

Table A. Long-Term Studies with measured exposure to NO2 and particles, published 2004 until January 2013

author, location, publication year	population §	study design and period	Pollutant exposure assessment			NO2 mortality estimates* (95% CI)	PM mortality estimates * (95% CI)	remarks
			methods and period**	mean annual level (SD or range)	exposure metrics			
12 Cesaroni G, Italy, 2013	all 1,265,058 people, 30+ yrs old, resident in Rome for 5+ yrs, enrolled in the Roman longitudinal cohort in 2001	Population- based cohort study  Follow-up 2001-2009	NO <sub>2</sub> LUR models for traffic-related air pollution (TRAP), 2007.  PM <sub>2.5</sub> dispersion model for TRAP, 2005  Address-level exposure for previous 5yrs  TRAFFIC INDICATORS 1. distance from high-traffic roads 2. traffic intensity	NO <sub>2</sub> (µg/ m <sup>3</sup> ) 44.0 (8.2)  PM <sub>2.5</sub> (µg/m <sup>3</sup> ) 23.2 (3.5)  Pearson's Correlation 0.79	NO <sub>2</sub> IQR 10.7 µg/ m <sup>3</sup>  PM <sub>2.5</sub> IQR 5.8 µg/m <sup>3</sup>	<b>Natural</b> HR 1.03 (1.02-1.04) <b>Cardiovascular</b> HR 1.03 (1.02-1.04) <b>Respiratory</b> HR 1.03 (1.00-1.06)	1.02 (1.02 - 1.03)  1.04 (1.03 - 1.05)  1.01 (0.99 - 1.05)	Other pollutants: None  Bi-pollutant NO <sub>2</sub> - PM <sub>2.5</sub> Natural HR 1.02 (1.01-1 .03)
13 Heinrich J, Germany, 2012	4752 women, 50- 59 yrs old, resident in North Rhine- Westphalia for 5+ yrs, randomly sampled from previous cross- sectional studies from 1985-94	Sub-cohort enrolled in 1985-87  Follow-up 1986-2008	Monitoring NO <sub>2</sub> and TSP (from PM <sub>10</sub> ) within 5-15 km from residence in 1985-94 (predicted in part before 1990)  TRAFFIC INDICATORS 1. distance from high traffic roads	NO <sub>2</sub> (µg/m <sup>3</sup> ) 39 (20-60)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 43.7 (35-53)  Spearman's correlation 0.5	NO <sub>2</sub> IQR 16 µg/ m <sup>3</sup>  PM <sub>10</sub> IQR 7 µg/m <sup>3</sup>	<b>Total</b> RR 1.22 (1.04–1.43) <b>Cardio-pulmonary</b> RR 1.58 (1.19 -2.09)	1.48 (1.08 - 2.04)  2.49 (1.39 - 4.44)	Other pollutants: None  Occupational exposure, smoking status and previous diseases.
14 Dong GH China 2011  NOT INCLUDED IN META-ANALYSIS	9941 people, 35+ yrs old, resident in 10 communities in Shenyang region	Retrospecti ve cohort  Follow-up 1998-2009	Monitoring NO <sub>2</sub> and PM <sub>10</sub> at 5 background monitors, 1998-2009	NO <sub>2</sub> (µg/m <sup>3</sup> ) 46 (13)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 154 (41)  Pearson,s Correlation 0.88	NO <sub>2</sub> 10 µg/m <sup>3</sup>  PM <sub>10</sub> 10 µg/m <sup>3</sup>	<b>Respiratory and lung cancer</b> HR 2.97 (2.69–3.27)	1.67 (1.60–1.74)	Other pollutants: SO <sub>2</sub>  Occupational and behavioral exposure in 2009 (interviews with proxies)

