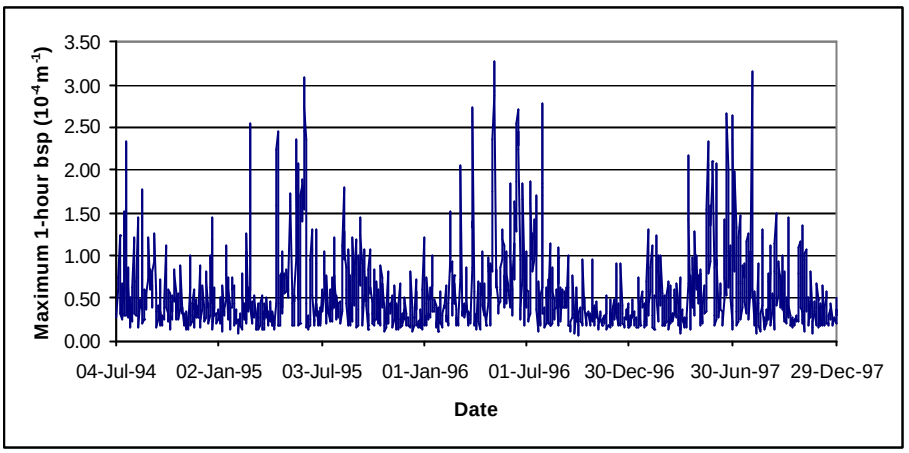

Figure A1.5 Time series: 1-hour bsp (network average), Melbourne, July 1994-December 1997

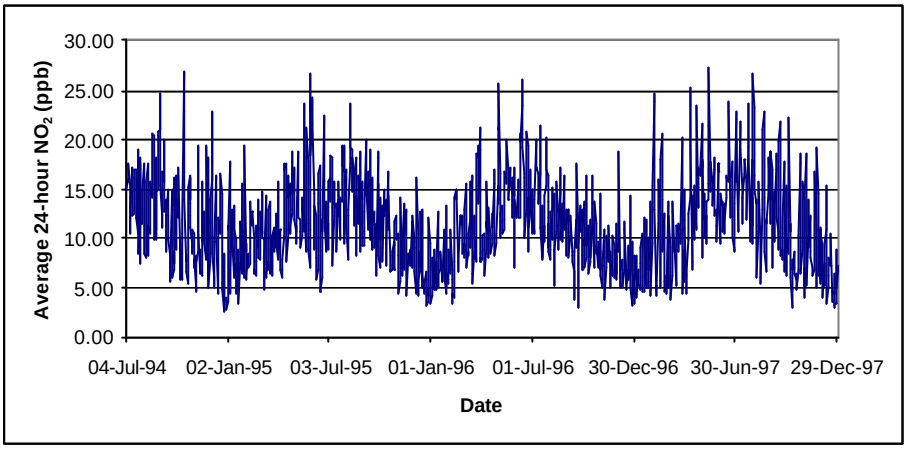

Figure A1.6 Time series: 24-hour nitrogen dioxide (network average), Melbourne, July 1994-December 1997

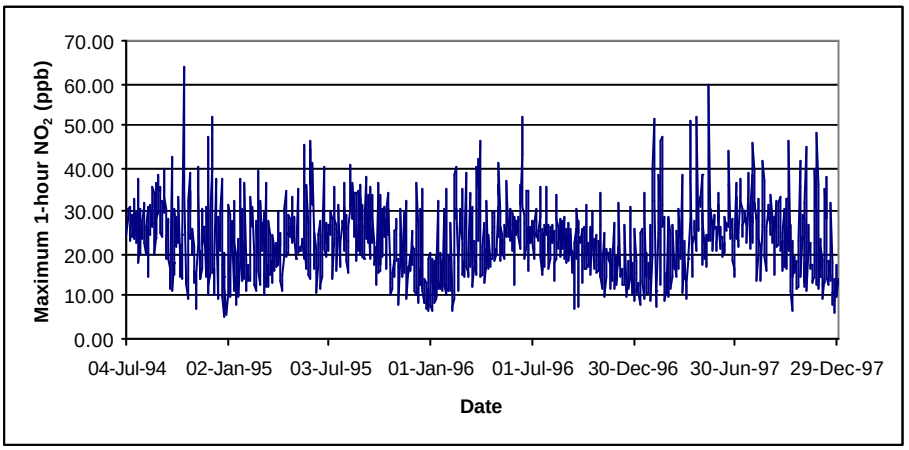

Figure A1.7 Time series: 1-hour nitrogen dioxide (network average), Melbourne, July 1994-December 1997

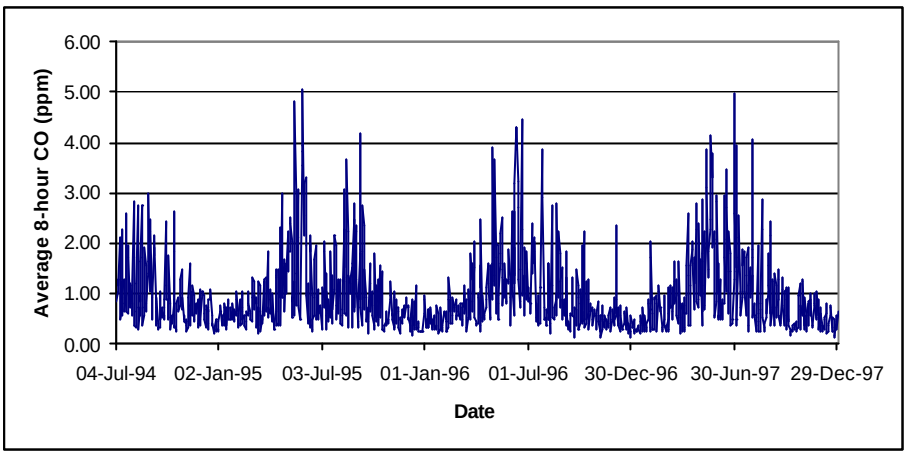

Figure A1.8 Time series: 8-hour carbon monoxide (network average), Melbourne, July 1994-December 1997

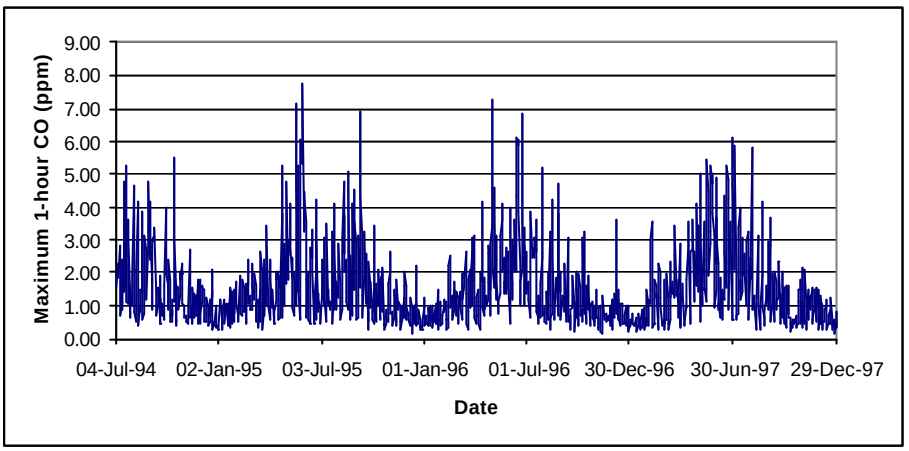

Figure A1.9 Time series: 1-hour carbon monoxide (network average), Melbourne, July 1994-December 1997

APPENDIX A2: METEOROLOGY

Table A2 Meteorological variables, Melbourne, July 1994 – December 1997

	Whole study period				Cool season[a]				Warm season[b]			
	Mean	SD	Min	Max	Mean	SD	Min	Max	Mean	SD	Min	Max
Min temp (°C)	9.78	4.06	-1.44	25.60	7.59	3.02	-1.44	16.95	13.02	3.16	5.00	25.60
Max temp (°C)	19.10	5.84	7.10	41.48	16.08	3.75	7.10	32.80	23.57	5.52	11.62	41.48
Average temp (°C)	14.34	4.55	4.22	33.54	11.77	2.90	4.22	23.50	18.15	3.81	9.08	33.54
Dew point min (°C)	6.34	3.24	-2.05	17.15	4.86	2.49	-2.05	13.35	8.53	2.97	2.00	17.15
Dew point max (°C)	10.75	3.38	2.95	20.85	9.07	2.48	2.95	17.40	13.24	2.98	6.20	20.85
Rain (mm)	1.66	4.93	0	80.40	1.69	3.96	0	36.60	1.60	6.10	0	80.40

Data Source: Bureau of Meteorology
a April – October
b November - March

APPENDIX A3: HEALTH OUTCOMES

Table A3 Daily hospital admissions, Melbourne, July 1994 – December 1997

	Whole study period				Cool season[a]				Warm season[b]			
	Mean	SD	Min	Max	Mean	SD	Min	Max	Mean	SD	Min	Max
Asthma 0-14	9.65	4.64	0	29	9.94	4.18	1	26	9.21	5.22	0	29
Total asthma	18.47	6.45	3	52	19.60	5.92	7	38	16.78	6.83	3	52
Respiratory 0-14	21.93	8.92	2	54	25.53	8.03	7	54	16.58	7.38	2	40
Respiratory 15-64	19.86	6.19	4	54	21.59	6.24	5	54	17.29	5.15	4	37
Respiratory 65+	24.08	8.37	8	68	26.96	8.78	10	68	19.80	5.41	8	38
Total Respiratory	65.87	18.32	21	132	74.08	16.99	35	132	53.68	12.53	21	105
Cardiovas. 0-64	27.93	6.14	11	51	28.47	6.09	12	51	27.13	6.13	11	46
Cardiovas. 65+	56.11	9.34	29	88	58.45	9.17	33	88	52.65	8.48	29	79
Total cardiovas.	84.04	12.53	47	129	86.91	12.09	48	129	79.78	11.94	47	112
Total IHD	31.25	6.23	12	56	32.06	6.07	17	56	30.04	6.27	12	52

Data source: Department of Human Services, Victoria
a April – October
b November - March

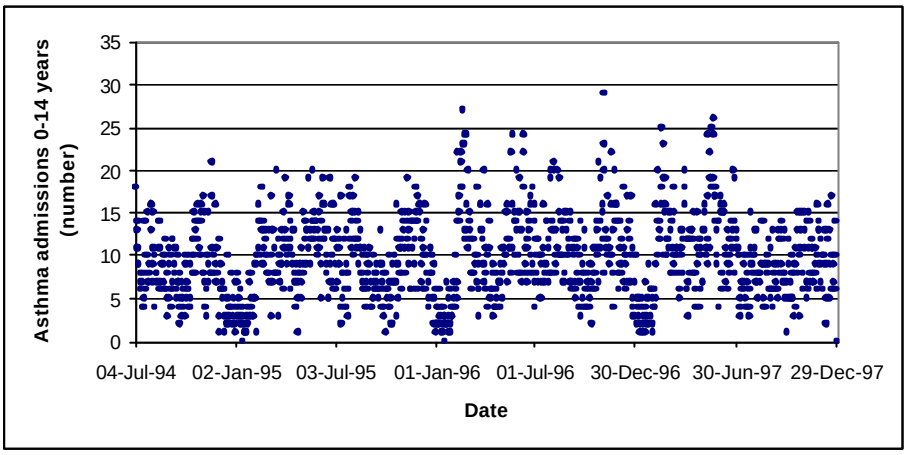

Figure A3.1 Time series: Hospital admissions for asthma, 0-14 years, Melbourne, July 1994-December 1997

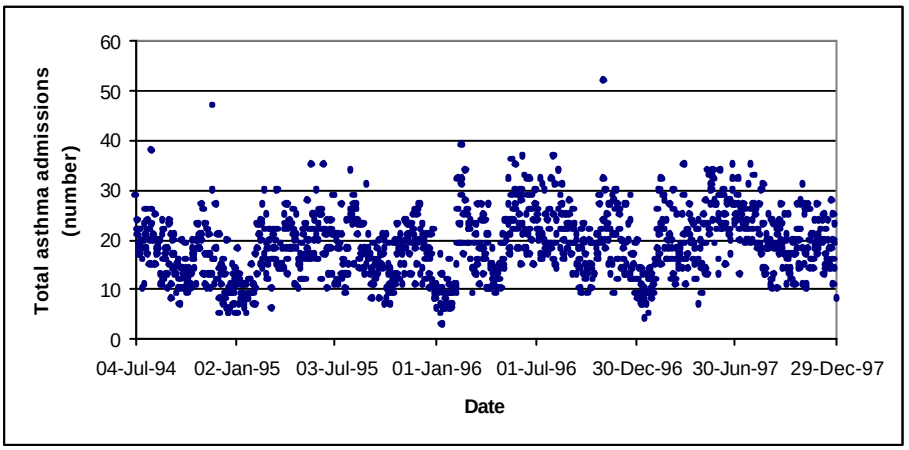

Figure A3.2 Time series: Hospital admissions for asthma, all ages, Melbourne, July 1994-December 1997

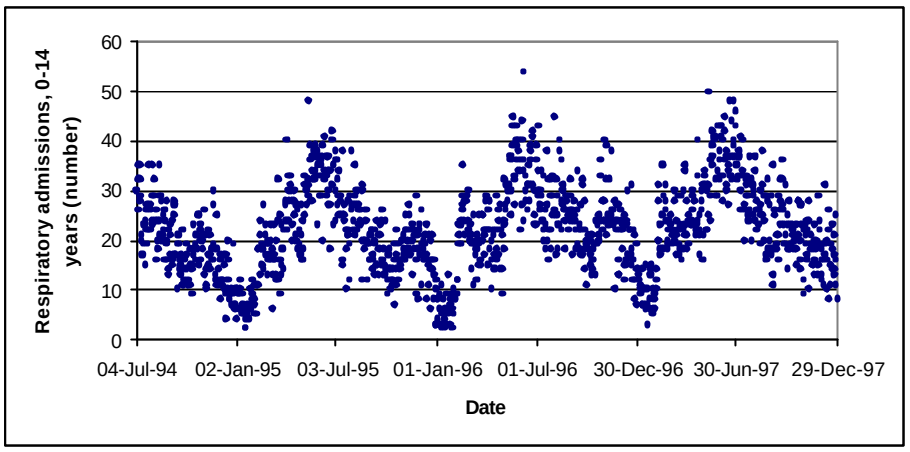

Figure A3.3 Time series: Hospital admissions for respiratory disease, 0-14 years, Melbourne, July 1994-December 1997

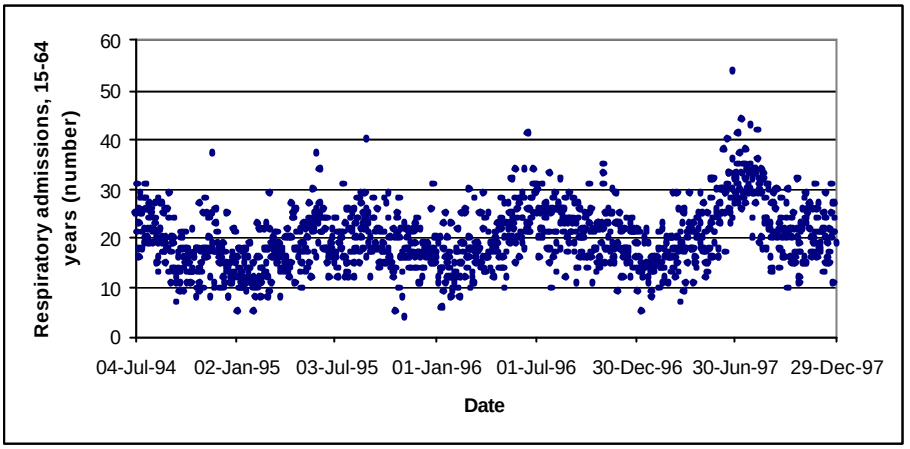

Figure A3.4 Time series: Hospital admissions for respiratory disease, 15-64 years, Melbourne, July 1994-December 1997

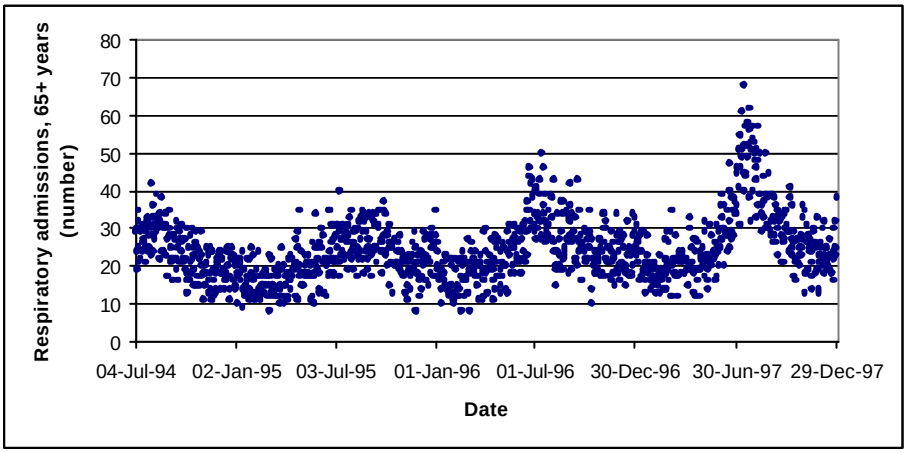

Figure A3.5 Time series: Hospital admissions for respiratory disease, 65+ years, Melbourne, July 1994-December 1997

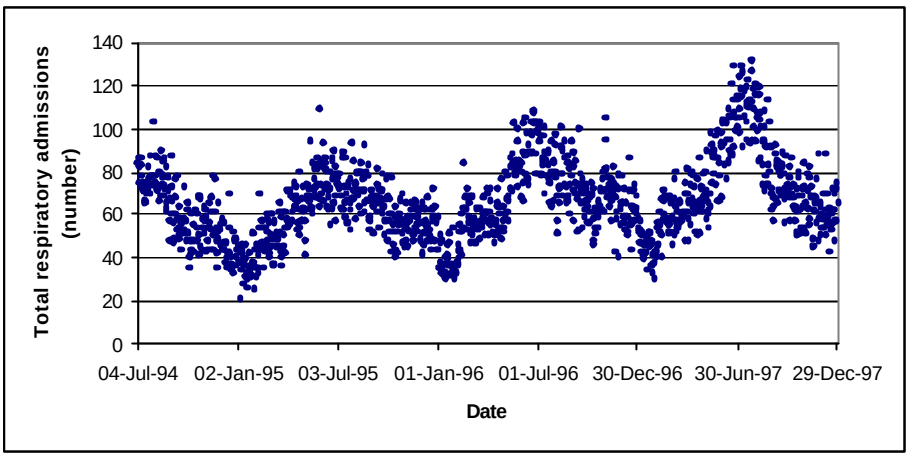

Figure A3.6 Time series: Hospital admissions for respiratory disease, all ages, Melbourne, July 1994-December 1997

