

Appendix Table A1 -

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma

This analysis is restricted to results for:

- 1) Biochemical, total, household (overall), parental, or workplace exposure
- 2) Results not by amount of exposure
- 3) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 4) ASTHMA : lifetime, current
 - 5) EXPOS : biochemical (cotinine), total, household, workplace
 - 6) WHESMO : 3=childhood, 1=lifetime, 10=adult, 7=recent, 6=unspec, 2=current
 - 7) WHOHOU : household overall, mother
 - 8) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
 - 9) For overlapping studies: principal rather than subsidiary studies
- Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3 and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A1 - 1

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
BECKE2	2	b	1	Non	18	40	US:mul	1985	2001	Pr	prv	5	Cot	Low	current	non
BECKE2	4	b	1	Non	18	40	US:mul	1985	2001	Pr	ons	5	Cot	Low	current	non
JAAKK3	34	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	7	Hh,Wk	None	lifetime	non
JANSON	1	b	c	<lyr	20	48	multi	1990	2001	CS	prv	9	Hh,Wk	None	current	non
JEDRYC	1	f	c	<lyr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	2	b	1	Never	15	69	Eu:Swe	1995	2001	CS	prv	3	Hh	NoHhMemb	childhood	non
LARSS2	4	b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
MISHRA	3	m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
MISHRA	4	f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
NG	6	f	c	<lyr	20	74	As:Sin	*	1993	CS	prv	6	Hh	NoHhMemb	lifetime	non
NHANE3	1	b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1	m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2	f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1	b	1	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
ROBBIN	10	b	1	Non	25	99	US:Cal	1977	1993	Pr	ons	4	Hh,Wk	None	childhood	never
SAPALD	2	b	1	<20pks	18	60	Eu:Swi	1991	1994	CS	prv	8	Hh,Wk	None	current	non
THORN	2	m	1	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non
THORN	3	f	1	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non

Appendix Table A1 - 2

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Control	Case	Control		
BECKE2	2	b	5	63	-	215	-	0.74	(0.55- 1.00)
*BECKE2	4	b	5	54	-	141	-	0.96	(0.70- 1.32)
Subtotal BECKE2								0.84	(0.67- 1.04)
JAAK3	34	b	7	135	-	104	-	1.40	(0.99- 1.96)
JANSON	1	b	9	-	-	-	-	1.15	(0.84- 1.58)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24- 1.14)
LARSS1	2	b	3	85	-	58	-	1.82	(1.28- 2.58)
LARSS2	4	b	5	-	-	-	-	1.13	(0.80- 1.59)
MISHRA	3	m	12	242	-	835	-	1.20	(0.99- 1.46)
MISHRA	4	f	12	561	-	829	-	1.05	(0.91- 1.21)
Subtotal MISHRA								1.10	(0.98- 1.23)
NG	6	f	6	18	-	15	-	1.18	(0.57- 2.46)
NHANE3	1	b	0	70	1481	370	8660	1.11	(0.85- 1.44)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29- 7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37- 2.78)
Subtotal ORYSZC								1.13	(0.48- 2.67)
PILOTT	1	b	3	-	-	-	-	1.09	(0.65- 1.82)
*ROBBIN	10	b	4	-	-	-	-	1.57	(0.96- 2.58)
SAPALD	2	b	8	96	-	191	-	1.39	(1.04- 1.86)
THORN	2	m	2	-	-	-	-	4.80	(2.00- 11.60)
THORN	3	f	2	-	-	-	-	1.50	(0.80- 3.10)
Subtotal THORN								2.31	(1.35- 3.96)
Partial Totals				1335	1498	2798	8731		
*prospective study									

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
BECKE2	2	b	5	-0.30	42.99	8.17	0.0483
*BECKE2	4	b	5	-0.04	38.19	1.18	0.8008
Subtotal BECKE2				-0.61	81.18	9.34	
JAAK3	34	b	7	0.34	32.94	1.34	0.0535
JANSON	1	b	9	0.14	38.50	0.00	0.3859
JEDRYC	1	f	3	-0.63	6.33	3.75	0.1102
LARSS1	2	b	3	0.60	31.28	6.74	0.0008
LARSS2	4	b	5	0.12	32.57	0.01	0.4855
MISHRA	3	m	12	0.18	101.81	0.23	0.0658
MISHRA	4	f	12	0.05	189.27	1.40	0.5021
Subtotal MISHRA				-0.04	291.08	1.63	
NG	6	f	6	0.17	7.19	0.01	0.6573
NHANE3	1	b	0	0.10	56.25	0.06	0.4488
ORYSZC	1	m	0	0.41	1.45	0.11	0.6256
ORYSZC	2	f	0	0.02	3.79	0.05	0.9727
Subtotal ORYSZC				0.15	5.24	0.16	
PILOTT	1	b	3	0.09	14.49	0.03	0.7428
*ROBBIN	10	b	4	0.45	15.72	1.57	0.0737
SAPALD	2	b	8	0.33	45.46	1.72	0.0264
THORN	2	m	2	1.57	4.97	10.22	0.0005
THORN	3	f	2	0.41	8.37	0.61	0.2406
Subtotal THORN				1.70	13.35	10.84	

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Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Adjusted

	N	18
	NS	14
	Wt	671.57
Het	Chi	37.20
Het	df	17
Het	P	**
Fixed	RR	1.14
	RRl	1.06
	RRu	1.23
	P	+++
Random	RR	1.19
	RRl	1.04
	RRu	1.35
	P	+
Asymm	P	N.S.

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Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
	N	4	9	5	18
	NS	3	7	4	14
	Wt	153.15	167.17	351.26	671.57
Het	Chi	7.71	17.60	1.28	37.20
Het	df	3	8	4	17
Het	P	(*)	*	N.S.	**
Fixed	RR	0.99	1.40	1.11	1.14
	RR1	0.84	1.21	1.00	1.06
	RRu	1.16	1.63	1.23	1.23
	P	N.S.	+++	(+)	+++
Random	RR	1.01	1.40	1.11	1.19
	RR1	0.78	1.08	1.00	1.04
	RRu	1.32	1.82	1.23	1.35
	P	N.S.	++	(+)	+
Between	Chi				10.60
Between	df				2
Between	P				**
		<u>Start year of study</u>			
		<1990	1990-99	unknown	Total
	N	4	10	4	18
	NS	3	8	3	14
	Wt	153.15	499.67	18.76	671.57
Het	Chi	7.71	20.84	2.74	37.20
Het	df	3	9	3	17
Het	P	(*)	*	N.S.	**
Fixed	RR	0.99	1.21	0.89	1.14
	RR1	0.84	1.11	0.57	1.06
	RRu	1.16	1.32	1.40	1.23
	P	N.S.	+++	N.S.	+++
Random	RR	1.01	1.30	0.89	1.19
	RR1	0.78	1.12	0.57	1.04
	RRu	1.32	1.52	1.40	1.35
	P	N.S.	+++	N.S.	+
Between	Chi				5.91
Between	df				2
Between	P				(*)
		<u>Publication year</u>			
		1990-99	2000+		Total
	N	5	13		18
	NS	5	9		14
	Wt	89.20	582.38		671.57
Het	Chi	6.28	29.99		37.20
Het	df	4	12		17
Het	P	N.S.	**		**
Fixed	RR	1.26	1.13		1.14
	RR1	1.02	1.04		1.06
	RRu	1.55	1.22		1.23
	P	+	++		+++
Random	RR	1.20	1.18		1.19
	RR1	0.90	1.02		1.04
	RRu	1.60	1.37		1.35
	P	N.S.	+		+
Between	Chi				0.93
Between	df				1
Between	P				N.S.

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Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

	Study type		CS	Total
	CC	Pr		
N	5	3	10	18
NS	3	2	9	14
Wt	51.53	96.90	523.14	671.57
Het Chi	7.37	6.59	13.91	37.20
Het df	4	2	9	17
Het P	N.S.	*	N.S.	**
Fixed RR	1.56	0.93	1.15	1.14
RRl	1.19	0.76	1.06	1.06
RRu	2.05	1.13	1.26	1.23
P	++	N.S.	++	+++
Random RR	1.69	0.99	1.18	1.19
RRl	1.06	0.68	1.04	1.04
RRu	2.69	1.45	1.33	1.35
P	+	N.S.	++	+
Between Chi				9.32
Between df				2
Between P				**

	Ex smokers		Total
	excluded	included	
N	13	5	18
NS	10	4	14

Wt	503.93	167.65	671.57
Het Chi	25.13	7.84	37.20
Het df	12	4	17
Het P	*	(*)	**
Fixed RR	1.20	1.00	1.14
RRl	1.10	0.86	1.06
RRu	1.31	1.16	1.23
P	+++	N.S.	+++
Random RR	1.27	1.02	1.19
RRl	1.09	0.82	1.04
RRu	1.49	1.27	1.35
P	++	N.S.	+
Between Chi			4.23
Between df			1
Between P			*

	Lowest age in RR			Total
	15-19	20-25	60+	
N	7	8	3	18
NS	6	6	2	14
Wt	261.23	112.93	297.41	671.57
Het Chi	17.81	9.87	4.48	37.20
Het df	6	7	2	17
Het P	**	N.S.	N.S.	**
Fixed RR	1.12	1.38	1.08	1.14
RRl	0.99	1.15	0.97	1.06
RRu	1.27	1.66	1.21	1.23
P	(+)	+++	N.S.	+++
Random RR	1.13	1.44	1.06	1.19
RRl	0.91	1.12	0.86	1.04
RRu	1.40	1.83	1.31	1.35
P	N.S.	++	N.S.	+
Between Chi				5.04
Between df				2
Between P				(*)

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Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

		<u>Highest age in RR</u>			Total
		-55	60-69	70+	
	N	7	4	7	18
	NS	4	4	6	14
	Wt	138.27	142.25	391.06	671.57
Het	Chi	18.51	3.64	6.58	37.20
Het	df	6	3	6	17
Het	P	**	N.S.	N.S.	**
Fixed	RR	1.02	1.41	1.10	1.14
	RRl	0.86	1.20	1.00	1.06
	RRu	1.20	1.66	1.22	1.23
	P	N.S.	+++	+	+++
Random	RR	1.20	1.41	1.11	1.19
	RRl	0.84	1.18	0.99	1.04
	RRu	1.70	1.69	1.24	1.35
	P	N.S.	+++	(+)	+
Between	Chi				8.47
Between	df				2
Between	P				*

		<u>Physician diagnosis</u>		Total
		yes	no/mixed	
	N	11	7	18
	NS	9	5	14
	Wt	306.54	365.04	671.57
Het	Chi	33.64	3.26	37.20
Het	df	10	6	17
Het	P	***	N.S.	**
Fixed	RR	1.17	1.12	1.14
	RRl	1.05	1.01	1.06
	RRu	1.31	1.24	1.23
	P	++	+	+++
Random	RR	1.22	1.12	1.19
	RRl	0.97	1.01	1.04
	RRu	1.52	1.24	1.35
	P	(+)	+	+
Between	Chi			0.29
Between	df			1
Between	P			N.S.

		<u>Onset (prosp or CC)</u>		Total
		prev	onset	
	N	15	3	18
	NS	12	3	15
	Wt	584.72	86.85	671.57
Het	Chi	33.07	3.81	37.20
Het	df	14	2	17
Het	P	**	N.S.	**
Fixed	RR	1.13	1.21	1.14
	RRl	1.05	0.98	1.06
	RRu	1.23	1.49	1.23
	P	++	(+)	+++
Random	RR	1.17	1.24	1.19
	RRl	1.01	0.92	1.04
	RRu	1.36	1.67	1.35
	P	+	N.S.	+
Between	Chi			0.32
Between	df			1
Between	P			N.S.

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Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

		Number of cases			unknown	Total
		1-100	101-400	401+		
N		7	3	5	3	18
NS		5	3	3	3	14
	Wt	47.83	109.68	428.51	85.56	671.57
Het	Chi	14.37	1.59	7.53	0.03	37.20
Het	df	6	2	4	2	17
Het	P	*	N.S.	N.S.	N.S.	**
Fixed	RR	1.40	1.50	1.05	1.13	1.14
	RR1	1.05	1.25	0.95	0.92	1.06
	RRu	1.86	1.81	1.15	1.40	1.23
	P	+	+++	N.S.	N.S.	+++
Random	RR	1.39	1.50	1.03	1.13	1.19
	RR1	0.87	1.25	0.89	0.92	1.04
	RRu	2.22	1.81	1.18	1.40	1.35
	P	N.S.	+++	N.S.	N.S.	+
Between	Chi					13.68
Between	df					3
Between	P					**

Study adjusts for or is matched on sex

		Yes	No	Total
		N	9	9	18
NS	8	6	14	
	Wt	292.14	379.43	671.57
Het	Chi	20.50	16.25	37.20
Het	df	8	8	17
Het	P	**	*	**
Fixed	RR	1.18	1.12	1.14
	RR1	1.05	1.01	1.06
	RRu	1.32	1.24	1.23
	P	++	+	+++
Random	RR	1.20	1.17	1.19
	RR1	0.99	0.96	1.04
	RRu	1.44	1.43	1.35
	P	(+)	N.S.	+
Between	Chi			0.45
Between	df			1
Between	P			N.S.

Study adjusts for or is matched on age

		15	3	18
		NS	12	2	14
	Wt	610.09	61.49	671.57
Het	Chi	36.97	0.16	37.20
Het	df	14	2	17
Het	P	***	N.S.	**
Fixed	RR	1.15	1.11	1.14
	RR1	1.06	0.86	1.06
	RRu	1.24	1.42	1.23
	P	+++	N.S.	+++
Random	RR	1.20	1.11	1.19
	RR1	1.03	0.86	1.04
	RRu	1.39	1.42	1.35
	P	+	N.S.	+
Between	Chi			0.07
Between	df			1
Between	P			N.S.

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Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

		<u>Study adjusts for race</u>		
		Yes	No	Total
	N	3	15	18
	NS	2	12	14
	Wt	88.37	583.21	671.57
Het	Chi	2.15	26.76	37.20
Het	df	2	14	17
Het	P	N.S.	*	**
Fixed	RR	0.86	1.19	1.14
	RRl	0.70	1.10	1.06
	RRu	1.06	1.30	1.23
	P	N.S.	+++	+++
Random	RR	0.86	1.26	1.19
	RRl	0.69	1.10	1.04
	RRu	1.08	1.43	1.35
	P	N.S.	+++	+
Between	Chi			8.29
Between	df			1
Between	P			**

		<u>Study adjusts for location</u>		
	N	10	8	18
	NS	8	6	14
	Wt	526.20	145.38	671.57
Het	Chi	13.24	19.01	37.20
Het	df	9	7	17
Het	P	N.S.	**	**
Fixed	RR	1.09	1.35	1.14
	RRl	1.00	1.15	1.06
	RRu	1.19	1.58	1.23
	P	+	+++	+++
Random	RR	1.10	1.40	1.19
	RRl	0.98	1.01	1.04
	RRu	1.23	1.93	1.35
	P	N.S.	+	+
Between	Chi			4.95
Between	df			1
Between	P			*

		<u>Study adjusts for SES</u>		
	N	2	16	18
	NS	1	13	14
	Wt	291.08	380.49	671.57
Het	Chi	1.18	35.23	37.20
Het	df	1	15	17
Het	P	N.S.	**	**
Fixed	RR	1.10	1.18	1.14
	RRl	0.98	1.07	1.06
	RRu	1.23	1.30	1.23
	P	N.S.	++	+++
Random	RR	1.10	1.21	1.19
	RRl	0.97	1.02	1.04
	RRu	1.25	1.44	1.35
	P	N.S.	+	+
Between	Chi			0.79
Between	df			1
Between	P			N.S.

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Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma

		Adjusted		
		Study adjusts for family medical history		
		Yes	No	Total
	N	3	15	18
	NS	3	11	14
	Wt	110.97	560.60	671.57
Het	Chi	1.02	33.73	37.20
Het	df	2	14	17
Het	P	N.S.	**	**
Fixed	RR	1.31	1.11	1.14
	RRl	1.09	1.03	1.06
	RRu	1.58	1.21	1.23
	P	++	+	+++
Random	RR	1.31	1.16	1.19
	RRl	1.09	0.99	1.04
	RRu	1.58	1.36	1.35
	P	++	(+)	+
Between	Chi			2.46
Between	df			1
Between	P			N.S.

Study adjusts for family composition

	N	3	15	18
	NS	2	12	14
	Wt	329.58	342.00	671.57
Het	Chi	1.25	35.20	37.20
Het	df	2	14	17
Het	P	N.S.	**	**
Fixed	RR	1.11	1.18	1.14
	RRl	0.99	1.06	1.06
	RRu	1.23	1.31	1.23
	P	(+)	++	+++
Random	RR	1.11	1.22	1.19
	RRl	0.99	1.01	1.04
	RRu	1.23	1.47	1.35
	P	(+)	+	+
Between	Chi			0.75
Between	df			1
Between	P			N.S.

Study adjusts for cooking, heating

	N	4	14	18
	NS	3	11	14
	Wt	304.60	366.98	671.57
Het	Chi	4.54	31.11	37.20
Het	df	3	13	17
Het	P	N.S.	**	**
Fixed	RR	1.09	1.20	1.14
	RRl	0.97	1.08	1.06
	RRu	1.21	1.32	1.23
	P	N.S.	+++	+++
Random	RR	1.08	1.25	1.19
	RRl	0.91	1.05	1.04
	RRu	1.28	1.48	1.35
	P	N.S.	+	+
Between	Chi			1.55
Between	df			1
Between	P			N.S.

Appendix Table A1 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma

<u>Adjusted</u>				
<u>Study adjusts for housing quality, crowding, damp, mould</u>				
	Yes	No	Total	
N	4	14	18	
NS	3	11	14	
Wt	331.21	340.37	671.57	
Het Chi	2.91	34.16	37.20	
Het df	3	13	17	
Het P	N.S.	**	**	
Fixed RR	1.13	1.16	1.14	
RRl	1.01	1.04	1.06	
RRu	1.26	1.29	1.23	
P	+	++	+++	
Random RR	1.13	1.20	1.19	
RRl	1.01	0.99	1.04	
RRu	1.26	1.45	1.35	
P	+	(+)	+	
Between Chi			0.12	
Between df			1	
Between P			N.S.	

Study adjusts for subject's medical history

N	5	13	18	
NS	4	10	14	
Wt	113.03	558.54	671.57	
Het Chi	9.28	22.08	37.20	
Het df	4	12	17	
Het P	(*)	*	**	
Fixed RR	1.41	1.10	1.14	
RRl	1.17	1.01	1.06	
RRu	1.69	1.19	1.23	
P	+++	+	+++	
Random RR	1.54	1.10	1.19	
RRl	1.12	0.97	1.04	
RRu	2.11	1.26	1.35	
P	++	N.S.	+	
Between Chi			5.83	
Between df			1	
Between P			*	

Study adjusts for ex-smoking or other ETS exposure

N	4	14	18	
NS	4	10	14	
Wt	119.73	551.85	671.57	
Het Chi	1.83	34.04	37.20	
Het df	3	13	17	
Het P	N.S.	**	**	
Fixed RR	1.26	1.12	1.14	
RRl	1.05	1.03	1.06	
RRu	1.51	1.22	1.23	
P	+	++	+++	
Random RR	1.26	1.16	1.19	
RRl	1.05	0.99	1.04	
RRu	1.51	1.37	1.35	
P	+	(+)	+	
Between Chi			1.32	
Between df			1	
Between P			N.S.	

Appendix Table A1 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

	Hh	Exposure Hh,Wk	Cot	Work	Total	
N	11	4	2	1	18	
NS	8	4	1	1	14	
Wt	425.20	132.62	81.18	32.57	671.57	
Het Chi	23.15	1.42	1.37	0.00	37.20	
Het df	10	3	1	0	17	
Het P	*	N.S.	N.S.	N.S.	**	
Fixed RR	1.16	1.34	0.84	1.13	1.14	
RRl	1.05	1.13	0.67	0.80	1.06	
RRu	1.27	1.59	1.04	1.59	1.23	
P	++	+++	N.S.	N.S.	+++	
Random RR	1.24	1.34	0.84	1.13	1.19	
RRl	1.02	1.13	0.65	0.80	1.04	
RRu	1.50	1.59	1.08	1.59	1.35	
P	+	+++	N.S.	N.S.	+	
Between Chi					11.26	
Between df					3	
Between P					*	
<u>Exposed group : when Exposed</u>						
	life	adult	child	current	unspec	Total
N	2	2	2	11	1	18
NS	2	1	2	8	1	14
Wt	40.13	13.35	47.00	556.61	14.49	671.57
Het Chi	0.17	4.22	0.23	14.46	0.00	37.20
Het df	1	1	1	10	0	17
Het P	N.S.	*	N.S.	N.S.	N.S.	**
Fixed RR	1.36	2.31	1.73	1.07	1.09	1.14
RRl	1.00	1.35	1.30	0.99	0.65	1.06
RRu	1.85	3.96	2.31	1.17	1.82	1.23
P	(+)	++	+++	(+)	N.S.	+++
Random RR	1.36	2.59	1.73	1.07	1.09	1.19
RRl	1.00	0.83	1.30	0.95	0.65	1.04
RRu	1.85	8.08	2.31	1.19	1.82	1.35
P	(+)	N.S.	+++	N.S.	N.S.	+
Between Chi						18.11
Between df						4
Between P						**
<u>Number of adjustment variables</u>						
	0	2	3-5	6-9	10+	Total
N	3	2	7	4	2	18
NS	2	1	6	4	1	14
Wt	61.49	13.35	181.57	124.09	291.08	671.57
Het Chi	0.16	4.22	20.66	1.03	1.18	37.20
Het df	2	1	6	3	1	17
Het P	N.S.	*	**	N.S.	N.S.	**
Fixed RR	1.11	2.31	1.07	1.30	1.10	1.14
RRl	0.86	1.35	0.93	1.09	0.98	1.06
RRu	1.42	3.96	1.24	1.55	1.23	1.23
P	N.S.	++	N.S.	++	N.S.	+++
Random RR	1.11	2.59	1.08	1.30	1.10	1.19
RRl	0.86	0.83	0.81	1.09	0.97	1.04
RRu	1.42	8.08	1.43	1.55	1.25	1.35
P	N.S.	N.S.	N.S.	++	N.S.	+
Between Chi						9.95
Between df						4
Between P						*

Appendix Table A1 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

		<u>RR adjusted for sex</u>		
		Yes	No	Total
	N	9	9	18
	NS	8	6	14
	Wt	292.14	379.43	671.57
Het	Chi	20.50	16.25	37.20
Het	df	8	8	17
Het	P	**	*	**
Fixed	RR	1.18	1.12	1.14
	RRl	1.05	1.01	1.06
	RRu	1.32	1.24	1.23
	P	++	+	+++
Random	RR	1.20	1.17	1.19
	RRl	0.99	0.96	1.04
	RRu	1.44	1.43	1.35
	P	(+)	N.S.	+
Between	Chi			0.45
Between	df			1
Between	P			N.S.