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15 Zhang P China, 2011	9941 people, 35+ yrs old, resident in 10 communities in Shenyang region	Retrospe- ctive cohort  Follow-up 1998-2009	Monitoring NO <sub>2</sub> and PM <sub>10</sub> , at 5 background monitors, 1998-2009	NO <sub>2</sub> (µg/m <sup>3</sup> ) 46 (13)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 154 (41)  Pearson's Correlation 0.88	NO <sub>2</sub> 10 µg/ m <sup>3</sup>  PM <sub>10</sub> 10 µg/ m <sup>3</sup>	<b>Cardiovascular</b> HR 2.46 (2.31 -2.63)  <b>Cerebrovascular</b> mortality also assessed HR 2.44 (2.27-2.42)	1.55 (1.51 - 1.60)  1.49 (1.45 - 1.53)	Other pollutants: SO <sub>2</sub> .  Occupational and individual exposure by interviews in 2009
16 Katanoda K Japan 2011	All 63,520 people, 40+ yrs old, resident in three prefectures, enrolled during a survey from 1983- 85	Population- based cohort study  Follow-up 1985-1995	Monitoring NO <sub>2</sub> and PM <sub>2.5</sub> (from SPM x 0.7) at 4 background monitors, from 1974-1983 and from 1984-1993.	NO <sub>2</sub> (ppb) 10-yr range 1.2 -33.7  PM <sub>2.5</sub> (µg/m <sup>3</sup> ) 10-yr range 16.8 - 41.9  Pearson's Correlation 0.26	NO <sub>2</sub> 10 ppb/m <sup>3</sup>  PM <sub>2.5</sub> 10 µg/m <sup>3</sup>	<b>Respiratory</b> HR 1.16 (1.12–1.21).	1.16 (1.04–1.30)	Other pollutants: SO <sub>2</sub>  Occupation, smoking status, heating exposure assessed at baseline (questionnaire)
17 Cao J China 2011	70,947 people, 15+ yrs old, resident in 17 provinces, randomly sampled in 1991 from China National Hypertension Survey	Cohort study  Follow-up 1991-2000	Monitoring NO <sub>x</sub> and TSP at fixed monitors within 15 km from zip-code area of residence in 1991-2000.	NO <sub>x</sub> (µg/m <sup>3</sup> ) 50  TSP (µg/m <sup>3</sup> ) 289  Correlation not given	NO <sub>x</sub> 10 µg/m <sup>3</sup>  TSP 10 µg/m <sup>3</sup>	<b>Total</b> %IR 1.5 (0.4 - 2.5) <b>Cardiovascular</b> %IR 2.3 (0.6 - 4.1) <b>Respiratory</b> %IR 2.6 (-0.2 to 5.6)	0.3 (-0.1 to 0.6)  0.9 (0.3 - 1.5)  0.3 (-0.6 to 1.3)	Other pollutants: SO <sub>2</sub>  Bi-pollutant NO <sub>x</sub> - TSP Tot %IR 1.4 (0.3-2.5) CV %IR 1.5 (-0.4 to 3.3)
18 Gan WQ Canada 2011	418,826 adults, 45- 85 yrs old, resident in Vancouver for 5+ yrs in 1994 - 1998	Population- based cohort study  Follow-up 1999-2002	LUR model for NO <sub>2</sub> (116 sites) and PM <sub>2.5</sub> (25 sites) from 1994 - 1998  (LUR assessment year not given)	NO <sub>2</sub> (µg/m <sup>3</sup> ) 32.1 (8.0)  PM <sub>2.5</sub> (µg/m <sup>3</sup> ) 4.08 (1.63)  Pearson's Correlation 0.47	NO <sub>2</sub> IQR 8.4 µg/m <sup>3</sup>  PM <sub>2.5</sub> IQR 1.6 µg/m <sup>3</sup>	<b>Cardiovascular (CHD)</b> RR 1.04 (1.01–1.08)	1.01 (0.98-1.05)	Other pollutants: BC, NO <sub>x</sub>  Multi-pollutant NO <sub>2</sub> - PM <sub>2.5</sub> - BC CHD mort. RR 1.03 (0.99–1.07)