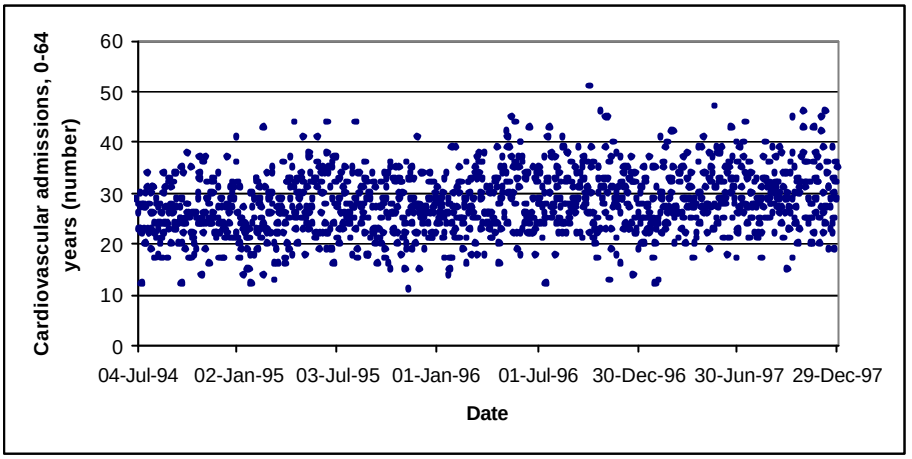

Figure A3.7 Time series: Hospital admissions for cardiovascular disease, 0-64 years, Melbourne, July 1994-December 1997

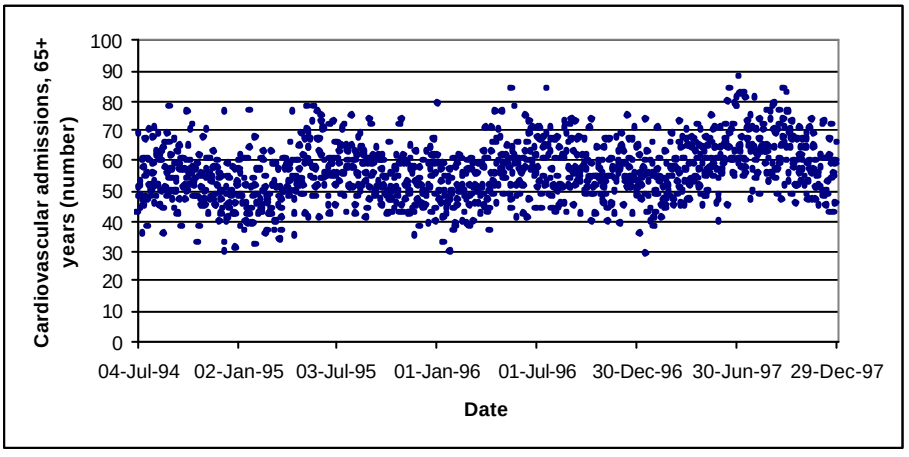

Figure A3.8 Time series: Hospital admissions for cardiovascular disease, 65+ years, Melbourne, July 1994-December 1997

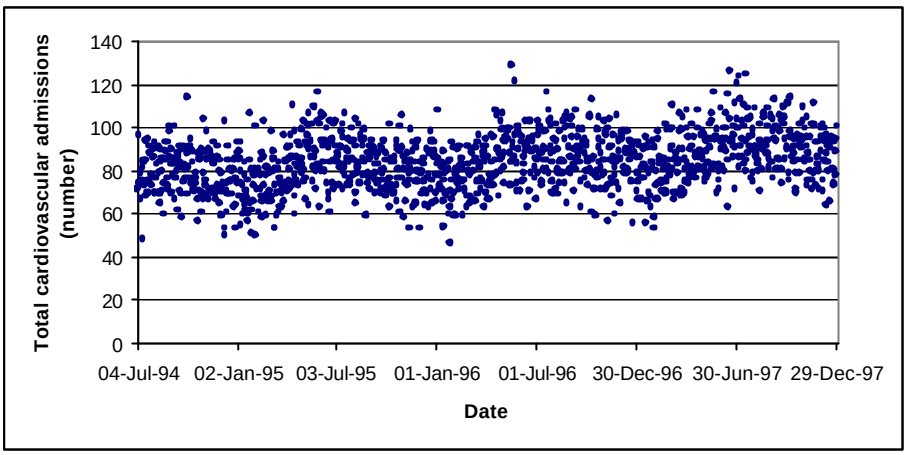

Figure A3.9 Time series: Hospital admissions for cardiovascular disease, all ages, Melbourne, July 1994-December 1997

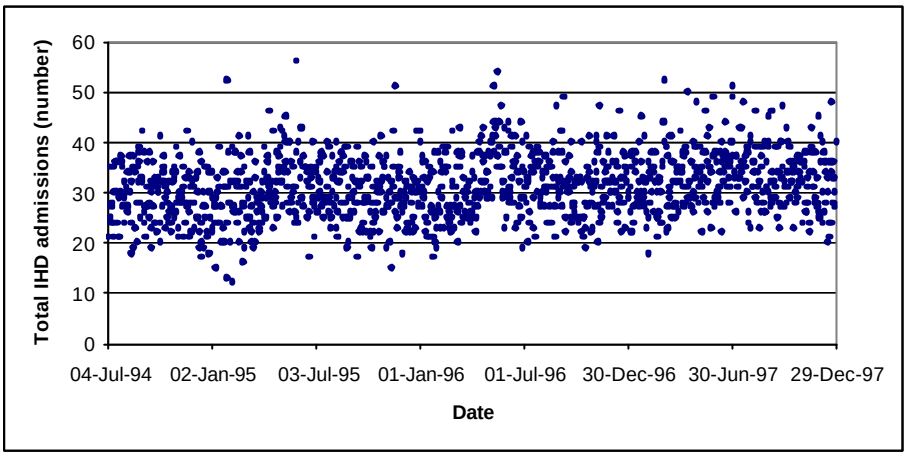

Figure A3.10 Time series: Hospital admissions for ischaemic heart disease, all ages, Melbourne, July 1994-December 1997

APPENDIX B: RESULTS

B1 SINGLE-POLLUTANT MODELS

B2 MULTI-POLLUTANT MODELS

B3 BASE MODELS

Table B1.1 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for asthma, 0-14 years

Outcome	Pollutant	Whole year models						Cool Season						Warm Season					
		Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Asthma	**Av 24h bsp**	0.1381	0.0394	3.50	1.1481	1.0628	1.2403	0.1311	0.0429	3.06	1.1401	1.0481	1.2401	0.1932	0.1059	1.82	1.2131	0.9857	1.4930
0-14	Lag 1	0.0419	0.0386	1.08	1.0428	0.9668	1.1247	0.0592	0.0414	1.43	1.0610	0.9783	1.1507	-0.0714	0.1134	-0.63	0.9311	0.7455	1.1628
	Lag 2	0.0253	0.0368	0.69	1.0256	0.9543	1.1023	0.0345	0.0396	0.87	1.0351	0.9578	1.1186	-0.0508	0.1165	-0.44	0.9505	0.7564	1.1943
	3 day av.	0.1065	0.0454	2.35	1.1124	1.0177	1.2159	0.1129	0.0489	2.31	1.1195	1.0172	1.2321	0.0538	0.1388	0.39	1.0553	0.8039	1.3852
	5 day av.	0.0999	0.05059	1.97	1.1051	1.0007	1.2203	0.0894	0.055	1.63	1.0935	0.9818	1.2180	0.2521	0.16	1.58	1.2867	0.9404	1.7607
	Max 1h bsp	0.0575	0.0194	2.96	1.0592	1.0197	1.1002	0.0596	0.0222	2.69	1.0614	1.0162	1.1086	0.0557	0.0433	1.28	1.0573	0.9713	1.1509
	Lag 1	0.0196	0.0189	1.03	1.0198	0.9827	1.0583	0.0384	0.0211	1.82	1.0391	0.9970	1.0830	-0.0577	0.0468	-1.23	0.9439	0.8612	1.0346
	Lag 2	0.0217	0.0178	1.21	1.0219	0.9869	1.0582	0.0297	0.02	1.48	1.0301	0.9905	1.0713	-0.0189	0.047	-0.40	0.9813	0.8949	1.0760
	3 day av.	0.0568	0.0228	2.49	1.0584	1.0122	1.1068	0.0691	0.0255	2.71	1.0715	1.0193	1.1265	-0.0113	0.0613	-0.18	0.9888	0.8768	1.1150
	5 day av.	0.0612	0.0254	2.41	1.0631	1.0115	1.1174	0.0638	0.0285	2.24	1.0659	1.0080	1.1271	0.0641	0.0728	0.88	1.0662	0.9244	1.2297
	Av 24h NO_2	0.0084	0.0023	3.70	1.0084	1.0039	1.0130	0.0094	0.0029	3.22	1.0094	1.0037	1.0152	0.0073	0.004	1.84	1.0073	0.9995	1.0153
	Lag 1	0.0032	0.0022	1.46	1.0032	0.9989	1.0075	0.0058	0.0028	2.08	1.0058	1.0003	1.0114	-0.0017	0.0041	-0.42	0.9983	0.9903	1.0064
	Lag 2	0.0027	0.0021	1.29	1.0027	0.9986	1.0068	0.0024	0.0027	0.88	1.0024	0.9971	1.0077	0.0048	0.0044	1.08	1.0048	0.9962	1.0135
	3 day av.	0.0096	0.0027	3.55	1.0096	1.0043	1.0150	0.0106	0.0035	3.00	1.0107	1.0037	1.0176	0.0074	0.0712	1.28	1.0074	0.8762	1.1583
	5 day av.	0.0117	0.003	3.88	1.0118	1.0058	1.0177	0.008	0.004	2.00	1.0080	1.0002	1.0160	0.0281	0.0073	3.86	1.0285	1.0139	1.0433
	Max 1h NO_2	0.0024	0.00118	2.05	1.0024	1.0001	1.0047	0.00335	0.0017	1.97	1.0034	1.0000	1.0067	0.0017	0.0017	1.02	1.0017	0.9984	1.0050
	Lag 1	0.0004	0.0012	0.36	1.0004	0.9980	1.0028	0.0014	0.0016	0.86	1.0014	0.9983	1.0045	-0.0005	0.0018	-0.29	0.9995	0.9960	1.0030
	Lag 2	0.0018	0.0011	1.59	1.0018	0.9996	1.0040	0.0008	0.0016	0.51	1.0008	0.9977	1.0039	0.0042	0.0019	2.15	1.0042	1.0005	1.0080
	3 day av.	0.0034	0.0015	2.21	1.0034	1.0005	1.0064	0.0036	0.0022	1.62	1.0036	0.9993	1.0079	0.0034	0.0025	1.37	1.0034	0.9985	1.0083
	5 day av.	0.0048	0.0018	2.67	1.0048	1.0013	1.0084	0.0013	0.0026	0.50	1.0013	0.9962	1.0064	0.0114	0.0032	3.62	1.0115	1.0051	1.0178
	Av 8h O_3	0.0003	0.0011	0.25	1.0003	0.9981	1.0025	-0.0064	0.002	-3.30	0.9936	0.9897	0.9975	0.0025	0.001318	1.92	1.0025	0.9999	1.0051
	Lag 1	-0.0022	0.0012	-1.92	0.9978	0.9955	1.0002	-0.0081	0.0019	-4.22	0.9919	0.9882	0.9956	-0.0002	0.0014	-0.16	0.9998	0.9971	1.0025
	Lag 2	-0.0009	0.0014	-0.65	0.9991	0.9964	1.0018	-0.0072	0.002	-3.70	0.9928	0.9889	0.9967	0.0023	0.0016	1.41	1.0023	0.9992	1.0055
	3 day av.	-0.0018	0.0015	-1.17	0.9982	0.9953	1.0011	-0.013	0.0023	-5.76	0.9871	0.9826	0.9915	0.0027	0.0018	1.48	1.0027	0.9992	1.0062
	5 day av.	-0.00006	0.0018	-0.03	0.9999	0.9964	1.0035	-0.0125	0.0025	-5.11	0.9876	0.9828	0.9924	0.0072	0.0023	3.11	1.0072	1.0027	1.0118
	Av 4h O_3	0.0008	0.001	0.82	1.0008	0.9988	1.0028	-0.0046	0.0019	-2.40	0.9954	0.9917	0.9991	0.0022	0.0011	1.99	1.0022	1.0000	1.0044
	Lag 1	-0.0015	0.001	-1.45	0.9985	0.9965	1.0005	-0.0062	0.0019	-3.23	0.9938	0.9901	0.9975	-0.0002	0.0012	-0.21	0.9998	0.9975	1.0022
	Lag 2	-0.0002	0.0012	-0.06	0.9998	0.9975	1.0022	-0.0057	0.002	-2.92	0.9943	0.9904	0.9982	0.0016	0.0014	1.21	1.0016	0.9989	1.0044
	3 day av.	-0.0006	0.0014	-0.43	0.9994	0.9967	1.0021	-0.0105	0.0023	-4.58	0.9896	0.9851	0.9940	0.0022	0.0016	1.43	1.0022	0.9991	1.0054
	5 day av.	0.0014	0.0017	0.87	1.0014	0.9981	1.0047	-0.0109	0.0025	-4.33	0.9892	0.9843	0.9940	0.0062	0.0019	3.22	1.0062	1.0025	1.0100
	Max 1h O_3	0.001	0.0009	1.11	1.0010	0.9992	1.0028	-0.0041	0.002	-2.12	0.9959	0.9920	0.9998	0.002	0.001	2.07	1.0020	1.0000	1.0040
	Lag 1	-0.001	0.0009	-1.08	0.9990	0.9972	1.0008	-0.0051	0.0019	-2.66	0.9949	0.9912	0.9986	-0.0002	0.001	-0.15	0.9998	0.9978	1.0018
	Lag 2	0.0001	0.0011	0.09	1.0001	0.9979	1.0023	-0.0051	0.002	-2.57	0.9949	0.9910	0.9988	0.0014	0.0012	1.16	1.0014	0.9990	1.0038
	3 day av.	0.00002	0.0012	0.02	1.0000	0.9977	1.0024	-0.0094	0.0023	-4.00	0.9906	0.9862	0.9951	0.0021	0.0014	1.51	1.0021	0.9994	1.0049
	5 day av.	0.0021	0.0015	1.37	1.0021	0.9992	1.0051	-0.0102	0.0026	-3.93	0.9899	0.9848	0.9949	0.0056	0.0017	3.34	1.0056	1.0023	1.0090
	Av 8h CO	0.034	0.0131	2.59	1.0346	1.0084	1.0615	0.0351	0.0139	2.52	1.0357	1.0079	1.0643	0.0311	0.0475	0.66	1.0316	0.9399	1.1322
	Lag 1	0.0213	0.013	1.64	1.0215	0.9958	1.0479	0.0286	0.0138	2.08	1.0290	1.0016	1.0572	-0.0565	0.0472	-1.20	0.9451	0.8616	1.0367
	Lag 2	0.0251	0.012	2.09	1.0254	1.0016	1.0498	0.0236	0.013	1.82	1.0239	0.9981	1.0503	0.0515	0.0466	1.10	1.0528	0.9609	1.1535
	3 day av.	0.0588	0.0162	3.63	1.0606	1.0274	1.0948	0.0601	0.0175	3.43	1.0619	1.0261	1.0990	0.0155	0.0659	0.24	1.0156	0.8926	1.1557
	5 day av.	0.0546	0.0176	3.10	1.0561	1.0203	1.0932	0.0462	0.0196	2.36	1.0473	1.0078	1.0883	0.1964	0.0802	2.45	1.2170	1.0400	1.4242
	Max 1h CO	0.0168	0.0085	1.98	1.0169	1.0001	1.0340	0.0199	0.0092	2.16	1.0201	1.0019	1.0387	-0.0041	0.0251	-0.16	0.9959	0.9481	1.0461
	Lag 1	0.0109	0.0082	1.32	1.0110	0.9948	1.0273	0.0185	0.0089	2.08	1.0187	1.0011	1.0366	-0.0448	0.0254	-1.77	0.9562	0.9098	1.0050
	Lag 2	0.0156	0.0077	2.03	1.0157	1.0005	1.0312	0.0132	0.0085	1.56	1.0133	0.9965	1.0303	0.0391	0.0252	1.55	1.0399	0.9898	1.0925
	3 day av.	0.0305	0.0105	2.91	1.0310	1.0100	1.0524	0.0366	0.0116	3.15	1.0373	1.0140	1.0611	-0.012	0.0357	-0.34	0.9881	0.9213	1.0597
	5 day av.	0.033	0.0114	2.89	1.0336	1.0107	1.0569	0.0284	0.013	2.19	1.0288	1.0029	1.0554	0.0853	0.0431	1.98	1.0890	1.0008	1.1850

Table B1.2 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for asthma, all ages

