

Supplementary File S4. GRADE Assessments

<b>Pollutant and exposure</b>	<b>Number of studies and design, and number of infants</b>	<b>Conclusion</b>	<b>Study limitations</b>	<b>Inconsistency</b>	<b>Imprecision</b>	<b>Grade of evidence</b>
PM2.5 acute exposure	2 case-crossover studies and of 41,474 infants (Karr et al. 2004; Karr et al. 2006)	Does not seem to affect risk of hospitalisation	No change	No change	+1	Moderate
PM2.5 subchronic exposure	3 case-control studies including 33,394 infants (Karr et al. 2007; Karr et al. 2009a; Karr et al. 2009b)	Unclear effect on risk of hospitalisation	+1	-1	+1	Moderate
PM2.5 lifetime exposure	4 case-control studies of 52,768 infants (Girguis et al. 2017; Karr et al. 2007; Karr et al. 2009a; Karr et al. 2009b)	May increase risk of hospitalisation	+1	-1	+1	Moderate
PM10 acute exposure	1 case crossover study of 16588 infants (Segala et al. 2008)	Unclear effect on risk of hospitalisation	+1	No change	No change	Low
PM10 subchronic exposure	1 case control study of 11,675 infants (Karr et al. 2009a)	Does not seem to affect risk of hospitalisation	+1	No change	No change	Low
PM10 lifetime exposure	1 case crossover study and 1 case control study, including 17,454 infants (Abdul Rahman et al. 2017; Karr et al. 2009a)	Unclear effect on risk of hospitalisation	-1	No change	No change	Low

NO2 acute exposure	3 case-crossover studies of 58,062 infants (Karr et al. 2004; Karr et al. 2006; Segala et al. 2008)	Unclear effect on risk of hospitalisation	+1	No change	+1	Moderate
NO2 subchronic exposure	2 case-control studies of 30,270 infants (Karr et al. 2007; Karr et al. 2009a)	Unclear effect on risk of hospitalisation	+1	No change	+1	Moderate
NO2 lifetime exposure	2 case control studies and 2 case crossover studies of 39,173 infants (Abdul Rahman et al. 2017; Karr et al. 2007; Karr et al. 2009a; Karr et al. 2009b)	Unclear effect on risk of hospitalisation	-1	No change	+1	Low
SO2 acute exposure	1 case crossover study of 16,588 infants (Segala et al. 2008)	May increase risk of hospitalisation	+1	No change	No change	Low
SO2 subchronic exposure	1 case crossover study of 11,675 infants (Karr et al. 2009a)	May increase risk of hospitalisation	+1	No change	No change	Low
SO2 lifetime exposure	1 case control study of 11,675 infants (Karr et al. 2009a)	May increase risk of hospitalisation	+1	No change	No change	Low
CO acute exposure	2 case crossover study of 41,474 infants (Karr et al. 2004; Karr et al. 2006)	Does not seem to affect risk of hospitalisation	+1	No change	No change	Low

CO subchronic exposure	2 case control studies of 30,270 infants (Karr et al. 2007; Karr et al. 2009a)	Unclear effect on risk of hospitalisation	+1	No change	+1	Moderate
CO lifetime exposure	2 case control studies and 1 case crossover study of 36049 infants (Abdul Rahman et al. 2017; Karr et al. 2007; Karr et al. 2009a)	Unclear effect on risk of hospitalisation	-1	No change	+1	Low
Ozone acute exposure	No studies	No assessment can be made				
Ozone subchronic exposure	2 case control studies of 30,270 infants (Karr et al. 2007; Karr et al. 2009a)	Does not seem to increase risk of hospitalisation and may be associated with lower risk of admission	+1	No change	+1	Moderate
Ozone lifetime exposure	2 case control studies and 1 case crossover study of 36049 infants (Abdul Rahman et al. 2017; Karr et al. 2007; Karr et al. 2009a)	Does not seem to increase risk of hospitalisation and may be associated with lower risk of admission	-1	No change	+1	Low

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