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19 Lipsett MJ USA 2011	124,614 women, 20+ yrs old and resident in California in 1995 at enrolment from California Teachers Study cohort	Cohort study  Follow-up 1997-2005	Monitoring NO <sub>2</sub> and PM <sub>10</sub> at fixed monitors, in a representative range of 3 km for NO <sub>2</sub> and 10 km for PM <sub>10</sub> . ( 250 x 250m grid), from 1996- 2005.	NO <sub>2</sub> (ppb) 33.6 (9.6)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 29.3 (9.7)  Spearman's correlation 0.8	NO <sub>2</sub> IQR 10.3 ppb  PM <sub>10</sub> 10 µg/m <sup>3</sup>	<b>Total</b> HR 0.97 (0.91-1.04) <b>Cardiovascular</b> HR 0.98 (0.88-1.09) <b>Respiratory</b> HR 0.93 (0.75-1.15)	1.0 (0.97-1.04)  1.03 (0.98-1.08)  1.08 (0.98-1.19)	Other pollutants: PM <sub>2.5</sub> since 2000, NOx, SO <sub>2</sub> , CO
20 Hart JE USA 2011	53,814 men, 42 yrs old ± 9.9 yrs at enrolment from trucking industry registries in 1985.	Cohort study  Follow-up 1985-2000	Spatial modeling to predict NO <sub>2</sub> and PM <sub>10</sub> yearly mean levels from 1985 – 2000, on the basis of data observed in 1985  Address-level exposure	NO <sub>2</sub> (ppb) 14.2 (7.1)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 26.8 (6.0)  Pearson's correlation > 0.64 for all pollutants	NO <sub>2</sub> IQR 8 ppb  PM <sub>10</sub> IQR 6 µg/m <sup>3</sup>	<b>Natural</b> %IR 8.2 (4.5-12.1), <b>Cardiovascular</b> %IR 6.9 (0.6 - 13.6) <b>Respiratory</b> %IR 5.9 (27.4- 21.1)	4.3 (1.1 –7.7)  2.9 (-2.6; 8.7)  2.5 (-9.0; 15.5)	Other pollutants: SO <sub>2</sub> , PM <sub>2.5</sub> only for 2000  Multi-pollutant NO <sub>2</sub> - PM <sub>10</sub> - SO <sub>2</sub>  Tot. mort.%IR 7.4 (2.4-12.5)
21 Maheswaran R UK 2010	3320 patients with first stroke from 1995-2005, London, from stroke register	Cohort study  Survival follow-up 1995-2006	Dispersion modeling (from traffic and other sources) for NO <sub>2</sub> and PM <sub>10</sub> (20 x 20m grid) in 2002  zip-code-level exposure	NO <sub>2</sub> (µg/m <sup>3</sup> ) 41 (3.3)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 25 (1.3)  Correlation not given	NO <sub>2</sub> 10 µg/m <sup>3</sup>  PM <sub>10</sub> 10 µg/m <sup>3</sup>	<b>Total</b> %IR 28 (11 - 48)	52 (6 - 118)	