Outcome	Pollutant	Whole year models						Cool Season						Warm Season					
		Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Total asthma	**Av 24h bsp**	0.0764	0.0278	2.75	1.0794	1.0222	1.1398	0.0646	0.0299	2.16	1.0667	1.0060	1.1311	0.1849	0.0804	2.30	1.2031	1.0277	1.4084
	Lag 1	0.0532	0.0278	1.91	1.0546	0.9987	1.1137	0.0604	0.0296	2.04	1.0623	1.0024	1.1257	0.0119	0.0849	0.14	1.0120	0.8568	1.1952
	Lag 2	0.0513	0.0277	1.85	1.0526	0.9970	1.1114	0.052	0.0294	1.77	1.0534	0.9944	1.1159	0.0785	0.0883	0.89	1.0817	0.9098	1.2860
	3 day av.	0.0985	0.0332	2.97	1.1035	1.0340	1.1777	0.0954	0.0355	2.69	1.1001	1.0262	1.1794	0.1593	0.1045	1.52	1.1727	0.9555	1.4392
	5 day av.	0.1305	0.0377	3.46	1.1394	1.0582	1.2268	0.1276	0.0404	3.16	1.1361	1.0496	1.2297	0.2251	0.1247	1.80	1.2524	0.9809	1.5992
	Max 1h bsp	0.0317	0.0134	2.38	1.0322	1.0055	1.0597	0.0334	0.0148	2.26	1.0340	1.0044	1.0644	0.0289	0.0335	0.86	1.0293	0.9639	1.0992
	Lag 1	0.0218	0.0135	1.62	1.0220	0.9954	1.0494	0.0319	0.0148	2.16	1.0324	1.0029	1.0628	-0.023	0.0353	-0.65	0.9773	0.9119	1.0473
	Lag 2	0.0303	0.0136	2.23	1.0308	1.0037	1.0586	0.034	0.0149	2.29	1.0346	1.0048	1.0652	0.0185	0.0361	0.51	1.0187	0.9491	1.0934
	3 day av.	0.0496	0.0165	3.00	1.0509	1.0174	1.0854	0.0573	0.0181	3.17	1.0590	1.0221	1.0972	0.0149	0.0469	0.32	1.0150	0.9259	1.1127
	5 day av.	0.0738	0.0189	3.90	1.0766	1.0374	1.1172	0.0836	0.0208	4.03	1.0872	1.0438	1.1324	0.0191	0.0574	0.33	1.0193	0.9108	1.1407
	Av 24h NO_2	0.0055	0.0016	3.37	1.0055	1.0024	1.0087	0.0052	0.002	2.62	1.0052	1.0013	1.0092	0.0059	0.00297	1.99	1.0059	1.0001	1.0118
	Lag 1	0.0045	0.0016	2.79	1.0045	1.0014	1.0077	0.0054	0.002	2.77	1.0054	1.0015	1.0094	0.0025	0.003	0.83	1.0025	0.9966	1.0084
	Lag 2	0.0042	0.0016	2.66	1.0042	1.0011	1.0074	0.0047	0.002	2.37	1.0047	1.0008	1.0087	0.0037	0.0032	1.15	1.0037	0.9974	1.0100
	3 day av.	0.0096	0.002	4.66	1.0096	1.0057	1.0136	0.0098	0.0025	3.89	1.0098	1.0049	1.0148	0.0086	0.00425	2.01	1.0086	1.0003	1.0171
	5 day av.	0.0144	0.0023	6.17	1.0145	1.0099	1.0191	0.0127	0.0029	4.36	1.0128	1.0070	1.0186	0.0213	0.0055	3.86	1.0215	1.0106	1.0326
	Max 1h NO_2	0.0021	0.0009	2.43	1.0021	1.0003	1.0039	0.0023	0.0012	1.95	1.0023	0.9999	1.0047	0.0015	0.0013	1.22	1.0015	0.9990	1.0041
	Lag 1	0.0008	0.0009	0.94	1.0008	0.9990	1.0026	0.0007	0.0012	0.56	1.0007	0.9983	1.0031	0.0009	0.0013	0.69	1.0009	0.9984	1.0035
	Lag 2	0.0018	0.0008	2.20	1.0018	1.0002	1.0034	0.0014	0.0011	1.20	1.0014	0.9992	1.0036	0.00266	0.0014	1.90	1.0027	0.9999	1.0054
	3 day av.	0.0034	0.0011	2.95	1.0034	1.0012	1.0056	0.003	0.0016	1.91	1.0030	0.9999	1.0062	0.0033	0.0018	1.83	1.0033	0.9998	1.0069
	5 day av.	0.0059	0.0014	4.35	1.0059	1.0032	1.0087	0.0042	0.0019	2.28	1.0042	1.0005	1.0080	0.0085	0.0024	3.55	1.0085	1.0038	1.0133
	Av 8h O_3	0.0003	0.0008	0.40	1.0003	0.9987	1.0019	-0.0051	0.0014	-3.59	0.9949	0.9922	0.9976	0.0022	0.001	2.29	1.0022	1.0002	1.0042
	Lag 1	-0.00169	0.00086	-1.97	0.9983	0.9966	1.0000	-0.0073	0.0014	-5.15	0.9927	0.9900	0.9955	0.0008	0.001	0.77	1.0008	0.9988	1.0028
	Lag 2	-0.0009	0.001	-0.95	0.9991	0.9971	1.0011	-0.0063	0.0015	-4.25	0.9937	0.9908	0.9966	0.0019	0.0011	1.65	1.0019	0.9997	1.0041
	3 day av.	-0.0015	0.0011	-1.33	0.9985	0.9964	1.0007	-0.0111	0.0017	-6.60	0.9890	0.9857	0.9923	0.0031	0.0014	2.28	1.0031	1.0004	1.0059
	5 day av.	-0.0024	0.0014	-1.76	0.9976	0.9949	1.0003	-0.0133	0.0018	-7.19	0.9868	0.9833	0.9903	0.0054	0.0017	3.12	1.0054	1.0021	1.0088
	Av 4h O_3	0.0006	0.0007	0.87	1.0006	0.9992	1.0020	-0.0042	0.0014	-2.97	0.9958	0.9931	0.9985	0.0018	0.0008	2.21	1.0018	1.0002	1.0034
	Lag 1	-0.0011	0.0008	-1.43	0.9989	0.9973	1.0005	-0.006	0.0014	-4.26	0.9940	0.9913	0.9967	0.0006	0.0009	0.65	1.0006	0.9988	1.0024
	Lag 2	-0.0003	0.0009	-0.41	0.9997	0.9979	1.0015	-0.0051	0.0015	-3.53	0.9949	0.9920	0.9978	0.0015	0.0009	1.54	1.0015	0.9997	1.0033
	3 day av.	-0.0006	0.001	-0.56	0.9994	0.9974	1.0014	-0.0097	0.0017	-5.68	0.9903	0.9871	0.9937	0.0024	0.0011	2.13	1.0024	1.0002	1.0046
	5 day av.	-0.0009	0.0013	-0.70	0.9991	0.9966	1.0016	-0.0122	0.0019	-6.44	0.9879	0.9842	0.9916	0.0045	0.0015	3.09	1.0045	1.0016	1.0075
	Max 1h O_3	0.0005	0.0006	0.75	1.0005	0.9993	1.0017	-0.004	0.0014	-2.78	0.9960	0.9933	0.9987	0.0015	0.0007	2.06	1.0015	1.0001	1.0029
	Lag 1	-0.0007	0.0007	-0.97	0.9993	0.9979	1.0007	-0.0055	0.0014	-3.84	0.9945	0.9918	0.9972	0.0006	0.0008	0.73	1.0006	0.9990	1.0022
	Lag 2	-0.0001	0.0008	-0.17	0.9999	0.9983	1.0015	-0.0048	0.0015	-3.25	0.9952	0.9923	0.9981	0.0012	0.0008	1.45	1.0012	0.9996	1.0028
	3 day av.	-0.0003	0.0009	-0.35	0.9997	0.9979	1.0015	-0.0092	0.0018	-5.26	0.9908	0.9874	0.9943	0.0021	0.001	2.08	1.0021	1.0001	1.0041
	5 day av.	-0.0004	0.0011	-0.36	0.9996	0.9974	1.0018	-0.0118	0.002	-6.05	0.9883	0.9844	0.9922	0.0038	0.0013	2.95	1.0038	1.0013	1.0064
	Av 8h CO	0.0124	0.0092	1.36	1.0125	0.9944	1.0309	0.0126	0.0096	1.32	1.0127	0.9938	1.0319	0.0188	0.0359	0.53	1.0190	0.9497	1.0933
	Lag 1	0.0165	0.0092	1.80	1.0166	0.9985	1.0351	0.0189	0.0095	1.99	1.0191	1.0003	1.0382	-0.0102	0.0357	-0.29	0.9899	0.9230	1.0616
	Lag 2	0.0251	0.0092	2.72	1.0254	1.0071	1.0441	0.0248	0.0096	2.57	1.0251	1.0060	1.0446	0.0445	0.0355	1.25	1.0455	0.9752	1.1208
	3 day av.	0.0379	0.0119	3.19	1.0386	1.0147	1.0631	0.0391	0.0124	3.15	1.0399	1.0149	1.0655	0.0398	0.0503	0.79	1.0406	0.9429	1.1484
	5 day av.	0.0619	0.0134	4.62	1.0639	1.0363	1.0922	0.0616	0.0143	4.31	1.0635	1.0341	1.0938	0.0799	0.0622	1.28	1.0832	0.9589	1.2236
	Max 1h CO	0.0069	0.0059	1.17	1.0069	0.9953	1.0186	0.0076	0.0062	1.21	1.0076	0.9955	1.0199	0.0008	0.0189	0.04	1.0008	0.9644	1.0386
	Lag 1	0.0085	0.0059	1.44	1.0085	0.9969	1.0203	0.012	0.0062	1.92	1.0121	0.9998	1.0244	-0.0204	0.0192	-1.06	0.9798	0.9436	1.0174
	Lag 2	0.0163	0.0059	2.78	1.0164	1.0047	1.0283	0.0154	0.0063	2.45	1.0155	1.0031	1.0281	0.0334	0.0191	1.75	1.0340	0.9960	1.0734
	3 day av.	0.0233	0.0077	3.02	1.0236	1.0082	1.0391	0.0252	0.0082	3.07	1.0255	1.0092	1.0421	0.0098	0.0271	0.36	1.0098	0.9576	1.0649
	5 day av.	0.039	0.0087	4.48	1.0398	1.0222	1.0577	0.0384	0.0094	4.07	1.0391	1.0202	1.0585	0.053	0.0332	1.60	1.0544	0.9880	1.1253

Table B1.3 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for respiratory admissions, 0-14 years

Pollutant	Whole year models						Cool Season						Warm Season					
	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Av 24h bsp	-0.006	0.0257	-0.23	0.9940	0.9452	1.0454	-0.0002	0.0272	-0.01	0.9998	0.9479	1.0545	0.0286	0.0818	0.35	1.0290	0.8766	1.2080
Lag 1	-0.0025	0.0248	-0.10	0.9975	0.9502	1.0472	0.0114	0.0262	0.44	1.0115	0.9608	1.0648	-0.0364	0.0844	-0.43	0.9643	0.8172	1.1377
Lag 2	-0.0191	0.024	-0.79	0.9811	0.9360	1.0283	-0.0126	0.0253	-0.50	0.9875	0.9397	1.0377	0.0215	0.087	0.25	1.0217	0.8616	1.2117
3 day av.	-0.0152	0.0296	-0.51	0.9849	0.9294	1.0437	-0.0017	0.0313	-0.06	0.9983	0.9389	1.0615	0.0091	0.1048	0.09	1.0091	0.8218	1.2393
5 day av.	-0.014	0.0332	-0.42	0.9861	0.9240	1.0524	-0.0077	0.0353	-0.22	0.9923	0.9260	1.0634	0.1519	0.1221	1.24	1.1640	0.9163	1.4788
Max 1h bsp	-0.006	0.0125	-0.48	0.9940	0.9700	1.0187	-0.0011	0.014	-0.09	0.9989	0.9719	1.0267	-0.0061	0.0383	-0.18	0.9939	0.9220	1.0714
Lag 1	-0.0012	0.0122	-0.10	0.9988	0.9752	1.0230	0.0103	0.0133	0.78	1.0104	0.9844	1.0370	-0.0332	0.0349	-0.95	0.9673	0.9034	1.0358
Lag 2	-0.0029	0.0117	-0.25	0.9971	0.9745	1.0202	-0.0009	0.0127	-0.07	0.9991	0.9745	1.0243	0.0203	0.0352	0.58	1.0205	0.9525	1.0934
3 day av.	-0.0056	0.015	-0.37	0.9944	0.9656	1.0241	0.0047	0.0162	0.29	1.0047	0.9733	1.0371	-0.0138	0.0465	-0.30	0.9863	0.9004	1.0804
5 day av.	0.0008	0.0168	0.05	1.0008	0.9684	1.0343	0.0081	0.0182	0.44	1.0081	0.9728	1.0447	0.0358	0.0559	0.64	1.0364	0.9289	1.1565
Av 24h NO_2	0.0032	0.0015	2.09	1.0032	1.0003	1.0062	0.0039	0.0018	2.14	1.0039	1.0004	1.0075	0.0033	0.003	1.11	1.0033	0.9974	1.0092
Lag 1	0.0024	0.0015	1.62	1.0024	0.9995	1.0054	0.0039	0.0018	2.17	1.0039	1.0004	1.0075	0.0009	0.0031	0.28	1.0009	0.9948	1.0070
Lag 2	0.0019	0.0015	1.34	1.0019	0.9990	1.0049	0.0021	0.0017	1.20	1.0021	0.9988	1.0054	0.0041	0.0034	1.22	1.0041	0.9974	1.0108
3 day av.	0.005	0.0019	2.65	1.0050	1.0013	1.0088	0.0063	0.0023	2.79	1.0063	1.0018	1.0109	0.0058	0.0044	1.31	1.0058	0.9972	1.0145
5 day av.	0.0079	0.0021	3.68	1.0079	1.0038	1.0121	0.0065	0.0026	2.52	1.0065	1.0014	1.0117	0.0226	0.0058	3.91	1.0229	1.0113	1.0346
Max 1h NO_2	0.0008	0.0008	0.96	1.0008	0.9992	1.0024	0.0011	0.0011	1.04	1.0011	0.9989	1.0033	0.0009	0.0013	0.72	1.0009	0.9984	1.0035
Lag 1	0.0003	0.0008	0.42	1.0003	0.9987	1.0019	0.0008	0.0011	0.77	1.0008	0.9986	1.0030	0.0004	0.0013	0.31	1.0004	0.9979	1.0030
Lag 2	0.0007	0.0008	0.84	1.0007	0.9991	1.0023	0.0005	0.001	0.48	1.0005	0.9985	1.0025	0.0024	0.0015	1.54	1.0024	0.9995	1.0054
3 day av.	0.0013	0.0011	1.16	1.0013	0.9991	1.0035	0.0017	0.0014	1.17	1.0017	0.9990	1.0045	0.0024	0.0019	1.23	1.0024	0.9987	1.0061
5 day av.	0.0025	0.00133	1.91	1.0025	0.9999	1.0051	0.001	0.0017	0.59	1.0010	0.9977	1.0043	0.0087	0.0026	3.36	1.0087	1.0036	1.0139
Av 8h O_3	-0.0015	0.0008	-1.93	0.9985	0.9969	1.0001	-0.0061	0.0012	-4.95	0.9939	0.9916	0.9963	0.0009	0.001	0.85	1.0009	0.9989	1.0029
Lag 1	-0.0014	0.0008	-1.72	0.9986	0.9970	1.0002	-0.0049	0.0012	-3.96	0.9951	0.9928	0.9975	0.0004	0.0011	0.37	1.0004	0.9982	1.0026
Lag 2	-0.0006	0.0009	-0.67	0.9994	0.9976	1.0012	-0.0036	0.0012	-2.91	0.9964	0.9941	0.9988	0.0018	0.0013	1.36	1.0018	0.9993	1.0044
3 day av.	-0.0024	0.001	-2.30	0.9976	0.9956	0.9996	-0.0092	0.0014	-6.32	0.9908	0.9881	0.9936	0.0016	0.0015	1.12	1.0016	0.9987	1.0046
5 day av.	-0.0023	0.0012	-1.83	0.9977	0.9954	1.0001	-0.0105	0.0016	-6.66	0.9896	0.9865	0.9927	0.005	0.0019	2.61	1.0050	1.0013	1.0088
Av 4h O_3	-0.0011	0.0007	-1.54	0.9989	0.9975	1.0003	-0.0055	0.0012	-4.48	0.9945	0.9922	0.9969	0.0007	0.0009	0.80	1.0007	0.9989	1.0025
Lag 1	-0.0009	0.0007	-1.20	0.9991	0.9977	1.0005	-0.0037	0.0012	-2.99	0.9963	0.9940	0.9987	0.0003	0.0009	0.33	1.0003	0.9985	1.0021
Lag 2	-0.00004	0.0008	-0.05	1.0000	0.9984	1.0015	-0.0025	0.0012	-2.01	0.9975	0.9952	0.9999	0.0015	0.001	1.30	1.0015	0.9995	1.0035
3 day av.	-0.0014	0.001	-1.51	0.9986	0.9966	1.0006	-0.0076	0.0015	-5.17	0.9924	0.9895	0.9954	0.0013	0.0012	1.09	1.0013	0.9989	1.0037
5 day av.	-0.0008	0.0012	-0.70	0.9992	0.9969	1.0016	-0.0093	0.0016	-5.74	0.9907	0.9876	0.9939	0.0044	0.0016	2.72	1.0044	1.0013	1.0076
Max 1h O_3	-0.0008	0.0006	-1.18	0.9992	0.9980	1.0004	-0.0055	0.0013	-4.35	0.9945	0.9920	0.9971	0.0007	0.0007	0.91	1.0007	0.9993	1.0021
Lag 1	-0.0006	0.0007	-0.84	0.9994	0.9980	1.0008	-0.0032	0.0012	-2.59	0.9968	0.9945	0.9992	0.0003	0.0008	0.38	1.0003	0.9987	1.0019
Lag 2	0.00006	0.0008	-0.08	1.0001	0.9985	1.0016	-0.0024	0.0012	-1.90	0.9976	0.9953	1.0000	0.0011	0.0009	1.22	1.0011	0.9993	1.0029
3 day av.	-0.0009	0.0009	-1.07	0.9991	0.9973	1.0009	-0.0074	0.0015	-4.87	0.9926	0.9897	0.9955	0.0013	0.0011	1.17	1.0013	0.9991	1.0035
5 day av.	-0.0002	0.0011	-0.17	0.9998	0.9976	1.0020	-0.0093	0.0017	-5.57	0.9907	0.9874	0.9940	0.004	0.0014	2.85	1.0040	1.0013	1.0068
Av 8h CO	-0.0037	0.0084	-0.44	0.9963	0.9800	1.0128	-0.0024	0.0087	-0.28	0.9976	0.9807	1.0148	0.014	0.035	0.40	1.0141	0.9469	1.0861
Lag 1	0.0082	0.0085	0.97	1.0082	0.9916	1.0252	0.0146	0.0088	1.66	1.0147	0.9974	1.0324	-0.0335	0.035	-0.96	0.9671	0.9029	1.0357
Lag 2	0.0012	0.0079	0.15	1.0012	0.9858	1.0168	0.0023	0.0083	0.28	1.0023	0.9861	1.0187	0.0347	0.035	0.98	1.0353	0.9667	1.1088
3 day av.	0.0043	0.0109	0.40	1.0043	0.9831	1.0260	0.0107	0.0114	0.94	1.0108	0.9884	1.0336	0.0121	0.0496	0.24	1.0122	0.9184	1.1155
5 day av.	0.0055	0.0119	0.46	1.0055	0.9823	1.0292	0.0069	0.0127	0.54	1.0069	0.9822	1.0323	0.1061	0.0614	1.73	1.1119	0.9859	1.2541
Max 1h CO	-0.0044	0.0055	-0.80	0.9956	0.9849	1.0064	-0.0034	0.0058	-0.59	0.9966	0.9853	1.0080	0.0034	0.0186	0.18	1.0034	0.9675	1.0407
Lag 1	0.0056	0.0054	1.03	1.0056	0.9950	1.0163	0.0112	0.0057	1.97	1.0113	1.0000	1.0226	-0.0264	0.0189	-1.40	0.9739	0.9385	1.0107
Lag 2	0.0009	0.0051	0.17	1.0009	0.9909	1.0110	0.0014	0.0054	0.26	1.0014	0.9909	1.0121	0.0202	0.0191	1.06	1.0204	0.9829	1.0593
3 day av.	0.0022	0.0071	0.31	1.0022	0.9884	1.0162	0.0071	0.0075	0.94	1.0071	0.9924	1.0220	-0.0025	0.0268	-0.09	0.9975	0.9465	1.0513
5 day av.	0.0057	0.0078	0.73	1.0057	0.9905	1.0212	0.0062	0.0085	0.73	1.0062	0.9896	1.0231	0.0598	0.0329	1.82	1.0616	0.9953	1.1323