		<u>RR adjusted for age</u>		
	N	15	3	18
	NS	12	2	14
	Wt	610.09	61.49	671.57
Het	Chi	36.97	0.16	37.20
Het	df	14	2	17
Het	P	***	N.S.	**
Fixed	RR	1.15	1.11	1.14
	RRl	1.06	0.86	1.06
	RRu	1.24	1.42	1.23
	P	+++	N.S.	+++
Random	RR	1.20	1.11	1.19
	RRl	1.03	0.86	1.04
	RRu	1.39	1.42	1.35
	P	+	N.S.	+
Between	Chi			0.07
Between	df			1
Between	P			N.S.

		<u>RR adjusted for ex-smoking or other ETS</u>		
	N	3	15	18
	NS	3	11	14
	Wt	86.79	584.79	671.57
Het	Chi	1.32	35.58	37.20
Het	df	2	14	17
Het	P	N.S.	**	**
Fixed	RR	1.21	1.13	1.14
	RRl	0.98	1.05	1.06
	RRu	1.49	1.23	1.23
	P	(+)	++	+++
Random	RR	1.21	1.18	1.19
	RRl	0.98	1.01	1.04
	RRu	1.49	1.38	1.35
	P	(+)	+	+
Between	Chi			0.30
Between	df			1
Between	P			N.S.

Appendix Table A1 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma

Adjusted			
RR adjusted for factor other than sex, age, other ETS			
	Yes	No	Total
N	15	3	18
NS	12	2	14
Wt	610.09	61.49	671.57
Het Chi	36.97	0.16	37.20
Het df	14	2	17
Het P	***	N.S.	**
Fixed RR	1.15	1.11	1.14
RRl	1.06	0.86	1.06
RRu	1.24	1.42	1.23
P	+++	N.S.	+++
Random RR	1.20	1.11	1.19
RRl	1.03	0.86	1.04
RRu	1.39	1.42	1.35
P	+	N.S.	+
Between Chi			0.07
Between df			1
Between P			N.S.

Derivation of RR/CI				
	Original	Numbers	Sum/F&L	Total
N	11	3	4	18
NS	8	2	4	14
Wt	521.67	61.49	88.42	671.57
Het Chi	33.88	0.16	1.45	37.20
Het df	10	2	3	17
Het P	***	N.S.	N.S.	**
Fixed RR	1.12	1.11	1.30	1.14
RRl	1.03	0.86	1.06	1.06
RRu	1.22	1.42	1.60	1.23
P	++	N.S.	+	+++
Random RR	1.17	1.11	1.30	1.19
RRl	0.97	0.86	1.06	1.04
RRu	1.41	1.42	1.60	1.35
P	(+)	N.S.	+	+
Between Chi				1.71
Between df				2
Between P				N.S.

Appendix Table A1 - 4

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
BECKE2	1	x	b	1	Non	18	40	US:mul	1985	2001	Pr	prv	0	Cot	Low	current	non
BECKE2	3	x	b	1	Non	18	40	US:mul	1985	2001	Pr	ons	0	Cot	Low	current	non
JAACK3	10	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	0	Hh,Wk	None	lifetime	non
JANSON	1		b	c	<1yr	20	48	multi	1990	2001	CS	prv	9	Hh,Wk	None	current	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	1	x	b	1	Never	15	69	Eu:Swe	1995	2001	CS	prv	0	Hh	NoHhMemb	childhood	non
LARSS2	4		b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
MISHRA	1	x	m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
MISHRA	2	x	f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
NG	3	x	f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	0	Hh	NoHhMemb	lifetime	non
NHANE3	1		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1		b	1	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
ROBBIN	10		b	1	Non	25	99	US:Cal	1977	1993	Pr	ons	4	Hh,Wk	None	childhood	never
SAPALD	1	x	b	1	<20pks	18	60	Eu:Swi	1991	1994	CS	prv	0	Hh,Wk	None	current	non
THORN	1	x	b	1	Never	20	50	Eu:Swe	1994	2001	CC	prv	0	Hh	NoHhMemb	last6homes	non

Appendix Table A1 - 5

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Unadjusted

REF	NRR	SEX	ADJ	Numbers		Non-exposed		RR	95.00%CI	
				Exposed Case	Control	Case	Control			
BECKE2	1	b	0	63	799	215	2051	0.75	(0.56-	1.01)
*BECKE2	3	b	0	54	799	141	2051	0.98	(0.73-	1.33)
Subtotal BECKE2								0.86	(0.69-	1.06)
JAAK3	10	b	0	135	256	104	231	1.17	(0.86-	1.60)
JANSON	1	b	9	-	-	-	-	1.15	(0.84-	1.58)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24-	1.14)
LARSS1	1	b	0	85	1171	58	1470	1.84	(1.31-	2.59)
LARSS2	4	b	5	-	-	-	-	1.13	(0.80-	1.59)
MISHRA	1	m	0	242	1739	835	8047	1.34	(1.15-	1.56)
MISHRA	2	f	0	561	6037	829	9659	1.08	(0.97-	1.21)
Subtotal MISHRA								1.17	(1.07-	1.28)
NG	3	f	0	18	645	15	604	1.12	(0.56-	2.25)
NHANE3	1	b	0	70	1481	370	8660	1.11	(0.85-	1.44)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29-	7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37-	2.78)
Subtotal ORYSZC								1.13	(0.48-	2.67)
PILOTT	1	b	3	-	-	-	-	1.09	(0.65-	1.82)
*ROBBIN	10	b	4	-	-	-	-	1.57	(0.96-	2.58)
SAPALD	1	b	0	96	1163	191	2747	1.19	(0.92-	1.53)
THORN	1	b	0	33	116	36	302	2.39	(1.42-	4.01)
Partial Totals				1368	14223	2834	35893			
*prospective study										

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
BECKE2	1	b	0	-0.28	44.92	8.36	0.0563
*BECKE2	3	b	0	-0.02	41.89	1.12	0.9121
Subtotal BECKE2				-0.59	86.81	9.48	
JAAK3	10	b	0	0.16	39.59	0.01	0.3198
JANSON	1	b	9	0.14	38.50	0.00	0.3859
JEDRYC	1	f	3	-0.63	6.33	3.86	0.1102
LARSS1	1	b	0	0.61	32.74	7.02	0.0005
LARSS2	4	b	5	0.12	32.57	0.02	0.4855
MISHRA	1	m	0	0.29	165.86	3.58	0.0002
MISHRA	2	f	0	0.08	306.94	1.38	0.1638
Subtotal MISHRA				0.08	472.80	4.96	
NG	3	f	0	0.12	7.97	0.01	0.7419
NHANE3	1	b	0	0.10	56.25	0.12	0.4488
ORYSZC	1	m	0	0.41	1.45	0.10	0.6256
ORYSZC	2	f	0	0.02	3.79	0.06	0.9727
Subtotal ORYSZC				0.13	5.24	0.16	
PILOTT	1	b	3	0.09	14.49	0.05	0.7428
*ROBBIN	10	b	4	0.45	15.72	1.46	0.0737
SAPALD	1	b	0	0.17	59.26	0.04	0.1866
THORN	1	b	0	0.87	14.28	7.47	0.0010

N 17
NS 14

Wt 882.55
Het Chi 34.66
Het df 16
Het P **
Fixed RR 1.16
RRl 1.08
RRu 1.24
P +++
Random RR 1.17
RRl 1.04
RRu 1.32
P ++
Asymm P N.S.

Appendix Table A1 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Unadjusted

	N	17			
	NS	14			
	Wt	882.55			
Het	Chi	34.66			
Het	df	16			
Het	P	**			
Fixed	RR	1.16			
	RRl	1.08			
	RRu	1.24			
	P	+++			
Random	RR	1.17			
	RRl	1.04			
	RRu	1.32			
	P	++			
Asymm	P	N.S.			
			<u>Sex</u>		
	both	male	female	Total	
	N	11	2	4	17
	NS	10	2	4	16
	Wt	390.21	167.31	325.03	882.55
Het	Chi	25.66	0.02	3.19	34.66
Het	df	10	1	3	16
Het	P	**	N.S.	N.S.	**
Fixed	RR	1.16	1.34	1.07	1.16
	RRl	1.05	1.15	0.96	1.08
	RRu	1.28	1.56	1.19	1.24
	P	++	+++	N.S.	+++
Random	RR	1.20	1.34	1.05	1.17
	RRl	1.02	1.15	0.88	1.04
	RRu	1.42	1.56	1.24	1.32
	P	+	+++	N.S.	++
Between	Chi				5.79
Between	df				2
Between	P				(*)
	<u>Asthma definition (lifetime/current)</u>				
	lifetime	current	Total		
	N	8	9	17	
	NS	7	7	14	
	Wt	255.87	626.68	882.55	
Het	Chi	25.48	9.09	34.66	
Het	df	7	8	16	
Het	P	***	N.S.	**	
Fixed	RR	1.18	1.15	1.16	
	RRl	1.04	1.06	1.08	
	RRu	1.33	1.24	1.24	
	P	++	+++	+++	
Random	RR	1.25	1.15	1.17	
	RRl	0.98	1.05	1.04	
	RRu	1.59	1.27	1.32	
	P	(+)	++	++	
Between	Chi			0.08	
Between	df			1	
Between	P			N.S.	

Appendix Table A1 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Unadjusted

		Continent			
		NAmer	Europe	Oth/Mult	Total
	N	4	8	5	17
	NS	3	7	4	14
	Wt	158.78	190.01	533.76	882.55
Het	Chi	7.42	16.13	5.01	34.66
Het	df	3	7	4	16
Het	P	(*)	*	N.S.	**
Fixed	RR	1.00	1.30	1.16	1.16
	RRl	0.85	1.13	1.07	1.08
	RRu	1.16	1.50	1.27	1.24
	P	N.S.	+++	+++	+++
Random	RR	1.02	1.30	1.17	1.17
	RRl	0.79	1.01	1.05	1.04
	RRu	1.32	1.66	1.31	1.32
	P	N.S.	+	++	++
Between	Chi				6.09
Between	df				2
Between	P				*
<u>Start year of study</u>					
		<1990	1990-99	unknown	Total
	N	4	9	4	17
	NS	3	8	3	14
	Wt	158.78	704.23	19.54	882.55
Het	Chi	7.42	18.35	2.60	34.66
Het	df	3	8	3	16
Het	P	(*)	*	N.S.	**
Fixed	RR	1.00	1.21	0.88	1.16
	RRl	0.85	1.12	0.57	1.08
	RRu	1.16	1.30	1.38	1.24
	P	N.S.	+++	N.S.	+++
Random	RR	1.02	1.27	0.88	1.17
	RRl	0.79	1.11	0.57	1.04
	RRu	1.32	1.45	1.38	1.32
	P	N.S.	+++	N.S.	++
Between	Chi				6.28
Between	df				2
Between	P				*
<u>Study type</u>					
		CC	Pr	CS	Total
	N	4	3	10	17
	NS	3	2	9	14
	Wt	59.12	102.53	720.91	882.55
Het	Chi	5.71	6.45	15.92	34.66
Het	df	3	2	9	16
Het	P	N.S.	*	(*)	**
Fixed	RR	1.39	0.94	1.18	1.16
	RRl	1.07	0.77	1.09	1.08
	RRu	1.79	1.14	1.26	1.24
	P	+	N.S.	+++	+++
Random	RR	1.47	1.00	1.19	1.17
	RRl	0.94	0.70	1.06	1.04
	RRu	2.32	1.45	1.34	1.32
	P	(+)	N.S.	++	++
Between	Chi				6.57
Between	df				2
Between	P				*

Appendix Table A1 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Unadjusted

	Ex smokers		Total
	excluded	included	
N	12	5	17
NS	10	4	14
Wt	709.28	173.27	882.55
Het Chi	22.68	7.53	34.66
Het df	11	4	16
Het P	*	N.S.	**
Fixed RR	1.20	1.00	1.16
RRl	1.11	0.86	1.08
RRu	1.29	1.16	1.24
P	+++	N.S.	+++
Random RR	1.24	1.02	1.17
RRl	1.09	0.83	1.04
RRu	1.42	1.27	1.32
P	++	N.S.	++
Between Chi			4.44
Between df			1
Between P			*

Appendix Table A1 - 7

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
 Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3	KRONQV	PLATTS														
9	RAHERI															

Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP
JANSON	JANSON	p	JANSON/RAHERI

Adjusted - insufficient data for metaanalysis

REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI	RR	SIG
KRONQV	1	b	1	Never	15	65	Eu:Swe	1996	1999	CS	prv	4	Total	None	childhood	non	*	n
LARSS2	5	b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Hh NoHhMemb		current	non	*	n
PLATTS	1	b	c	Non	15	55	US:Del	1988	1993	CC	prv	0	Total	None	unspec	non	*	n

Appendix Table A2 -

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
Lifetime/Current Asthma

This analysis is restricted to results for:

- 1) Biochemical, total, household (overall), parental, or workplace exposure
- 2) Ex-smokers excluded
- 3) Results not by amount of exposure
- 4) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 5) ASTHMA : lifetime, current
- 6) EXPOS : biochemical (cotinine), total, household, workplace
- 7) WHESMO : 3=childhood, 1=lifetime, 10=adult, 7=recent, 6=unspec, 2=current
- 8) WHOHOU : household overall, mother
- 9) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
- 10) For overlapping studies: principal rather than subsidiary studies

Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3 and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A2 - 1

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
 Lifetime/Current Asthma
 Adjusted

REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAK3	34	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	7	Hh,Wk	None	lifetime	non
JANSON	1	b	c	<lyr	20	48	multi	1990	2001	CS	prv	9	Hh,Wk	None	current	non
JEDRYC	1	f	c	<lyr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	2	b	l	Never	15	69	Eu:Swe	1995	2001	CS	prv	3	Hh	NoHhMemb	childhood	non
LARSS2	4	b	l	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
MISHRA	3	m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
MISHRA	4	f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
NG	6	f	c	<lyr	20	74	As:Sin	*	1993	CS	prv	6	Hh	NoHhMemb	lifetime	non
ORYSZC	1	m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2	f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
SAPALD	2	b	l	<20pks	18	60	Eu:Swi	1991	1994	CS	prv	8	Hh,Wk	None	current	non
THORN	2	m	l	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non
THORN	3	f	l	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non

Appendix Table A2 - 2

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
Lifetime/Current Asthma
Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Control	Case	Control		
JAAKK3	34	b	7	135	-	104	-	1.40	(0.99- 1.96)
JANSON	1	b	9	-	-	-	-	1.15	(0.84- 1.58)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24- 1.14)
LARSS1	2	b	3	85	-	58	-	1.82	(1.28- 2.58)
LARSS2	4	b	5	-	-	-	-	1.13	(0.80- 1.59)
MISHRA	3	m	12	242	-	835	-	1.20	(0.99- 1.46)
MISHRA	4	f	12	561	-	829	-	1.05	(0.91- 1.21)
Subtotal MISHRA								1.10	(0.98- 1.23)
NG	6	f	6	18	-	15	-	1.18	(0.57- 2.46)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29- 7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37- 2.78)
Subtotal ORYSZC								1.13	(0.48- 2.67)
SAPALD	2	b	8	96	-	191	-	1.39	(1.04- 1.86)
THORN	2	m	2	-	-	-	-	4.80	(2.00- 11.60)
THORN	3	f	2	-	-	-	-	1.50	(0.80- 3.10)
Subtotal THORN								2.31	(1.35- 3.96)
Partial Totals				1148	17	2072	71		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	34	b	7	0.34	32.94	0.80	0.0535
JANSON	1	b	9	0.14	38.50	0.06	0.3859
JEDRYC	1	f	3	-0.63	6.33	4.21	0.1102
LARSS1	2	b	3	0.60	31.28	5.47	0.0008
LARSS2	4	b	5	0.12	32.57	0.11	0.4855
MISHRA	3	m	12	0.18	101.81	0.00	0.0658
MISHRA	4	f	12	0.05	189.27	3.28	0.5021
Subtotal MISHRA				-0.13	291.08	3.28	
NG	6	f	6	0.17	7.19	0.00	0.6573
ORYSZC	1	m	0	0.41	1.45	0.07	0.6256
ORYSZC	2	f	0	0.02	3.79	0.10	0.9727
Subtotal ORYSZC				0.06	5.24	0.17	
SAPALD	2	b	8	0.33	45.46	1.01	0.0264
THORN	2	m	2	1.57	4.97	9.58	0.0005
THORN	3	f	2	0.41	8.37	0.42	0.2406
Subtotal THORN				1.61	13.35	10.01	

N 13
NS 10

Wt 503.93
Het Chi 25.13
Het df 12
Het P *
Fixed RR 1.20
RRl 1.10
RRu 1.31
P +++
Random RR 1.27
RRl 1.09
RRu 1.49
P ++
Asymm P N.S.

Appendix Table A2 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
 Lifetime/Current Asthma
 Adjusted

	N	13			
	NS	10			
	Wt	503.93			
Het	Chi	25.13			
Het	df	12			
Het	P	*			
Fixed	RR	1.20			
	RRl	1.10			
	RRu	1.31			
	P	+++			
Random	RR	1.27			
	RRl	1.09			
	RRu	1.49			
	P	++			
Asymm	P	N.S.			
			<u>Sex</u>		
			both	male	female
					Total
	N	5	3	5	13
	NS	5	3	5	13
	Wt	180.75	108.23	214.95	503.93
Het	Chi	4.89	9.15	4.12	25.13
Het	df	4	2	4	12
Het	P	N.S.	*	N.S.	*
Fixed	RR	1.35	1.28	1.05	1.20
	RRl	1.17	1.06	0.92	1.10
	RRu	1.56	1.55	1.20	1.31
	P	+++	++	N.S.	+++
Random	RR	1.35	2.02	1.05	1.27
	RRl	1.15	0.73	0.89	1.09
	RRu	1.59	5.56	1.23	1.49
	P	+++	N.S.	N.S.	++
Between	Chi				6.96
Between	df				2
Between	P				*
	<u>Asthma definition (lifetime/current)</u>				
		lifetime	current		Total
	N	5	8		13
	NS	4	6		10
	Wt	122.66	381.27		503.93
Het	Chi	10.77	6.66		25.13
Het	df	4	7		12
Het	P	*	N.S.		*
Fixed	RR	1.49	1.12		1.20
	RRl	1.25	1.01		1.10
	RRu	1.78	1.23		1.31
	P	+++	+		+++
Random	RR	1.61	1.12		1.27
	RRl	1.17	1.01		1.09
	RRu	2.21	1.23		1.49
	P	++	+		++
Between	Chi				7.70
Between	df				1
Between	P				**

Appendix Table A2 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
Lifetime/Current Asthma
Adjusted

	NAmer	Continent		Total
		Europe	Oth/Mult	
N		9	4	13
NS		7	3	10
Wt		167.17	336.76	503.93
Het Chi		17.60	1.28	25.13
Het df		8	3	12
Het P		*	N.S.	*
Fixed RR		1.40	1.11	1.20
RRl		1.21	1.00	1.10
RRu		1.63	1.23	1.31
P		+++	(+)	+++
Random RR		1.40	1.11	1.27
RRl		1.08	1.00	1.09
RRu		1.82	1.23	1.49
P		++	(+)	++
Between Chi				6.25
Between df				1
Between P				*

	N	Start year of study		Total
		<1990	1990-99	
N		9	4	13
NS		7	3	10
Wt		485.17	18.76	503.93
Het Chi		20.68	2.74	25.13
Het df		8	3	12
Het P		**	N.S.	*
Fixed RR		1.21	0.89	1.20
RRl		1.11	0.57	1.10
RRu		1.32	1.40	1.31
P		+++	N.S.	+++
Random RR		1.32	0.89	1.27
RRl		1.12	0.57	1.09
RRu		1.56	1.40	1.49
P		+++	N.S.	++
Between Chi				1.71
Between df				1
Between P				N.S.