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22 Jerrett M Canada 2009	2360 patients of a lung clinic in Toronto from 1992-1999.	Cohort study  Follow-up 1992-2002	LUR for NO <sub>2</sub> 2002- 2004, using 2- week (in 2002) and 2-week (in 2004) data  LUR for PM <sub>10</sub> 2002-2004, using monitoring data from 2002  census-area-level exposure TRAFFIC INDICATORS 1. distance from high-traffic roads	NO <sub>2</sub> (ppb) range 20.8 – 24.8  PM <sub>2.5</sub> (µg/m <sup>3</sup> ) range 8.64 – 8.83  Correlation not given	NO <sub>2</sub> IQR 4 ppb  PM <sub>2.5</sub> IQR 1 µg/m <sup>3</sup>	<b>Total</b> RR 1.17 (1.00–1.36) <b>Cardiovascular (IHD)</b> RR 1.45 (1.10–1.92) <b>Respiratory</b> RR 1.06 (0.67–1.49)	No significant effects for PM <sub>2.5</sub> (estimates not given)	Other pollutants: ozone  Bi-pollutant with traffic proximity; lower estimates for total and IHD mortality
23 Krewski D, USA, 2009	406,917 (for NO <sub>2</sub> ), 351,338 (for PM <sub>2.5</sub> ) adults 30+ yrs old (with at least one 45+-yr-old household) randomly enrolled from original ACS database	Cohort study  Follow-up 1982-1989	Monitoring NO <sub>2</sub> and PM <sub>2.5</sub> at fixed monitors, in metropolitan statistical areas (MSA)	NO <sub>2</sub> (ppb) 1979-83 27.9 (9.2)  PM <sub>2.5</sub> (µg/m <sup>3</sup> ) 1979-83 21.2 (4.6)  Correlation not given	NO <sub>2</sub> IQR 10.6 ppb  PM <sub>2.5</sub> IQR 6.3 µg/m <sup>3</sup>	<b>Total</b> HR 0.99 (0.99-1.00) <b>Cardiopulmonary</b> HR 1.01 (1.00–1.02) <b>Cardiovascular (IHD)</b> HR 1.02 (1.00–1.03)	1.03 (1.01-1.04)  1.06 (1.04-1.08)  1.12 (1.09-1.16)	Other pollutants: SO <sub>2</sub> , SO <sub>4</sub> <sup>2-</sup>  In 2009 reanalysis, including ecological covarieties
24 Lipfert FW, USA 2009	67,938 male military veterans with hypertension, aged 51 (± 12) at enrolment in 1976, from the Veterans cohort database	Cohort study  Survival follow-up 1976-2001	Dispersion models for NO <sub>x</sub> and diesel PM (resolution 36 x 36 Km)  County-level exposure in 1975- 76  TRAFFIC INDICATORS 1. traffic density	NO <sub>x</sub> (ppb) 19.5 (14.0)  Diesel PM (µg/m <sup>3</sup> ) 1.81 (1.0)  Correlation 0.7	NO <sub>x</sub> IQR 10 ppb  Diesel PM 10 µg/m <sup>3</sup>	<b>Total</b> RR 1.08 (1.06-1.10)	1.08 (1.06-1.10)	Other pollutants: Metals, PAH, HCl, benzene, SO <sub>2</sub> , SO <sub>4</sub> <sup>2-</sup> , EC  Bipollutant NO <sub>x</sub> - with traffic density Tot RR 1.01

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25 Rosenlund M Sweden 2009	24,347 incident cases of MI from hospital discharge registries from 1985-1996, 15-79 yrs old, 5+ yrs' exposure  276,926 controls, matched with residents of Stockholm for sex, age, calendar year	Case- control study, population- based  Survival follow-up within 28 days of event	Dispersion models for NO <sub>2</sub> and PM <sub>10</sub> based on traffic data for 1960, 1970, 1980, 1990 and 2000, and on land-use variations  Address-level exposure in previous 5 yrs	5-yr mean (95 <sup>th</sup> -5 <sup>th</sup> percentile)  NO <sub>2</sub> (µg/m <sup>3</sup> ) 12.4 (31.3)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 2.3 (5.7)  Correlation not given	95 <sup>th</sup> -5 <sup>th</sup> percentile  NO <sub>2</sub> 31.3 µg/m <sup>3</sup>  PM <sub>10</sub> 5.7 µg/m <sup>3</sup>	<b>Cardiovascular Non-fatal MI</b> No association  <b>fatal MI</b> OR 1.23 (1.15-1.32)	No association  1.16 (1.09-1.24)	Other pollutants: CO  Additional OR restricted to people not changing address duringstudy  Individual data on SEP, not smoking
26 Beelen R, Netherlands 2008	120,852 subjects enrolled in 1986 in NLCS, aged 55-69	Cohort study  follow-up 1987-1996  (case control within cohort)	Monitoring NO <sub>2</sub> , for 1976-85 and 1987-96, and PM <sub>2.5</sub> (from PM <sub>10</sub> , by a local factor) for '92-'96.  Residence-level exposure  TRAFFIC INDICATORS Traffic density	NO <sub>2</sub> (µg/m <sup>3</sup> ) 36.9 (8.2)  PM <sub>2.5</sub> (µg/m <sup>3</sup> ) 28.3 (2.5)  Correlation coefficient > 0.8 for all pollutants	Difference 95 <sup>th</sup> - 5 <sup>th</sup> perc.  NO <sub>2</sub> 30 µg/m <sup>3</sup>  PM <sub>2.5</sub> 10 µg/m <sup>3</sup>	<b>Total</b> RR 1.08 (1.00-1.16) <b>Cardiovascular</b> RR 1.07 (0.94-1.21) <b>Respiratory</b> RR 1.37 (1.00-1.87)	1.06 (0.97-1.16)  1.04 (0.90-1.21)  1.07 (0.75-1.52)	Other pollutants: BS, SO <sub>2</sub>  No association with individual risk factors  Details about residence expo not given