Table B1.4 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for respiratory admissions, 15-64 years

Outcome	Pollutant	Whole year models						Cool Season						Warm Season					
		Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Respiratory	**Av 24h bsp**	0.0515	0.0283	1.82	1.0528	0.9960	1.1129	0.0546	0.0304	1.79	1.0561	0.9950	1.1210	0.0382	0.0828	0.46	1.0389	0.8833	1.2220
15-64	Lag 1	0.0559	0.0269	2.08	1.0575	1.0032	1.1147	0.0622	0.0287	2.16	1.0642	1.0060	1.1258	0.0251	0.0852	0.29	1.0254	0.8677	1.2118
	Lag 2	0.0437	0.0264	1.65	1.0447	0.9920	1.1001	0.046	0.0283	1.63	1.0471	0.9906	1.1068	0.0548	0.0849	0.64	1.0563	0.8944	1.2476
	3 day av.	0.0755	0.0324	2.33	1.0784	1.0121	1.1491	0.0804	0.0347	2.32	1.0837	1.0125	1.1600	0.0645	0.1059	0.61	1.0666	0.8667	1.3127
	5 day av.	0.077	0.0372	2.07	1.0800	1.0041	1.1617	0.0863	0.0398	2.16	1.0901	1.0083	1.1786	0.0439	0.1266	0.35	1.0449	0.8153	1.3392
	Max 1h bsp	0.0324	0.0138	2.35	1.0329	1.0054	1.0613	0.0419	0.0153	2.75	1.0428	1.0120	1.0745	-0.0068	0.0348	-0.19	0.9932	0.9277	1.0633
	Lag 1	0.0272	0.013	2.10	1.0276	1.0017	1.0541	0.034	0.0143	2.38	1.0346	1.0060	1.0640	-0.0021	0.0353	-0.06	0.9979	0.9312	1.0694
	Lag 2	0.0117	0.0127	0.92	1.0118	0.9869	1.0373	0.0157	0.014	1.12	1.0158	0.9883	1.0441	-0.0012	0.0354	-0.03	0.9988	0.9318	1.0706
	3 day av.	0.0376	0.016	2.35	1.0383	1.0063	1.0714	0.0468	0.0176	2.66	1.0479	1.0124	1.0847	-0.0068	0.0473	-0.14	0.9932	0.9053	1.0897
	5 day av.	0.0365	0.0184	1.98	1.0372	1.0004	1.0753	0.0488	0.0202	2.42	1.0500	1.0093	1.0924	-0.0323	0.0579	-0.56	0.9682	0.8643	1.0846
	Av 24h NO_2	0.0041	0.0016	2.54	1.0041	1.0010	1.0073	0.0056	0.002	2.79	1.0056	1.0017	1.0096	0.0017	0.0028	0.61	1.0017	0.9962	1.0072
	Lag 1	0.0035	0.0015	2.33	1.0035	1.0006	1.0065	0.0046	0.0019	2.45	1.0046	1.0009	1.0084	0.0017	0.0029	0.58	1.0017	0.9960	1.0074
	Lag 2	0.0036	0.0015	2.45	1.0036	1.0007	1.0066	0.0045	0.0019	2.43	1.0045	1.0008	1.0083	0.0023	0.0029	0.81	1.0023	0.9966	1.0080
	3 day av.	0.0067	0.0019	3.57	1.0067	1.0030	1.0105	0.0085	0.0024	3.51	1.0085	1.0038	1.0133	0.0035	0.0038	0.91	1.0035	0.9961	1.0110
	5 day av.	0.0084	0.0021	3.92	1.0084	1.0043	1.0126	0.0109	0.0028	3.85	1.0110	1.0054	1.0165	0.0041	0.0046	0.88	1.0041	0.9951	1.0132
	Max 1h NO_2	0.0023	0.0008	2.76	1.0023	1.0007	1.0039	0.0036	0.0012	3.03	1.0036	1.0012	1.0060	0.0011	0.0012	0.88	1.0011	0.9987	1.0035
	Lag 1	0.0015	0.0008	1.90	1.0015	0.9999	1.0031	0.0019	0.0011	1.65	1.0019	0.9997	1.0041	0.0013	0.0013	1.08	1.0013	0.9988	1.0039
	Lag 2	0.0017	0.0008	2.10	1.0017	1.0001	1.0033	0.0018	0.0011	1.63	1.0018	0.9996	1.0040	0.0018	0.0012	1.44	1.0018	0.9994	1.0042
	3 day av.	0.0035	0.0011	3.30	1.0035	1.0013	1.0057	0.0044	0.0015	2.90	1.0044	1.0015	1.0074	0.0027	0.0017	1.63	1.0027	0.9994	1.0061
	5 day av.	0.0045	0.0013	3.62	1.0045	1.0020	1.0071	0.0061	0.0018	3.33	1.0061	1.0026	1.0097	0.0032	0.0021	1.56	1.0032	0.9991	1.0073
	Av 8h O_3	-0.0004	0.0008	-0.43	0.9996	0.9980	1.0012	-0.0036	0.0014	-2.65	0.9964	0.9937	0.9991	0.0007	0.001	0.74	1.0007	0.9987	1.0027
	Lag 1	0.00002	0.0008	0.02	1.0000	0.9985	1.0016	-0.0036	0.0014	-2.62	0.9964	0.9937	0.9991	0.0014	0.001	1.31	1.0014	0.9994	1.0034
	Lag 2	0.0003	0.0008	0.39	1.0003	0.9987	1.0019	-0.0027	0.0013	-2.00	0.9973	0.9948	0.9998	0.0014	0.001	1.42	1.0014	0.9994	1.0034
	3 day av.	-0.00002	0.001	-0.02	1.0000	0.9980	1.0019	-0.0056	0.0016	-3.51	0.9944	0.9913	0.9975	0.0021	0.0013	1.60	1.0021	0.9996	1.0047
	5 day av.	-0.0007	0.0012	-0.62	0.9993	0.9970	1.0017	-0.0076	0.0017	-4.38	0.9924	0.9891	0.9957	0.0023	0.0016	1.42	1.0023	0.9992	1.0055
	Av 4h O_3	-0.00009	0.0007	-0.13	0.9999	0.9985	1.0013	-0.003	0.0013	-2.21	0.9970	0.9945	0.9995	0.0007	0.0008	0.79	1.0007	0.9991	1.0023
	Lag 1	0.0001	0.0007	0.16	1.0001	0.9987	1.0015	-0.0029	0.0013	-2.15	0.9971	0.9946	0.9996	0.001	0.0009	1.16	1.0010	0.9992	1.0028
	Lag 2	0.0005	0.0007	0.66	1.0005	0.9991	1.0019	-0.0017	0.0013	-1.30	0.9983	0.9958	1.0008	0.0011	0.0009	1.31	1.0011	0.9993	1.0029
	3 day av.	0.0003	0.0009	0.34	1.0003	0.9985	1.0021	-0.0045	0.0016	-2.76	0.9955	0.9924	0.9986	0.0018	0.0011	1.53	1.0018	0.9996	1.0040
	5 day av.	-0.0003	0.0011	-0.23	0.9997	0.9975	1.0019	-0.0061	0.0018	-3.45	0.9939	0.9904	0.9974	0.0017	0.0014	1.23	1.0017	0.9990	1.0045
	Max 1h O_3	-0.0001	0.0006	-0.20	0.9999	0.9987	1.0011	-0.003	0.0014	-2.22	0.9970	0.9943	0.9997	0.0005	0.0007	0.61	1.0005	0.9991	1.0019
	Lag 1	0.00003	0.0007	0.05	1.0000	0.9987	1.0014	-0.0029	0.0014	-2.15	0.9971	0.9944	0.9998	0.0007	0.0008	0.92	1.0007	0.9991	1.0023
	Lag 2	0.0005	0.0007	0.70	1.0005	0.9991	1.0019	-0.0017	0.0014	-1.19	0.9983	0.9956	1.0010	0.0009	0.0008	1.22	1.0009	0.9993	1.0025
	3 day av.	0.0002	0.0009	0.27	1.0002	0.9984	1.0020	-0.0045	0.0017	-2.75	0.9955	0.9922	0.9988	0.0013	0.001	1.29	1.0013	0.9993	1.0033
	5 day av.	-0.0003	0.001	-0.30	0.9997	0.9977	1.0017	-0.0063	0.0018	-3.42	0.9937	0.9902	0.9972	0.0012	0.0012	0.95	1.0012	0.9988	1.0036
	Av 8h CO	0.0231	0.0094	2.45	1.0234	1.0047	1.0424	0.0273	0.0098	2.79	1.0277	1.0081	1.0476	-0.0225	0.0344	-0.65	0.9778	0.9140	1.0459
	Lag 1	0.0199	0.0089	2.23	1.0201	1.0025	1.0381	0.0215	0.0094	2.28	1.0217	1.0031	1.0407	0.0124	0.0342	0.36	1.0125	0.9468	1.0827
	Lag 2	0.0089	0.0085	1.05	1.0089	0.9923	1.0259	0.0109	0.009	1.20	1.0110	0.9933	1.0290	-0.0001	0.034	0.00	0.9999	0.9354	1.0688
	3 day av.	0.0323	0.0115	2.81	1.0328	1.0098	1.0564	0.0373	0.0123	3.04	1.0380	1.0133	1.0633	-0.0091	0.0465	-0.20	0.9909	0.9046	1.0855
	5 day av.	0.0338	0.0128	2.64	1.0344	1.0088	1.0607	0.0412	0.0139	2.96	1.0421	1.0141	1.0708	-0.0393	0.0552	-0.71	0.9615	0.8629	1.0713
	Max 1h CO	0.0154	0.0061	2.54	1.0155	1.0034	1.0277	0.0179	0.0064	2.78	1.0181	1.0054	1.0309	-0.001	0.0181	-0.06	0.9990	0.9642	1.0351
	Lag 1	0.012	0.0056	2.14	1.0121	1.0010	1.0232	0.013	0.0061	2.14	1.0131	1.0010	1.0253	0.0099	0.0182	0.54	1.0099	0.9746	1.0466
	Lag 2	0.0031	0.0054	0.58	1.0031	0.9925	1.0138	0.005	0.0059	0.85	1.0050	0.9935	1.0167	-0.0061	0.0182	-0.34	0.9939	0.9591	1.0300
	3 day av.	0.0193	0.0073	2.63	1.0195	1.0050	1.0342	0.0225	0.008	2.81	1.0228	1.0068	1.0389	0.0013	0.0247	0.05	1.0013	0.9540	1.0510
	5 day av.	0.0208	0.0082	2.54	1.0210	1.0047	1.0376	0.026	0.0092	2.84	1.0263	1.0080	1.0450	-0.0045	0.0289	-0.16	0.9955	0.9407	1.0535

Table B1.5 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for respiratory admissions, 65+ years

Outcome	Pollutant	Whole year models						Cool Season						Warm Season					
		Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Respiratory	**Av 24h bsp**	0.0267	0.0258	1.03	1.0271	0.9764	1.0803	0.023	0.0277	0.83	1.0233	0.9692	1.0804	0.0492	0.0782	0.63	1.0504	0.9012	1.2244
65+	Lag 1	0.0236	0.025	0.94	1.0239	0.9749	1.0753	0.0051	0.0269	0.19	1.0051	0.9535	1.0595	0.2027	0.0779	2.60	1.2247	1.0513	1.4267
	Lag 2	0.0245	0.0248	0.99	1.0248	0.9762	1.0758	0.0194	0.0265	0.73	1.0196	0.9680	1.0739	0.1157	0.0815	1.42	1.1227	0.9569	1.3171
	3 day av.	0.0388	0.0303	1.28	1.0396	0.9796	1.1032	0.0242	0.0324	0.75	1.0245	0.9615	1.0917	0.2054	0.0984	2.09	1.2280	1.0126	1.4892
	5 day av.	0.0719	0.0346	2.08	1.0745	1.0041	1.1499	0.0656	0.037	1.77	1.0678	0.9931	1.1481	0.2058	0.1169	1.76	1.2285	0.9769	1.5448
	Max 1h bsp	0.017	0.0125	1.34	1.0171	0.9925	1.0424	0.0196	0.0138	1.42	1.0198	0.9926	1.0478	0.0049	0.0328	0.15	1.0049	0.9423	1.0716
	Lag 1	0.0111	0.012	0.93	1.0112	0.9877	1.0352	0.0009	0.0132	0.07	1.0009	0.9753	1.0271	0.0795	0.0322	2.47	1.0827	1.0165	1.1533
	Lag 2	0.0148	0.0117	1.26	1.0149	0.9919	1.0385	0.0143	0.0129	1.11	1.0144	0.9891	1.0404	0.0346	0.0339	1.02	1.0352	0.9687	1.1063
	3 day av.	0.0238	0.0148	1.61	1.0241	0.9948	1.0542	0.0184	0.0162	1.13	1.0186	0.9867	1.0514	0.0773	0.0438	1.76	1.0804	0.9915	1.1772
	5 day av.	0.0421	0.017	2.48	1.0430	1.0088	1.0783	0.0404	0.0186	2.17	1.0412	1.0040	1.0799	0.0912	0.0531	1.72	1.0955	0.9872	1.2156
	Av 24h NO_2	0.0035	0.0015	2.43	1.0035	1.0006	1.0065	0.0055	0.0018	3.04	1.0055	1.0020	1.0091	0.0003	0.0026	0.11	1.0003	0.9952	1.0054
	Lag 1	0.0043	0.0014	3.11	1.0043	1.0016	1.0071	0.0045	0.0017	2.62	1.0045	1.0012	1.0079	0.0046	0.0027	1.72	1.0046	0.9993	1.0099
	Lag 2	0.0043	0.0013	3.21	1.0043	1.0018	1.0069	0.0048	0.0017	2.85	1.0048	1.0015	1.0082	0.0037	0.0027	1.35	1.0037	0.9984	1.0090
	3 day av.	0.0076	0.0017	4.40	1.0076	1.0043	1.0110	0.0087	0.0022	3.98	1.0087	1.0044	1.0131	0.0056	0.0036	1.57	1.0056	0.9985	1.0127
	5 day av.	0.0109	0.002	5.54	1.0110	1.0070	1.0149	0.0142	0.0026	5.53	1.0143	1.0091	1.0195	0.0004	0.0043	0.10	1.0004	0.9920	1.0089
	Max 1h NO_2	0.0013	0.0008	1.69	1.0013	0.9997	1.0029	0.0024	0.0011	2.24	1.0024	1.0002	1.0046	0.0003	0.0011	0.24	1.0003	0.9981	1.0025
	Lag 1	0.002	0.0007	2.65	1.0020	1.0006	1.0034	0.0019	0.001	1.88	1.0019	0.9999	1.0039	0.0023	0.00116	1.98	1.0023	1.0000	1.0046
	Lag 2	0.0019	0.0007	2.60	1.0019	1.0005	1.0033	0.0022	0.001	2.22	1.0022	1.0002	1.0042	0.0017	0.0012	1.41	1.0017	0.9993	1.0041
	3 day av.	0.0035	0.001	3.54	1.0035	1.0015	1.0055	0.0042	0.0014	3.04	1.0042	1.0015	1.0070	0.0029	0.0016	1.83	1.0029	0.9998	1.0061
	5 day av.	0.0048	0.0012	4.14	1.0048	1.0025	1.0072	0.0075	0.0017	4.50	1.0075	1.0042	1.0109	0.0012	0.0019	0.60	1.0012	0.9975	1.0049
	Av 8h O_3	-0.0009	0.0007	-1.28	0.9991	0.9977	1.0005	-0.0036	0.0012	-2.97	0.9964	0.9941	0.9988	-6E-07	0.0009	0.00	1.0000	0.9982	1.0018
	Lag 1	-0.0003	0.0008	-0.42	0.9997	0.9981	1.0013	-0.0025	0.0012	-2.10	0.9975	0.9952	0.9999	0.0006	0.001	0.62	1.0006	0.9986	1.0026
	Lag 2	0.0014	0.0008	1.86	1.0014	0.9998	1.0030	-0.0013	0.0012	-1.09	0.9987	0.9964	1.0011	0.0025	0.0009	2.61	1.0025	1.0007	1.0043
	3 day av.	0.00004	0.001	0.05	1.0000	0.9981	1.0020	-0.0042	0.0014	-2.97	0.9958	0.9931	0.9985	0.002	0.0013	1.56	1.0020	0.9995	1.0046
	5 day av.	-0.0011	0.0011	-0.95	0.9989	0.9967	1.0011	-0.0056	0.0015	-3.64	0.9944	0.9915	0.9973	0.0011	0.0015	0.68	1.0011	0.9982	1.0040
	Av 4h O_3	-0.0006	0.0007	-0.91	0.9994	0.9980	1.0008	-0.0028	0.0012	-2.30	0.9972	0.9949	0.9996	-0.00003	0.0008	-0.04	1.0000	0.9984	1.0015
	Lag 1	-0.0002	0.0007	-0.33	0.9998	0.9984	1.0012	-0.0021	0.0012	-1.71	0.9979	0.9956	1.0003	0.0004	0.0008	0.43	1.0004	0.9988	1.0020
	Lag 2	0.0016	0.0007	2.37	1.0016	1.0002	1.0030	-0.0002	0.0012	-0.19	0.9998	0.9975	1.0022	0.0021	0.0008	2.64	1.0021	1.0005	1.0037
	3 day av.	0.0005	0.0009	0.52	1.0005	0.9987	1.0023	-0.003	0.0014	-2.06	0.9970	0.9943	0.9997	0.0016	0.0011	1.47	1.0016	0.9994	1.0038
	5 day av.	-0.0004	0.001	-0.34	0.9996	0.9976	1.0016	-0.0039	0.0016	-2.45	0.9961	0.9930	0.9992	0.0007	0.0013	0.56	1.0007	0.9982	1.0033
	Max 1h O_3	-0.0004	0.0006	-0.74	0.9996	0.9984	1.0008	-0.002	0.0012	-1.68	0.9980	0.9957	1.0004	-0.0001	0.0007	-0.21	0.9999	0.9985	1.0013
	Lag 1	-0.0002	0.0006	-0.35	0.9998	0.9986	1.0010	-0.0018	0.0012	-1.50	0.9982	0.9959	1.0006	0.0001	0.0007	0.20	1.0001	0.9987	1.0015
	Lag 2	0.0015	0.0006	2.47	1.0015	1.0003	1.0027	0.0003	0.0012	0.23	1.0003	0.9980	1.0027	0.0018	0.0007	2.50	1.0018	1.0004	1.0032
	3 day av.	0.0005	0.0008	0.64	1.0005	0.9989	1.0021	-0.0022	0.0015	-1.47	0.9978	0.9949	1.0007	0.0011	0.0009	1.19	1.0011	0.9993	1.0029
	5 day av.	-0.0002	0.001	-0.20	0.9998	0.9978	1.0018	-0.0026	0.0016	-1.57	0.9974	0.9943	1.0005	0.0002	0.0012	0.19	1.0002	0.9979	1.0026
	Av 8h CO	0.0093	0.0085	1.09	1.0093	0.9927	1.0263	0.0086	0.0088	0.98	1.0086	0.9914	1.0262	0.0298	0.0317	0.94	1.0302	0.9682	1.0963
	Lag 1	0.0093	0.0082	1.14	1.0093	0.9933	1.0257	0.0082	0.0086	0.96	1.0082	0.9914	1.0254	0.0414	0.0318	1.30	1.0423	0.9793	1.1093
	Lag 2	0.0053	0.0078	0.68	1.0053	0.9901	1.0208	0.005	0.0083	0.60	1.0050	0.9888	1.0215	0.0402	0.0322	1.25	1.0410	0.9773	1.1088
	3 day av.	0.0158	0.0106	1.49	1.0159	0.9950	1.0373	0.0142	0.0112	1.27	1.0143	0.9923	1.0368	0.0771	0.043	1.79	1.0802	0.9928	1.1751
	5 day av.	0.03	0.0118	2.54	1.0305	1.0069	1.0546	0.0347	0.0128	2.72	1.0353	1.0097	1.0616	0.0151	0.0512	0.29	1.0152	0.9183	1.1224
	Max 1h CO	0.0084	0.0054	1.55	1.0084	0.9978	1.0192	0.0082	0.0058	1.43	1.0082	0.9968	1.0198	0.0178	0.0168	1.06	1.0180	0.9850	1.0520
	Lag 1	0.0031	0.0052	0.59	1.0031	0.9929	1.0134	0.0023	0.0055	0.42	1.0023	0.9916	1.0132	0.0211	0.017	1.24	1.0213	0.9879	1.0559
	Lag 2	0.0091	0.0049	1.85	1.0091	0.9995	1.0189	0.0084	0.0054	1.57	1.0084	0.9978	1.0192	0.033	0.0171	1.93	1.0336	0.9995	1.0688
	3 day av.	0.0139	0.0068	2.05	1.0140	1.0006	1.0276	0.0127	0.0073	1.74	1.0128	0.9984	1.0274	0.0523	0.0229	2.28	1.0537	1.0074	1.1021
	5 day av.	0.0208	0.0076	2.75	1.0210	1.0059	1.0363	0.0234	0.0084	2.80	1.0237	1.0070	1.0407	0.0279	0.0269	1.04	1.0283	0.9755	1.0840