	N	Study type		Total
		CC	Pr	
N		5	8	13
NS		3	7	10
Wt		51.53	452.40	503.93
Het Chi		7.37	13.74	25.13
Het df		4	7	12
Het P		N.S.	(*)	*
Fixed RR		1.56	1.16	1.20
RRl		1.19	1.06	1.10
RRu		2.05	1.27	1.31
P		++	++	+++
Random RR		1.69	1.20	1.27
RRl		1.06	1.03	1.09
RRu		2.69	1.39	1.49
P		+	+	++
Between Chi				4.02
Between df				1
Between P				*

Appendix Table A2 - 4

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAK3	10	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	0	Hh,Wk	None	lifetime	non
JANSON	1		b	c	<1yr	20	48	multi	1990	2001	CS	prv	9	Hh,Wk	None	current	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	1	x	b	l	Never	15	69	Eu:Swe	1995	2001	CS	prv	0	Hh	NoHhMemb	childhood	non
LARSS2	4		b	l	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
MISHRA	1	x	m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
MISHRA	2	x	f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
NG	3	x	f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	0	Hh	NoHhMemb	lifetime	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
SAPALD	1	x	b	l	<20pks	18	60	Eu:Swi	1991	1994	CS	prv	0	Hh,Wk	None	current	non
THORN	1	x	b	l	Never	20	50	Eu:Swe	1994	2001	CC	prv	0	Hh	NoHhMemb	last6homes	non

Appendix Table A2 - 5

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
Lifetime/Current Asthma
Unadjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Control	Case	Control		
JAAKK3	10	b	0	135	256	104	231	1.17 (	0.86- 1.60)
JANSON	1	b	9	-	-	-	-	1.15 (	0.84- 1.58)
JEDRYC	1	f	3	-	-	-	-	0.53 (	0.24- 1.14)
LARSS1	1	b	0	85	1171	58	1470	1.84 (	1.31- 2.59)
LARSS2	4	b	5	-	-	-	-	1.13 (	0.80- 1.59)
MISHRA	1	m	0	242	1739	835	8047	1.34 (	1.15- 1.56)
MISHRA	2	f	0	561	6037	829	9659	1.08 (	0.97- 1.21)
Subtotal MISHRA								1.17 (	1.07- 1.28)
NG	3	f	0	18	645	15	604	1.12 (	0.56- 2.25)
ORYSZC	1	m	0	3	4	14	28	1.50 (	0.29- 7.65)
ORYSZC	2	f	0	8	13	26	43	1.02 (	0.37- 2.78)
Subtotal ORYSZC								1.13 (	0.48- 2.67)
SAPALD	1	b	0	96	1163	191	2747	1.19 (	0.92- 1.53)
THORN	1	b	0	33	116	36	302	2.39 (	1.42- 4.01)
Partial Totals				1181	11144	2108	23131		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	10	b	0	0.16	39.59	0.02	0.3198
JANSON	1	b	9	0.14	38.50	0.07	0.3859
JEDRYC	1	f	3	-0.63	6.33	4.22	0.1102
LARSS1	1	b	0	0.61	32.74	6.00	0.0005
LARSS2	4	b	5	0.12	32.57	0.11	0.4855
MISHRA	1	m	0	0.29	165.86	2.08	0.0002
MISHRA	2	f	0	0.08	306.94	3.20	0.1638
Subtotal MISHRA				0.01	472.80	5.28	
NG	3	f	0	0.12	7.97	0.03	0.7419
ORYSZC	1	m	0	0.41	1.45	0.07	0.6256
ORYSZC	2	f	0	0.02	3.79	0.10	0.9727
Subtotal ORYSZC				0.06	5.24	0.17	
SAPALD	1	b	0	0.17	59.26	0.01	0.1866
THORN	1	b	0	0.87	14.28	6.77	0.0010

N 12
NS 10

Wt 709.28
Het Chi 22.68
Het df 11
Het P *
Fixed RR 1.20
RRl 1.11
RRu 1.29
P +++
Random RR 1.24
RRl 1.09
RRu 1.42
P ++
Asymm P N.S.

Appendix Table A2 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
 Lifetime/Current Asthma
 Unadjusted

N	12			
NS	10			
Wt	709.28			
Het Chi	22.68			
Het df	11			
Het P	*			
Fixed RR	1.20			
RR1	1.11			
RRu	1.29			
P	+++			
Random RR	1.24			
RR1	1.09			
RRu	1.42			
P	++			
Asymm P	N.S.			
		<u>Sex</u>		
	both	male	female	Total
N	6	2	4	12
NS	6	2	4	12
Wt	216.94	167.31	325.03	709.28
Het Chi	11.35	0.02	3.19	22.68
Het df	5	1	3	11
Het P	*	N.S.	N.S.	*
Fixed RR	1.31	1.34	1.07	1.20
RR1	1.14	1.15	0.96	1.11
RRu	1.49	1.56	1.19	1.29
P	+++	+++	N.S.	+++
Random RR	1.35	1.34	1.05	1.24
RR1	1.10	1.15	0.88	1.09
RRu	1.66	1.56	1.24	1.42
P	++	+++	N.S.	++
Between Chi				8.12
Between df				2
Between P				*
<u>Asthma definition (lifetime/current)</u>				
	lifetime	current	Total	
N	4	8	12	
NS	4	6	10	
Wt	138.85	570.43	709.28	
Het Chi	9.61	9.00	22.68	
Het df	3	7	11	
Het P	*	N.S.	*	
Fixed RR	1.40	1.16	1.20	
RR1	1.18	1.06	1.11	
RRu	1.65	1.25	1.29	
P	+++	+++	+++	
Random RR	1.49	1.16	1.24	
RR1	1.09	1.03	1.09	
RRu	2.04	1.30	1.42	
P	+	+	++	
Between Chi			4.07	
Between df			1	
Between P			*	

Appendix Table A2 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
 Lifetime/Current Asthma
 Unadjusted

	NAmer	Continent		Total	
		Europe	Oth/Mult		
N		8	4	12	
NS		7	3	10	
Wt		190.01	519.27	709.28	
Het Chi		16.13	4.95	22.68	
Het df		7	3	11	
Het P		*	N.S.	*	
Fixed RR		1.30	1.17	1.20	
RRl		1.13	1.07	1.11	
RRu		1.50	1.27	1.29	
P		+++	+++	+++	
Random RR		1.30	1.18	1.24	
RRl		1.01	1.03	1.09	
RRu		1.66	1.35	1.42	
P		+	+	++	
Between Chi				1.60	
Between df				1	
Between P				N.S.	
<u>Start year of study</u>					
		<1990	1990-99	unknown	Total
N			8	4	12
NS			7	3	10
Wt		689.74	19.54		709.28
Het Chi		18.20	2.60		22.68
Het df		7	3		11
Het P		*	N.S.		*
Fixed RR		1.21	0.88		1.20
RRl		1.12	0.57		1.11
RRu		1.30	1.38		1.29
P		+++	N.S.		+++
Random RR		1.28	0.88		1.24
RRl		1.11	0.57		1.09
RRu		1.48	1.38		1.42
P		+++	N.S.		++
Between Chi					1.88
Between df					1
Between P					N.S.
<u>Study type</u>					
		CC	Pr	CS	Total
N		4		8	12
NS		3		7	10
Wt	59.12			650.17	709.28
Het Chi	5.71			15.60	22.68
Het df	3			7	11
Het P	N.S.			*	*
Fixed RR	1.39			1.18	1.20
RRl	1.07			1.10	1.11
RRu	1.79			1.28	1.29
P	+			+++	+++
Random RR	1.47			1.21	1.24
RRl	0.94			1.05	1.09
RRu	2.32			1.39	1.42
P	(+)			+	++
Between Chi					1.37
Between df					1
Between P					N.S.

Appendix Table A2 - 7

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest) - Ex-smokers excluded
 Lifetime/Current Asthma
 Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2	BECKE2	NHANE3	PILOTT	PLATTS	ROBBIN											
4	KRONQV															
10	RAHERI															

Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP
JANSON	JANSON	p	JANSON/RAHERI

Adjusted - insufficient data for metaanalysis

REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI	RR	SIG
KRONQV	1	b	1	Never	15	65	Eu:Swe	1996	1999	CS	prv	4	Total	None	childhood	non	*	n
LARSS2	5	b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Hh	NoHhMemb	current	non	*	n

Appendix Table A3 -

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
Lifetime/Current Asthma

This analysis is restricted to results for:

- 1) Biochemical, total, household (overall), parental, or workplace exposure
- 2) Results not by amount of exposure
- 3) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 4) ASTHMA : lifetime, current
- 5) EXPOS : biochemical (cotinine), total, household, workplace
- 6) WHESMO : 2=current, 7=recent, 6=unspec, 10=adult, 1=lifetime, 3=childhood
- 7) WHOHOU : household overall, mother
- 8) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
- 9) For overlapping studies: principal rather than subsidiary studies

Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3

(and those which actually differ from the adjusted results in Appendix Table A1 - 1 are marked 'x' in Section -1) and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A3 - 1

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	CompA1	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
BECKE2	2		b	1	Non	18	40	US:mul	1985	2001	Pr	prv	5	Cot	Low	current	non
BECKE2	4		b	1	Non	18	40	US:mul	1985	2001	Pr	ons	5	Cot	Low	current	non
JAACK3	25	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	7	Hh,Wk	None	current	non
JANSON	1		b	c	<1yr	20	48	multi	1990	2001	CS	prv	9	Hh,Wk	None	current	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	2		b	1	Never	15	69	Eu:Swe	1995	2001	CS	prv	3	Hh	NoHhMemb	childhood	non
LARSS2	4		b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
MISHRA	3		m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
MISHRA	4		f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
NG	6		f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	6	Hh	NoHhMemb	lifetime	non
NHANE3	1		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1		b	1	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
ROBBIN	11	x	b	1	Non	25	99	US:Cal	1977	1993	Pr	ons	4	Hh,Wk	None	adult	never
SAPALD	2		b	1	<20pks	18	60	Eu:Swi	1991	1994	CS	prv	8	Hh,Wk	None	current	non
THORN	2		m	1	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non
THORN	3		f	1	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non

Appendix Table A3 - 2

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Control	Case	Control		
BECKE2	2	b	5	63	-	215	-	0.74	(0.55- 1.00)
*BECKE2	4	b	5	54	-	141	-	0.96	(0.70- 1.32)
Subtotal BECKE2								0.84	(0.67- 1.04)
JAAK3	25	b	7	38	-	196	-	1.97	(1.19- 3.25)
JANSON	1	b	9	-	-	-	-	1.15	(0.84- 1.58)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24- 1.14)
LARSS1	2	b	3	85	-	58	-	1.82	(1.28- 2.58)
LARSS2	4	b	5	-	-	-	-	1.13	(0.80- 1.59)
MISHRA	3	m	12	242	-	835	-	1.20	(0.99- 1.46)
MISHRA	4	f	12	561	-	829	-	1.05	(0.91- 1.21)
Subtotal MISHRA								1.10	(0.98- 1.23)
NG	6	f	6	18	-	15	-	1.18	(0.57- 2.46)
NHANE3	1	b	0	70	1481	370	8660	1.11	(0.85- 1.44)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29- 7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37- 2.78)
Subtotal ORYSZC								1.13	(0.48- 2.67)
PILOTT	1	b	3	-	-	-	-	1.09	(0.65- 1.82)
*ROBBIN	11	b	4	-	-	-	-	1.77	(1.11- 2.83)
SAPALD	2	b	8	96	-	191	-	1.39	(1.04- 1.86)
THORN	2	m	2	-	-	-	-	4.80	(2.00- 11.60)
THORN	3	f	2	-	-	-	-	1.50	(0.80- 3.10)
Subtotal THORN								2.31	(1.35- 3.96)
Partial Totals				1238	1498	2890	8731		
*prospective study									

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
BECKE2	2	b	5	-0.30	42.99	8.41	0.0483
*BECKE2	4	b	5	-0.04	38.19	1.27	0.8008
Subtotal BECKE2				-0.62	81.18	9.68	
JAAK3	25	b	7	0.68	15.22	4.39	0.0082
JANSON	1	b	9	0.14	38.50	0.00	0.3859
JEDRYC	1	f	3	-0.63	6.33	3.81	0.1102
LARSS1	2	b	3	0.60	31.28	6.55	0.0008
LARSS2	4	b	5	0.12	32.57	0.01	0.4855
MISHRA	3	m	12	0.18	101.81	0.17	0.0658
MISHRA	4	f	12	0.05	189.27	1.62	0.5021
Subtotal MISHRA				-0.05	291.08	1.79	
NG	6	f	6	0.17	7.19	0.00	0.6573
NHANE3	1	b	0	0.10	56.25	0.09	0.4488
ORYSZC	1	m	0	0.41	1.45	0.10	0.6256
ORYSZC	2	f	0	0.02	3.79	0.06	0.9727
Subtotal ORYSZC				0.14	5.24	0.16	
PILOTT	1	b	3	0.09	14.49	0.04	0.7428
*ROBBIN	11	b	4	0.57	17.54	3.24	0.0168
SAPALD	2	b	8	0.33	45.46	1.61	0.0264
THORN	2	m	2	1.57	4.97	10.13	0.0005
THORN	3	f	2	0.41	8.37	0.58	0.2406
Subtotal THORN				1.69	13.35	10.71	

Appendix Table A3 - 2

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

	N	18
	NS	14
	Wt	655.68
Het	Chi	42.09
Het	df	17
Het	P	***
Fixed	RR	1.15
	RRl	1.07
	RRu	1.24
	P	+++
Random	RR	1.21
	RRl	1.05
	RRu	1.40
	P	++
Asymm	P	N.S.

Appendix Table A3 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

N	18			
NS	14			
Wt	655.68			
Het Chi	42.09			
Het df	17			
Het P	***			
Fixed RR	1.15			
RR1	1.07			
RRu	1.24			
P	+++			
Random RR	1.21			
RR1	1.05			
RRu	1.40			
P	++			
Asymm P	N.S.			
		<u>Sex</u>		
	both	male	female	Total
N	10	3	5	18
NS	9	3	5	17
Wt	332.49	108.23	214.95	655.68
Het Chi	25.37	9.15	4.12	42.09
Het df	9	2	4	17
Het P	**	*	N.S.	***
Fixed RR	1.18	1.28	1.05	1.15
RR1	1.06	1.06	0.92	1.07
RRu	1.32	1.55	1.20	1.24
P	++	++	N.S.	+++
Random RR	1.22	2.02	1.05	1.21
RR1	1.02	0.73	0.89	1.05
RRu	1.47	5.56	1.23	1.40
P	+	N.S.	N.S.	++
Between Chi				3.45
Between df				2
Between P				N.S.
<u>Asthma definition (lifetime/current)</u>				
	lifetime	current	Total	
N	9	9	18	
NS	7	7	14	
Wt	235.88	419.80	655.68	
Het Chi	31.20	9.88	42.09	
Het df	8	8	17	
Het P	***	N.S.	***	
Fixed RR	1.21	1.12	1.15	
RR1	1.07	1.02	1.07	
RRu	1.38	1.23	1.24	
P	++	+	+++	
Random RR	1.33	1.13	1.21	
RR1	1.02	1.00	1.05	
RRu	1.73	1.28	1.40	
P	+	+	++	
Between Chi			1.00	
Between df			1	
Between P			N.S.	

Appendix Table A3 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Adjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
	N	4	9	5	18
	NS	3	7	4	14
	Wt	154.97	149.45	351.26	655.68
Het	Chi	10.25	19.17	1.28	42.09
Het	df	3	8	4	17
Het	P	*	*	N.S.	***
Fixed	RR	1.01	1.45	1.11	1.15
	RRl	0.86	1.24	1.00	1.07
	RRu	1.18	1.71	1.23	1.24
	P	N.S.	+++	(+)	+++
Random	RR	1.05	1.47	1.11	1.21
	RRl	0.78	1.10	1.00	1.05
	RRu	1.42	1.96	1.23	1.40
	P	N.S.	++	(+)	++
Between	Chi				11.39
Between	df				2
Between	P				**
		<u>Start year of study</u>			
		<1990	1990-99	unknown	Total
	N	4	10	4	18
	NS	3	8	3	14
	Wt	154.97	481.95	18.76	655.68
Het	Chi	10.25	23.75	2.74	42.09
Het	df	3	9	3	17
Het	P	*	**	N.S.	***
Fixed	RR	1.01	1.21	0.89	1.15
	RRl	0.86	1.11	0.57	1.07
	RRu	1.18	1.33	1.40	1.24
	P	N.S.	+++	N.S.	+++
Random	RR	1.05	1.34	0.89	1.21
	RRl	0.78	1.13	0.57	1.05
	RRu	1.42	1.59	1.40	1.40
	P	N.S.	+++	N.S.	++
Between	Chi				5.36
Between	df				2
Between	P				(*)
		<u>Study type</u>			
		CC	Pr	CS	Total
	N	5	3	10	18
	NS	3	2	9	14
	Wt	33.81	98.72	523.14	655.68
Het	Chi	6.31	9.48	13.91	42.09
Het	df	4	2	9	17
Het	P	N.S.	**	N.S.	***
Fixed	RR	1.93	0.96	1.15	1.15
	RRl	1.38	0.78	1.06	1.07
	RRu	2.70	1.16	1.26	1.24
	P	+++	N.S.	++	+++
Random	RR	1.92	1.04	1.18	1.21
	RRl	1.21	0.67	1.04	1.05
	RRu	3.05	1.63	1.33	1.40
	P	++	N.S.	++	++
Between	Chi				12.39
Between	df				2
Between	P				**

Appendix Table A3 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Adjusted

		<u>Ex smokers</u>		Total						
		excluded	included							
	N	13	5	18						
	NS	10	4	14						
	Wt	486.21	169.47	655.68						
Het	Chi	28.08	10.33	42.09						
Het	df	12	4	17						
Het	P	**	*	***						
Fixed	RR	1.20	1.01	1.15						
	RRl	1.10	0.87	1.07						
	RRu	1.32	1.18	1.24						
	P	+++	N.S.	+++						
Random	RR	1.30	1.05	1.21						
	RRl	1.10	0.81	1.05						
	RRu	1.55	1.35	1.40						
	P	++	N.S.	++						
Between	Chi			3.68						
Between	df			1						
Between	P			(*)						
							<u>Exposed group : when Exposed</u>			
		life	adult	child	current	unspec	Total			
	N	1	3	1	12	1	18			
	NS	1	2	1	9	1	14			
	Wt	7.19	30.89	31.28	571.83	14.49	655.68			
Het	Chi	0.00	4.76	0.00	19.91	0.00	42.09			
Het	df	0	2	0	11	0	17			
Het	P	N.S.	(*)	N.S.	*	N.S.	***			
Fixed	RR	1.18	1.99	1.82	1.09	1.09	1.15			
	RRl	0.57	1.40	1.28	1.01	0.65	1.07			
	RRu	2.45	2.83	2.58	1.19	1.82	1.24			
	P	N.S.	+++	+++	+	N.S.	+++			
Random	RR	1.18	2.15	1.82	1.10	1.09	1.21			
	RRl	0.57	1.20	1.28	0.96	0.65	1.05			
	RRu	2.45	3.87	2.58	1.24	1.82	1.40			
	P	N.S.	+	+++	N.S.	N.S.	++			
Between	Chi						17.41			
Between	df						4			
Between	P						**			

Appendix Table A3 - 4

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
BECKE2	1	x	b	1	Non	18	40	US:mul	1985	2001	Pr	prv	0	Cot	Low	current	non
BECKE2	3	x	b	1	Non	18	40	US:mul	1985	2001	Pr	ons	0	Cot	Low	current	non
JAACK3	1	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	0	Hh,Wk	None	current	non
JANSON	1		b	c	<1yr	20	48	multi	1990	2001	CS	prv	9	Hh,Wk	None	current	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	1	x	b	1	Never	15	69	Eu:Swe	1995	2001	CS	prv	0	Hh	NoHhMemb	childhood	non
LARSS2	4		b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
MISHRA	1	x	m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
MISHRA	2	x	f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
NG	3	x	f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	0	Hh	NoHhMemb	lifetime	non
NHANE3	1		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1		b	1	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
ROBBIN	11		b	1	Non	25	99	US:Cal	1977	1993	Pr	ons	4	Hh,Wk	None	adult	never
SAPALD	1	x	b	1	<20pks	18	60	Eu:Swi	1991	1994	CS	prv	0	Hh,Wk	None	current	non
THORN	1	x	b	1	Never	20	50	Eu:Swe	1994	2001	CC	prv	0	Hh	NoHhMemb	last6homes	non

Appendix Table A3 - 5

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Unadjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Control	Case	Control		
BECKE2	1	b	0	63	799	215	2051	0.75	(0.56- 1.01)
*BECKE2	3	b	0	54	799	141	2051	0.98	(0.73- 1.33)
Subtotal BECKE2								0.86	(0.69- 1.06)
JAAK3	1	b	0	38	49	196	436	1.73	(1.09- 2.72)
JANSON	1	b	9	-	-	-	-	1.15	(0.84- 1.58)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24- 1.14)
LARSS1	1	b	0	85	1171	58	1470	1.84	(1.31- 2.59)
LARSS2	4	b	5	-	-	-	-	1.13	(0.80- 1.59)
MISHRA	1	m	0	242	1739	835	8047	1.34	(1.15- 1.56)
MISHRA	2	f	0	561	6037	829	9659	1.08	(0.97- 1.21)
Subtotal MISHRA								1.17	(1.07- 1.28)
NG	3	f	0	18	645	15	604	1.12	(0.56- 2.25)
NHANE3	1	b	0	70	1481	370	8660	1.11	(0.85- 1.44)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29- 7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37- 2.78)
Subtotal ORYSZC								1.13	(0.48- 2.67)
PILOTT	1	b	3	-	-	-	-	1.09	(0.65- 1.82)
*ROBBIN	11	b	4	-	-	-	-	1.77	(1.11- 2.83)
SAPALD	1	b	0	96	1163	191	2747	1.19	(0.92- 1.53)
THORN	1	b	0	33	116	36	302	2.39	(1.42- 4.01)
Partial Totals				1271	14016	2926	36098		
*prospective study									

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
BECKE2	1	b	0	-0.28	44.92	8.79	0.0563
*BECKE2	3	b	0	-0.02	41.89	1.28	0.9121
Subtotal BECKE2				-0.62	86.81	10.07	
JAAK3	1	b	0	0.55	18.48	2.78	0.0191
JANSON	1	b	9	0.14	38.50	0.01	0.3859
JEDRYC	1	f	3	-0.63	6.33	3.98	0.1102
LARSS1	1	b	0	0.61	32.74	6.69	0.0005
LARSS2	4	b	5	0.12	32.57	0.04	0.4855
MISHRA	1	m	0	0.29	165.86	3.06	0.0002
MISHRA	2	f	0	0.08	306.94	1.87	0.1638
Subtotal MISHRA				0.06	472.80	4.94	
NG	3	f	0	0.12	7.97	0.01	0.7419
NHANE3	1	b	0	0.10	56.25	0.18	0.4488
ORYSZC	1	m	0	0.41	1.45	0.09	0.6256
ORYSZC	2	f	0	0.02	3.79	0.07	0.9727
Subtotal ORYSZC				0.11	5.24	0.16	
PILOTT	1	b	3	0.09	14.49	0.07	0.7428
*ROBBIN	11	b	4	0.57	17.54	3.00	0.0168
SAPALD	1	b	0	0.17	59.26	0.01	0.1866
THORN	1	b	0	0.87	14.28	7.24	0.0010

N 17
NS 14

Wt 863.26
Het Chi 39.18
Het df 16
Het P **
Fixed RR 1.17
RRl 1.10
RRu 1.25
P +++
Random RR 1.20
RRl 1.06
RRu 1.37
P ++
Asymm P N.S.

