

**Title**

Is pesticide exposure a cause of obstructive airways disease? A systematic review.  
Supplementary Information

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**Table E1: Characteristics of studies included in the systematic review**

Reference	Type of study	Population	Pesticides studied	Quality Grade
Beard <i>et al.</i> , 2003 [15]	Historical cohort study	1,999 Australian outdoor staff from an insecticide application program during 1935–1996 compared to 1,984 outdoor workers not occupationally exposed to insecticides, and the Australian population. 270 exposed workers were lost to follow-up. For the sub-study (questionnaire), 1,533 were contacted and the response rate was 54.9%.	Numerous	+
Boers <i>et al.</i> , 2008 [16]	Cross-sectional survey	248 pesticide exposed workers and 231 unexposed workers from 5 field studies in the Netherlands, Italy, Bulgaria (2 studies) and Finland. Total response rate not given.	Ethylenebisdithiocarbamate	+
Chakraborty <i>et al.</i> , 2009 [17]	Cross-sectional survey	376 agricultural workers from Eastern India who sprayed organophosphate and carbamate pesticides in the field. 348 age and sex-matched controls with non-agricultural occupations from the same locality. Response rate not given.	Numerous	+
Faria <i>et al.</i> , 2005 [18]	Cross-sectional survey	1379 farmers from Southern Brazil were interviewed in 1995, equalling a 95% participation rate. This represented 20% of total workforce.	Numerous	+
Hoppin <i>et al.</i> , 2002 [11]	Cross-sectional survey	A total of 20,468 applicators in Iowa and North Carolina. Response rate not reported.	Numerous	+
Hoppin <i>et al.</i> , 2008 [9]	Cross-sectional survey	25,814 farm women in Iowa and North Carolina, 702 of whom had adult onset asthma. No data on response rate provided.	Numerous	+
Hoppin <i>et al.</i> , 2006b [12]	Cross-sectional survey	The AHS study enrolled over 52,000 licensed private pesticide applicators in Iowa and North Carolina, mostly farmers, from 1993 to 1997. After completing the enrolment questionnaire, 22,916	Numerous	+

		(44%) applicators returned a second mailed questionnaire.		
Hoppin <i>et al.</i> , 2006 [13]	Cross-sectional survey	4916 commercial pesticide applicators in Iowa. The response rate to the second, more detailed, questionnaire was 2375 of 4916 applicators (48% response rate).	Numerous	+
Hoppin <i>et al.</i> , 2007 [14]	Cross-sectional survey	20908 private pesticide applicators in Iowa and North Carolina. 44% response within study.	Numerous	+
Hoppin <i>et al.</i> , 2009 [10]	Cross-sectional survey	19704 male farmers in Iowa and North Carolina. Response rate not given.	Numerous	++
Huang <i>et al.</i> , 1995 [22]	Cross-sectional survey	28 workers (19 men and 9 women) in the TCPN manufacturing workshop of a pesticide plant in Japan. The participation of the work force in this study was 93.3% (28/30), and two workers were absent at the time of the study owing to vacation.	Tetrachloroisophthalonitrile	+
Jones <i>et al.</i> , 2009 [23]	Systematic review	Meta-analysis of 21 papers reporting on 37 separate cohorts for mortality.	Phenoxy herbicides and pesticides more generally	++
Nriagu <i>et al.</i> , 1999 [19]	Cross-sectional survey	Health study in South Africa. 213 households, 367 children, 693 adults.	No specified agent	+
Salam <i>et al.</i> , 2004 [25]	Nested case-control study	Children's Health Study population of 6259 in Southern California. Average classroom participation of 82%,. Study base of 4244, from this base, 338 with asthma and 570 controls were identified, with 279 cases (83%) and 412 controls (72%) participating.	No specified agent	+
Salameh <i>et al.</i> , 2003 [26]	Cross-sectional survey	4644 questionnaires sent to 18 schools in Lebanon with a response rate of 71% (total = 3291).	No specified agent	+

Schenker <i>et al.</i> , 2004 [20]	Cross-sectional survey	219 paraquat handlers and 110 non-handlers working on Costa Rican banana, palm oil and coffee farms. Of 560 subjects identified 338 participated (77.5%).	Paraquat	++
Senanayake <i>et al.</i> , 1993 [31]	Case-control study	All tea workers. 85 paraquat spraymen, with 76 factory workers and 79 general workers as controls in Sri Lanka. Response rate not given.	Paraquat	++
Sprince <i>et al.</i> , [30]	Cross-sectional survey, stratified two-stage cluster sample	989 invited, 385 participated (response rate 39%) as part of the Iowa Farm Family Health and Hazard Surveillance Project.	No specified agents	+
Sunyer <i>et al.</i> , 2006 [28]	Birth cohort, longitudinal	Birth cohort n=482 in Spain. 462 followed up at 6.5 years. DDE and DDT measured in 402 infants and 285 4 year olds.	DDE, DDT*	++
Sunyer <i>et al.</i> , 2005 [27]	Birth cohort, longitudinal	Birth cohort n= 482 in Spain, 468 participated at 4 years with 306 blood tests at 4 years.	DDE, HCB, PCBs*	++
Weselak <i>et al.</i> , 2007 [29]	Cross-sectional survey, retrospective	2964 parents in Canada, of which 64% returned all 3 questionnaires. Responding couples identified 5853 pregnancies, after exclusion resulted in 3405 children.	Numerous	++
Yemaneberhan <i>et al.</i> , 1997 [24]	Cross-sectional survey	9844 urban, 3032 rural Ethiopian people. Estimated over 95% response rate (as unreliable census data, rate based on fieldworkers).	Numerous	+
Zhang <i>et al.</i> , 2002 [21]	Cross-sectional survey	22528 people from two villages in China. 98% response rate.	Numerous	+

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\* DDE = dichlorodiphenyldichloroethylene, DDT = dichlorodiphenyltrichloroethane, HCB = Hexachlorobenzene, PCBs = polychlorinated biphenyls