Table B1.6 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for respiratory admissions, all ages

Outcome	Pollutant	Whole year models						Cool Season						Warm Season					
		Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Total respiratory	**Av 24h bsp**	0.0236	0.0158	1.49	1.0239	0.9927	1.0561	0.0265	0.0167	1.59	1.0269	0.9938	1.0610	0.0473	0.0484	0.98	1.0484	0.9535	1.1528
	Lag 1	0.0192	0.0149	1.29	1.0194	0.9900	1.0496	0.0225	0.0159	1.42	1.0228	0.9914	1.0551	0.0812	0.048	1.69	1.0846	0.9872	1.1916
	Lag 2	0.0052	0.0146	0.36	1.0052	0.9769	1.0344	0.0112	0.0155	0.72	1.0113	0.9810	1.0425	0.0724	0.047	1.54	1.0751	0.9805	1.1788
	3 day av.	0.0246	0.0181	1.36	1.0249	0.9892	1.0619	0.0306	0.0192	1.59	1.0311	0.9930	1.0706	0.119	0.0599	1.99	1.1264	1.0016	1.2667
	5 day av.	0.0266	0.0205	1.30	1.0270	0.9865	1.0691	0.0334	0.022	1.52	1.0340	0.9903	1.0795	0.2142	0.0692	3.10	1.2389	1.0817	1.4188
	Max 1h bsp	0.0118	0.0077	1.53	1.0119	0.9967	1.0273	0.0175	0.0084	2.09	1.0177	1.0010	1.0345	0.0008	0.0203	0.04	1.0008	0.9618	1.0414
	Lag 1	0.0077	0.0072	1.07	1.0077	0.9936	1.0221	0.0119	0.0079	1.51	1.0120	0.9964	1.0278	0.0174	0.0198	0.88	1.0176	0.9788	1.0578
	Lag 2	0.0014	0.007	0.20	1.0014	0.9878	1.0152	0.0058	0.0076	0.75	1.0058	0.9909	1.0209	0.0188	0.0194	0.97	1.0190	0.9810	1.0585
	3 day av.	0.0114	0.009	1.27	1.0115	0.9938	1.0295	0.0188	0.0098	1.92	1.0190	0.9996	1.0387	0.0252	0.0267	0.94	1.0255	0.9732	1.0806
	5 day av.	0.0141	0.0102	1.39	1.0142	0.9941	1.0347	0.0222	0.01115	1.99	1.0224	1.0003	1.0450	0.0653	0.0318	2.06	1.0675	1.0030	1.1361
	Av 24h NO_2	0.0031	0.0009	3.33	1.0031	1.0013	1.0049	0.0043	0.0011	3.92	1.0043	1.0021	1.0065	0.0021	0.0018	1.17	1.0021	0.9986	1.0056
	Lag 1	0.0026	0.0008	3.09	1.0026	1.0010	1.0042	0.0033	0.001	3.21	1.0033	1.0013	1.0053	0.0036	0.0017	2.09	1.0036	1.0003	1.0070
	Lag 2	0.0025	0.0008	2.96	1.0025	1.0009	1.0041	0.0029	0.001	2.88	1.0029	1.0009	1.0049	0.0044	0.0017	2.59	1.0044	1.0011	1.0078
	3 day av.	0.0054	0.0011	4.97	1.0054	1.0032	1.0076	0.0063	0.0013	4.78	1.0063	1.0038	1.0089	0.0073	0.0024	3.01	1.0073	1.0026	1.0121
	5 day av.	0.0078	0.0012	6.32	1.0078	1.0055	1.0102	0.0082	0.0015	5.32	1.0082	1.0053	1.0112	0.0128	0.003	4.23	1.0129	1.0069	1.0189
	Max 1h NO_2	0.0016	0.0005	3.23	1.0016	1.0006	1.0026	0.0024	0.0007	3.70	1.0024	1.0010	1.0038	0.0011	0.0007	1.47	1.0011	0.9997	1.0025
	Lag 1	0.0013	0.0005	2.76	1.0013	1.0003	1.0023	0.0014	0.0006	2.29	1.0014	1.0002	1.0026	0.0019	0.0007	2.62	1.0019	1.0005	1.0033
	Lag 2	0.0014	0.0005	3.13	1.0014	1.0004	1.0024	0.0013	0.0006	2.23	1.0013	1.0001	1.0025	0.0025	0.0007	3.45	1.0025	1.0011	1.0039
	3 day av.	0.0029	0.0006	4.73	1.0029	1.0017	1.0041	0.0033	0.0008	3.96	1.0033	1.0017	1.0049	0.004	0.001	3.84	1.0040	1.0020	1.0060
	5 day av.	0.0043	0.0007	5.80	1.0043	1.0029	1.0057	0.0045	0.001	4.56	1.0045	1.0025	1.0065	0.0064	0.0013	4.98	1.0064	1.0039	1.0090
	Av 8h O_3	-0.0004	0.0005	-0.78	0.9996	0.9986	1.0006	-0.0035	0.0007	-4.73	0.9965	0.9951	0.9979	0.0007	0.0006	1.20	1.0007	0.9995	1.0019
	Lag 1	0.0002	0.0005	0.50	1.0002	0.9992	1.0012	-0.0026	0.0007	-3.53	0.9974	0.9960	0.9988	0.0012	0.0006	2.10	1.0012	1.0000	1.0024
	Lag 2	0.0014	0.0004	3.21	1.0014	1.0006	1.0022	-0.00142	0.000725	-1.96	0.9986	0.9972	1.0000	0.0023	0.0006	4.09	1.0023	1.0011	1.0035
	3 day av.	0.0009	0.0006	1.50	1.0009	0.9997	1.0021	-0.0046	0.0009	-5.30	0.9954	0.9937	0.9972	0.0028	0.0008	3.66	1.0028	1.0012	1.0044
	5 day av.	0.0014	0.0006	2.23	1.0014	1.0002	1.0026	-0.0057	0.0009	-6.12	0.9943	0.9926	0.9961	0.0039	0.0009	4.35	1.0039	1.0021	1.0057
	Av 4h O_3	-0.0001	0.0004	-0.25	0.9999	0.9991	1.0007	-0.0028	0.0007	-3.88	0.9972	0.9958	0.9986	0.0006	0.0005	1.22	1.0006	0.9996	1.0016
	Lag 1	0.0003	0.0004	0.76	1.0003	0.9995	1.0011	-0.0019	0.0007	-2.57	0.9981	0.9967	0.9995	0.0009	0.0005	1.84	1.0009	0.9999	1.0019
	Lag 2	0.0014	0.0004	3.61	1.0014	1.0006	1.0022	-0.0005	0.0007	-0.70	0.9995	0.9981	1.0009	0.0019	0.0005	3.87	1.0019	1.0009	1.0029
	3 day av.	0.0011	0.0005	2.13	1.0011	1.0001	1.0021	-0.0033	0.0009	-3.80	0.9967	0.9949	0.9985	0.0023	0.0007	3.49	1.0023	1.0009	1.0037
	5 day av.	0.0018	0.0006	3.07	1.0018	1.0006	1.0030	-0.0042	0.001	-4.37	0.9958	0.9939	0.9978	0.0032	0.0008	4.16	1.0032	1.0016	1.0048
	Max 1h O_3	-0.00004	0.0004	-0.10	1.0000	0.9992	1.0007	-0.0027	0.0007	-3.60	0.9973	0.9959	0.9987	0.0004	0.0004	1.04	1.0004	0.9996	1.0012
	Lag 1	0.0003	0.0004	0.71	1.0003	0.9995	1.0011	-0.0017	0.0007	-2.33	0.9983	0.9969	0.9997	0.0007	0.0004	1.53	1.0007	0.9999	1.0015
	Lag 2	0.0013	0.0004	3.57	1.0013	1.0005	1.0021	-0.0003	0.0007	-0.46	0.9997	0.9983	1.0011	0.0015	0.0004	3.65	1.0015	1.0007	1.0023
	3 day av.	0.0011	0.0005	2.18	1.0011	1.0001	1.0021	-0.0031	0.0009	-3.45	0.9969	0.9951	0.9987	0.0018	0.000603	3.18	1.0018	1.0006	1.0030
	5 day av.	0.0017	0.0006	3.12	1.0017	1.0005	1.0029	-0.0039	0.001	-3.95	0.9961	0.9942	0.9981	0.0026	0.0007	3.79	1.0026	1.0012	1.0040
	Av 8h CO	0.0058	0.0052	1.11	1.0058	0.9956	1.0161	0.0083	0.0054	1.54	1.0083	0.9977	1.0191	0.0089	0.0209	0.43	1.0089	0.9684	1.0511
	Lag 1	0.009	0.005	1.81	1.0090	0.9992	1.0190	0.0122	0.0052	2.34	1.0123	1.0020	1.0226	0.024	0.0204	1.17	1.0243	0.9841	1.0661
	Lag 2	0.0007	0.0047	0.16	1.0007	0.9915	1.0100	0.003	0.0049	0.61	1.0030	0.9934	1.0127	0.0446	0.0199	2.25	1.0456	1.0056	1.0872
	3 day av.	0.0108	0.0065	1.67	1.0109	0.9981	1.0238	0.016	0.0068	2.34	1.0161	1.0027	1.0298	0.0614	0.0291	2.11	1.0633	1.0044	1.1257
	5 day av.	0.012	0.0072	1.66	1.0121	0.9979	1.0265	0.02	0.0078	2.57	1.0202	1.0047	1.0359	0.0868	0.0352	2.47	1.0907	1.0180	1.1686
	Max 1h CO	0.0047	0.0034	1.39	1.0047	0.9980	1.0114	0.006	0.0035	1.70	1.0060	0.9991	1.0129	0.0118	0.011	1.07	1.0119	0.9903	1.0339
	Lag 1	0.0052	0.0031	1.64	1.0052	0.9991	1.0113	0.0073	0.0034	2.18	1.0073	1.0006	1.0141	0.014	0.0109	1.29	1.0141	0.9927	1.0360
	Lag 2	0.002	0.003	0.67	1.0020	0.9961	1.0079	0.0033	0.0032	1.02	1.0033	0.9970	1.0096	0.0271	0.0106	2.55	1.0275	1.0063	1.0490
	3 day av.	0.0086	0.0042	2.05	1.0086	1.0004	1.0170	0.0115	0.0045	2.56	1.0116	1.0027	1.0205	0.0433	0.0156	2.78	1.0443	1.0128	1.0767
	5 day av.	0.01	0.0046	2.15	1.0101	1.0010	1.0192	0.0141	0.0051	2.76	1.0142	1.0041	1.0244	0.0711	0.0187	3.80	1.0737	1.0350	1.1138

Table B1.7 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for cardiovascular admissions, 0-64 years

Outcome	Pollutant	Whole year models						Cool Season						Warm Season					
		Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Cardiovascular	**Av 24h bsp**	0.0415	0.0238	1.75	1.0424	0.9949	1.0921	0.0418	0.0258	1.62	1.0427	0.9913	1.0968	0.0353	0.0644	0.55	1.0359	0.9131	1.1753
0-64	Lag 1	0.0407	0.0242	1.68	1.0415	0.9933	1.0921	0.0529	0.0262	2.02	1.0543	1.0015	1.1099	-0.0323	0.0664	-0.49	0.9682	0.8501	1.1028
	Lag 2	0.0147	0.0236	0.62	1.0148	0.9689	1.0629	0.0252	0.0253	1.00	1.0255	0.9759	1.0777	-0.0831	0.0696	-1.19	0.9203	0.8029	1.0548
	3 day av.	0.0482	0.0286	1.68	1.0494	0.9922	1.1099	0.0592	0.0309	1.92	1.0610	0.9986	1.1272	-0.0138	0.1799	-0.08	0.9863	0.6932	1.4033
	5 day av.	0.0355	0.0325	1.09	1.0361	0.9722	1.1043	0.0435	0.0351	1.24	1.0445	0.9750	1.1188	-0.0708	0.0998	-0.71	0.9316	0.7661	1.1329
	Max 1h bsp	0.0188	0.0115	1.64	1.0190	0.9963	1.0422	0.0222	0.0129	1.72	1.0224	0.9969	1.0486	0.0017	0.0269	0.06	1.0017	0.9503	1.0559
	Lag 1	0.0172	0.0118	1.45	1.0173	0.9941	1.0412	0.03	0.0133	2.26	1.0305	1.0039	1.0577	-0.0343	0.0278	-1.24	0.9663	0.9150	1.0204
	Lag 2	0.0069	0.0114	0.61	1.0069	0.9847	1.0297	0.013	0.0127	1.03	1.0131	0.9882	1.0386	-0.0287	0.0287	-1.00	0.9717	0.9186	1.0279
	3 day av.	0.0231	0.0143	1.61	1.0234	0.9951	1.0525	0.0339	0.0159	2.13	1.0345	1.0027	1.0672	-0.0366	0.0371	-0.99	0.9641	0.8964	1.0368
	5 day av.	0.0087	0.0162	0.54	1.0087	0.9772	1.0413	0.0167	0.018	0.93	1.0168	0.9816	1.0534	-0.052	0.0453	-1.15	0.9493	0.8687	1.0375
	Av 24h NO_2	0.0036	0.0013	2.75	1.0036	1.0011	1.0062	0.0038	0.0017	2.29	1.0038	1.0005	1.0072	0.0028	0.0022	1.24	1.0028	0.9985	1.0071
	Lag 1	0.0009	0.0013	0.71	1.0009	0.9984	1.0035	0.0027	0.0017	1.55	1.0027	0.9994	1.0061	-0.0022	0.0023	-0.99	0.9978	0.9933	1.0023
	Lag 2	0.0007	0.0013	0.52	1.0007	0.9982	1.0033	0.0022	0.0016	1.32	1.0022	0.9991	1.0054	-0.0034	0.0023	-1.47	0.9966	0.9921	1.0011
	3 day av.	0.003	0.0016	1.85	1.0030	0.9999	1.0062	0.005	0.0021	2.33	1.0050	1.0009	1.0092	-0.0018	0.003	-0.60	0.9982	0.9923	1.0041
	5 day av.	0.0021	0.0018	1.15	1.0021	0.9986	1.0056	0.0036	0.0024	1.49	1.0036	0.9989	1.0083	-0.0039	0.0037	-1.07	0.9961	0.9889	1.0034
	Max 1h NO_2	0.0013	0.0007	1.95	1.0013	0.9999	1.0027	0.0018	0.001	1.82	1.0018	0.9998	1.0038	0.0008	0.001	0.83	1.0008	0.9988	1.0028
	Lag 1	-0.0002	0.0007	-0.27	0.9998	0.9984	1.0012	0.0011	0.001	1.08	1.0011	0.9991	1.0031	-0.0014	0.001	-1.46	0.9986	0.9966	1.0006
	Lag 2	0.0002	0.0007	0.25	1.0002	0.9988	1.0016	0.0011	0.001	1.19	1.0011	0.9991	1.0031	-0.0012	0.001	-1.18	0.9988	0.9968	1.0008
	3 day av.	0.0008	0.0009	0.91	1.0008	0.9990	1.0026	0.00256	0.001334	1.92	1.0026	0.9999	1.0052	-0.0011	0.0013	-0.86	0.9989	0.9964	1.0014
	5 day av.	-0.0004	0.001	-0.33	0.9996	0.9976	1.0016	0.0008	0.0016	0.50	1.0008	0.9977	1.0039	-0.0023	0.0016	-1.42	0.9977	0.9946	1.0008
	Av 8h O_3	-0.0016	0.0006	-2.52	0.9984	0.9972	0.9996	-0.004	0.0012	-3.50	0.9960	0.9937	0.9984	-0.0007	0.0008	-0.92	0.9993	0.9977	1.0009
	Lag 1	-0.0014	0.0007	-2.14	0.9986	0.9972	1.0000	-0.0008	0.012	-0.71	0.9992	0.9760	1.0230	-0.0016	0.0008	-2.02	0.9984	0.9968	1.0000
	Lag 2	-0.0016	0.0007	-2.30	0.9984	0.9970	0.9998	-0.0021	0.0012	-1.83	0.9979	0.9956	1.0003	-0.0014	0.0008	-1.73	0.9986	0.9970	1.0002
	3 day av.	-0.0027	0.0008	-3.21	0.9973	0.9957	0.9989	-0.0037	0.0014	-2.72	0.9963	0.9936	0.9990	-0.0023	0.0011	-2.15	0.9977	0.9956	0.9999
	5 day av.	-0.0037	0.001	-3.75	0.9963	0.9944	0.9983	-0.0039	0.0015	-2.63	0.9961	0.9932	0.9990	-0.0035	0.0013	-2.69	0.9965	0.9940	0.9990
	Av 4h O_3	-0.0012	0.0006	-2.07	0.9988	0.9976	1.0000	-0.0032	0.0011	-2.76	0.9968	0.9947	0.9990	-0.0006	0.0007	-0.91	0.9994	0.9980	1.0008
	Lag 1	-0.0011	0.0006	-1.91	0.9989	0.9977	1.0001	-0.00005	0.0011	-0.04	1.0000	0.9978	1.0021	-0.0014	0.0007	-2.04	0.9986	0.9972	1.0000
	Lag 2	-0.0014	0.0006	-2.26	0.9986	0.9974	0.9998	-0.0016	0.0011	-1.41	0.9984	0.9963	1.0006	-0.0013	0.0007	-1.89	0.9987	0.9973	1.0001
	3 day av.	-0.0022	0.0008	-2.87	0.9978	0.9962	0.9994	-0.0026	0.0014	-1.93	0.9974	0.9947	1.0001	-0.002	0.0009	-2.21	0.9980	0.9962	0.9998
	5 day av.	-0.0032	0.0009	-3.53	0.9968	0.9950	0.9986	-0.0033	0.0015	-2.20	0.9967	0.9938	0.9996	-0.003	0.0011	-2.75	0.9970	0.9949	0.9992
	Max 1h O_3	-0.0009	0.0005	-1.76	0.9991	0.9981	1.0001	-0.0025	0.0012	-2.14	0.9975	0.9952	0.9999	-0.0005	0.0006	-0.92	0.9995	0.9983	1.0007
	Lag 1	-0.0011	0.0005	-2.13	0.9989	0.9979	0.9999	0.0002	0.0011	0.21	1.0002	0.9980	1.0024	-0.0014	0.0006	-2.32	0.9986	0.9974	0.9998
	Lag 2	-0.0013	0.0005	-2.31	0.9987	0.9977	0.9997	-0.0014	0.0011	-1.21	0.9986	0.9965	1.0008	-0.0013	0.0006	-2.03	0.9987	0.9975	0.9999
	3 day av.	-0.002	0.0007	-2.85	0.9980	0.9966	0.9994	-0.002	0.0014	-1.46	0.9980	0.9953	1.0007	-0.0019	0.0008	-2.40	0.9981	0.9965	0.9997
	5 day av.	-0.0029	0.0008	-3.49	0.9971	0.9955	0.9987	-0.0028	0.0015	-1.85	0.9972	0.9943	1.0001	-0.0028	0.001	-2.89	0.9972	0.9953	0.9992
	Av 8h CO	0.0166	0.0076	2.18	1.0167	1.0017	1.0320	0.0118	0.0081	1.45	1.0119	0.9959	1.0281	0.0666	0.0268	2.48	1.0689	1.0142	1.1265
	Lag 1	0.0184	0.0081	2.27	1.0186	1.0025	1.0349	0.0202	0.0085	2.37	1.0204	1.0035	1.0375	-0.0029	0.0272	-0.11	0.9971	0.9453	1.0517
	Lag 2	0.0039	0.0078	0.49	1.0039	0.9887	1.0194	0.0068	0.0083	0.82	1.0068	0.9906	1.0233	-0.0343	0.0275	-1.25	0.9663	0.9156	1.0198
	3 day av.	0.0245	0.0103	2.38	1.0248	1.0043	1.0457	0.0236	0.011	2.16	1.0239	1.0020	1.0462	0.0204	0.0369	0.55	1.0206	0.9494	1.0972
	5 day av.	0.0121	0.0113	1.08	1.0122	0.9900	1.0348	0.0093	0.0124	0.75	1.0093	0.9851	1.0342	0.0274	0.0436	0.63	1.0278	0.9436	1.1195
	Max 1h CO	0.0117	0.0049	2.40	1.0118	1.0021	1.0215	0.0082	0.0053	1.54	1.0082	0.9978	1.0188	0.0368	0.0141	2.60	1.0375	1.0092	1.0666
	Lag 1	0.0091	0.0052	1.75	1.0091	0.9989	1.0195	0.0112	0.0056	2.02	1.0113	1.0002	1.0224	-0.0064	0.0144	-0.44	0.9936	0.9660	1.0221
	Lag 2	0.003	0.0049	0.62	1.0030	0.9934	1.0127	0.0048	0.0053	0.90	1.0048	0.9944	1.0153	-0.0136	0.0146	-0.93	0.9865	0.9587	1.0151
	3 day av.	0.0154	0.0065	2.35	1.0155	1.0027	1.0285	0.0151	0.0072	2.10	1.0152	1.0010	1.0296	0.012	0.0195	0.62	1.0121	0.9741	1.0515
	5 day av.	0.0078	0.0072	1.08	1.0078	0.9937	1.0222	0.0065	0.0081	0.80	1.0065	0.9907	1.0226	0.0094	0.0229	0.41	1.0094	0.9651	1.0558