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27 Schikowski T, Germany 2007	4750 subjects from 4874 women enrolled in SALIA cohort from 1985- 1994, aged 55+ , in North Rhine- Westphalia	Cohort study  Follow-up 2001-2003	Monitoring NO <sub>2</sub> and PM <sub>10</sub> (from TSP, by 0.71) at fixed stations.  Previous 5-yr exposure inferred from Ruhr-area monitoring data  TRAFFIC INDICATORS 1. Proximity to traffic.	NO <sub>2</sub> (µg/m <sup>3</sup> ) 39 (22-55)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 48 (39-56)  Correlation not given.	NO <sub>2</sub> IQR 16 µg/m <sup>3</sup>  PM <sub>10</sub> IQR 7 µg/m <sup>3</sup>	<b>Cardiovascular</b> RR 1.72 (1.24–2.39)	1.64 (1.15–2.33)	Publication with original analysis of cardio-pulmonary mortality in Gehring U 2006.
28 Naess O, Norway 2007	All 143,842 residents of Oslo, aged 51-90 on 1 <sup>st</sup> Jan 1992	Cohort study, registry- based  Follow-up 1992-1998	Dispersion model for NO <sub>2</sub> and PM <sub>2.5</sub> from 1992–1995  Neighborhood- level exposure. Previous 4-yr exposures given in quartiles	NO <sub>2</sub> (µg/m <sup>3</sup> ) 39 (2-73)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 15 (7-22)  Correlation > 0.88	NO <sub>2</sub> IQR 21.8 µg/m <sup>3</sup>  PM <sub>10</sub> IQR 7 µg/m <sup>3</sup>	MEN (51-70 years old) <b>Cardiovascular</b> HR 1.08 (1.04-1.13) <b>Respiratory (COPD)</b> HR 1.21 (1.05-1.39)  WOMEN (51-70 year sold) <b>Cardiovascular</b> HR 1.07 (1.0-1.14) <b>Respiratory (COPD)</b> HR 1.06 (0.92-1.21)	MEN  1.10 (1.05-1.16) rev 1.27 (1.11-1.47) rev  WOMEN  1.14 (1.06-1.21)  1.09 (0.94-1.25)	Other pollutants: PM10  smoking impact has been inferred from other studies  Dose – response linear increase of total mortality between 20 and 60 µg/m <sup>3</sup> NO <sub>2</sub> or above 19 µg PM <sub>10</sub> /m <sup>3</sup> or above 14µg PM <sub>2.5</sub> /m <sup>3</sup> .  No threshold for COPD, evidence of threshold for CV death and lung cancer deaths.

