

Summary of Conclusions of Eight Major Reviews Concerning Exposure to Second-Hand Tobacco Smoke



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National Collaborating Centre
for Environmental Health

Centre de collaboration nationale
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Based on *Environmental Tobacco Smoke in Indoor and Outdoor Public Places* (2006), a Provincial Health Services Authority Prevention, Promotion and Protection Project, prepared for Dr. John Millar and Lydia Drasic by the British Columbia Centre for Disease Control, Ray Copes, MD, MSc, and Jo Rekart, MSc, PhD.

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Disease or Condition	US EPA (1992)	Australian NHMRC (1997)	Cal EPA (1997)	Cal EPA (2005)	UK SCOTH (1998)	WHO (1999)	WHO IARC (2004)	US Nat'l Tox Program (2000)
Developmental Effects								
Fetal growth: low birth weight or small for gestational age		√?	√	√	√	√	√	
Sudden infant death syndrome (SIDS)		√	√	√	√			
Pre-term delivery				√				
Spontaneous abortion				*				
Adverse impact on cognition and behaviour				*				
Intrauterine growth retardation				*				
Lymphomas in children				*				
Allergic sensitization				*				
Fertility or fecundity				*				
Respiratory Effects								
Acute lower respiratory tract infections in children (e.g. bronchitis and pneumonia)	√	√	√	√	√	√	√	
Asthma exacerbation in children	√	√	√	√	√	√	√	
Asthma exacerbation in adults				√				
Asthma induction in children		√?	√	√		*√	√	
Respiratory symptoms	√	√	*	*	√	√	√	
Middle ear disease in children	√	√	√	√	√	√	√	
Decreased pulmonary function	√	√	*	√		*	*	
Exacerbation of cystic fibrosis			*	√			*	
Decreased exercise tolerance				√				

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Carcinogenic Effects								
Lung cancer	√	√	√	√	√		√	√
Nasal sinus cancer	√	√	√	√				√?
Cervical cancer			*	*				
Breast cancer (pre-menopausal)				√				
Brain cancer (children)				*				
Cardiovascular Effects								
Coronary heart disease		*	√	√	√		√	
Stroke				*				
Altered vascular properties				√				

√=causal

*=possibly causal

blank=relationship reviewed only briefly or not at all

?=report's conclusions about the relationship were inconsistent or ambiguous

US EPA – United States Environmental Protection Agency

NHMRC – National Health and Medical Research Council

Cal EPA – California Environmental Protection Agency

UK SCOTH – United Kingdom Department of Health, Scientific Committee on Tobacco and Health

WHO – World Health Organization

IARC – International Agency for Research on Cancer

US Nat'l Tox Program – United States National Toxicology Program

Partially adapted from: Ontario Tobacco Research Unit (2001). Protection from second-hand tobacco smoke in Ontario. A report of the Ontario Tobacco Research Unit, University of Toronto.

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