Table B1.8 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for cardiovascular admissions, 65+ years

Outcome	Pollutant	Whole year models						Cool Season						Warm Season					
		Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Cardiovascular	**Av 24h bsp**	0.0534	0.0176	3.03	1.0549	1.0191	1.0919	0.0567	0.0189	3.00	1.0583	1.0199	1.0983	0.0128	0.0476	0.27	1.0129	0.9227	1.1119
65+	Lag 1	0.0545	0.0173	3.16	1.0560	1.0208	1.0924	0.0571	0.0183	3.12	1.0588	1.0215	1.0974	0.0184	0.0491	0.38	1.0186	0.9251	1.1215
	Lag 2	0.0219	0.0168	1.31	1.0221	0.9890	1.0564	0.0227	0.018	1.26	1.0230	0.9875	1.0597	-0.002	0.0494	-0.04	0.9980	0.9059	1.0995
	3 day av.	0.0654	0.0208	3.15	1.0676	1.0249	1.1120	0.0673	0.0221	3.04	1.0696	1.0243	1.1170	0.0187	0.0612	0.30	1.0189	0.9037	1.1487
	5 day av.	0.0403	0.0235	1.72	1.0411	0.9943	1.0902	0.0427	0.0252	1.69	1.0436	0.9933	1.0965	-0.0431	0.0731	-0.59	0.9578	0.8300	1.1054
	Max 1h bsp	0.0251	0.0086	2.91	1.0254	1.0083	1.0428	0.0263	0.0097	2.72	1.0266	1.0073	1.0464	0.0126	0.0198	0.64	1.0127	0.9741	1.0528
	Lag 1	0.0274	0.0084	3.27	1.0278	1.0110	1.0448	0.0301	0.0093	3.25	1.0306	1.0119	1.0495	0.0085	0.0202	0.42	1.0085	0.9694	1.0493
	Lag 2	0.0111	0.008	1.40	1.0112	0.9954	1.0271	0.0118	0.0089	1.33	1.0119	0.9944	1.0297	0.0022	0.0202	0.11	1.0022	0.9633	1.0427
	3 day av.	0.0346	0.0104	3.34	1.0352	1.0143	1.0565	0.0356	0.0114	3.12	1.0362	1.0133	1.0597	0.0158	0.027	0.59	1.0159	0.9636	1.0711
	5 day av.	0.0213	0.0116	1.84	1.0215	0.9986	1.0450	0.0232	0.0129	1.80	1.0235	0.9979	1.0497	-0.0172	0.0328	-0.52	0.9829	0.9217	1.0482
	Av 24h NO_2	0.0023	0.0009	2.41	1.0023	1.0005	1.0041	0.0034	0.0012	2.79	1.0034	1.0010	1.0058	-0.0004	0.0016	-0.27	0.9996	0.9965	1.0027
	Lag 1	0.0025	0.0009	2.75	1.0025	1.0007	1.0043	0.0027	0.0012	2.32	1.0027	1.0003	1.0051	0.0013	0.0016	0.77	1.0013	0.9982	1.0044
	Lag 2	0.0025	0.0009	2.90	1.0025	1.0007	1.0043	0.0023	0.0011	2.00	1.0023	1.0001	1.0045	0.0017	0.0017	1.02	1.0017	0.9984	1.0050
	3 day av.	0.0045	0.0011	3.96	1.0045	1.0023	1.0067	0.0049	0.0015	3.23	1.0049	1.0020	1.0079	0.0015	0.0022	0.68	1.0015	0.9972	1.0058
	5 day av.	0.0046	0.0013	3.64	1.0046	1.0021	1.0072	0.0044	0.0017	2.55	1.0044	1.0011	1.0078	0.0007	0.0027	0.25	1.0007	0.9954	1.0060
	Max 1h NO_2	0.0006	0.0005	1.28	1.0006	0.9996	1.0016	0.0013	0.0007	1.84	1.0013	0.9999	1.0027	-0.0002	0.0007	-0.30	0.9998	0.9984	1.0012
	Lag 1	0.0015	0.0005	3.17	1.0015	1.0005	1.0025	0.0018	0.0007	2.61	1.0018	1.0004	1.0032	0.001	0.0007	1.35	1.0010	0.9996	1.0024
	Lag 2	0.0011	0.0005	2.37	1.0011	1.0001	1.0021	0.0003	0.0005	0.62	1.0003	0.9993	1.0013	0.0003	0.0005	0.62	1.0003	0.9993	1.0013
	3 day av.	0.002	0.0006	3.26	1.0020	1.0008	1.0032	0.0024	0.0009	2.58	1.0024	1.0006	1.0042	0.0011	0.001	1.12	1.0011	0.9991	1.0031
	5 day av.	0.0019	0.0007	2.62	1.0019	1.0005	1.0033	0.0021	0.0011	1.89	1.0021	0.9999	1.0043	0.0005	0.0012	0.41	1.0005	0.9981	1.0029
	Av 8h O_3	-0.0011	0.0005	-2.30	0.9989	0.9979	0.9999	-0.0011	0.0008	-1.38	0.9989	0.9973	1.0005	-0.001	0.0006	-1.73	0.9990	0.9978	1.0002
	Lag 1	-0.0002	0.0005	-0.41	0.9998	0.9988	1.0008	-0.0024	0.0008	-2.88	0.9976	0.9960	0.9992	0.0006	0.0006	1.03	1.0006	0.9994	1.0018
	Lag 2	0.0004	0.0006	0.78	1.0004	0.9992	1.0016	-0.0025	0.0009	-2.88	0.9975	0.9957	0.9993	0.0015	0.0006	2.40	1.0015	1.0003	1.0027
	3 day av.	-0.0007	0.0006	-1.04	0.9993	0.9981	1.0005	-0.0032	0.001	-3.28	0.9968	0.9949	0.9988	0.0004	0.0008	0.54	1.0004	0.9988	1.0020
	5 day av.	-0.0019	0.0008	-2.46	0.9981	0.9965	0.9997	-0.0038	0.0011	-3.50	0.9962	0.9941	0.9984	-0.0008	0.001	-0.84	0.9992	0.9972	1.0012
	Av 4h O_3	-0.00079	0.0004	-1.94	0.9992	0.9984	1.0000	-0.0007	0.0008	-0.90	0.9993	0.9977	1.0009	-0.0008	0.0005	-1.60	0.9992	0.9982	1.0002
	Lag 1	-0.0002	0.0004	-0.37	0.9998	0.9990	1.0006	-0.0022	0.0008	-2.71	0.9978	0.9962	0.9994	0.0004	0.0005	0.88	1.0004	0.9994	1.0014
	Lag 2	0.0005	0.0005	1.12	1.0005	0.9995	1.0015	-0.0019	0.0008	-2.25	0.9981	0.9965	0.9997	0.0012	0.0005	2.21	1.0012	1.0002	1.0022
	3 day av.	-0.0004	0.0006	-0.71	0.9996	0.9984	1.0008	-0.0027	0.001	-2.76	0.9973	0.9954	0.9993	0.0003	0.0007	0.48	1.0003	0.9989	1.0017
	5 day av.	-0.00148	0.0007	-2.06	0.9985	0.9972	0.9999	-0.0034	0.0011	-3.09	0.9966	0.9945	0.9988	-0.0007	0.0009	-0.85	0.9993	0.9975	1.0011
	Max 1h O_3	-0.0007	0.0004	-1.88	0.9993	0.9985	1.0001	-0.0006	0.0008	-0.79	0.9994	0.9978	1.0010	-0.0007	0.0004	-1.57	0.9993	0.9985	1.0001
	Lag 1	-0.0002	0.0004	-0.41	0.9998	0.9990	1.0006	-0.0019	0.0008	-2.34	0.9981	0.9965	0.9997	0.0002	0.0004	0.57	1.0002	0.9994	1.0010
	Lag 2	0.0005	0.0004	1.22	1.0005	0.9997	1.0013	-0.0018	0.0008	-2.10	0.9982	0.9966	0.9998	0.001	0.0005	2.09	1.0010	1.0000	1.0020
	3 day av.	-0.0003	0.0005	-0.67	0.9997	0.9987	1.0007	-0.0025	0.001	-2.50	0.9975	0.9955	0.9995	0.0002	0.0006	0.30	1.0002	0.9990	1.0014
	5 day av.	-0.0013	0.00065	-1.99	0.9987	0.9974	1.0000	-0.0033	0.0011	-2.92	0.9967	0.9946	0.9989	-0.0007	0.0007	-0.96	0.9993	0.9979	1.0007
	Av 8h CO	0.0141	0.0056	2.53	1.0142	1.0031	1.0254	0.0139	0.0059	2.33	1.0140	1.0023	1.0258	0.0004	0.0196	0.02	1.0004	0.9627	1.0396
	Lag 1	0.0222	0.0056	3.96	1.0224	1.0113	1.0337	0.0222	0.0059	3.75	1.0224	1.0107	1.0343	0.009	0.0198	0.46	1.0090	0.9706	1.0490
	Lag 2	0.0144	0.0054	2.68	1.0145	1.0038	1.0253	0.0132	0.0057	2.32	1.0133	1.0020	1.0247	0.019	0.0196	0.97	1.0192	0.9808	1.0591
	3 day av.	0.0324	0.0072	4.49	1.0329	1.0185	1.0476	0.0307	0.0077	3.97	1.0312	1.0157	1.0469	0.0201	0.0268	0.75	1.0203	0.9681	1.0753
	5 day av.	0.0284	0.0079	3.57	1.0288	1.0130	1.0449	0.0233	0.0087	2.66	1.0236	1.0063	1.0412	0.0366	0.0315	1.16	1.0373	0.9752	1.1033
	Max 1h CO	0.0102	0.0036	2.84	1.0103	1.0031	1.0174	0.0099	0.0039	2.54	1.0099	1.0023	1.0177	0.0057	0.0103	0.56	1.0057	0.9856	1.0262
	Lag 1	0.0119	0.0035	3.38	1.0120	1.0051	1.0189	0.0117	0.0038	3.06	1.0118	1.0043	1.0193	0.0087	0.0104	0.84	1.0087	0.9884	1.0295
	Lag 2	0.0087	0.0034	2.56	1.0087	1.0020	1.0155	0.0081	0.0037	2.19	1.0081	1.0008	1.0155	0.0087	0.0104	0.84	1.0087	0.9884	1.0295
	3 day av.	0.0203	0.0046	4.42	1.0205	1.0113	1.0297	0.019	0.0051	3.75	1.0192	1.0090	1.0294	0.0163	0.0141	1.15	1.0164	0.9887	1.0449
	5 day av.	0.0172	0.005	3.42	1.0173	1.0074	1.0274	0.0135	0.0057	2.38	1.0136	1.0023	1.0250	0.0224	0.0165	1.36	1.0227	0.9901	1.0563

Table B1.9 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for cardiovascular admissions, all ages