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29 Rosenlund, Sweden 2006  NOT INCLUDED IN META-ANALYSIS	1397 cases with first MI, aged 45- 70 from 1992- 1994 (females) and from 1992-1993 (males), resident of Stockholm, and 1870 population controls	Case- control study, registry- based	Dispersion model for NO <sub>2</sub> and PM <sub>10</sub> based on 1995 data  address-level exposure since 1960 (average for previous 30 yrs), based on mea- surements from 2000.	NO <sub>2</sub> (µg/m <sup>3</sup> ) (95 <sup>th</sup> -5 <sup>th</sup> percentile) 13.9 (3.0 – 32.2)  PM <sub>10</sub> (µg/m <sup>3</sup> ) 2.5 (0.5-6.0)  Correlation (0.9)	NO <sub>2</sub> (differ- ence between 95 <sup>th</sup> and 5 <sup>th</sup> Percentile). 30 µg/m <sup>3</sup>  PM <sub>10</sub> IQR 5 µg/m <sup>3</sup>	<b>Fatal MI within 28 days</b> OR 1.51 (0.96-2.16), ,  <b>Fatal MI out of hospital</b> OR 2.17 (1.05-4.51).	1.39 (0.94–2.07)  1.84 (1.00-3.4).	Other pollutants: CO, SO <sub>2</sub>  No association between any pollutant and MI incidence.
30 Lipfert FW, USA 2006 ( <b>INHAL TOXICOL</b> )  NOT INCLUDED IN META-ANALYSIS	70,000 male military veterans enrolled in 1975, 28,635 survivors in 1997	Cohort study  Follow-up 1997-2001	Monitoring NO <sub>2</sub> and PM <sub>2.5</sub> , from 1997-2002  County-level exposure  TRAFFIC INDICATORS Traffic density	NO <sub>2</sub> (ppb) 20.3 (5.2)  PM <sub>2.5</sub> (µg/m <sup>3</sup> ) 14.3 (3.0)  Correlation (0.6)	NO <sub>2</sub> exp incr. (20.3- 3.9) 16.4 ppb  PM <sub>2.5</sub> exp incr. (14.3-4.8) 9.5 µg/m <sup>3</sup>	<b>Total</b> RR 1.07 (1.01 – 1.30)	1.06 (0.99 – 1.27)	Other pollutants: CO, SO <sub>2</sub> ,SO <sub>3</sub> , O <sub>3</sub> ,SO <sub>4</sub> , , NO <sub>3</sub> , EC, OC, metals  Bi-pollutant with traffic density No effect for NO2 or PM <sub>2.5</sub>
31 Lipfert FW, USA 2006 ( <b>ATMOSPH ENVIRON</b> )  NOT INCLUDED IN META-ANALYSIS	70,000 male military veterans enrolled in 1975, 28,635 survivors in 1997	Cohort study  Follow-up 1997-2001	Monitoring NO <sub>2</sub> and PM <sub>2.5</sub> in 1997-2002  County-level exposure in 1997  TRAFFIC INDICATORS Traffic density	NO <sub>2</sub> (ppb) 19.8 (5.5)  PM <sub>2.5</sub> (µg/m <sup>3</sup> ) 14.4 (3.1)  Correlation (0.6)	NO <sub>2</sub> IQR 17 ppb  PM <sub>2.5</sub> IQR 10 µg/m <sup>3</sup>	<b>Total</b> RR 1.10 (0.98-1.23)	1.03 (0.92, 1.15)	Other pollutants: CO, SO <sub>2</sub> ,SO <sub>3</sub> , O <sub>3</sub> ,SO <sub>4</sub> , NO <sub>3</sub> , , EC, OC, metals  associations with TD, EC, NO <sub>3</sub> , vanadium, nickel

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32 Gehring U, Germany 2006	4750 women, 50-59 yrs old, enrolled in two cross-sectional studies in 1985 and 1994 in North Rhine-Westphalia	Follow-up study 2002-2003	Monitoring NO <sub>2</sub> and PM <sub>10</sub> (from TSP by 0.71)  TRAFFIC INDICATORS distance from high-traffic roads	mean 5-yr NO <sub>2</sub> (µg/m <sup>3</sup> ) 39 (22-55) PM <sub>10</sub> (µg/m <sup>3</sup> ) 48 (39-56) Correlation 0.8	NO <sub>2</sub> IQR 24 µg/m <sup>3</sup>  PM <sub>10</sub> IQR 10.7 µg/m <sup>3</sup>	<b>Total</b> RR 1.19 (1.02-1.39) <b>Cardio-pulmonary</b> RR 1.74 (1.29-2.33). Lung cancer estimated with other diseases	1.13 (0.99-1.30)  1.59 (1.23-2.04)	Bi-pollutant with traffic density No change in effects for NO <sub>2</sub> or PM <sub>10</sub>
33 Chen LH, USA, 2005	3239 not smoking, non-Hispanic whites, aged 25+ enrolled from Adventists Health Study in 1977, from 3 metropolitan areas in California.	Cohort study  Follow-up 1977-2000	Fixed stations monitoring for NO <sub>2</sub> and PM2.5, in 1973-1998, PM2.5 estimated from airport visibility data  Zip-code-level exposure in the 4 yrs before event	NO <sub>2</sub> (ppb) 34.9 (9.7)  PM2.5 (µg/m <sup>3</sup> ) 29.0 (9.8)  Correlation (0.3)	NO <sub>2</sub> IQR ppb 10  PM2.5 IQR 10 µg/m <sup>3</sup>	<b>Cardiovascular (CHD)</b> MEN RR 1.16 (0.86–1.56),  WOMEN RR 1.17 (0.92–1.49),	MEN 0.90 (0.67–1.19)  WOMEN 1.42 (1.11–1.81) ,	Other pollutants: PM <sub>10</sub> , PM <sub>10</sub> -2.5, SO <sub>2</sub> , O <sub>3</sub>  Multipollutant model results given only for particles.
34 Filleul L, France 2005	Subjects enrolled in 24 areas of seven cities, from 1974-76 ( PAARC study), household (not headed by manual worker) members, aged 25-59, born in France	Cohort study  Follow-up: vital status 1995 - 2001; cause of death 1995 - 1998	Monitoring NO <sub>2</sub> and BS in each area from 1974-76  in 18/24 areas with a NO/ NO <sub>2</sub> ratio < 3 ppb	3-yrs range NO <sub>2</sub> (µg/m <sup>3</sup> ) 12-32  PM2.5 (as BS) 18-77  correlation 0.72	NO <sub>2</sub> 10 µg/m <sup>3</sup>  PM2.5 10 µg/m <sup>3</sup>	<b>Natural</b> RR 1.14 (1.03 - 1.25)  <b>Cardio-pulmonary</b> RR 1.27 (1.04-1.56)	1.07 (1.03 - 1.10)  1.05 (0.98 - 1.12)	Other pollutants: SO <sub>2</sub> , TSP, NO