Appendix Table A3 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Unadjusted

	N	17			
	NS	14			
	Wt	863.26			
	Het Chi	39.18			
	Het df	16			
	Het P	**			
Fixed	RR	1.17			
	RRl	1.10			
	RRu	1.25			
	P	+++			
Random	RR	1.20			
	RRl	1.06			
	RRu	1.37			
	P	++			
Asymm	P	N.S.			
			<u>Sex</u>		
		both	male	female	Total
	N	11	2	4	17
	NS	10	2	4	16
	Wt	370.92	167.31	325.03	863.26
	Het Chi	29.97	0.02	3.19	39.18
	Het df	10	1	3	16
	Het P	***	N.S.	N.S.	**
Fixed	RR	1.19	1.34	1.07	1.17
	RRl	1.08	1.15	0.96	1.10
	RRu	1.32	1.56	1.19	1.25
	P	+++	+++	N.S.	+++
Random	RR	1.26	1.34	1.05	1.20
	RRl	1.05	1.15	0.88	1.06
	RRu	1.51	1.56	1.24	1.37
	P	+	+++	N.S.	++
Between	Chi				6.01
Between	df				2
Between	P				*
		<u>Asthma definition (lifetime/current)</u>			
		lifetime	current	Total	
	N	8	9	17	
	NS	7	7	14	
	Wt	257.69	605.56	863.26	
	Het Chi	27.07	12.04	39.18	
	Het df	7	8	16	
	Het P	***	N.S.	**	
Fixed	RR	1.19	1.16	1.17	
	RRl	1.05	1.07	1.10	
	RRu	1.34	1.26	1.25	
	P	++	+++	+++	
Random	RR	1.27	1.18	1.20	
	RRl	0.99	1.03	1.06	
	RRu	1.62	1.34	1.37	
	P	(+)	+	++	
Between	Chi			0.07	
Between	df			1	
Between	P			N.S.	

Appendix Table A3 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Unadjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
	N	4	8	5	17
	NS	3	7	4	14
	Wt	160.60	168.90	533.76	863.26
Het	Chi	9.92	16.71	5.01	39.18
Het	df	3	7	4	16
Het	P	*	*	N.S.	**
Fixed	RR	1.01	1.37	1.16	1.17
	RRl	0.87	1.18	1.07	1.10
	RRu	1.18	1.59	1.27	1.25
	P	N.S.	+++	+++	+++
Random	RR	1.06	1.38	1.17	1.20
	RRl	0.79	1.05	1.05	1.06
	RRu	1.41	1.80	1.31	1.37
	P	N.S.	+	++	++
Between	Chi				7.55
Between	df				2
Between	P				*
		<u>Start year of study</u>			
		<1990	1990-99	unknown	Total
	N	4	9	4	17
	NS	3	8	3	14
	Wt	160.60	683.12	19.54	863.26
Het	Chi	9.92	20.59	2.60	39.18
Het	df	3	8	3	16
Het	P	*	**	N.S.	**
Fixed	RR	1.01	1.22	0.88	1.17
	RRl	0.87	1.13	0.57	1.10
	RRu	1.18	1.32	1.38	1.25
	P	N.S.	+++	N.S.	+++
Random	RR	1.06	1.31	0.88	1.20
	RRl	0.79	1.13	0.57	1.06
	RRu	1.41	1.52	1.38	1.37
	P	N.S.	+++	N.S.	++
Between	Chi				6.09
Between	df				2
Between	P				*
		<u>Study type</u>			
		CC	Pr	CS	Total
	N	4	3	10	17
	NS	3	2	9	14
	Wt	38.00	104.35	720.91	863.26
Het	Chi	2.43	9.26	15.92	39.18
Het	df	3	2	9	16
Het	P	N.S.	**	(*)	**
Fixed	RR	1.84	0.97	1.18	1.17
	RRl	1.34	0.80	1.09	1.10
	RRu	2.53	1.17	1.26	1.25
	P	+++	N.S.	+++	+++
Random	RR	1.84	1.06	1.19	1.20
	RRl	1.34	0.69	1.06	1.06
	RRu	2.53	1.62	1.34	1.37
	P	+++	N.S.	++	++
Between	Chi				11.57
Between	df				2
Between	P				**

Appendix Table A3 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Unadjusted

	Ex smokers		Total
	excluded	included	
N	12	5	17
NS	10	4	14
Wt	688.17	175.09	863.26
Het Chi	25.02	9.99	39.18
Het df	11	4	16
Het P	**	*	**
Fixed RR	1.21	1.02	1.17
RRl	1.13	0.88	1.10
RRu	1.31	1.18	1.25
P	+++	N.S.	+++
Random RR	1.28	1.06	1.20
RRl	1.11	0.83	1.06
RRu	1.49	1.35	1.37
P	++	N.S.	++
Between Chi			4.18
Between df			1
Between P			*

Appendix Table A3 - 7

Adults - Meta-analysis of Biochemical/Total/Household/Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
 Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3	KRONQV	PLATTS														
9	RAHERI															

Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP
JANSON	JANSON	p	JANSON/RAHERI

Adjusted - insufficient data for metaanalysis

REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI	RR	SIG
KRONQV	1	b	1	Never	15	65	Eu:Swe	1996	1999	CS	prv	4	Total	None	childhood	non	*	n
LARSS2	5	b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Hh NoHhMemb		current	non	*	n
PLATTS	1	b	c	Non	15	55	US:Del	1988	1993	CC	prv	0	Total	None	unspec	non	*	n

Appendix Table A4 -

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
Lifetime/Current Asthma

This analysis is restricted to results for:

- 1) Total, household (overall), parental, or workplace exposure
- 2) Childhood exposure
- 3) Results not by amount of exposure
- 4) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 5) ASTHMA : lifetime, current
- 6) EXPOS : biochemical (cotinine), total, household, workplace
- 7) WHOHOU : household overall, mother
- 8) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
- 9) For overlapping studies: principal rather than subsidiary studies

Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3 (and those which actually differ from the adjusted results in Appendix Table A1 - 1 are marked 'x' in Section -1) and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A4 - 1

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
 Lifetime/Current Asthma
 Adjusted

REF	NRR	CompA1	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JANSON	9	x	m	c	<1yr	20	48	multi	1990	2001	CS prv	6	Mothr	NotMoth	childhood	non	
JANSON	10	x	f	c	<1yr	20	48	multi	1990	2001	CS prv	6	Mothr	NotMoth	childhood	non	
LARSS1	2		b	l	Never	15	69	Eu:Swe	1995	2001	CS prv	3	Hh	NoHhMemb	childhood	non	
ROBBIN	10		b	l	Non	25	99	US:Cal	1977	1993	Pr ons	4	Hh,Wk	None	childhood	never	

Appendix Table A4 - 2

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
Lifetime/Current Asthma
 Adjusted

REF	NRR	SEX	ADJ	Numbers		Non-exposed		RR	95.00%CI
				Exposed Case	Control	Case	Control		
JANSON 9		m	6	-	-	-	-	0.81	(0.54- 1.23)
JANSON 10		f	6	-	-	-	-	1.10	(0.78- 1.55)
Subtotal JANSON								0.97	(0.75- 1.26)
LARSS1 2		b	3	85	-	58	-	1.82	(1.28- 2.58)
*ROBBIN 10		b	4	-	-	-	-	1.57	(0.96- 2.58)
Partial Totals				85	0	58	0		
*prospective study									

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JANSON 9		m	6	-0.21	22.67	4.53	0.3157
JANSON 10		f	6	0.10	32.58	0.65	0.5864
Subtotal JANSON				-0.59	55.26	5.17	
LARSS1 2		b	3	0.60	31.28	4.11	0.0008
*ROBBIN 10		b	4	0.45	15.72	0.73	0.0737

N 4
NS 3

Wt 102.26
 Het Chi 10.01
 Het df 3
 Het P *
 Fixed RR 1.27
 RR1 1.04
 RRu 1.54
 P +
 Random RR 1.26
 RR1 0.88
 RRu 1.81
 P N.S.
 Asymm P N.S.

Appendix Table A4 - 3

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
Lifetime/Current Asthma
 Adjusted

N	4			
NS	3			
Wt	102.26			
Het Chi	10.01			
Het df	3			
Het P	*			
Fixed RR	1.27			
RR1	1.04			
RRu	1.54			
P	+			
Random RR	1.26			
RR1	0.88			
RRu	1.81			
P	N.S.			
Asymm P	N.S.			
		<u>Sex</u>		
	both	male	female	Total
N	2	1	1	4
NS	2	1	1	3
Wt	47.00	22.67	32.58	102.26
Het Chi	0.23	0.00	0.00	10.01
Het df	1	0	0	3
Het P	N.S.	N.S.	N.S.	*
Fixed RR	1.73	0.81	1.10	1.27
RR1	1.30	0.54	0.78	1.04
RRu	2.31	1.22	1.55	1.54
P	+++	N.S.	N.S.	+
Random RR	1.73	0.81	1.10	1.26
RR1	1.30	0.54	0.78	0.88
RRu	2.31	1.22	1.55	1.81
P	+++	N.S.	N.S.	N.S.
Between Chi				9.79
Between df				2
Between P				**
<u>Asthma definition (lifetime/current)</u>				
	lifetime	current	Total	
N	2	2	4	
NS	2	1	3	
Wt	47.00	55.26	102.26	
Het Chi	0.23	1.25	10.01	
Het df	1	1	3	
Het P	N.S.	N.S.	*	
Fixed RR	1.73	0.97	1.27	
RR1	1.30	0.75	1.04	
RRu	2.31	1.26	1.54	
P	+++	N.S.	+	
Random RR	1.73	0.96	1.26	
RR1	1.30	0.72	0.88	
RRu	2.31	1.30	1.81	
P	+++	N.S.	N.S.	
Between Chi			8.53	
Between df			1	
Between P			**	

Appendix Table A4 - 3

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
Lifetime/Current Asthma
 Adjusted

		<u>Continent</u>			Total
		NAmer	Europe	Oth/Mult	
	N	1	1	2	4
	NS	1	1	1	3
	Wt	15.72	31.28	55.26	102.26
Het	Chi	0.00	0.00	1.25	10.01
Het	df	0	0	1	3
Het	P	N.S.	N.S.	N.S.	*
Fixed	RR	1.57	1.82	0.97	1.27
	RRl	0.96	1.28	0.75	1.04
	RRu	2.57	2.58	1.26	1.54
	P	(+)	+++	N.S.	+
Random	RR	1.57	1.82	0.96	1.26
	RRl	0.96	1.28	0.72	0.88
	RRu	2.57	2.58	1.30	1.81
	P	(+)	+++	N.S.	N.S.
Between	Chi				8.76
Between	df				2
Between	P				*

		<u>Start year of study</u>			Total
		<1990	1990-99	unknown	
	N	1	3		4
	NS	1	2		3
	Wt	15.72	86.53		102.26
Het	Chi	0.00	9.16		10.01
Het	df	0	2		3
Het	P	N.S.	*		*
Fixed	RR	1.57	1.22		1.27
	RRl	0.96	0.99		1.04
	RRu	2.57	1.50		1.54
	P	(+)	(+)		+
Random	RR	1.57	1.19		1.26
	RRl	0.96	0.75		0.88
	RRu	2.57	1.87		1.81
	P	(+)	N.S.		N.S.
Between	Chi				0.86
Between	df				1
Between	P				N.S.

		<u>Study type</u>			Total
		CC	Pr	CS	
	N		1	3	4
	NS		1	2	3
	Wt		15.72	86.53	102.26
Het	Chi		0.00	9.16	10.01
Het	df		0	2	3
Het	P		N.S.	*	*
Fixed	RR		1.57	1.22	1.27
	RRl		0.96	0.99	1.04
	RRu		2.57	1.50	1.54
	P		(+)	(+)	+
Random	RR		1.57	1.19	1.26
	RRl		0.96	0.75	0.88
	RRu		2.57	1.87	1.81
	P		(+)	N.S.	N.S.
Between	Chi				0.86
Between	df				1
Between	P				N.S.

Appendix Table A4 - 3

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
Lifetime/Current Asthma
 Adjusted

		<u>Ex smokers</u>		Total
		excluded	included	
	N	3	1	4
	NS	2	1	3
	Wt	86.53	15.72	102.26
Het	Chi	9.16	0.00	10.01
Het	df	2	0	3
Het	P	*	N.S.	*
Fixed	RR	1.22	1.57	1.27
	RRl	0.99	0.96	1.04
	RRu	1.50	2.57	1.54
	P	(+)	(+)	+
Random	RR	1.19	1.57	1.26
	RRl	0.75	0.96	0.88
	RRu	1.87	2.57	1.81
	P	N.S.	(+)	N.S.
Between	Chi			0.86
Between	df			1
Between	P			N.S.

Appendix Table A4 - 4

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JANSON	9		m	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Mothr	NotMoth	childhood	non
JANSON	10		f	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Mothr	NotMoth	childhood	non
LARSS1	1	x	b	l	Never	15	69	Eu:Swe	1995	2001	CS	prv	0	Hh	NoHhMemb	childhood	non
ROBBIN	10		b	l	Non	25	99	US:Cal	1977	1993	Pr	ons	4	Hh,Wk	None	childhood	never

Appendix Table A4 - 5

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	SEX	ADJ	Numbers				RR	95.00%CI	
				Exposed		Non-exposed				
				Case	Control	Case	Control			
JANSON 9		m	6	-	-	-	-	0.81	(0.54- 1.23)	
JANSON 10		f	6	-	-	-	-	1.10	(0.78- 1.55)	
Subtotal JANSON								0.97	(0.75- 1.26)	
LARSS1 1		b	0	85	1171	58	1470	1.84	(1.31- 2.59)	
*ROBBIN 10		b	4	-	-	-	-	1.57	(0.96- 2.58)	
Partial Totals				85	1171	58	1470			
*prospective study										

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JANSON 9		m	6	-0.21	22.67	4.70	0.3157
JANSON 10		f	6	0.10	32.58	0.73	0.5864
Subtotal JANSON				-0.60	55.26	5.43	
LARSS1 1		b	0	0.61	32.74	4.36	0.0005
*ROBBIN 10		b	4	0.45	15.72	0.67	0.0737

N 4
 NS 3

Wt 103.72
 Het Chi 10.46
 Het df 3
 Het P *
 Fixed RR 1.28
 RR1 1.05
 RRu 1.55
 P +
 Random RR 1.27
 RR1 0.88
 RRu 1.83
 P N.S.
 Asymm P N.S.

Appendix Table A4 - 6

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
Lifetime/Current Asthma
 Unadjusted

N	4			
NS	3			
Wt	103.72			
Het Chi	10.46			
Het df	3			
Het P	*			
Fixed RR	1.28			
RRl	1.05			
RRu	1.55			
P	+			
Random RR	1.27			
RRl	0.88			
RRu	1.83			
P	N.S.			
Asymm P	N.S.			
		<u>Sex</u>		
	both	male	female	Total
N	2	1	1	4
NS	2	1	1	3
Wt	48.47	22.67	32.58	103.72
Het Chi	0.27	0.00	0.00	10.46
Het df	1	0	0	3
Het P	N.S.	N.S.	N.S.	*
Fixed RR	1.75	0.81	1.10	1.28
RRl	1.32	0.54	0.78	1.05
RRu	2.32	1.22	1.55	1.55
P	+++	N.S.	N.S.	+
Random RR	1.75	0.81	1.10	1.27
RRl	1.32	0.54	0.78	0.88
RRu	2.32	1.22	1.55	1.83
P	+++	N.S.	N.S.	N.S.
Between Chi				10.19
Between df				2
Between P				**

Asthma definition (lifetime/current)
 lifetime current Total

N	2	2	4
NS	2	1	3
Wt	48.47	55.26	103.72
Het Chi	0.27	1.25	10.46
Het df	1	1	3
Het P	N.S.	N.S.	*
Fixed RR	1.75	0.97	1.28
RRl	1.32	0.75	1.05
RRu	2.32	1.26	1.55
P	+++	N.S.	+
Random RR	1.75	0.96	1.27
RRl	1.32	0.72	0.88
RRu	2.32	1.30	1.83
P	+++	N.S.	N.S.
Between Chi			8.94
Between df			1
Between P			**

Appendix Table A4 - 6

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
Lifetime/Current Asthma
 Unadjusted

		<u>Continent</u>			Total
		NAmer	Europe	Oth/Mult	
	N	1	1	2	4
	NS	1	1	1	3
	Wt	15.72	32.74	55.26	103.72
Het	Chi	0.00	0.00	1.25	10.46
Het	df	0	0	1	3
Het	P	N.S.	N.S.	N.S.	*
Fixed	RR	1.57	1.84	0.97	1.28
	RRl	0.96	1.31	0.75	1.05
	RRu	2.57	2.59	1.26	1.55
	P	(+)	+++	N.S.	+
Random	RR	1.57	1.84	0.96	1.27
	RRl	0.96	1.31	0.72	0.88
	RRu	2.57	2.59	1.30	1.83
	P	(+)	+++	N.S.	N.S.
Between	Chi				9.21
Between	df				2
Between	P				*

		<u>Start year of study</u>			Total
		<1990	1990-99	unknown	
	N	1	3		4
	NS	1	2		3
	Wt	15.72	88.00		103.72
Het	Chi	0.00	9.67		10.46
Het	df	0	2		3
Het	P	N.S.	**		*
Fixed	RR	1.57	1.23		1.28
	RRl	0.96	1.00		1.05
	RRu	2.57	1.52		1.55
	P	(+)	(+)		+
Random	RR	1.57	1.19		1.27
	RRl	0.96	0.75		0.88
	RRu	2.57	1.89		1.83
	P	(+)	N.S.		N.S.
Between	Chi				0.79
Between	df				1
Between	P				N.S.

		<u>Study type</u>			Total
		CC	Pr	CS	
	N		1	3	4
	NS		1	2	3
	Wt		15.72	88.00	103.72
Het	Chi		0.00	9.67	10.46
Het	df		0	2	3
Het	P		N.S.	**	*
Fixed	RR		1.57	1.23	1.28
	RRl		0.96	1.00	1.05
	RRu		2.57	1.52	1.55
	P		(+)	(+)	+
Random	RR		1.57	1.19	1.27
	RRl		0.96	0.75	0.88
	RRu		2.57	1.89	1.83
	P		(+)	N.S.	N.S.
Between	Chi				0.79
Between	df				1
Between	P				N.S.

Appendix Table A4 - 6

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
Lifetime/Current Asthma
 Unadjusted

		<u>Ex smokers</u>		Total
		excluded	included	
	N	3	1	4
	NS	2	1	3
	Wt	88.00	15.72	103.72
Het	Chi	9.67	0.00	10.46
Het	df	2	0	3
Het	P	**	N.S.	*
Fixed	RR	1.23	1.57	1.28
	RRl	1.00	0.96	1.05
	RRu	1.52	2.57	1.55
	P	(+)	(+)	+
Random	RR	1.19	1.57	1.27
	RRl	0.75	0.96	0.88
	RRu	1.89	2.57	1.83
	P	N.S.	(+)	N.S.
Between	Chi			0.79
Between	df			1
Between	P			N.S.