Outcome	Pollutant	Whole year models						Cool Season						Warm Season					
		Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Total cardiovascular	**Av 24h bsp**	0.0452	0.0145	3.13	1.0462	1.0169	1.0764	0.0452	0.0156	2.90	1.0462	1.0147	1.0787	0.0291	0.0385	0.76	1.0295	0.9547	1.1102
	Lag 1	0.0451	0.0142	3.19	1.0461	1.0174	1.0757	0.0477	0.0151	3.17	1.0489	1.0183	1.0804	0.0113	0.04	0.28	1.0114	0.9351	1.0938
	Lag 2	0.0168	0.0137	1.22	1.0169	0.9900	1.0446	0.0205	0.0148	1.38	1.0207	0.9915	1.0508	-0.0276	0.0402	-0.69	0.9728	0.8991	1.0525
	3 day av.	0.054	0.0171	3.17	1.0555	1.0207	1.0915	0.056	0.0182	3.08	1.0576	1.0205	1.0960	0.0108	0.0497	0.22	1.0109	0.9170	1.1143
	5 day av.	0.0342	0.0192	1.78	1.0348	0.9966	1.0745	0.0359	0.0207	1.74	1.0366	0.9953	1.0795	-0.0357	0.0593	-0.60	0.9649	0.8591	1.0839
	Max 1h bsp	0.0205	0.0071	2.89	1.0207	1.0066	1.0350	0.0211	0.008	2.65	1.0213	1.0054	1.0375	0.0113	0.0161	0.71	1.0114	0.9799	1.0438
	Lag 1	0.0211	0.0069	3.07	1.0213	1.0076	1.0352	0.0251	0.0076	3.30	1.0254	1.0103	1.0408	-0.0033	0.0165	-0.20	0.9967	0.9650	1.0295
	Lag 2	0.0082	0.0065	1.25	1.0082	0.9955	1.0212	0.0101	0.0073	1.38	1.0102	0.9958	1.0247	-0.0059	0.0165	-0.36	0.9941	0.9625	1.0268
	3 day av.	0.027	0.0085	3.18	1.0274	1.0104	1.0446	0.0294	0.0094	3.13	1.0298	1.0110	1.0490	0.0026	0.022	0.12	1.0026	0.9603	1.0468
	5 day av.	0.015	0.0095	1.58	1.0151	0.9964	1.0342	0.0169	0.0106	1.60	1.0170	0.9961	1.0384	-0.0212	0.0267	-0.79	0.9790	0.9291	1.0316
	Av 24h NO_2	0.0027	0.0008	3.48	1.0027	1.0011	1.0043	0.0035	0.001	3.50	1.0035	1.0015	1.0055	0.0007	0.0013	0.51	1.0007	0.9982	1.0033
	Lag 1	0.0021	0.0008	2.76	1.0021	1.0005	1.0037	0.0026	0.001	2.65	1.0026	1.0006	1.0046	0.0004	0.0013	0.33	1.0004	0.9979	1.0030
	Lag 2	0.002	0.0007	2.77	1.0020	1.0006	1.0034	0.0021	0.0009	2.23	1.0021	1.0003	1.0039	0.0005	0.0014	0.37	1.0005	0.9978	1.0032
	3 day av.	0.004	0.0009	4.30	1.0040	1.0022	1.0058	0.0047	0.0012	3.80	1.0047	1.0024	1.0071	0.001	0.0018	0.57	1.0010	0.9975	1.0045
	5 day av.	0.0038	0.001	3.68	1.0038	1.0018	1.0058	0.004	0.0014	2.86	1.0040	1.0013	1.0068	0.0001	0.0022	0.03	1.0001	0.9958	1.0044
	Max 1h NO_2	0.0008	0.0004	2.08	1.0008	1.0000	1.0016	0.0014	0.0006	2.42	1.0014	1.0002	1.0026	0.0001	0.0006	0.24	1.0001	0.9989	1.0013
	Lag 1	0.001	0.0004	2.56	1.0010	1.0002	1.0018	0.0015	0.0006	2.70	1.0015	1.0003	1.0027	0.0002	0.0006	0.41	1.0002	0.9990	1.0014
	Lag 2	0.0009	0.0004	2.46	1.0009	1.0001	1.0017	0.0008	0.0005	1.55	1.0008	0.9998	1.0018	0.0006	0.0006	0.98	1.0006	0.9994	1.0018
	3 day av.	0.0017	0.0005	3.41	1.0017	1.0007	1.0027	0.0024	0.0008	3.11	1.0024	1.0008	1.0040	0.0006	0.0008	0.73	1.0006	0.9990	1.0022
	5 day av.	0.0013	0.0006	2.17	1.0013	1.0001	1.0025	0.0017	0.0009	1.90	1.0017	0.9999	1.0035	-0.0001	0.001	-0.12	0.9999	0.9979	1.0019
	Av 8h O_3	-0.0012	0.0004	-3.25	0.9988	0.9980	0.9996	-0.002	0.0007	-2.92	0.9980	0.9966	0.9994	-0.0009	0.00045	-1.99	0.9991	0.9982	1.0000
	Lag 1	-0.0005	0.0004	-1.36	0.9995	0.9987	1.0003	-0.0017	0.0007	-2.44	0.9983	0.9969	0.9997	-0.0001	0.0005	-0.31	0.9999	0.9989	1.0009
	Lag 2	-0.0002	0.0005	-0.36	0.9998	0.9988	1.0008	-0.0022	0.0007	-3.10	0.9978	0.9964	0.9992	0.0005	0.0005	1.05	1.0005	0.9995	1.0015
	3 day av.	-0.0012	0.0005	-2.40	0.9988	0.9978	0.9998	-0.0031	0.0008	-3.88	0.9969	0.9953	0.9985	-0.0005	0.0006	-0.76	0.9995	0.9983	1.0007
	5 day av.	-0.0024	0.0006	-3.76	0.9976	0.9964	0.9988	-0.0035	0.0009	-3.98	0.9965	0.9947	0.9983	-0.0018	0.0008	-2.21	0.9982	0.9966	0.9998
	Av 4h O_3	-0.0009	0.0003	-2.71	0.9991	0.9985	0.9997	-0.00138	0.00066	-2.09	0.9986	0.9973	0.9999	-0.0007	0.0004	-1.88	0.9993	0.9985	1.0001
	Lag 1	-0.0004	0.0003	-1.21	0.9996	0.9990	1.0002	-0.0013	0.0007	-1.91	0.9987	0.9973	1.0001	-0.0002	0.0004	-0.47	0.9998	0.9990	1.0006
	Lag 2	-0.00003	0.0004	-0.08	1.0000	0.9992	1.0008	-0.0016	0.0007	-2.35	0.9984	0.9970	0.9998	0.0003	0.0004	0.79	1.0003	0.9995	1.0011
	3 day av.	-0.0009	0.00046	-1.97	0.9991	0.9982	1.0000	-0.0024	0.0008	-2.99	0.9976	0.9960	0.9992	-0.0005	0.0005	-0.87	0.9995	0.9985	1.0005
	5 day av.	-0.0019	0.0006	-3.32	0.9981	0.9969	0.9993	-0.003	0.0009	-3.34	0.9970	0.9952	0.9988	-0.0016	0.0007	-2.26	0.9984	0.9970	0.9998
	Max 1h O_3	-0.0007	0.0003	-2.48	0.9993	0.9987	0.9999	-0.0011	0.0007	-1.65	0.9989	0.9975	1.0003	-0.0006	0.00033	-1.85	0.9994	0.9988	1.0000
	Lag 1	-0.0004	0.0003	-1.41	0.9996	0.9990	1.0002	-0.001	0.0007	-1.53	0.9990	0.9976	1.0004	-0.0003	0.0003	-0.89	0.9997	0.9991	1.0003
	Lag 2	-0.00003	0.0003	-0.08	1.0000	0.9994	1.0006	-0.0015	0.0007	-2.13	0.9985	0.9971	0.9999	0.0002	0.0004	0.59	1.0002	0.9994	1.0010
	3 day av.	-0.0008	0.0004	-1.97	0.9992	0.9984	1.0000	-0.0021	0.0008	-2.54	0.9979	0.9963	0.9995	-0.0005	0.0005	-1.14	0.9995	0.9985	1.0005
	5 day av.	-0.0018	0.0005	-3.30	0.9982	0.9972	0.9992	-0.0028	0.0009	-3.00	0.9972	0.9954	0.9990	-0.0015	0.0006	-2.45	0.9985	0.9973	0.9997
	Av 8h CO	0.0138	0.0046	3.01	1.0139	1.0048	1.0231	0.0117	0.0049	2.40	1.0118	1.0021	1.0215	0.0235	0.0159	1.48	1.0238	0.9924	1.0562
	Lag 1	0.0196	0.0046	4.24	1.0198	1.0106	1.0290	0.0197	0.0049	4.04	1.0199	1.0101	1.0297	0.0063	0.0161	0.39	1.0063	0.9751	1.0386
	Lag 2	0.0094	0.0044	2.13	1.0094	1.0008	1.0182	0.00915	0.0047	1.95	1.0092	0.9999	1.0185	0.0043	0.016	0.27	1.0043	0.9733	1.0363
	3 day av.	0.0268	0.0059	4.52	1.0272	1.0154	1.0391	0.0252	0.0064	3.97	1.0255	1.0127	1.0385	0.0236	0.0218	1.08	1.0239	0.9811	1.0686
	5 day av.	0.0214	0.0065	3.27	1.0216	1.0087	1.0347	0.0168	0.0072	2.34	1.0169	1.0027	1.0314	0.0402	0.0257	1.57	1.0410	0.9899	1.0948
	Max 1h CO	0.0102	0.0029	3.47	1.0103	1.0045	1.0160	0.0086	0.0032	2.69	1.0086	1.0023	1.0150	0.0163	0.0084	1.95	1.0164	0.9998	1.0333
	Lag 1	0.0102	0.0029	3.52	1.0103	1.0045	1.0160	0.0103	0.0031	3.29	1.0104	1.0042	1.0165	0.0049	0.0085	0.58	1.0049	0.9883	1.0218
	Lag 2	0.0063	0.0028	2.24	1.0063	1.0008	1.0119	0.006	0.003	1.98	1.0060	1.0001	1.0120	0.004	0.0085	0.47	1.0040	0.9874	1.0209
	3 day av.	0.0172	0.0038	4.56	1.0173	1.0098	1.0250	0.0159	0.0042	3.84	1.0160	1.0077	1.0244	0.0177	0.0115	1.54	1.0179	0.9952	1.0411
	5 day av.	0.0134	0.0041	3.24	1.0135	1.0054	1.0217	0.0103	0.0047	2.21	1.0104	1.0011	1.0197	0.0218	0.0134	1.62	1.0220	0.9955	1.0492

Table B1.10 Parameter estimates, standard errors and relative risk of admission (with 95% confidence intervals) for ischaemic heart desease, all ages

Outcome	Pollutant	Whole year models						Cool Season						Warm Season					
		Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI	Parameter estimate	Standard error	t statistic	Relative risk	Lower CI	Upper CI
Total IHD	**Av 24h bsp**	0.0612	0.0217	2.82	1.0631	1.0188	1.1093	0.0658	0.0233	2.82	1.0680	1.0203	1.1179	0.0057	0.0622	0.09	1.0057	0.8903	1.1361
	Lag 1	0.0475	0.0224	2.12	1.0486	1.0036	1.0957	0.0621	0.0237	2.62	1.0641	1.0158	1.1147	-0.0743	0.0653	-1.14	0.9284	0.8169	1.0552
	Lag 2	-0.0027	0.0233	-0.12	0.9973	0.9528	1.0439	0.0153	0.0248	0.62	1.0154	0.9672	1.0660	-0.126	0.065	-1.94	0.8816	0.7762	1.0014
	3 day av.	0.0548	0.0269	2.03	1.0563	1.0021	1.1135	0.0713	0.0285	2.50	1.0739	1.0156	1.1356	-0.1007	0.0812	-1.24	0.9042	0.7712	1.0602
	5 day av.	0.0348	0.0309	1.13	1.0354	0.9746	1.1001	0.0594	0.0331	1.80	1.0612	0.9945	1.1323	-0.2307	0.0972	-2.37	0.7940	0.6563	0.9606
	Max 1h bsp	0.0293	0.0104	2.80	1.0297	1.0090	1.0509	0.031	0.0117	2.66	1.0315	1.0081	1.0554	0.0093	0.0259	0.36	1.0093	0.9594	1.0619
	Lag 1	0.0193	0.0108	1.79	1.0195	0.9981	1.0413	0.0302	0.0119	2.55	1.0307	1.0069	1.0550	-0.0403	0.0271	-1.48	0.9605	0.9108	1.0129
	Lag 2	-0.002	0.0112	-0.18	0.9980	0.9763	1.0202	0.0069	0.0125	0.55	1.0069	0.9826	1.0319	-0.0401	0.0267	-1.50	0.9607	0.9117	1.0123
	3 day av.	0.0259	0.0133	1.94	1.0262	0.9998	1.0533	0.0357	0.0146	2.45	1.0363	1.0071	1.0664	-0.0424	0.0359	-1.18	0.9585	0.8934	1.0284
	5 day av.	0.011	0.0153	0.72	1.0111	0.9812	1.0418	0.0271	0.017	1.60	1.0275	0.9938	1.0623	-0.1081	0.0437	-2.47	0.8975	0.8239	0.9778
	Av 24h NO_2	0.0037	0.0012	3.12	1.0037	1.0013	1.0061	0.0047	0.0015	3.06	1.0047	1.0018	1.0077	0.0008	0.0021	0.39	1.0008	0.9967	1.0049
	Lag 1	0.003	0.0012	2.39	1.0030	1.0006	1.0054	0.0041	0.0016	2.61	1.0041	1.0010	1.0073	-0.0002	0.0022	-0.10	0.9998	0.9955	1.0041
	Lag 2	0.0012	0.0013	0.91	1.0012	0.9987	1.0038	0.0023	0.0016	1.43	1.0023	0.9992	1.0055	-0.0018	0.0022	-0.84	0.9982	0.9939	1.0025
	3 day av.	0.0049	0.0016	3.08	1.0049	1.0018	1.0081	0.0064	0.002	3.22	1.0064	1.0025	1.0104	-0.0006	0.0029	-0.20	0.9994	0.9937	1.0051
	5 day av.	0.0036	0.0017	2.08	1.0036	1.0003	1.0070	0.0061	0.0023	2.61	1.0061	1.0016	1.0107	-0.0058	0.0035	-1.68	0.9942	0.9874	1.0011
	Max 1h NO_2	0.0012201	0.0006316	1.93	1.0012	1.0000	1.0025	0.0018	0.0009	2.01	1.0018	1.0000	1.0036	0.0004	0.0009	0.39	1.0004	0.9986	1.0022
	Lag 1	0.001	0.0006	1.52	1.0010	0.9998	1.0022	0.002	0.0009	2.17	1.0020	1.0002	1.0038	-0.0003	0.0009	-0.29	0.9997	0.9979	1.0015
	Lag 2	0.0004	0.0007	0.57	1.0004	0.9990	1.0018	0.0007	0.0009	0.69	1.0007	0.9989	1.0025	-0.0001	0.0009	-0.10	0.9999	0.9981	1.0017
	3 day av.	0.0017	0.0009	1.93	1.0017	0.9999	1.0035	0.0028	0.0012	2.27	1.0028	1.0004	1.0052	0.00004	0.0013	0.03	1.0000	0.9975	1.0026
	5 day av.	0.0005	0.001	0.48	1.0005	0.9985	1.0025	0.0021	0.0015	1.40	1.0021	0.9992	1.0051	-0.0023	0.0015	-1.50	0.9977	0.9948	1.0006
	Av 8h O_3	-0.002	0.0006	-3.34	0.9980	0.9968	0.9992	-0.0038	0.0011	-3.53	0.9962	0.9941	0.9984	-0.0012	0.0007	-1.65	0.9988	0.9974	1.0002
	Lag 1	-0.0003	0.0006	-0.48	0.9997	0.9985	1.0009	-0.0026	0.0011	-2.41	0.9974	0.9953	0.9996	0.0007	0.0007	0.90	1.0007	0.9993	1.0021
	Lag 2	-0.0009	0.0006	-1.45	0.9991	0.9979	1.0003	-0.0038	0.0011	-3.49	0.9962	0.9941	0.9984	0.0002	0.0007	0.31	1.0002	0.9988	1.0016
	3 day av.	-0.0019	0.0008	-2.45	0.9981	0.9965	0.9997	-0.0053	0.0013	-4.16	0.9947	0.9922	0.9973	-0.0002	0.001	-0.21	0.9998	0.9978	1.0018
	5 day av.	-0.0034	0.0009	-3.71	0.9966	0.9948	0.9984	-0.0061	0.0014	-4.38	0.9939	0.9912	0.9966	-0.0018	0.0012	-1.46	0.9982	0.9959	1.0006
	Av 4h O_3	-0.0015	0.0005	-2.86	0.9985	0.9975	0.9995	-0.0029	0.0011	-2.73	0.9971	0.9950	0.9993	-0.001	0.0006	-1.66	0.9990	0.9978	1.0002
	Lag 1	-0.0002	0.0005	-0.31	0.9998	0.9988	1.0008	-0.0018	0.0011	-1.70	0.9982	0.9961	1.0004	0.0004	0.0006	0.63	1.0004	0.9992	1.0016
	Lag 2	-0.0007	0.0005	-1.24	0.9993	0.9983	1.0003	-0.0028	0.0011	-2.59	0.9972	0.9951	0.9994	0.000004	0.0006	0.01	1.0000	0.9988	1.0012
	3 day av.	-0.0014	0.0007	-2.06	0.9986	0.9972	1.0000	-0.0041	0.0013	-3.17	0.9959	0.9934	0.9984	-0.0004	0.0008	-0.47	0.9996	0.9980	1.0012
	5 day av.	-0.0028	0.0008	-3.33	0.9972	0.9956	0.9988	-0.005	0.0014	-3.57	0.9950	0.9923	0.9977	-0.0018	0.001	-1.71	0.9982	0.9962	1.0002
	Max 1h O_3	-0.0013	0.0005	-2.66	0.9987	0.9977	0.9997	-0.0024	0.0011	-2.24	0.9976	0.9955	0.9998	-0.0009	0.0005	-1.72	0.9991	0.9981	1.0001
	Lag 1	-0.0003	0.0005	-0.55	0.9997	0.9987	1.0007	-0.0015	0.0011	-1.38	0.9985	0.9964	1.0007	0.0001	0.0006	0.17	1.0001	0.9989	1.0013
	Lag 2	-0.0007	0.0005	-1.36	0.9993	0.9983	1.0003	-0.003	0.0011	-2.79	0.9970	0.9949	0.9992	-0.0001	0.0006	-0.12	0.9999	0.9987	1.0011
	3 day av.	-0.0013	0.0006	-2.14	0.9987	0.9975	0.9999	-0.0038	0.0013	-2.93	0.9962	0.9937	0.9987	-0.0006	0.0007	-0.77	0.9994	0.9980	1.0008
	5 day av.	-0.0026	0.0008	-3.39	0.9974	0.9958	0.9990	-0.0049	0.0014	-3.41	0.9951	0.9924	0.9978	-0.0018	0.0009	-1.97	0.9982	0.9964	1.0000
	Av 8h CO	0.0222	0.007	3.19	1.0224	1.0085	1.0366	0.0203	0.0075	2.71	1.0205	1.0056	1.0356	0.0194	0.0256	0.76	1.0196	0.9697	1.0721
	Lag 1	0.0221	0.0072	3.09	1.0223	1.0080	1.0369	0.0228	0.0076	3.02	1.0231	1.0079	1.0384	-0.0068	0.0263	-0.26	0.9932	0.9433	1.0458
	Lag 2	0.0143	0.0076	1.87	1.0144	0.9994	1.0296	0.016	0.0079	2.01	1.0161	1.0005	1.0320	-0.0125	0.0261	-0.48	0.9876	0.9383	1.0394
	3 day av.	0.0361	0.0093	3.88	1.0368	1.0180	1.0558	0.0354	0.0099	3.58	1.0360	1.0161	1.0563	0.0035	0.0357	0.10	1.0035	0.9357	1.0762
	5 day av.	0.0248	0.0106	2.33	1.0251	1.0040	1.0466	0.025	0.0116	2.15	1.0253	1.0023	1.0489	-0.0348	0.0416	-0.84	0.9658	0.8902	1.0478
	Max 1h CO	0.0143	0.0045	3.21	1.0144	1.0055	1.0234	0.0126	0.0049	2.59	1.0127	1.0030	1.0225	0.0172	0.0135	1.28	1.0173	0.9908	1.0446
	Lag 1	0.0137	0.0046	2.99	1.0138	1.0047	1.0230	0.0139	0.0049	2.81	1.0140	1.0043	1.0238	0.0055	0.0139	0.40	1.0055	0.9785	1.0333
	Lag 2	0.0072	0.0049	1.47	1.0072	0.9976	1.0169	0.009	0.0052	1.73	1.0090	0.9988	1.0194	-0.0089	0.0138	-0.65	0.9911	0.9647	1.0183
	3 day av.	0.0224	0.006	3.72	1.0227	1.0107	1.0348	0.0222	0.0065	3.39	1.0224	1.0095	1.0356	0.0118	0.0187	0.63	1.0119	0.9755	1.0496
	5 day av.	0.0157	0.0068	2.31	1.0158	1.0024	1.0295	0.0163	0.0076	2.13	1.0164	1.0014	1.0317	-0.0134	0.0217	-0.62	0.9867	0.9456	1.0296

APPENDIX B2: MULTI-POLLUTANT MODELS

Table B2.1 Multi-pollutant models for asthma admissions, 0-14 years

Pollutant combination	Parameter estimate	Standard error	Relative risk	Lower CI	Upper CI
bsp 24-hour NO_2 24-hour	0.0778 0.0056	0.0517 0.0030	1.0809 1.0056	0.9767 0.9997	1.1962 1.0115
bsp 24-hour CO 8-hour	0.1243 0.0083	0.0588 0.0179	1.1324 1.0083	1.0091 0.9736	1.2707 1.0443
NO_2 24-hour CO 8-hour	0.0080 0.0048	0.0031 0.0182	1.0080 1.0048	1.0019 0.9696	1.0142 1.0413