### Notes

Studies excluded from meta-analysis: all four ecological studies; three studies for which analyses were repeated a few years later [29, 30, 31 ]; one study [15] which reported effect estimates by exposure tertiles. The papers included were 19. Since two papers [28, 33] gave separate estimates for men and women, the effect estimates considered for the meta-analysis numbered 21.

(a)men (b)women § gender and/or specific health conditions are specified, when there are restrictions.

\* the estimates were adjusted for many factors at baseline. The specific factors for each study are reported below.

1. Cesaroni adjusted for individual (sex, age, place of birth, residential history, marital status, education, occupation) and area (socio-economic status, clustering) characteristics 2. Heinrich adjusted for age, educational level and smoking status 3. Zang adjusted for sex, age, education, family, smoking status, income, occupation, BMI, physical exercise 4. Dong adjusted for age, gender, educational level, smoking status, personal income, occupational exposure, BMI and exercise 5. Katanoda adjusted for sex, age (continuous), smoking status, pack-years, smoking status of cohabiting family members, daily green and yellow vegetable consumption, daily fruit consumption, and use of indoor charcoal or briquette braziers for heating 6. Cao adjusted for sex, age, smoking status, education, physical activity, alcohol consumption, hypertension 7. Gan adjusted for age, comorbidity, SES 8. Lipsett adjusted for age, race, smoking status, total pack-years, body mass index, marital status, alcohol consumption, diet, menopause and hormone therapy, family history of CV diseases, blood pressure medication, aspirin use and six different SEP indicators 9. Hart adjusted for age, hire time, race, occupation, health worker effects 10. Mahesharan adjusted for age, sex, ethnicity, smoking status, alcohol consumption, living alone, Barthel Index score, comorbidities, deprivation index, social class 11. Jerret adjusted for age, sex, BMI, FVC %, deprivation index 12. Krewski adjusted for 44 individual-level covariates 16. Beelen adjusted for sex, age at baseline, smoking status, area-level (income) 17. Schikowski adjusted for education level and smoking status 18. Naess adjusted for occupation and education 22. Gehring adjusted for SES and smoking status 23. Chen adjusted for smoking status, BMI, education, meat consumption 24. Filleul adjusted for age, smoking, BMI, education and occupation, and stratified by sex

\*\* Method refers to data obtained by monitoring or by models, including whether they were dispersion or LUR models. The level of precision at which spatial exposure was assessed for the subjects is also reported: address-level, zip-code-level or larger-area assessment. Period refers to both the monitoring period and the time interval covered by the modelling estimates; in the latter case, even the period when data for models were observed is reported.