Appendix Table A4 - 7

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood
Lifetime/Current Asthma
 Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2	BECKE2	JAAKK3	JEDRYC	LARSS2	MISHRA		NG	NHANE3	ORYSZC	PILOTT	PLATTS	SAPALD	THORN			
4	KRONQV															
9	RAHERI															

Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP
JANSON	JANSON	p	JANSON/RAHERI

Adjusted - insufficient data for metaanalysis

REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STYYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI	RR	SIG
KRONQV	1	b	1	Never	15	65	Eu:Swe	1996	1999	CS	prv	4	Total	None	childhood	non	*	n

Appendix Table A5 -

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
Lifetime/Current Asthma

This analysis is restricted to results for:

- 1) Total, household (overall), parental, or workplace exposure
- 2) Childhood exposure
- 3) Results not by amount of exposure
- 4) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 5) ASTHMA : lifetime, current
- 6) EXPOS : biochemical (cotinine), total, household, workplace
- 7) WHOHOU : household overall, father
- 8) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
- 9) For overlapping studies: principal rather than subsidiary studies

Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3

(and those which actually differ from the adjusted results in Appendix Table A4 - 1 are marked 'x' in Section -1) and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A5 - 1

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	CompA4	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JANSON	7	x	m	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Fathr	NotFathr	childhood	non
JANSON	8	x	f	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Fathr	NotFathr	childhood	non
LARSS1	2		b	l	Never	15	69	Eu:Swe	1995	2001	CS	prv	3	Hh	NoHhMemb	childhood	non
ROBBIN	10		b	l	Non	25	99	US:Cal	1977	1993	Pr	ons	4	Hh,Wk	None	childhood	never

Appendix Table A5 - 2

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	SEX	ADJ	Numbers				RR	95.00%CI
				Exposed		Non-exposed			
				Case	Control	Case	Control		
JANSON 7		m	6	-	-	-	-	1.08	(0.76- 1.54)
JANSON 8		f	6	-	-	-	-	0.67	(0.49- 0.91)
Subtotal JANSON								0.82	(0.65- 1.04)
LARSS1 2		b	3	85	-	58	-	1.82	(1.28- 2.58)
*ROBBIN 10		b	4	-	-	-	-	1.57	(0.96- 2.58)
Partial Totals				85	0	58	0		
*prospective study									

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JANSON 7		m	6	0.08	30.81	0.02	0.6692
JANSON 8		f	6	-0.40	40.10	10.16	0.0112
Subtotal JANSON				-0.53	70.91	10.18	
LARSS1 2		b	3	0.60	31.28	7.69	0.0008
*ROBBIN 10		b	4	0.45	15.72	1.91	0.0737

N 4
 NS 3

Wt 117.90
 Het Chi 19.78
 Het df 3
 Het P ***
 Fixed RR 1.11
 RR1 0.93
 RRu 1.33
 P N.S.
 Random RR 1.18
 RR1 0.74
 RRu 1.90
 P N.S.
 Asymm P N.S.

Appendix Table A5 - 3

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
 Lifetime/Current Asthma
 Adjusted

	N	4		
	NS	3		
	Wt	117.90		
	Het Chi	19.78		
	Het df	3		
	Het P	***		
Fixed	RR	1.11		
	RRl	0.93		
	RRu	1.33		
	P	N.S.		
Random	RR	1.18		
	RRl	0.74		
	RRu	1.90		
	P	N.S.		
Asymm	P	N.S.		
		<u>Sex</u>		
		both	male	female
				Total
	N	2	1	1
	NS	2	1	1
	Wt	47.00	30.81	40.10
	Het Chi	0.23	0.00	0.00
	Het df	1	0	0
	Het P	N.S.	N.S.	N.S.
Fixed	RR	1.73	1.08	0.67
	RRl	1.30	0.76	0.49
	RRu	2.31	1.54	0.91
	P	+++	N.S.	-
Random	RR	1.73	1.08	0.67
	RRl	1.30	0.76	0.49
	RRu	2.31	1.54	0.91
	P	+++	N.S.	-
Between	Chi			19.55
Between	df			2
Between	P			***
		<u>Asthma definition (lifetime/current)</u>		
		lifetime	current	Total
	N	2	2	4
	NS	2	1	3
	Wt	47.00	70.91	117.90
	Het Chi	0.23	3.97	19.78
	Het df	1	1	3
	Het P	N.S.	*	***
Fixed	RR	1.73	0.82	1.11
	RRl	1.30	0.65	0.93
	RRu	2.31	1.04	1.33
	P	+++	N.S.	N.S.
Random	RR	1.73	0.84	1.18
	RRl	1.30	0.53	0.74
	RRu	2.31	1.35	1.90
	P	+++	N.S.	N.S.
Between	Chi			15.58
Between	df			1
Between	P			***

Appendix Table A5 - 3

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
Lifetime/Current Asthma
Adjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
	N	1	1	2	4
	NS	1	1	1	3
	Wt	15.72	31.28	70.91	117.90
Het	Chi	0.00	0.00	3.97	19.78
Het	df	0	0	1	3
Het	P	N.S.	N.S.	*	***
Fixed	RR	1.57	1.82	0.82	1.11
	RRl	0.96	1.28	0.65	0.93
	RRu	2.57	2.58	1.04	1.33
	P	(+)	+++	N.S.	N.S.
Random	RR	1.57	1.82	0.84	1.18
	RRl	0.96	1.28	0.53	0.74
	RRu	2.57	2.58	1.35	1.90
	P	(+)	+++	N.S.	N.S.
Between	Chi				15.81
Between	df				2
Between	P				***
		<u>Start year of study</u>			
		<1990	1990-99	unknown	Total
	N	1	3		4
	NS	1	2		3
	Wt	15.72	102.18		117.90
Het	Chi	0.00	17.58		19.78
Het	df	0	2		3
Het	P	N.S.	***		***
Fixed	RR	1.57	1.05		1.11
	RRl	0.96	0.87		0.93
	RRu	2.57	1.28		1.33
	P	(+)	N.S.		N.S.
Random	RR	1.57	1.09		1.18
	RRl	0.96	0.61		0.74
	RRu	2.57	1.94		1.90
	P	(+)	N.S.		N.S.
Between	Chi				2.20
Between	df				1
Between	P				N.S.
		<u>Study type</u>			
		CC	Pr	CS	Total
	N		1	3	4
	NS		1	2	3
	Wt		15.72	102.18	117.90
Het	Chi		0.00	17.58	19.78
Het	df		0	2	3
Het	P		N.S.	***	***
Fixed	RR		1.57	1.05	1.11
	RRl		0.96	0.87	0.93
	RRu		2.57	1.28	1.33
	P		(+)	N.S.	N.S.
Random	RR		1.57	1.09	1.18
	RRl		0.96	0.61	0.74
	RRu		2.57	1.94	1.90
	P		(+)	N.S.	N.S.
Between	Chi				2.20
Between	df				1
Between	P				N.S.

Appendix Table A5 - 3

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
 Lifetime/Current Asthma
 Adjusted

	Ex smokers		Total
	excluded	included	
N	3	1	4
NS	2	1	3
Wt	102.18	15.72	117.90
Het Chi	17.58	0.00	19.78
Het df	2	0	3
Het P	***	N.S.	***
Fixed RR	1.05	1.57	1.11
RRl	0.87	0.96	0.93
RRu	1.28	2.57	1.33
P	N.S.	(+)	N.S.
Random RR	1.09	1.57	1.18
RRl	0.61	0.96	0.74
RRu	1.94	2.57	1.90
P	N.S.	(+)	N.S.
Between Chi			2.20
Between df			1
Between P			N.S.

Appendix Table A5 - 4

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JANSON	7		m	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Fathr	NotFathr	childhood	non
JANSON	8		f	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Fathr	NotFathr	childhood	non
LARSS1	1	x	b	l	Never	15	69	Eu:Swe	1995	2001	CS	prv	0	Hh	NoHhMemb	childhood	non
ROBBIN	10		b	l	Non	25	99	US:Cal	1977	1993	Pr	ons	4	Hh,Wk	None	childhood	never

Appendix Table A5 - 5

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	SEX	ADJ	Numbers		Non-exposed		RR	95.00%CI
				Exposed Case	Control	Case	Control		
JANSON 7		m	6	-	-	-	-	1.08	(0.76- 1.54)
JANSON 8		f	6	-	-	-	-	0.67	(0.49- 0.91)
Subtotal JANSON								0.82	(0.65- 1.04)
LARSS1 1		b	0	85	1171	58	1470	1.84	(1.31- 2.59)
*ROBBIN 10		b	4	-	-	-	-	1.57	(0.96- 2.58)
Partial Totals				85	1171	58	1470		
*prospective study									

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JANSON 7		m	6	0.08	30.81	0.04	0.6692
JANSON 8		f	6	-0.40	40.10	10.53	0.0112
Subtotal JANSON				-0.55	70.91	10.57	
LARSS1 1		b	0	0.61	32.74	8.11	0.0005
*ROBBIN 10		b	4	0.45	15.72	1.81	0.0737

N 4
 NS 3

Wt 119.37
 Het Chi 20.48
 Het df 3
 Het P ***
 Fixed RR 1.12
 RR1 0.93
 RRu 1.34
 P N.S.
 Random RR 1.19
 RR1 0.74
 RRu 1.92
 P N.S.
 Asymm P N.S.

Appendix Table A5 - 6

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
 Lifetime/Current Asthma
 Unadjusted

N	4				
NS	3				
Wt	119.37				
Het Chi	20.48				
Het df	3				
Het P	***				
Fixed RR	1.12				
RRl	0.93				
RRu	1.34				
P	N.S.				
Random RR	1.19				
RRl	0.74				
RRu	1.92				
P	N.S.				
Asymm P	N.S.				
		<u>Sex</u>			
		both	male	female	Total
N	2		1	1	4
NS	2		1	1	3
Wt	48.47	30.81	40.10	119.37	
Het Chi	0.27	0.00	0.00	20.48	
Het df	1	0	0	3	
Het P	N.S.	N.S.	N.S.	***	
Fixed RR	1.75	1.08	0.67	1.12	
RRl	1.32	0.76	0.49	0.93	
RRu	2.32	1.54	0.91	1.34	
P	+++	N.S.	-	N.S.	
Random RR	1.75	1.08	0.67	1.19	
RRl	1.32	0.76	0.49	0.74	
RRu	2.32	1.54	0.91	1.92	
P	+++	N.S.	-	N.S.	
Between Chi				20.22	
Between df				2	
Between P				***	
<u>Asthma definition (lifetime/current)</u>					
		lifetime	current	Total	
N	2		2	4	
NS	2		1	3	
Wt	48.47	70.91	119.37		
Het Chi	0.27	3.97	20.48		
Het df	1	1	3		
Het P	N.S.	*	***		
Fixed RR	1.75	0.82	1.12		
RRl	1.32	0.65	0.93		
RRu	2.32	1.04	1.34		
P	+++	N.S.	N.S.		
Random RR	1.75	0.84	1.19		
RRl	1.32	0.53	0.74		
RRu	2.32	1.35	1.92		
P	+++	N.S.	N.S.		
Between Chi			16.25		
Between df			1		
Between P			***		

Appendix Table A5 - 6

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
Lifetime/Current Asthma
Unadjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
	N	1	1	2	4
	NS	1	1	1	3
	Wt	15.72	32.74	70.91	119.37
Het	Chi	0.00	0.00	3.97	20.48
Het	df	0	0	1	3
Het	P	N.S.	N.S.	*	***
Fixed	RR	1.57	1.84	0.82	1.12
	RRl	0.96	1.31	0.65	0.93
	RRu	2.57	2.59	1.04	1.34
	P	(+)	+++	N.S.	N.S.
Random	RR	1.57	1.84	0.84	1.19
	RRl	0.96	1.31	0.53	0.74
	RRu	2.57	2.59	1.35	1.92
	P	(+)	+++	N.S.	N.S.
Between	Chi				16.51
Between	df				2
Between	P				***
		<u>Start year of study</u>			
		<1990	1990-99	unknown	Total
	N	1	3		4
	NS	1	2		3
	Wt	15.72	103.65		119.37
Het	Chi	0.00	18.40		20.48
Het	df	0	2		3
Het	P	N.S.	***		***
Fixed	RR	1.57	1.06		1.12
	RRl	0.96	0.88		0.93
	RRu	2.57	1.29		1.34
	P	(+)	N.S.		N.S.
Random	RR	1.57	1.10		1.19
	RRl	0.96	0.61		0.74
	RRu	2.57	1.97		1.92
	P	(+)	N.S.		N.S.
Between	Chi				2.08
Between	df				1
Between	P				N.S.
		<u>Study type</u>			
		CC	Pr	CS	Total
	N		1	3	4
	NS		1	2	3
	Wt		15.72	103.65	119.37
Het	Chi		0.00	18.40	20.48
Het	df		0	2	3
Het	P		N.S.	***	***
Fixed	RR		1.57	1.06	1.12
	RRl		0.96	0.88	0.93
	RRu		2.57	1.29	1.34
	P		(+)	N.S.	N.S.
Random	RR		1.57	1.10	1.19
	RRl		0.96	0.61	0.74
	RRu		2.57	1.97	1.92
	P		(+)	N.S.	N.S.
Between	Chi				2.08
Between	df				1
Between	P				N.S.

Appendix Table A5 - 6

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
 Lifetime/Current Asthma
 Unadjusted

	Ex smokers		Total
	excluded	included	
N	3	1	4
NS	2	1	3
Wt	103.65	15.72	119.37
Het Chi	18.40	0.00	20.48
Het df	2	0	3
Het P	***	N.S.	***
Fixed RR	1.06	1.57	1.12
RRl	0.88	0.96	0.93
RRu	1.29	2.57	1.34
P	N.S.	(+)	N.S.
Random RR	1.10	1.57	1.19
RRl	0.61	0.96	0.74
RRu	1.97	2.57	1.92
P	N.S.	(+)	N.S.
Between Chi			2.08
Between df			1
Between P			N.S.

Appendix Table A5 - 7

Adults - Meta-analysis of Total/Household/Workplace Exposure in Childhood (preferring father)
Lifetime/Current Asthma
 Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2	BECKE2	JAAKK3	JEDRYC	LARSS2	MISHRA		NG	NHANE3	ORYSZC	PILOTT	PLATTS	SAPALD	THORN			
4	KRONQV															
9	RAHERI															

Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP
JANSON	JANSON	p	JANSON/RAHERI

Adjusted - insufficient data for metaanalysis

REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STYYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI	RR	SIG
KRONQV	1	b	1	Never	15	65	Eu:Swe	1996	1999	CS	prv	4	Total	None	childhood	non	*	n

Appendix Table A6 -

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
Current/Lifetime Asthma

This analysis is restricted to results for:

- 1) Biochemical, total, household (overall), parental, or workplace exposure
- 2) Results not by amount of exposure
- 3) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 4) ASTHMA : current, lifetime
- 5) EXPOS : biochemical (cotinine), total, household, workplace
- 6) WHESMO : 3=childhood, 1=lifetime, 10=adult, 7=recent, 6=unspec, 2=current
- 7) WHOHOU : household overall, mother
- 8) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
- 9) For overlapping studies: principal rather than subsidiary studies

Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3

(and those which actually differ from the adjusted results in Appendix Table A1 - 1 are marked 'x' in Section -1) and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A6 - 1

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
 Current/Lifetime Asthma
 Adjusted

REF	NRR	CompA1	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
BECKE2	2		b	1	Non	18	40	US:mul	1985	2001	Pr	prv	5	Cot	Low	current	non
BECKE2	4		b	1	Non	18	40	US:mul	1985	2001	Pr	ons	5	Cot	Low	current	non
JAACK3	34		b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	7	Hh,Wk	None	lifetime	non
JANSON	1		b	c	<1yr	20	48	multi	1990	2001	CS	prv	9	Hh,Wk	None	current	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	2		b	1	Never	15	69	Eu:Swe	1995	2001	CS	prv	3	Hh	NoHhMemb	childhood	non
LARSS2	4		b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
MISHRA	3		m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
MISHRA	4		f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
NG	6		f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	6	Hh	NoHhMemb	lifetime	non
NHANE3	1		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1		b	1	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
ROBBIN	10		b	1	Non	25	99	US:Cal	1977	1993	Pr	ons	4	Hh,Wk	None	childhood	never
SAPALD	7	x	b	c	<20pks	18	60	Eu:Swi	1991	1994	CS	prv	8	Hh,Wk	None	current	non
THORN	2		m	1	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non
THORN	3		f	1	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non

Appendix Table A6 - 2

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
Current/Lifetime Asthma
Adjusted

REF	NRR	SEX	ADJ	Numbers				RR	95.00%CI	
				Exposed		Non-exposed				
				Case	Control	Case	Control			
BECKE2 2		b	5	63	-	215	-	0.74	(0.55-	1.00)
*BECKE2 4		b	5	54	-	141	-	0.96	(0.70-	1.32)
Subtotal BECKE2								0.84	(0.67-	1.04)
JAAK3 34		b	7	135	-	104	-	1.40	(0.99-	1.96)
JANSON 1		b	9	-	-	-	-	1.15	(0.84-	1.58)
JEDRYC 1		f	3	-	-	-	-	0.53	(0.24-	1.14)
LARSS1 2		b	3	85	-	58	-	1.82	(1.28-	2.58)
LARSS2 4		b	5	-	-	-	-	1.13	(0.80-	1.59)
MISHRA 3		m	12	242	-	835	-	1.20	(0.99-	1.46)
MISHRA 4		f	12	561	-	829	-	1.05	(0.91-	1.21)
Subtotal MISHRA								1.10	(0.98-	1.23)
NG 6		f	6	18	-	15	-	1.18	(0.57-	2.46)
NHANE3 1		b	0	70	1481	370	8660	1.11	(0.85-	1.44)
ORYSZC 1		m	0	3	4	14	28	1.50	(0.29-	7.65)
ORYSZC 2		f	0	8	13	26	43	1.02	(0.37-	2.78)
Subtotal ORYSZC								1.13	(0.48-	2.67)
PILOTT 1		b	3	-	-	-	-	1.09	(0.65-	1.82)
*ROBBIN 10		b	4	-	-	-	-	1.57	(0.96-	2.58)
SAPALD 7		b	8	-	-	-	-	1.62	(1.10-	2.37)
THORN 2		m	2	-	-	-	-	4.80	(2.00-	11.60)
THORN 3		f	2	-	-	-	-	1.50	(0.80-	3.10)
Subtotal THORN								2.31	(1.35-	3.96)
Partial Totals				1239	1498	2607	8731			
*prospective study										
REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps			
BECKE2 2		b	5	-0.30	42.99	8.18	0.0483			
*BECKE2 4		b	5	-0.04	38.19	1.18	0.8008			
Subtotal BECKE2				-0.61	81.18	9.36				
JAAK3 34		b	7	0.34	32.94	1.34	0.0535			
JANSON 1		b	9	0.14	38.50	0.00	0.3859			
JEDRYC 1		f	3	-0.63	6.33	3.75	0.1102			
LARSS1 2		b	3	0.60	31.28	6.73	0.0008			
LARSS2 4		b	5	0.12	32.57	0.01	0.4855			
MISHRA 3		m	12	0.18	101.81	0.23	0.0658			
MISHRA 4		f	12	0.05	189.27	1.41	0.5021			
Subtotal MISHRA				-0.04	291.08	1.64				
NG 6		f	6	0.17	7.19	0.01	0.6573			
NHANE3 1		b	0	0.10	56.25	0.07	0.4488			
ORYSZC 1		m	0	0.41	1.45	0.11	0.6256			
ORYSZC 2		f	0	0.02	3.79	0.05	0.9727			
Subtotal ORYSZC				0.15	5.24	0.16				
PILOTT 1		b	3	0.09	14.49	0.03	0.7428			
*ROBBIN 10		b	4	0.45	15.72	1.57	0.0737			
SAPALD 7		b	8	0.48	26.08	3.15	0.0138			
THORN 2		m	2	1.57	4.97	10.22	0.0005			
THORN 3		f	2	0.41	8.37	0.61	0.2406			
Subtotal THORN				1.70	13.35	10.83				

Appendix Table A6 - 2

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
 Current/Lifetime Asthma
 Adjusted

	N	18
	NS	14
	Wt	652.19
Het	Chi	38.63
Het	df	17
Het	P	**
Fixed	RR	1.14
	RRl	1.06
	RRu	1.24
	P	+++
Random	RR	1.20
	RRl	1.04
	RRu	1.37
	P	++
Asymm	P	N.S.

