

CONFIDENTIAL November 22, 2015 “PM2.5 is Not Killing Californians” by James E. Enstrom, Ph.D., M.P.H.

Table 1. Epidemiologic cohort studies of PM2.5 and total mortality in California, 2000-2015

Relative risk of death from all causes (RR and 95% CI) associated with increase of 10 µg/m³ in PM2.5

Krewski 2000 & 2010	CA CPS II Cohort	N=40,408	RR = 0.872 (0.805-0.944)	1982-1989 (N=[18,000 M + 22,408 F]; 4 MSAs; 1979-1983 PM2.5; 44 covariates)
McDonnell 2000	CA AHSMOG Cohort	N~3,800	RR ~ 1.00 (0.95 – 1.05)	1977-1992 (N~[1,347 M + 2,422 F]; SC&SD&SF AB; M RR=1.09(0.98-1.21) & F RR~0.98(0.92-1.03))
Jerrett 2005	CPS II Cohort in LA Basin	N=22,905	RR = 1.11 (0.99 - 1.25)	1982-2000 (N=22,905 M & F; 267 zip code areas; 1999-2000 PM2.5; 44 cov + max confounders)
Enstrom 2005	CA CPS I Cohort	N=35,783	RR = 1.039 (1.010-1.069)	1973-1982 (N=[15,573 M + 20,210 F]; 11 counties; 1979-1983 PM2.5)
Enstrom 2006	CA CPS I Cohort	N=35,783	RR = 1.061 (1.017-1.106)	1973-1982 (11 counties; 1979-1983 & 1999-2001 PM2.5)
Zeger 2008	MCAPS Cohort “West”	N=3,100,000	RR = 0.989 (0.970-1.008)	2000-2005 (N=[1.5 M M + 1.6 M F]; Medicare enrollees in CA+OR+WA (CA=73%); 2000-2005 PM2.5)
Jerrett 2010	CA CPS II Cohort	N=77,767	RR ~ 0.994 (0.965-1.025)	1982-2000 (N=[34,367 M + 43,400 F]; 54 counties; 2000 PM2.5; KRG ZIP; 20 ind cov+7 eco var; Slide 12)
Krewski 2010	CA CPS II Cohort (4 MSAs; 1979-1983 PM2.5; 44 cov) (7 MSAs; 1999-2000 PM2.5; 44 cov)	N=40,408 N=50,930	RR = 0.960 (0.920-1.002) RR = 0.968 (0.916-1.022)	1982-2000 1982-2000
Jerrett 2011	CA CPS II Cohort	N=73,609	RR = 0.994 (0.965-1.024)	1982-2000 (N=[32,509 M + 41,100 F]; 54 counties; 2000 PM2.5; KRG ZIP Model; 20 ind cov+7 eco var; Table 28)
Jerrett 2011	CA CPS II Cohort	N=73,609	RR = 1.002 (0.992-1.012)	1982-2000 (N=[32,509 M + 41,100 F]; 54 counties; 2000 PM2.5; Nine Model Ave; 20 ic+7 ev; Fig 22 & Tab 27-32)
Lipsett 2011	CA Teachers Cohort	N=73,489	RR = 1.01 (0.95 – 1.09)	2000-2005 (N=[73,489 F]; 2000-2005 PM2.5)
Ostro 2011	CA Teachers Cohort	N=43,220	RR = 1.06 (0.96 – 1.16)	2002-2007 (N=[43,220 F]; 2002-2007 PM2.5)
Jerrett 2013	CA CPS II Cohort	N=73,711	RR = 1.060 (1.003–1.120)	1982-2000 (N=[~32,550 M + ~41,161 F]; 54 counties; 2000 PM2.5; LUR Conurb Model; 42 ind cov+7 eco var+5 metro; Table 6)
Jerrett 2013	CA CPS II Cohort	N=73,711	RR = 1.028 (0.957-1.104)	1982-2000 (same parameters and model as above, except including co-pollutants NO ₂ and Ozone; Table 5)
Thurston 2015	CA NIH-AARP Cohort	N=160,209	RR = 1.02 (0.99 -1.04)	2000-2009 (N=[~95,965 M + ~64,245 F]; full baseline model: PM2.5 by zip code; Table 3)
Enstrom 2015 unpub	CA NIH-AARP Cohort	N=160,368	RR = 1.001 (0.949-1.055)	2000-2009 (N=[~96,059 M + ~64,309 F]; full baseline model: 2000 PM2.5 by country)

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