Table B2.2 Multi-pollutant models for asthma admissions, all ages

Pollutant combination	Parameter estimate	Standard error	Relative risk	Lower CI	Upper CI
bsp 24-hour NO_2 24-hour	0.0295 0.0042	0.0382 0.0022	1.0299 1.0042	0.9556 0.9999	1.1100 1.0085
bsp 24-hour CO 8-hour (lag 2)	0.0658 0.0210	0.0294 0.0097	1.0680 1.0212	1.0082 1.0020	1.1314 1.0408
NO_2 24-hour CO 8-hour (lag 2)	0.0051 0.0239	0.0017 0.0095	1.0051 1.0242	1.0018 1.0053	1.0085 1.0434

Table B2.3 Multi-pollutant models for respiratory admissions, 15-64 years

Pollutant combination	Parameter estimate	Standard error	Relative risk	Lower CI	Upper CI
bsp 1-hour NO_2 1-hour	0.0156 0.0018	0.0170 0.0010	1.0157 1.0018	0.9824 0.9998	1.0501 1.0038
bsp 1-hour CO 1-hour	0.0172 0.0099	0.0203 0.0089	1.0173 1.0099	0.9777 0.9925	1.0586 1.0277
NO_2 1-hour CO 1-hour	0.0017 0.0077	0.0011 0.0077	1.0017 1.0077	0.9995 0.9926	1.0039 1.0231

Table B2.4 Multi-pollutant models for respiratory admissions, 65+ years

Pollutant combination	Parameter estimate	Standard error	Relative risk	Lower CI	Upper CI
O_3 4-hour (lag 2) NO_2 24-hour (lag 2)	0.0012 0.0038	0.0007 0.0014	1.0012 1.0038	0.9998 1.0011	1.0026 1.0066
O_3 4-hour (lag 2) CO 1-hour (lag 2)	0.0016 0.0094	0.0007 0.0050	1.0016 1.0094	1.0002 0.9996	1.0030 1.0194
NO_2 24-hour (lag 2) CO 1-hour (lag 2)	0.0048 -0.0027	0.0020 0.0075	1.0048 0.9973	1.0009 0.9828	1.0088 1.0121
bsp 1-hour NO_2 24-hour (lag 2)	0.0128 0.0041	0.0127 0.0014	1.0129 1.0041	0.9880 1.0014	1.0384 1.0069
bsp 1-hour CO 1-hour (lag 2)	0.0136 0.0083	0.0129 0.0051	1.0137 1.0083	0.9884 0.9983	1.0396 1.0167
bsp 1-hour O_3 4-hour (lag 2)	0.0183 0.0017	0.0125 0.0007	1.0185 1.0017	0.9938 1.0003	1.0437 1.0031

Table B2.5 Multi-pollutant models for respiratory admissions, all ages

Pollutant combination	Parameter estimate	Standard error	Relative risk	Lower CI	Upper CI
NO_2 24-hour O_3 4-hour (lag 2)	0.0028 0.0013	0.0009 0.0004	1.0028 1.0013	1.0010 1.0005	1.0046 1.0021
O_3 4-hour (lag 2) CO 8-hour (lag 1)	0.0014 0.0090	0.0004 0.0050	1.0014 1.0090	1.0006 0.9990	1.0022 1.0192
NO_2 24-hour CO 8-hour (lag 1)	0.0028 0.0041	0.0010 0.0056	1.0028 1.0041	1.0008 0.9929	1.0048 1.0154

Table B2.6 Multi-pollutant models for cardiovascular admissions, 0-64 years

Pollutant combination	Parameter estimate	Standard error	Relative risk	Lower CI	Upper CI
NO_2 24-hour CO 1-hour	0.0027 0.0047	0.0019 0.0071	1.0027 1.0047	0.9989 0.9905	1.0065 1.0191

Table B2.7 Multi-pollutant models for cardiovascular admissions, 65+ years

Pollutant combination	Parameter estimate	Standard error	Relative risk	Lower CI	Upper CI
bsp 1-hour (lag1) NO_2 1-hour (lag 1)	0.0183 0.0009	0.0103 0.0006	1.0185 1.0009	0.9977 0.9997	1.0397 1.0021
bsp 1-hour (lag1) CO 8-hour (lag 1)	0.0072 0.0186	0.0127 0.0085	1.0072 1.0188	0.9820 1.0016	1.0331 1.0362
NO_2 1-hour (lag 1) CO 8-hour (lag 1)	0.0006 0.0178	0.0006 0.0070	1.0006 1.0180	0.9994 1.0038	1.0018 1.0323

Table B2.8 Multi-pollutant models for cardiovascular admissions, all ages

Pollutant combination	Parameter estimate	Standard error	Relative risk	Lower CI	Upper CI
bsp 24-hour (lag 1) NO_2 24-hour	0.0328 0.0021	0.0153 0.0008	1.0333 1.0021	1.0022 1.0005	1.0655 1.0037
bsp 24-hour (lag 1) CO 8-hour (lag 1)	0.0113 0.0171	0.0194 0.0063	1.0114 0.0172	0.9729 1.0045	1.0514 1.0301
NO_2 24-hour CO 8-hour (lag 1)	0.0016 0.0158	0.0009 0.0052	1.0016 0.0159	0.9998 1.0054	1.0034 1.0265

Table B2.9 Multi-pollutant models for admissions for ischaemic heart disease, all ages

Pollutant combination	Parameter estimate	Standard error	Relative risk	Lower CI	Upper CI
bsp 24-hour NO_2 24-hour	0.0323 0.0025	0.0294 0.0016	1.0328 1.0025	0.9738 0.9993	1.0954 1.0057
bsp 24-hour CO 1-hour	0.0312 0.0101	0.0292 0.0060	1.0317 1.0102	0.9732 0.9981	1.0937 1.0223
NO_2 24-hour CO 1-hour	0.0020 0.0090	0.0018 0.0066	1.0020 1.0090	0.9984 0.9958	1.0056 1.0224

APPENDIX B3: BASE MODELS

ASTHMA 0-14

	Value	Std. Error	t value
(Intercept)	2.286873473	0.009272542	246.628540
lo(SCHTERM, span = 40/1276)	2.659180233	0.349383232	7.611070
lo(SUMHOBS, span = 182.5/1276)	-3.970597429	0.430446057	-9.224379
WEEKD1	0.033367942	0.015683722	2.127553
WEEKD2	-0.029033642	0.009328306	-3.112424
WEEKD3	-0.051237295	0.007038638	-7.279433
WEEKD4	-0.040163502	0.005616419	-7.151087
WEEKD5	-0.028926448	0.004636870	-6.238357
WEEKD6	-0.007469437	0.003784337	-1.973777
lo(L2TMAX, span = 1)	2.311196442	0.338942871	6.818838
lo(UTMIN, span = 0.8)	-0.779367357	0.348351537	-2.237301

(Dispersion Parameter for Poisson family taken to be 1)

Null Deviance: 2932.738 on 1275 degrees of freedom

Residual Deviance: 1288.532 on 1182.593097 degrees of freedom

Number of Fisher Scoring Iterations: 4

TOTAL ASTHMA

	Value	Std. Error	t value
(Intercept)	2.89692144	0.007353009	393.977695
lo(SCHTERM, span = 40/1276)	2.25530724	0.251217893	8.977494
lo(SUMHOBS, 60/1276, 2)1	-3.65055787	0.300069212	-12.165720
lo(SUMHOBS, 60/1276, 2)2	3.33084518	0.278423728	11.963223
WEEKD1	0.05689542	0.011483781	4.954416
WEEKD2	-0.02781720	0.006811223	-4.084025
WEEKD3	-0.03658492	0.005007840	-7.305530
WEEKD4	-0.03493507	0.004009713	-8.712611
WEEKD5	-0.02440167	0.003293778	-7.408415
WEEKD6	-0.01391721	0.002776502	-5.012497
R2TOT	0.02802341	0.006109876	4.586576
lo(L2TAV, span = 0.8)	1.42620353	0.414109840	3.444022
lo(L2DTMAX, span = 0.9)	-0.80147310	0.406495253	-1.971667
ASTHPEAK1	0.97821126	0.147646375	6.625366
ASTHPEAK2	0.68800413	0.140312108	4.903384

(Dispersion Parameter for Poisson family taken to be 1)

Null Deviance: 2913.209 on 1275 degrees of freedom

Residual Deviance: 1158.346 on 1125.6066159 degrees of freedom

Number of Fisher Scoring Iterations: 5

RESPIRATORY 0-14

	Value	Std. Error	t value
(Intercept)	3.059125560	0.024619798	124.254700
lo(SCHTERM, span = 60/1276, 2)1	2.381714807	0.283641895	8.396908
lo(SCHTERM, span = 60/1276, 2)2	-1.282114045	0.255304041	-5.021910
lo(SUMHOBS, span = 365/1276, 2)1	-6.115912244	0.333735660	-18.325618
lo(SUMHOBS, span = 365/1276, 2)2	4.904697291	0.308703957	15.888029
lo(OTHHOBS, span = 365/1276)	1.671678999	0.263091725	6.353978
WEEKD1	0.027457969	0.010695205	2.567316
WEEKD2	-0.019856448	0.006308624	-3.147509
WEEKD3	-0.031653798	0.004627244	-6.840745
WEEKD4	-0.022966429	0.003631530	-6.324174
WEEKD5	-0.017305343	0.002987948	-5.791714
WEEKD6	-0.004831198	0.002500417	-1.932157
R2TOT	0.033372735	0.005600202	5.959202

```
                      L2UTMAX  0.013990809 0.004549473    3.075259
                       A2TMIN  0.006926876 0.002464880    2.810228
                      L2DTMAX -0.004557864 0.002702039   -1.686824
                       A3RAIN -0.004967589 0.002176169   -2.282722
(Dispersion Parameter for Poisson family taken to be 1 )
    Null Deviance: 4879.015 on 1275 degrees of freedom
Residual Deviance: 1285.248 on 1174.8859398 degrees of freedom
Number of Fisher Scoring Iterations: 8
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RESPIRATORY 15-64

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                            Value  Std. Error     t value
            (Intercept)  2.946129465 0.018949695  155.471076
lo(OBS, span = 90/1276)  3.096400831 0.231763804   13.360157
                WEEKD1  0.076905165 0.011429625    6.728582
                WEEKD2 -0.011903936 0.006709767   -1.774121
                WEEKD3 -0.016051252 0.004785257   -3.354314
                WEEKD4 -0.012738398 0.003769442   -3.379386
                WEEKD5 -0.010901572 0.003089868   -3.528167
                WEEKD6 -0.015261368 0.002689775   -5.673845
             L1HOLIDAY  0.114326460 0.041723683    2.740086
                 R2TOT  0.033142160 0.005568627    5.951586
                  TMIN  0.007615049 0.002463071    3.091689
               A4DTMIN -0.007668415 0.003609294   -2.124630
             ASTHPEAK1  0.808643097 0.165749811    4.878697
             JUNE26.97  0.661347759 0.137102918    4.823732
(Dispersion Parameter for Poisson family taken to be 1 )
    Null Deviance: 2437.514 on 1275 degrees of freedom
Residual Deviance: 1260.351 on 1237.6481867 degrees of freedom
Number of Fisher Scoring Iterations: 7
```

RESPIRATORY 65+

```
                            Value  Std. Error      t value
            (Intercept)  3.2923468527 0.025324808  130.0048123
lo(OBS, span = 90/1276)  3.6099425135 0.208801428   17.2888785
                WEEKD1  0.0853249215 0.010587329    8.0591543
                WEEKD2 -0.0125971549 0.006187801   -2.0358049
                WEEKD3  0.0004768013 0.004339615    0.1098718
                WEEKD4 -0.0063580110 0.003407747   -1.8657519
                WEEKD5  0.0060702699 0.002711790    2.2384738
                WEEKD6 -0.0096249608 0.002405374   -4.0014400
                 R2TOT  0.0304455267 0.004852088    6.2747273
   lo(TMIN, span = 0.7)  0.7696314943 0.268655771    2.8647495
              L2DTMAX -0.0106982745 0.002285135   -4.6816816
   lo(L2RAIN, span = 1)  0.7003908557 0.207581848    3.3740467
(Dispersion Parameter for Poisson family taken to be 1 )
    Null Deviance: 3485.553 on 1275 degrees of freedom
Residual Deviance: 1304.059 on 1237.0075181 degrees of freedom
Number of Fisher Scoring Iterations: 9
```

TOTAL RESPIRATORY

	Value	Std. Error	t value
(Intercept)	4.083129455	0.013196427	309.411743
lo(SCHTERM, span = 90/1276, 2)1	1.404797994	0.162668579	8.635952
lo(SCHTERM, span = 90/1276, 2)2	1.833728566	0.145669380	12.588291
lo(SUMHOBS, span = 365/1276, 2)1	-3.751565746	0.169386163	-22.148006
lo(SUMHOBS, span = 365/1276, 2)2	3.087147345	0.146937048	21.010000
lo(OTHHOBS, span = 275/1276)	1.014985567	0.152110807	6.672672
WEEKD1	0.060899067	0.006278836	9.699101
WEEKD2	-0.017273573	0.003712025	-4.653410
WEEKD3	-0.015356525	0.002634786	-5.828375
WEEKD4	-0.013684989	0.002071512	-6.606280
WEEKD5	-0.006330510	0.001682929	-3.761604
WEEKD6	-0.010641624	0.001457994	-7.298811
L1HOLIDAY	0.058051270	0.023917457	2.427151
R2TOT	0.010336148	0.003085566	3.349839
TMIN	0.006311501	0.001456080	4.334585
DTMAX	0.004367357	0.001727348	2.528359

(Dispersion Parameter for Poisson family taken to be 1)

Null Deviance: 6390.356 on 1275 degrees of freedom

Residual Deviance: 1265.136 on 1196.9814585 degrees of freedom

Number of Fisher Scoring Iterations: 10

CARDIOVASCULAR 0-64

	Value	Std. Error	t value
(Intercept)	3.3063741130	0.020587840	160.5983944
lo(OBS, span = 182.5/1276)	2.0164782535	0.194688830	10.3574419
WEEKD1	0.1289498984	0.010061677	12.8159452
WEEKD2	0.0217303117	0.005642614	3.8511075
WEEKD3	-0.0007468699	0.004031308	-0.1852674
WEEKD4	0.0027499763	0.003105240	0.8855921
WEEKD5	0.0030947853	0.002529888	1.2232893
WEEKD6	-0.0186225614	0.002276062	-8.1819229
HOLIDAY	-0.1694540661	0.034257469	-4.9464852
R2TOT	-0.0129924268	0.005429184	-2.3930718
lo(L2DTMIN, span = 0.8)	-0.6002158448	0.281606031	-2.1314027
L1TMIN	0.0030388444	0.001969397	1.5430327

(Dispersion Parameter for Poisson family taken to be 1)

Null Deviance: 1732.79 on 1275 degrees of freedom

Residual Deviance: 1305.143 on 1251.9030795 degrees of freedom

Number of Fisher Scoring Iterations: 3

CARDIOVASCULAR 65+

	Value	Std. Error	t value
(Intercept)	4.027390683	0.003803345	1058.907422
lo(OBS, span = 182.5/1276)	1.573009846	0.133097954	11.818437
WEEKD1	0.087656429	0.007102410	12.341787
WEEKD2	0.014620365	0.004015837	3.640677
WEEKD3	0.003688390	0.002847089	1.295495
WEEKD4	0.003808909	0.002194899	1.735346
WEEKD5	0.006891410	0.001772568	3.887811
WEEKD6	-0.014669613	0.001587203	-9.242429
HOLIDAY	-0.123949014	0.024144066	-5.133726
L2HIRAIN	0.410772767	0.113184519	3.629231
lo(L2TAV, span = 0.9)	-1.484927215	0.189065216	-7.854048
lo(UTMIN, span = 1)	0.402863342	0.133568233	3.016161
lo(L1DTMIN, span = 0.9)	0.467302578	0.191204713	2.443991

(Dispersion Parameter for Poisson family taken to be 1)

    Null Deviance: 1979.555 on 1275 degrees of freedom

Residual Deviance: 1257.044 on 1249.4450011 degrees of freedom

Number of Fisher Scoring Iterations: 4

TOTAL CARDIOVASCULAR

	Value	Std. Error	t value
(Intercept)	4.427600270	0.003247460	1363.404068
lo(OBS, span = 182.5/1276)	1.646217432	0.109154614	15.081519
WEEKD1	0.100956924	0.005802281	17.399523
WEEKD2	0.015665030	0.003295382	4.753631
WEEKD3	0.002471447	0.002329795	1.060800
WEEKD4	0.003358933	0.001793777	1.872547
WEEKD5	0.005344330	0.001452049	3.680543
WEEKD6	-0.015988915	0.001301691	-12.283187
HOLIDAY	-0.135428470	0.019740930	-6.860288
L1HOLIDAY	0.068939969	0.019764448	3.488080
L2HIRAIN	0.310135046	0.096757934	3.205267
lo(L2TAV, span = 0.9)	-1.137600362	0.153685944	-7.402111
UTMIN	0.017024547	0.005064157	3.361773
lo(L1DTMIN, span = 0.8)	0.534923894	0.155797038	3.433466
JULY13.94	-0.504173992	0.144494995	-3.489214

(Dispersion Parameter for Poisson family taken to be 1)

    Null Deviance: 2388.729 on 1275 degrees of freedom

Residual Deviance: 1294.973 on 1247.8500754 degrees of freedom

Number of Fisher Scoring Iterations: 4

TOTAL ISCHAEMIC HEART DISEASE

	Value	Std. Error	t value
(Intercept)	3.439433048	0.014904046	230.7717632
lo(OBS, span = 182.5/1276)	1.460071227	0.184167301	7.9279613
WEEKD1	0.056081154	0.009414324	5.9570027
WEEKD2	0.009586669	0.005409066	1.7723335
WEEKD3	0.001419388	0.003802724	0.3732556
WEEKD4	0.002414188	0.002947141	0.8191626
WEEKD5	0.001949568	0.002398352	0.8128778
WEEKD6	-0.011044222	0.002115479	-5.2206718
L1HOLIDAY	0.090108609	0.032035832	2.8127445
R2TOT	0.012058488	0.004991603	2.4157545
L1DTMIN	0.010672420	0.002184149	4.8863059
L2TMIN	-0.007654209	0.001760614	-4.3474667
NOV18.95	0.592533618	0.140971729	4.2032089

(Dispersion Parameter for Poisson family taken to be 1)

    Null Deviance: 1582.778 on 1275 degrees of freedom

Residual Deviance: 1301.905 on 1251.9089517 degrees of freedom

Number of Fisher Scoring Iterations: 3