Appendix Table A6 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
 Current/Lifetime Asthma
 Adjusted

		Continent			
		NAmer	Europe	Oth/Mult	Total
	N	4	9	5	18
	NS	3	7	4	14
	Wt	153.15	147.78	351.26	652.19
Het	Chi	7.71	18.02	1.28	38.63
Het	df	3	8	4	17
Het	P	(*)	*	N.S.	**
Fixed	RR	0.99	1.44	1.11	1.14
	RRl	0.84	1.23	1.00	1.06
	RRu	1.16	1.70	1.23	1.24
	P	N.S.	+++	(+)	+++
Random	RR	1.01	1.44	1.11	1.20
	RRl	0.78	1.09	1.00	1.04
	RRu	1.32	1.89	1.23	1.37
	P	N.S.	++	(+)	++
Between	Chi				11.62
Between	df				2
Between	P				**
		Start year of study			
		<1990	1990-99	unknown	Total
	N	4	10	4	18
	NS	3	8	3	14
	Wt	153.15	480.28	18.76	652.19
Het	Chi	7.71	22.19	2.74	38.63
Het	df	3	9	3	17
Het	P	(*)	**	N.S.	**
Fixed	RR	0.99	1.21	0.89	1.14
	RRl	0.84	1.11	0.57	1.06
	RRu	1.16	1.32	1.40	1.24
	P	N.S.	+++	N.S.	+++
Random	RR	1.01	1.33	0.89	1.20
	RRl	0.78	1.12	0.57	1.04
	RRu	1.32	1.56	1.40	1.37
	P	N.S.	+++	N.S.	++
Between	Chi				6.00
Between	df				2
Between	P				*
		Study type			
		CC	Pr	CS	Total
	N	5	3	10	18
	NS	3	2	9	14
	Wt	51.53	96.90	503.76	652.19
Het	Chi	7.37	6.59	15.33	38.63
Het	df	4	2	9	17
Het	P	N.S.	*	(*)	**
Fixed	RR	1.56	0.93	1.15	1.14
	RRl	1.19	0.76	1.06	1.06
	RRu	2.05	1.13	1.26	1.24
	P	++	N.S.	++	+++
Random	RR	1.69	0.99	1.19	1.20
	RRl	1.06	0.68	1.04	1.04
	RRu	2.69	1.45	1.35	1.37
	P	+	N.S.	+	++
Between	Chi				9.33
Between	df				2
Between	P				**

Appendix Table A6 - 3

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
 Current/Lifetime Asthma
 Adjusted

	Ex smokers		Total
	excluded	included	
N	13	5	18
NS	10	4	14
Wt	484.55	167.65	652.19
Het Chi	26.50	7.84	38.63
Het df	12	4	17
Het P	**	(*)	**
Fixed RR	1.20	1.00	1.14
RRl	1.10	0.86	1.06
RRu	1.31	1.16	1.24
P	+++	N.S.	+++
Random RR	1.29	1.02	1.20
RRl	1.09	0.82	1.04
RRu	1.52	1.27	1.37
P	++	N.S.	++
Between Chi			4.29
Between df			1
Between P			*

Appendix Table A6 - 4

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
 Current/Lifetime Asthma
 Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
BECKE2	1	x	b	1	Non	18	40	US:mul	1985	2001	Pr	prv	0	Cot	Low	current	non
BECKE2	3	x	b	1	Non	18	40	US:mul	1985	2001	Pr	ons	0	Cot	Low	current	non
JAACK3	10	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	0	Hh,Wk	None	lifetime	non
JANSON	1		b	c	<1yr	20	48	multi	1990	2001	CS	prv	9	Hh,Wk	None	current	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	1	x	b	1	Never	15	69	Eu:Swe	1995	2001	CS	prv	0	Hh	NoHhMemb	childhood	non
LARSS2	4		b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
MISHRA	1	x	m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
MISHRA	2	x	f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
NG	3	x	f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	0	Hh	NoHhMemb	lifetime	non
NHANE3	1		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1		b	1	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
ROBBIN	10		b	1	Non	25	99	US:Cal	1977	1993	Pr	ons	4	Hh,Wk	None	childhood	never
SAPALD	7		b	c	<20pks	18	60	Eu:Swi	1991	1994	CS	prv	8	Hh,Wk	None	current	non
THORN	1	x	b	1	Never	20	50	Eu:Swe	1994	2001	CC	prv	0	Hh	NoHhMemb	last6homes	non

Appendix Table A6 - 5

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
Current/Lifetime Asthma
Unadjusted

REF	NRR	SEX	ADJ	Numbers		Non-exposed		RR	95.00%CI
				Exposed Case	Control	Case	Control		
BECKE2	1	b	0	63	799	215	2051	0.75	(0.56- 1.01)
*BECKE2	3	b	0	54	799	141	2051	0.98	(0.73- 1.33)
Subtotal BECKE2								0.86	(0.69- 1.06)
JAAK3	10	b	0	135	256	104	231	1.17	(0.86- 1.60)
JANSON	1	b	9	-	-	-	-	1.15	(0.84- 1.58)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24- 1.14)
LARSS1	1	b	0	85	1171	58	1470	1.84	(1.31- 2.59)
LARSS2	4	b	5	-	-	-	-	1.13	(0.80- 1.59)
MISHRA	1	m	0	242	1739	835	8047	1.34	(1.15- 1.56)
MISHRA	2	f	0	561	6037	829	9659	1.08	(0.97- 1.21)
Subtotal MISHRA								1.17	(1.07- 1.28)
NG	3	f	0	18	645	15	604	1.12	(0.56- 2.25)
NHANE3	1	b	0	70	1481	370	8660	1.11	(0.85- 1.44)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29- 7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37- 2.78)
Subtotal ORYSZC								1.13	(0.48- 2.67)
PILOTT	1	b	3	-	-	-	-	1.09	(0.65- 1.82)
*ROBBIN	10	b	4	-	-	-	-	1.57	(0.96- 2.58)
SAPALD	7	b	8	-	-	-	-	1.62	(1.10- 2.37)
THORN	1	b	0	33	116	36	302	2.39	(1.42- 4.01)
Partial Totals				1272	13060	2643	33146		
*prospective study									

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
BECKE2	1	b	0	-0.28	44.92	8.69	0.0563
*BECKE2	3	b	0	-0.02	41.89	1.24	0.9121
Subtotal BECKE2				-0.61	86.81	9.93	
JAAK3	10	b	0	0.16	39.59	0.00	0.3198
JANSON	1	b	9	0.14	38.50	0.01	0.3859
JEDRYC	1	f	3	-0.63	6.33	3.95	0.1102
LARSS1	1	b	0	0.61	32.74	6.76	0.0005
LARSS2	4	b	5	0.12	32.57	0.04	0.4855
MISHRA	1	m	0	0.29	165.86	3.18	0.0002
MISHRA	2	f	0	0.08	306.94	1.76	0.1638
Subtotal MISHRA				0.06	472.80	4.93	
NG	3	f	0	0.12	7.97	0.01	0.7419
NHANE3	1	b	0	0.10	56.25	0.16	0.4488
ORYSZC	1	m	0	0.41	1.45	0.09	0.6256
ORYSZC	2	f	0	0.02	3.79	0.07	0.9727
Subtotal ORYSZC				0.11	5.24	0.16	
PILOTT	1	b	3	0.09	14.49	0.07	0.7428
*ROBBIN	10	b	4	0.45	15.72	1.38	0.0737
SAPALD	7	b	8	0.48	26.08	2.79	0.0138
THORN	1	b	0	0.87	14.28	7.30	0.0010

N 17
NS 14

Wt 849.38
Het Chi 37.50
Het df 16
Het P **
Fixed RR 1.17
RRl 1.09
RRu 1.25
P +++
Random RR 1.19
RRl 1.05
RRu 1.35
P ++
Asymm P N.S.

Appendix Table A6 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
 Current/Lifetime Asthma
 Unadjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
	N	4	8	5	17
	NS	3	7	4	14
	Wt	158.78	156.84	533.76	849.38
Het	Chi	7.42	16.17	5.01	37.50
Het	df	3	7	4	16
Het	P	(*)	*	N.S.	**
Fixed	RR	1.00	1.39	1.16	1.17
	RRl	0.85	1.19	1.07	1.09
	RRu	1.16	1.63	1.27	1.25
	P	N.S.	+++	+++	+++
Random	RR	1.02	1.37	1.17	1.19
	RRl	0.79	1.05	1.05	1.05
	RRu	1.32	1.78	1.31	1.35
	P	N.S.	+	++	++
Between	Chi				8.89
Between	df				2
Between	P				*
		<u>Start year of study</u>			
		<1990	1990-99	unknown	Total
	N	4	9	4	17
	NS	3	8	3	14
	Wt	158.78	671.06	19.54	849.38
Het	Chi	7.42	20.48	2.60	37.50
Het	df	3	8	3	16
Het	P	(*)	**	N.S.	**
Fixed	RR	1.00	1.22	0.88	1.17
	RRl	0.85	1.13	0.57	1.09
	RRu	1.16	1.32	1.38	1.25
	P	N.S.	+++	N.S.	+++
Random	RR	1.02	1.31	0.88	1.19
	RRl	0.79	1.13	0.57	1.05
	RRu	1.32	1.52	1.38	1.35
	P	N.S.	+++	N.S.	++
Between	Chi				7.00
Between	df				2
Between	P				*
		<u>Study type</u>			
		CC	Pr	CS	Total
	N	4	3	10	17
	NS	3	2	9	14
	Wt	59.12	102.53	687.73	849.38
Het	Chi	5.71	6.45	18.51	37.50
Het	df	3	2	9	16
Het	P	N.S.	*	*	**
Fixed	RR	1.39	0.94	1.19	1.17
	RRl	1.07	0.77	1.10	1.09
	RRu	1.79	1.14	1.28	1.25
	P	+	N.S.	+++	+++
Random	RR	1.47	1.00	1.22	1.19
	RRl	0.94	0.70	1.07	1.05
	RRu	2.32	1.45	1.39	1.35
	P	(+)	N.S.	++	++
Between	Chi				6.82
Between	df				2
Between	P				*

Appendix Table A6 - 6

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
 Current/Lifetime Asthma
 Unadjusted

	Ex smokers		Total
	excluded	included	
N	12	5	17
NS	10	4	14
Wt	676.11	173.27	849.38
Het Chi	24.93	7.53	37.50
Het df	11	4	16
Het P	**	N.S.	**
Fixed RR	1.21	1.00	1.17
RRl	1.13	0.86	1.09
RRu	1.31	1.16	1.25
P	+++	N.S.	+++
Random RR	1.28	1.02	1.19
RRl	1.10	0.83	1.05
RRu	1.49	1.27	1.35
P	++	N.S.	++
Between Chi			5.04
Between df			1
Between P			*

Appendix Table A6 - 7

Adults - Meta-analysis of Biochemical/Total/Household/Workplace (preferring earliest, and preferring current asthma)
 Current/Lifetime Asthma
 Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
3	KRONQV PLATTS																		
9	RAHERI																		
	Potentially overlapping studies																		
	REF	REFGP	PRINC														OVERLAP		
	JANSON	JANSON	p														JANSON/RAHERI		
	Adjusted - insufficient data for metaanalysis																		
	REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI	RR	SIG
	KRONQV	1	b	1	Never	15	65	Eu:Swe	1996	1999	CS	prv	4	Total	None	childhood	non	*	n
	LARSS2	5	b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Hh NoHhMemb		current	non	*	n
	PLATTS	1	b	c	Non	15	55	US:Del	1988	1993	CC	prv	0	Total	None	unspec	non	*	n

Appendix Table A7 -

Adults - Meta-analysis of Household exposure (preferring earliest)
Lifetime/Current Asthma

This analysis is restricted to results for:

- 1) Household (overall) or parental exposure
- 2) Results not by amount of exposure
- 3) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 4) ASTHMA : lifetime, current
- 5) WHESMO : 3=childhood, 1=lifetime, 10=adult, 7=recent, 6=unspec, 2=current
- 6) WHOHOU : household overall, mother
- 7) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
- 8) For overlapping studies: principal rather than subsidiary studies

Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3 (and those which actually differ from the adjusted results in Appendix Table A1 - 1 are marked 'x' in Section -1) and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A7 - 1

Adults - Meta-analysis of Household exposure (preferring earliest)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	CompA1	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAK3	44	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	8	Hh	NoHhMemb	lifetime	non
JANSON	9	x	m	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Mothr	NotMoth	childhood	non
JANSON	10	x	f	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Mothr	NotMoth	childhood	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	2		b	l	Never	15	69	Eu:Swe	1995	2001	CS	prv	3	Hh	NoHhMemb	childhood	non
MISHRA	3		m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
MISHRA	4		f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
NG	6		f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	6	Hh	NoHhMemb	lifetime	non
NHANE3	1		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1		b	l	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
THORN	2		m	l	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non
THORN	3		f	l	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non

Appendix Table A7 - 2

Adults - Meta-analysis of Household exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Control	Case	Control		
JAAKK3	44	b	8	99	-	140	-	1.09	(0.77- 1.53)
JANSON	9	m	6	-	-	-	-	0.81	(0.54- 1.23)
JANSON	10	f	6	-	-	-	-	1.10	(0.78- 1.55)
Subtotal JANSON								1.01	(0.82- 1.25)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24- 1.14)
LARSS1	2	b	3	85	-	58	-	1.82	(1.28- 2.58)
MISHRA	3	m	12	242	-	835	-	1.20	(0.99- 1.46)
MISHRA	4	f	12	561	-	829	-	1.05	(0.91- 1.21)
Subtotal MISHRA								1.10	(0.98- 1.23)
NG	6	f	6	18	-	15	-	1.18	(0.57- 2.46)
NHANE3	1	b	0	70	1481	370	8660	1.11	(0.85- 1.44)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29- 7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37- 2.78)
Subtotal ORYSZC								1.13	(0.48- 2.67)
PILOTT	1	b	3	-	-	-	-	1.09	(0.65- 1.82)
THORN	2	m	2	-	-	-	-	4.80	(2.00- 11.60)
THORN	3	f	2	-	-	-	-	1.50	(0.80- 3.10)
Subtotal THORN								2.31	(1.35- 3.96)
Partial Totals				1086	1498	2287	8731		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	44	b	8	0.09	32.59	0.05	0.6227
JANSON	9	m	6	-0.21	22.67	2.54	0.3157
JANSON	10	f	6	0.10	32.58	0.03	0.5864
Subtotal JANSON				-0.36	55.26	2.57	
JEDRYC	1	f	3	-0.63	6.33	3.64	0.1102
LARSS1	2	b	3	0.60	31.28	7.05	0.0008
MISHRA	3	m	12	0.18	101.81	0.35	0.0658
MISHRA	4	f	12	0.05	189.27	1.07	0.5021
Subtotal MISHRA				-0.02	291.08	1.42	
NG	6	f	6	0.17	7.19	0.01	0.6573
NHANE3	1	b	0	0.10	56.25	0.03	0.4488
ORYSZC	1	m	0	0.41	1.45	0.11	0.6256
ORYSZC	2	f	0	0.02	3.79	0.04	0.9727
Subtotal ORYSZC				0.18	5.24	0.16	
PILOTT	1	b	3	0.09	14.49	0.02	0.7428
THORN	2	m	2	1.57	4.97	10.38	0.0005
THORN	3	f	2	0.41	8.37	0.66	0.2406
Subtotal THORN				1.73	13.35	11.04	

N 14
NS 10

Wt 513.05
Het Chi 25.99
Het df 13
Het P *
Fixed RR 1.13
RRl 1.04
RRu 1.23
P ++
Random RR 1.16
RRl 1.00
RRu 1.35
P +
Asymm P N.S.

Appendix Table A7 - 3

Adults - Meta-analysis of Household exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

N	14			
NS	10			
Wt	513.05			
Het Chi	25.99			
Het df	13			
Het P	*			
Fixed RR	1.13			
RRl	1.04			
RRu	1.23			
P	++			
Random RR	1.16			
RRl	1.00			
RRu	1.35			
P	+			
Asymm P	N.S.			
		<u>Sex</u>		
	both	male	female	Total
N	4	4	6	14
NS	4	4	6	14
Wt	134.61	130.91	247.53	513.05
Het Chi	6.12	13.11	4.19	25.99
Het df	3	3	5	13
Het P	N.S.	**	N.S.	*
Fixed RR	1.24	1.18	1.05	1.13
RRl	1.04	1.00	0.93	1.04
RRu	1.46	1.41	1.19	1.23
P	+	(+)	N.S.	++
Random RR	1.25	1.43	1.05	1.16
RRl	0.97	0.81	0.93	1.00
RRu	1.60	2.52	1.19	1.35
P	(+)	N.S.	N.S.	+
Between Chi				2.57
Between df				2
Between P				N.S.

Asthma definition (lifetime/current)
lifetime current Total

N	4	10	14
NS	3	7	10
Wt	59.12	453.93	513.05
Het Chi	8.50	6.62	25.99
Het df	3	9	13
Het P	*	N.S.	*
Fixed RR	1.69	1.07	1.13
RRl	1.31	0.98	1.04
RRu	2.19	1.18	1.23
P	+++	N.S.	++
Random RR	1.79	1.07	1.16
RRl	1.11	0.98	1.00
RRu	2.88	1.18	1.35
P	+	N.S.	+
Between Chi			10.87
Between df			1
Between P			***

Appendix Table A7 - 3

Adults - Meta-analysis of Household exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

		<u>Continent</u>			Total
		NAmer	Europe	Oth/Mult	
	N	1	7	6	14
	NS	1	5	4	10
	Wt	56.25	88.79	368.02	513.05
Het	Chi	0.00	18.15	3.23	25.99
Het	df	0	6	5	13
Het	P	N.S.	**	N.S.	*
Fixed	RR	1.11	1.39	1.08	1.13
	RRl	0.85	1.13	0.98	1.04
	RRu	1.44	1.71	1.20	1.23
	P	N.S.	++	N.S.	++
Random	RR	1.11	1.40	1.08	1.16
	RRl	0.85	0.91	0.98	1.00
	RRu	1.44	2.15	1.20	1.35
	P	N.S.	N.S.	N.S.	+
Between	Chi				4.62
Between	df				2
Between	P				(*)

		<u>Start year of study</u>			Total
		<1990	1990-99	unknown	
	N	1	9	4	14
	NS	1	6	3	10
	Wt	56.25	438.05	18.76	513.05
Het	Chi	0.00	22.07	2.74	25.99
Het	df	0	8	3	13
Het	P	N.S.	**	N.S.	*
Fixed	RR	1.11	1.15	0.89	1.13
	RRl	0.85	1.04	0.57	1.04
	RRu	1.44	1.26	1.40	1.23
	P	N.S.	++	N.S.	++
Random	RR	1.11	1.22	0.89	1.16
	RRl	0.85	1.01	0.57	1.00
	RRu	1.44	1.47	1.40	1.35
	P	N.S.	+	N.S.	+
Between	Chi				1.19
Between	df				2
Between	P				N.S.

		<u>Study type</u>			Total
		CC	Pr	CS	
	N	5		9	14
	NS	3		7	10
	Wt	51.18		461.87	513.05
Het	Chi	9.90		14.59	25.99
Het	df	4		8	13
Het	P	*		(*)	*
Fixed	RR	1.33		1.11	1.13
	RRl	1.01		1.01	1.04
	RRu	1.75		1.22	1.23
	P	+		+	++
Random	RR	1.58		1.12	1.16
	RRl	0.92		0.96	1.00
	RRu	2.73		1.29	1.35
	P	(+)		N.S.	+
Between	Chi				1.50
Between	df				1
Between	P				N.S.

Appendix Table A7 - 3

Adults - Meta-analysis of Household exposure (preferring earliest)
 Lifetime/Current Asthma
 Adjusted

		<u>Ex smokers</u>		Total					
		excluded	included						
	N	12	2	14					
	NS	8	2	10					
	Wt	442.31	70.74	513.05					
Het	Chi	25.93	0.00	25.99					
Het	df	11	1	13					
Het	P	**	N.S.	*					
Fixed	RR	1.14	1.10	1.13					
	RRl	1.04	0.87	1.04					
	RRu	1.25	1.39	1.23					
	P	++	N.S.	++					
Random	RR	1.19	1.10	1.16					
	RRl	0.99	0.87	1.00					
	RRu	1.42	1.39	1.35					
	P	(+)	N.S.	+					
Between	Chi			0.06					
Between	df			1					
Between	P			N.S.					
<u>Exposed group : when Exposed</u>									
		life	adult	child	current	unspec	Total		
	N	2	2	3	6	1	14		
	NS	2	1	2	4	1	10		
	Wt	39.78	13.35	86.53	358.90	14.49	513.05		
Het	Chi	0.04	4.22	9.16	4.67	0.00	25.99		
Het	df	1	1	2	5	0	13		
Het	P	N.S.	*	*	N.S.	N.S.	*		
Fixed	RR	1.11	2.31	1.22	1.09	1.09	1.13		
	RRl	0.81	1.35	0.99	0.98	0.65	1.04		
	RRu	1.51	3.96	1.50	1.21	1.82	1.23		
	P	N.S.	++	(+)	N.S.	N.S.	++		
Random	RR	1.11	2.59	1.19	1.09	1.09	1.16		
	RRl	0.81	0.83	0.75	0.98	0.65	1.00		
	RRu	1.51	8.08	1.87	1.21	1.82	1.35		
	P	N.S.	N.S.	N.S.	N.S.	N.S.	+		
Between	Chi						7.90		
Between	df						4		
Between	P						(*)		

Appendix Table A7 - 4

Adults - Meta-analysis of Household exposure (preferring earliest)
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAK3	20	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	0	Hh	NoHhMemb	lifetime	non
JANSON	9		m	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Mothr	NotMoth	childhood	non
JANSON	10		f	c	<1yr	20	48	multi	1990	2001	CS	prv	6	Mothr	NotMoth	childhood	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	1	x	b	l	Never	15	69	Eu:Swe	1995	2001	CS	prv	0	Hh	NoHhMemb	childhood	non
MISHRA	1	x	m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
MISHRA	2	x	f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
NG	3	x	f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	0	Hh	NoHhMemb	lifetime	non
NHANE3	1		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1		b	l	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
THORN	1	x	b	l	Never	20	50	Eu:Swe	1994	2001	CC	prv	0	Hh	NoHhMemb	last6homes	non

Appendix Table A7 - 5

Adults - Meta-analysis of Household exposure (preferring earliest)
Lifetime/Current Asthma
Unadjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Control	Case	Control		
JAAKK3	20	b	0	99	194	140	293	1.07	(0.78- 1.46)
JANSON	9	m	6	-	-	-	-	0.81	(0.54- 1.23)
JANSON	10	f	6	-	-	-	-	1.10	(0.78- 1.55)
Subtotal JANSON								1.01	(0.82- 1.24)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24- 1.14)
LARSS1	1	b	0	85	1171	58	1470	1.84	(1.31- 2.59)
MISHRA	1	m	0	242	1739	835	8047	1.34	(1.15- 1.56)
MISHRA	2	f	0	561	6037	829	9659	1.08	(0.97- 1.21)
Subtotal MISHRA								1.17	(1.07- 1.28)
NG	3	f	0	18	645	15	604	1.12	(0.56- 2.25)
NHANE3	1	b	0	70	1481	370	8660	1.11	(0.85- 1.44)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29- 7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37- 2.78)
Subtotal ORYSZC								1.13	(0.48- 2.67)
PILOTT	1	b	3	-	-	-	-	1.09	(0.65- 1.82)
THORN	1	b	0	33	116	36	302	2.39	(1.42- 4.01)
Partial Totals				1119	11400	2323	29106		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	20	b	0	0.07	38.74	0.33	0.6822
JANSON	9	m	6	-0.21	22.67	3.07	0.3157
JANSON	10	f	6	0.10	32.58	0.13	0.5864
Subtotal JANSON				-0.43	55.26	3.20	
JEDRYC	1	f	3	-0.63	6.33	3.97	0.1102
LARSS1	1	b	0	0.61	32.74	6.70	0.0005
MISHRA	1	m	0	0.29	165.86	3.07	0.0002
MISHRA	2	f	0	0.08	306.94	1.86	0.1638
Subtotal MISHRA				0.06	472.80	4.94	
NG	3	f	0	0.12	7.97	0.01	0.7419
NHANE3	1	b	0	0.10	56.25	0.18	0.4488
ORYSZC	1	m	0	0.41	1.45	0.09	0.6256
ORYSZC	2	f	0	0.02	3.79	0.07	0.9727
Subtotal ORYSZC				0.11	5.24	0.16	
PILOTT	1	b	3	0.09	14.49	0.07	0.7428
THORN	1	b	0	0.87	14.28	7.25	0.0010

N 13
NS 10

Wt 704.11
Het Chi 26.81
Het df 12
Het P **
Fixed RR 1.17
RRl 1.09
RRu 1.26
P +++
Random RR 1.18
RRl 1.02
RRu 1.37
P +
Asymm P N.S.

Appendix Table A7 - 6

Adults - Meta-analysis of Household exposure (preferring earliest)
 Lifetime/Current Asthma
 Unadjusted

		<u>Continent</u>			Total
		NAmer	Europe	Oth/Mult	
	N	1	6	6	13
	NS	1	5	4	10
	Wt	56.25	97.34	550.53	704.11
Het	Chi	0.00	15.69	7.91	26.81
Het	df	0	5	5	12
Het	P	N.S.	**	N.S.	**
Fixed	RR	1.11	1.38	1.14	1.17
	RRl	0.85	1.13	1.05	1.09
	RRu	1.44	1.69	1.24	1.26
	P	N.S.	++	++	+++
Random	RR	1.11	1.31	1.13	1.18
	RRl	0.85	0.86	0.99	1.02
	RRu	1.44	1.99	1.30	1.37
	P	N.S.	N.S.	(+)	+
Between	Chi				3.20
Between	df				2
Between	P				N.S.
<u>Start year of study</u>					
		<1990	1990-99	unknown	Total
	N	1	8	4	13
	NS	1	6	3	10
	Wt	56.25	628.32	19.54	704.11
Het	Chi	0.00	22.36	2.60	26.81
Het	df	0	7	3	12
Het	P	N.S.	**	N.S.	**
Fixed	RR	1.11	1.19	0.88	1.17
	RRl	0.85	1.10	0.57	1.09
	RRu	1.44	1.28	1.38	1.26
	P	N.S.	+++	N.S.	+++
Random	RR	1.11	1.24	0.88	1.18
	RRl	0.85	1.04	0.57	1.02
	RRu	1.44	1.47	1.38	1.37
	P	N.S.	+	N.S.	+
Between	Chi				1.85
Between	df				2
Between	P				N.S.
<u>Study type</u>					
		CC	Pr	CS	Total
	N	4		9	13
	NS	3		7	10
	Wt	58.27		645.84	704.11
Het	Chi	7.02		19.00	26.81
Het	df	3		8	12
Het	P	(*)		*	**
Fixed	RR	1.31		1.16	1.17
	RRl	1.01		1.07	1.09
	RRu	1.69		1.25	1.26
	P	+		+++	+++
Random	RR	1.42		1.15	1.18
	RRl	0.85		0.99	1.02
	RRu	2.38		1.34	1.37
	P	N.S.		(+)	+
Between	Chi				0.78
Between	df				1
Between	P				N.S.

Appendix Table A7 - 6

Adults - Meta-analysis of Household exposure (preferring earliest)
 Lifetime/Current Asthma
 Unadjusted

		<u>Ex smokers</u>		Total
		excluded	included	
	N	11	2	13
	NS	8	2	10
	Wt	633.37	70.74	704.11
Het	Chi	26.53	0.00	26.81
Het	df	10	1	12
Het	P	**	N.S.	**
Fixed	RR	1.18	1.10	1.17
	RRl	1.09	0.87	1.09
	RRu	1.27	1.39	1.26
	P	+++	N.S.	+++
Random	RR	1.20	1.10	1.18
	RRl	1.01	0.87	1.02
	RRu	1.43	1.39	1.37
	P	+	N.S.	+
Between	Chi			0.28
Between	df			1
Between	P			N.S.

Appendix Table A7 - 7

Adults - Meta-analysis of Household exposure (preferring earliest)
 Lifetime/Current Asthma
 Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	BECKE2	PLATTS	RAHERI	SAPALD												
2	ROBBIN															
3	KRONQV	LARSS2														

Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP
JANSON	JANSON	p	JANSON/RAHERI

Adjusted - insufficient data for metaanalysis

REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI	RR	SIG
KRONQV	2	b	1	Never	15	65	Eu:Swe	1996	1999	CS	prv	4	Hh	NoHhMemb	current	non	*	n
LARSS2	5	b	1	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Hh	NoHhMemb	current	non	*	n

Appendix Table A8 -

Adults - Meta-analysis of Household exposure (preferring most recent)
Lifetime/Current Asthma

This analysis is restricted to results for:

- 1) Household (overall) or parental exposure
- 2) Results not by amount of exposure
- 3) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 4) ASTHMA : lifetime, current
- 5) WHESMO : 2=current, 7=recent, 6=unspec, 10=adult, 1=lifetime, 3=childhood
- 6) WHOHOU : household overall, mother
- 7) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
- 8) For overlapping studies: principal rather than subsidiary studies

Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3

(and those which actually differ from the adjusted results in Appendix Table A7 - 1 are marked 'x' in Section -1) and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A8 - 1

Adults - Meta-analysis of Household exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	CompA7	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAK3	31	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	8	Hh	NoHhMemb	current	non
JANSON	2	x	b	c	<1yr	20	48	multi	1990	2001	CS	prv	10	Hh	NoHhMemb	current	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	2		b	l	Never	15	69	Eu:Swe	1995	2001	CS	prv	3	Hh	NoHhMemb	childhood	non
MISHRA	3		m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
MISHRA	4		f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	12	Hh	NoHhMemb	current	non
NG	6		f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	6	Hh	NoHhMemb	lifetime	non
NHANE3	1		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1		b	l	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
THORN	2		m	l	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non
THORN	3		f	l	Never	20	50	Eu:Swe	1994	2001	CC	prv	2	Hh	NoHhMemb	last6homes	non

Appendix Table A8 - 2

Adults - Meta-analysis of Household exposure (preferring most recent)
Lifetime/Current Asthma
Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI	
				Case	Control	Case	Control			
JAAKK3	31	b	8	7	-	224	-	4.77	(1.29-	17.70)
JANSON	2	b	10	-	-	-	-	1.14	(0.68-	1.90)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24-	1.14)
LARSS1	2	b	3	85	-	58	-	1.82	(1.28-	2.58)
MISHRA	3	m	12	242	-	835	-	1.20	(0.99-	1.46)
MISHRA	4	f	12	561	-	829	-	1.05	(0.91-	1.21)
Subtotal MISHRA								1.10	(0.98-	1.23)
NG	6	f	6	18	-	15	-	1.18	(0.57-	2.46)
NHANE3	1	b	0	70	1481	370	8660	1.11	(0.85-	1.44)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29-	7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37-	2.78)
Subtotal ORYSZC								1.13	(0.48-	2.67)
PILOTT	1	b	3	-	-	-	-	1.09	(0.65-	1.82)
THORN	2	m	2	-	-	-	-	4.80	(2.00-	11.60)
THORN	3	f	2	-	-	-	-	1.50	(0.80-	3.10)
Subtotal THORN								2.31	(1.35-	3.96)
Partial Totals				994	1498	2371	8731			

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	31	b	8	1.56	2.24	4.45	0.0194
JANSON	2	b	10	0.13	14.55	0.01	0.6172
JEDRYC	1	f	3	-0.63	6.33	3.93	0.1102
LARSS1	2	b	3	0.60	31.28	6.20	0.0008
MISHRA	3	m	12	0.18	101.81	0.08	0.0658
MISHRA	4	f	12	0.05	189.27	2.08	0.5021
Subtotal MISHRA				-0.08	291.08	2.16	
NG	6	f	6	0.17	7.19	0.00	0.6573
NHANE3	1	b	0	0.10	56.25	0.16	0.4488
ORYSZC	1	m	0	0.41	1.45	0.09	0.6256
ORYSZC	2	f	0	0.02	3.79	0.07	0.9727
Subtotal ORYSZC				0.12	5.24	0.16	
PILOTT	1	b	3	0.09	14.49	0.07	0.7428
THORN	2	m	2	1.57	4.97	9.96	0.0005
THORN	3	f	2	0.41	8.37	0.53	0.2406
Subtotal THORN				1.67	13.35	10.49	

N 13
NS 10

Wt 441.99
Het Chi 27.62
Het df 12
Het P **
Fixed RR 1.17
RRl 1.06
RRu 1.28
P ++
Random RR 1.26
RRl 1.05
RRu 1.53
P +
Asymm P N.S.

Appendix Table A8 - 3

Adults - Meta-analysis of Household exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

N	13			
NS	10			
Wt	441.99			
Het Chi	27.62			
Het df	12			
Het P	**			
Fixed RR	1.17			
RRl	1.06			
RRu	1.28			
P	++			
Random RR	1.26			
RRl	1.05			
RRu	1.53			
P	+			
Asymm P	N.S.			
		<u>Sex</u>		
	both	male	female	Total
N	5	3	5	13
NS	5	3	5	13
Wt	118.81	108.23	214.95	441.99
Het Chi	9.49	9.15	4.12	27.62
Het df	4	2	4	12
Het P	*	*	N.S.	**
Fixed RR	1.30	1.28	1.05	1.17
RRl	1.09	1.06	0.92	1.06
RRu	1.55	1.55	1.20	1.28
P	++	++	N.S.	++
Random RR	1.36	2.02	1.05	1.26
RRl	0.99	0.73	0.89	1.05
RRu	1.87	5.56	1.23	1.53
P	(+)	N.S.	N.S.	+
Between Chi				4.86
Between df				2
Between P				(*)

Asthma definition (lifetime/current)
 lifetime current Total

N	4	9	13
NS	3	7	10
Wt	59.12	382.88	441.99
Het Chi	8.50	9.59	27.62
Het df	3	8	12
Het P	*	N.S.	**
Fixed RR	1.69	1.10	1.17
RRl	1.31	1.00	1.06
RRu	2.19	1.22	1.28
P	+++	(+)	++
Random RR	1.79	1.11	1.26
RRl	1.11	0.97	1.05
RRu	2.88	1.26	1.53
P	+	N.S.	+
Between Chi			9.53
Between df			1
Between P			**

Appendix Table A8 - 3

Adults - Meta-analysis of Household exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
	N	1	7	5	13
	NS	1	5	4	10
	Wt	56.25	58.43	327.31	441.99
Het	Chi	0.00	17.62	1.23	27.62
Het	df	0	6	4	12
Het	P	N.S.	**	N.S.	**
Fixed	RR	1.11	1.67	1.10	1.17
	RRl	0.85	1.29	0.99	1.06
	RRu	1.44	2.16	1.23	1.28
	P	N.S.	+++	(+)	++
Random	RR	1.11	1.67	1.10	1.26
	RRl	0.85	0.99	0.99	1.05
	RRu	1.44	2.84	1.23	1.53
	P	N.S.	(+)	(+)	+
Between	Chi				8.77
Between	df				2
Between	P				*

		Start year of study			Total
		<1990	1990-99	unknown	
	N	1	8	4	13
	NS	1	6	3	10
	Wt	56.25	366.99	18.76	441.99
Het	Chi	0.00	23.20	2.74	27.62
Het	df	0	7	3	12
Het	P	N.S.	**	N.S.	**
Fixed	RR	1.11	1.19	0.89	1.17
	RRl	0.85	1.08	0.57	1.06
	RRu	1.44	1.32	1.40	1.28
	P	N.S.	+++	N.S.	++
Random	RR	1.11	1.42	0.89	1.26
	RRl	0.85	1.10	0.57	1.05
	RRu	1.44	1.82	1.40	1.53
	P	N.S.	++	N.S.	+
Between	Chi				1.69
Between	df				2
Between	P				N.S.

		Study type			Total
		CC	Pr	CS	
	N	5		8	13
	NS	3		7	10
	Wt	20.83		421.17	441.99
Het	Chi	8.01		12.18	27.62
Het	df	4		7	12
Het	P	(*)		(*)	**
Fixed	RR	2.09		1.13	1.17
	RRl	1.36		1.03	1.06
	RRu	3.21		1.25	1.28
	P	+++		+	++
Random	RR	2.18		1.16	1.26
	RRl	1.14		0.99	1.05
	RRu	4.17		1.35	1.53
	P	+		(+)	+
Between	Chi				7.44
Between	df				1
Between	P				**

Appendix Table A8 - 3

Adults - Meta-analysis of Household exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

		<u>Ex smokers</u>		Total					
		excluded	included						
	N	11	2	13					
	NS	8	2	10					
	Wt	371.25	70.74	441.99					
Het	Chi	27.36	0.00	27.62					
Het	df	10	1	12					
Het	P	**	N.S.	**					
Fixed	RR	1.18	1.10	1.17					
	RRl	1.06	0.87	1.06					
	RRu	1.30	1.39	1.28					
	P	++	N.S.	++					
Random	RR	1.33	1.10	1.26					
	RRl	1.05	0.87	1.05					
	RRu	1.70	1.39	1.53					
	P	+	N.S.	+					
Between	Chi			0.26					
Between	df			1					
Between	P			N.S.					
<u>Exposed group : when Exposed</u>									
		life	adult	child	current	unspec	Total		
	N	1	2	1	8	1	13		
	NS	1	1	1	6	1	10		
	Wt	7.19	13.35	31.28	375.69	14.49	441.99		
Het	Chi	0.00	4.22	0.00	9.56	0.00	27.62		
Het	df	0	1	0	7	0	12		
Het	P	N.S.	*	N.S.	N.S.	N.S.	**		
Fixed	RR	1.18	2.31	1.82	1.10	1.09	1.17		
	RRl	0.57	1.35	1.28	0.99	0.65	1.06		
	RRu	2.45	3.96	2.58	1.22	1.82	1.28		
	P	N.S.	++	+++	(+)	N.S.	++		
Random	RR	1.18	2.59	1.82	1.11	1.09	1.26		
	RRl	0.57	0.83	1.28	0.95	0.65	1.05		
	RRu	2.45	8.08	2.58	1.28	1.82	1.53		
	P	N.S.	N.S.	+++	N.S.	N.S.	+		
Between	Chi						13.84		
Between	df						4		
Between	P						**		

Appendix Table A8 - 4

Adults - Meta-analysis of Household exposure (preferring most recent)
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAK3	7	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	0	Hh	NoHhMemb	current	non
JANSON	2		b	c	<1yr	20	48	multi	1990	2001	CS	prv	10	Hh	NoHhMemb	current	non
JEDRYC	1		f	c	<1yr	65	99	Eu:Pol	*	1995	CS	prv	3	Hh	NoHhMemb	current	non
LARSS1	1	x	b	l	Never	15	69	Eu:Swe	1995	2001	CS	prv	0	Hh	NoHhMemb	childhood	non
MISHRA	1	x	m	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
MISHRA	2	x	f	c	NevReg	60	99	As:Ind	1998	2003	CS	prv	0	Hh	NoHhMemb	current	non
NG	3	x	f	c	<1yr	20	74	As:Sin	*	1993	CS	prv	0	Hh	NoHhMemb	lifetime	non
NHANE3	1		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Hh	NoHhMemb	current	non
ORYSZC	1		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
ORYSZC	2		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Hh	NoHhMemb	current	non
PILOTT	1		b	l	Non	18	99	Austra	1995	1999	CS	prv	3	Hh	NoHhMemb	unspec	non
THORN	1	x	b	l	Never	20	50	Eu:Swe	1994	2001	CC	prv	0	Hh	NoHhMemb	last6homes	non

Appendix Table A8 - 5

Adults - Meta-analysis of Household exposure (preferring most recent)
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	SEX	ADJ	Numbers				RR	95.00%CI	
				Exposed		Non-exposed				
				Case	Control	Case	Control			
JAAKK3	7	b	0	7	8	224	475	1.86	(0.66-	5.18)
JANSON	2	b	10	-	-	-	-	1.14	(0.68-	1.90)
JEDRYC	1	f	3	-	-	-	-	0.53	(0.24-	1.14)
LARSS1	1	b	0	85	1171	58	1470	1.84	(1.31-	2.59)
MISHRA	1	m	0	242	1739	835	8047	1.34	(1.15-	1.56)
MISHRA	2	f	0	561	6037	829	9659	1.08	(0.97-	1.21)
Subtotal	MISHRA							1.17	(1.07-	1.28)
NG	3	f	0	18	645	15	604	1.12	(0.56-	2.25)
NHANE3	1	b	0	70	1481	370	8660	1.11	(0.85-	1.44)
ORYSZC	1	m	0	3	4	14	28	1.50	(0.29-	7.65)
ORYSZC	2	f	0	8	13	26	43	1.02	(0.37-	2.78)
Subtotal	ORYSZC							1.13	(0.48-	2.67)
PILOTT	1	b	3	-	-	-	-	1.09	(0.65-	1.82)
THORN	1	b	0	33	116	36	302	2.39	(1.42-	4.01)
Partial Totals				1027	11214	2407	29288			
*prospective study										

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	7	b	0	0.62	3.64	0.69	0.2380
JANSON	2	b	10	0.13	14.55	0.04	0.6172
JEDRYC	1	f	3	-0.63	6.33	4.22	0.1102
LARSS1	1	b	0	0.61	32.74	6.00	0.0005
MISHRA	1	m	0	0.29	165.86	2.08	0.0002
MISHRA	2	f	0	0.08	306.94	3.20	0.1638
Subtotal	MISHRA			0.01	472.80	5.28	
NG	3	f	0	0.12	7.97	0.03	0.7419
NHANE3	1	b	0	0.10	56.25	0.37	0.4488
ORYSZC	1	m	0	0.41	1.45	0.07	0.6256
ORYSZC	2	f	0	0.02	3.79	0.10	0.9727
Subtotal	ORYSZC			0.06	5.24	0.17	
PILOTT	1	b	3	0.09	14.49	0.13	0.7428
THORN	1	b	0	0.87	14.28	6.76	0.0010

N	12
NS	10
Wt	628.31
Het Chi	23.70
Het df	11
Het P	*
Fixed RR	1.20
RRl	1.11
RRu	1.30
P	+++
Random RR	1.26
RRl	1.07
RRu	1.48
P	++
Asymm P	N.S.

Appendix Table A8 - 6

Adults - Meta-analysis of Household exposure (preferring most recent)
 Lifetime/Current Asthma
 Unadjusted

	N	12			
	NS	10			
	Wt	628.31			
Het	Chi	23.70			
Het	df	11			
Het	P	*			
Fixed	RR	1.20			
	RRl	1.11			
	RRu	1.30			
	P	+++			
Random	RR	1.26			
	RRl	1.07			
	RRu	1.48			
	P	++			
Asymm	P	N.S.			
			<u>Sex</u>		
	both	male	female	Total	
	N	6	2	4	12
	NS	6	2	4	12
	Wt	135.96	167.31	325.03	628.31
Het	Chi	11.40	0.02	3.19	23.70
Het	df	5	1	3	11
Het	P	*	N.S.	N.S.	*
Fixed	RR	1.38	1.34	1.07	1.20
	RRl	1.16	1.15	0.96	1.11
	RRu	1.63	1.56	1.19	1.30
	P	+++	+++	N.S.	+++
Random	RR	1.44	1.34	1.05	1.26
	RRl	1.09	1.15	0.88	1.07
	RRu	1.91	1.56	1.24	1.48
	P	+	+++	N.S.	++
Between	Chi				9.09
Between	df				2
Between	P				*

Asthma definition (lifetime/current)
 lifetime current Total

	N	3	9	12
	NS	3	7	10
	Wt	61.52	566.79	628.31
Het	Chi	4.69	9.91	23.70
Het	df	2	8	11
Het	P	(*)	N.S.	*
Fixed	RR	1.73	1.15	1.20
	RRl	1.35	1.06	1.11
	RRu	2.22	1.25	1.30
	P	+++	+++	+++
Random	RR	1.70	1.16	1.26
	RRl	1.14	1.03	1.07
	RRu	2.54	1.30	1.48
	P	++	+	++
Between	Chi			9.09
Between	df			1
Between	P			**

Appendix Table A8 - 6

Adults - Meta-analysis of Household exposure (preferring most recent)
 Lifetime/Current Asthma
 Unadjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
	N	1	6	5	12
	NS	1	5	4	10
	Wt	56.25	62.24	509.82	628.31
Het	Chi	0.00	11.44	5.01	23.70
Het	df	0	5	4	11
Het	P	N.S.	*	N.S.	*
Fixed	RR	1.11	1.65	1.16	1.20
	RRl	0.85	1.29	1.07	1.11
	RRu	1.44	2.12	1.27	1.30
	P	N.S.	+++	+++	+++
Random	RR	1.11	1.45	1.18	1.26
	RRl	0.85	0.92	1.05	1.07
	RRu	1.44	2.29	1.32	1.48
	P	N.S.	N.S.	++	++
Between	Chi				7.24
Between	df				2
Between	P				*

		Start year of study			Total
		<1990	1990-99	unknown	
	N	1	7	4	12
	NS	1	6	3	10
	Wt	56.25	552.52	19.54	628.31
Het	Chi	0.00	18.70	2.60	23.70
Het	df	0	6	3	11
Het	P	N.S.	**	N.S.	*
Fixed	RR	1.11	1.22	0.88	1.20
	RRl	0.85	1.12	0.57	1.11
	RRu	1.44	1.33	1.38	1.30
	P	N.S.	+++	N.S.	+++
Random	RR	1.11	1.38	0.88	1.26
	RRl	0.85	1.12	0.57	1.07
	RRu	1.44	1.69	1.38	1.48
	P	N.S.	++	N.S.	++
Between	Chi				2.40
Between	df				2
Between	P				N.S.

		Study type			Total
		CC	Pr	CS	
	N	4		8	12
	NS	3		7	10
	Wt	23.17		605.14	628.31
Het	Chi	2.29		15.86	23.70
Het	df	3		7	11
Het	P	N.S.		*	*
Fixed	RR	1.94		1.18	1.20
	RRl	1.29		1.09	1.11
	RRu	2.91		1.27	1.30
	P	++		+++	+++
Random	RR	1.94		1.19	1.26
	RRl	1.29		1.02	1.07
	RRu	2.91		1.40	1.48
	P	++		+	++
Between	Chi				5.54
Between	df				1
Between	P				*

Appendix Table A8 - 6

Adults - Meta-analysis of Household exposure (preferring most recent)
 Lifetime/Current Asthma
 Unadjusted

		<u>Ex smokers</u>		Total
		excluded	included	
	N	10	2	12
	NS	8	2	10
	Wt	557.57	70.74	628.31
Het	Chi	23.14	0.00	23.70
Het	df	9	1	11
Het	P	**	N.S.	*
Fixed	RR	1.21	1.10	1.20
	RRl	1.12	0.87	1.11
	RRu	1.32	1.39	1.30
	P	+++	N.S.	+++
Random	RR	1.31	1.10	1.26
	RRl	1.07	0.87	1.07
	RRu	1.61	1.39	1.48
	P	++	N.S.	++
Between	Chi			0.56
Between	df			1
Between	P			N.S.

Appendix Table A9 -

Adults - Meta-analysis of Workplace Exposure (preferring earliest)
Lifetime/Current Asthma

This analysis is restricted to results for:

- 1) Workplace exposure
- 2) Results not by amount of exposure
- 3) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 4) ASTHMA : lifetime, current
- 5) WHESMO : 3=childhood, 1=lifetime, 10=adult, 7=recent, 6=unspec, 2=current
- 6) WHOHOU : household overall, mother
- 7) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
- 8) For overlapping studies: principal rather than subsidiary studies

Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3

(and those which actually differ from the adjusted results in Appendix Table A1 - 1 are marked 'x' in Section -1) and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A9 - 1

Adults - Meta-analysis of Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	CompA1	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAKK3	39	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	8	Work	NotWork	lifetime	non
JANSON	3	x	b	c	<1yr	20	48	multi	1990	2001	CS	prv	10	Work	NotWork	current	non
LARSS2	4		b	l	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
NHANE3	2	x	b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Work	NotWork	current	non
ORYSZC	3	x	m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Work	NotWork	current	non
ORYSZC	4	x	f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Work	NotWork	current	non

Appendix Table A9 - 2

Adults - Meta-analysis of Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Control	Case	Control		
JAAKK3	39	b	8	76	-	163	-	1.55	(1.06- 2.25)
JANSON	3	b	10	-	-	-	-	1.90	(1.25- 2.88)
LARSS2	4	b	5	-	-	-	-	1.13	(0.80- 1.59)
NHANE3	2	b	0	114	2069	326	8072	1.36	(1.10- 1.70)
ORYSZC	3	m	0	3	7	13	24	0.79	(0.17- 3.59)
ORYSZC	4	f	0	4	13	30	42	0.43	(0.13- 1.45)
Subtotal ORYSZC								0.55	(0.21- 1.41)
Partial Totals				197	2089	532	8138		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	39	b	8	0.44	27.12	0.41	0.0225
JANSON	3	b	10	0.64	22.06	2.36	0.0026
LARSS2	4	b	5	0.12	32.57	1.21	0.4855
NHANE3	2	b	0	0.31	80.34	0.00	0.0054
ORYSZC	3	m	0	-0.23	1.68	0.51	0.7614
ORYSZC	4	f	0	-0.84	2.60	3.49	0.1742
Subtotal ORYSZC				-1.71	4.29	3.99	

N 6
 NS 5

Wt 166.38
 Het Chi 7.97
 Het df 5
 Het P N.S.
 Fixed RR 1.37
 RR1 1.18
 RRu 1.59
 P +++
 Random RR 1.36
 RR1 1.09
 RRu 1.70
 P ++
 Asymm P N.S.

Appendix Table A9 - 3

Adults - Meta-analysis of Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

		<u>Continent</u>			Total
		NAmer	Europe	Oth/Mult	
	N	1	4	1	6
	NS	1	3	1	5
	Wt	80.34	63.98	22.06	166.38
Het	Chi	0.00	4.88	0.00	7.97
Het	df	0	3	0	5
Het	P	N.S.	N.S.	N.S.	N.S.
Fixed	RR	1.36	1.23	1.90	1.37
	RRl	1.10	0.96	1.25	1.18
	RRu	1.70	1.57	2.88	1.59
	P	++	(+)	++	+++
Random	RR	1.36	1.16	1.90	1.36
	RRl	1.10	0.80	1.25	1.09
	RRu	1.70	1.70	2.88	1.70
	P	++	N.S.	++	++
Between	Chi				3.10
Between	df				2
Between	P				N.S.

		<u>Start year of study</u>			Total
		<1990	1990-99	unknown	
	N	1	3	2	6
	NS	1	3	1	5
	Wt	80.34	81.75	4.29	166.38
Het	Chi	0.00	3.76	0.38	7.97
Het	df	0	2	1	5
Het	P	N.S.	N.S.	N.S.	N.S.
Fixed	RR	1.36	1.44	0.55	1.37
	RRl	1.10	1.16	0.21	1.18
	RRu	1.70	1.79	1.41	1.59
	P	++	+++	N.S.	+++
Random	RR	1.36	1.47	0.55	1.36
	RRl	1.10	1.09	0.21	1.09
	RRu	1.70	1.98	1.41	1.70
	P	++	+	N.S.	++
Between	Chi				3.84
Between	df				2
Between	P				N.S.

		<u>Study type</u>			Total
		CC	Pr	CS	
	N	3		3	6
	NS	2		3	5
	Wt	31.41		134.97	166.38
Het	Chi	4.39		3.57	7.97
Het	df	2		2	5
Het	P	N.S.		N.S.	N.S.
Fixed	RR	1.34		1.38	1.37
	RRl	0.95		1.16	1.18
	RRu	1.91		1.63	1.59
	P	(+)		+++	+++
Random	RR	0.96		1.39	1.36
	RRl	0.41		1.09	1.09
	RRu	2.23		1.78	1.70
	P	N.S.		++	++
Between	Chi				0.01
Between	df				1
Between	P				N.S.

Appendix Table A9 - 3

Adults - Meta-analysis of Workplace Exposure (preferring earliest)
Lifetime/Current Asthma
Adjusted

		<u>Ex smokers</u>		Total					
		excluded	included						
	N	5	1	6					
	NS	4	1	5					
	Wt	86.03	80.34	166.38					
	Het Chi	7.97	0.00	7.97					
	Het df	4	0	5					
	Het P	(*)	N.S.	N.S.					
Fixed	RR	1.38	1.36	1.37					
	RRl	1.11	1.10	1.18					
	RRu	1.70	1.70	1.59					
	P	++	++	+++					
Random	RR	1.32	1.36	1.36					
	RRl	0.93	1.10	1.09					
	RRu	1.86	1.70	1.70					
	P	N.S.	++	++					
Between	Chi			0.00					
Between	df			1					
Between	P			N.S.					
<u>Exposed group : when Exposed</u>									
		life	adult	child	current	unspec	Total		
	N	1			5		6		
	NS	1			4		5		
	Wt	27.12			139.25		166.38		
	Het Chi	0.00			7.48		7.97		
	Het df	0			4		5		
	Het P	N.S.			N.S.		N.S.		
Fixed	RR	1.55			1.34		1.37		
	RRl	1.06			1.13		1.18		
	RRu	2.26			1.58		1.59		
	P	+			+++		+++		
Random	RR	1.55			1.30		1.36		
	RRl	1.06			0.98		1.09		
	RRu	2.26			1.73		1.70		
	P	+			(+)		++		
Between	Chi						0.49		
Between	df						1		
Between	P						N.S.		

Appendix Table A9 - 4

Adults - Meta-analysis of Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAKK3	15	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	0	Work	NotWork	lifetime	non
JANSON	3		b	c	<1yr	20	48	multi	1990	2001	CS	prv	10	Work	NotWork	current	non
LARSS2	4		b	l	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
NHANE3	2		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Work	NotWork	current	non
ORYSZC	3		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Work	NotWork	current	non
ORYSZC	4		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Work	NotWork	current	non

Appendix Table A9 - 5

Adults - Meta-analysis of Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI	
				Case	Control	Case	Control			
JAAKK3	15	b	0	76	132	163	355	1.25	(0.89-	1.76)
JANSON	3	b	10	-	-	-	-	1.90	(1.25-	2.88)
LARSS2	4	b	5	-	-	-	-	1.13	(0.80-	1.59)
NHANE3	2	b	0	114	2069	326	8072	1.36	(1.10-	1.70)
ORYSZC	3	m	0	3	7	13	24	0.79	(0.17-	3.59)
ORYSZC	4	f	0	4	13	30	42	0.43	(0.13-	1.45)
Subtotal ORYSZC								0.55	(0.21-	1.41)
Partial Totals				197	2221	532	8493			

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	15	b	0	0.23	33.69	0.09	0.1890
JANSON	3	b	10	0.64	22.06	2.92	0.0026
LARSS2	4	b	5	0.12	32.57	0.79	0.4855
NHANE3	2	b	0	0.31	80.34	0.08	0.0054
ORYSZC	3	m	0	-0.23	1.68	0.44	0.7614
ORYSZC	4	f	0	-0.84	2.60	3.27	0.1742
Subtotal ORYSZC				-1.63	4.29	3.71	

N 6
 NS 5

Wt 172.94
 Het Chi 7.59
 Het df 5
 Het P N.S.
 Fixed RR 1.32
 RR1 1.14
 RRu 1.53
 P +++
 Random RR 1.30
 RR1 1.06
 RRu 1.61
 P +
 Asymm P N.S.

Appendix Table A9 - 6

Adults - Meta-analysis of Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Unadjusted

		<u>Continent</u>			Total
		NAmer	Europe	Oth/Mult	
	N	1	4	1	6
	NS	1	3	1	5
	Wt	80.34	70.54	22.06	172.94
Het	Chi	0.00	3.00	0.00	7.59
Het	df	0	3	0	5
Het	P	N.S.	N.S.	N.S.	N.S.
Fixed	RR	1.36	1.14	1.90	1.32
	RRl	1.10	0.90	1.25	1.14
	RRu	1.70	1.44	2.88	1.53
Random	P	++	N.S.	++	+++
	RR	1.36	1.14	1.90	1.30
	RRl	1.10	0.90	1.25	1.06
	RRu	1.70	1.44	2.88	1.61
	P	++	N.S.	++	+
Between	Chi				4.60
Between	df				2
Between	P				N.S.

		<u>Start year of study</u>			Total
		<1990	1990-99	unknown	
	N	1	3	2	6
	NS	1	3	1	5
	Wt	80.34	88.31	4.29	172.94
Het	Chi	0.00	3.78	0.38	7.59
Het	df	0	2	1	5
Het	P	N.S.	N.S.	N.S.	N.S.
Fixed	RR	1.36	1.34	0.55	1.32
	RRl	1.10	1.09	0.21	1.14
	RRu	1.70	1.65	1.41	1.53
Random	P	++	++	N.S.	+++
	RR	1.36	1.36	0.55	1.30
	RRl	1.10	1.02	0.21	1.06
	RRu	1.70	1.82	1.41	1.61
	P	++	+	N.S.	+
Between	Chi				3.43
Between	df				2
Between	P				N.S.

		<u>Study type</u>			Total
		CC	Pr	CS	
	N	3		3	6
	NS	2		3	5
	Wt	37.97		134.97	172.94
Het	Chi	3.00		3.57	7.59
Het	df	2		2	5
Het	P	N.S.		N.S.	N.S.
Fixed	RR	1.14		1.38	1.32
	RRl	0.83		1.16	1.14
	RRu	1.57		1.63	1.53
Random	P	N.S.		+++	+++
	RR	0.95		1.39	1.30
	RRl	0.51		1.09	1.06
	RRu	1.78		1.78	1.61
	P	N.S.		++	+
Between	Chi				1.03
Between	df				1
Between	P				N.S.

Appendix Table A9 - 6

Adults - Meta-analysis of Workplace Exposure (preferring earliest)
 Lifetime/Current Asthma
 Unadjusted

		<u>Ex smokers</u>		Total
		excluded	included	
	N	5	1	6
	NS	4	1	5
	Wt	92.60	80.34	172.94
Het	Chi	7.44	0.00	7.59
Het	df	4	0	5
Het	P	N.S.	N.S.	N.S.
Fixed	RR	1.28	1.36	1.32
	RRl	1.05	1.10	1.14
	RRu	1.57	1.70	1.53
	P	+	++	+++
Random	RR	1.25	1.36	1.30
	RRl	0.91	1.10	1.06
	RRu	1.72	1.70	1.61
	P	N.S.	++	+
Between	Chi			0.16
Between	df			1
Between	P			N.S.

Appendix Table A10 -

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
Lifetime/Current Asthma

This analysis is restricted to results for:

- 1) Workplace exposure
- 2) Results not by amount of exposure
- 3) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 4) ASTHMA : lifetime, current
- 5) WHESMO : 2=current, 7=recent, 6=unspec, 10=adult, 1=lifetime, 3=childhood
- 6) UNEXTI : unexposed group never, non (i.e. not at time defined for exposed group)
- 7) For overlapping studies: principal rather than subsidiary studies

Finally for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3 (and those which actually differ from the adjusted results in Appendix Table A9 - 1 are marked 'x' in Section -1) and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found. It then lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table A10 - 1

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	CompA9	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAK3	28	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	8	Work	NotWork	current	non
JANSON	3		b	c	<1yr	20	48	multi	1990	2001	CS	prv	10	Work	NotWork	current	non
LARSS2	4		b	l	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
NHANE3	2		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Work	NotWork	current	non
ORYSZC	3		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Work	NotWork	current	non
ORYSZC	4		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Work	NotWork	current	non

Appendix Table A10 - 2

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

REF	NRR	SEX	ADJ	Numbers		Non-exposed		RR	95.00%CI
				Exposed Case	Control	Case	Control		
JAAKK3	28	b	8	34	-	184	-	2.16	(1.26- 3.72)
JANSON	3	b	10	-	-	-	-	1.90	(1.25- 2.88)
LARSS2	4	b	5	-	-	-	-	1.13	(0.80- 1.59)
NHANE3	2	b	0	114	2069	326	8072	1.36	(1.10- 1.70)
ORYSZC	3	m	0	3	7	13	24	0.79	(0.17- 3.59)
ORYSZC	4	f	0	4	13	30	42	0.43	(0.13- 1.45)
Subtotal ORYSZC								0.55	(0.21- 1.41)
Partial Totals				155	2089	553	8138		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	28	b	8	0.77	13.11	2.51	0.0053
JANSON	3	b	10	0.64	22.06	2.12	0.0026
LARSS2	4	b	5	0.12	32.57	1.44	0.4855
NHANE3	2	b	0	0.31	80.34	0.04	0.0054
ORYSZC	3	m	0	-0.23	1.68	0.54	0.7614
ORYSZC	4	f	0	-0.84	2.60	3.59	0.1742
Subtotal ORYSZC				-1.74	4.29	4.13	

N 6
 NS 5

Wt 152.36
 Het Chi 10.23
 Het df 5
 Het P (*)
 Fixed RR 1.39
 RR1 1.19
 RRu 1.63
 P +++
 Random RR 1.40
 RR1 1.06
 RRu 1.85
 P +
 Asymm P N.S.

Appendix Table A10 - 3

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Adjusted

	N	6			
	NS	5			
	Wt	152.36			
	Het Chi	10.23			
	Het df	5			
	Het P	(*)			
Fixed	RR	1.39			
	RRl	1.19			
	RRu	1.63			
	P	+++			
Random	RR	1.40			
	RRl	1.06			
	RRu	1.85			
	P	+			
Asymm	P	N.S.			
			<u>Sex</u>		
		both	male	female	Total
	N	4	1	1	6
	NS	4	1	1	5
	Wt	148.08	1.68	2.60	152.36
	Het Chi	5.99	0.00	0.00	10.23
	Het df	3	0	0	5
	Het P	N.S.	N.S.	N.S.	(*)
Fixed	RR	1.43	0.79	0.43	1.39
	RRl	1.22	0.17	0.13	1.19
	RRu	1.68	3.59	1.45	1.63
	P	+++	N.S.	N.S.	+++
Random	RR	1.49	0.79	0.43	1.40
	RRl	1.16	0.17	0.13	1.06
	RRu	1.92	3.59	1.45	1.85
	P	++	N.S.	N.S.	+
Between	Chi				4.24
Between	df				2
Between	P				N.S.

Asthma definition (lifetime/current)
 lifetime current Total

	N	1	5	6
	NS	1	4	5
	Wt	32.57	119.80	152.36
	Het Chi	0.00	8.41	10.23
	Het df	0	4	5
	Het P	N.S.	(*)	(*)
Fixed	RR	1.13	1.48	1.39
	RRl	0.80	1.23	1.19
	RRu	1.59	1.77	1.63
	P	N.S.	+++	+++
Random	RR	1.13	1.48	1.40
	RRl	0.80	1.04	1.06
	RRu	1.59	2.11	1.85
	P	N.S.	+	+
Between	Chi			1.83
Between	df			1
Between	P			N.S.

Appendix Table A10 - 3

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Adjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
N		1	4	1	6
NS		1	3	1	5
	Wt	80.34	49.96	22.06	152.36
Het	Chi	0.00	7.56	0.00	10.23
Het	df	0	3	0	5
Het	P	N.S.	(*)	N.S.	(*)
Fixed	RR	1.36	1.26	1.90	1.39
	RRl	1.10	0.95	1.25	1.19
	RRu	1.70	1.66	2.88	1.63
	P	++	N.S.	++	+++
Random	RR	1.36	1.16	1.90	1.40
	RRl	1.10	0.66	1.25	1.06
	RRu	1.70	2.07	2.88	1.85
	P	++	N.S.	++	+
Between	Chi				2.67
Between	df				2
Between	P				N.S.

		Start year of study			Total
		<1990	1990-99	unknown	
N		1	3	2	6
NS		1	3	1	5
	Wt	80.34	67.74	4.29	152.36
Het	Chi	0.00	5.58	0.38	10.23
Het	df	0	2	1	5
Het	P	N.S.	(*)	N.S.	(*)
Fixed	RR	1.36	1.52	0.55	1.39
	RRl	1.10	1.20	0.21	1.19
	RRu	1.70	1.93	1.41	1.63
	P	++	+++	N.S.	+++
Random	RR	1.36	1.61	0.55	1.40
	RRl	1.10	1.07	0.21	1.06
	RRu	1.70	2.43	1.41	1.85
	P	++	+	N.S.	+
Between	Chi				4.28
Between	df				2
Between	P				N.S.

		Study type			Total
		CC	Pr	CS	
N		3		3	6
NS		2		3	5
	Wt	17.40		134.97	152.36
Het	Chi	6.47		3.57	10.23
Het	df	2		2	5
Het	P	*		N.S.	(*)
Fixed	RR	1.54		1.38	1.39
	RRl	0.96		1.16	1.19
	RRu	2.46		1.63	1.63
	P	(+)		+++	+++
Random	RR	1.02		1.39	1.40
	RRl	0.34		1.09	1.06
	RRu	3.06		1.78	1.85
	P	N.S.		++	+
Between	Chi				0.19
Between	df				1
Between	P				N.S.

Appendix Table A10 - 3

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Adjusted

		<u>Ex smokers</u>					
		<u>excluded</u>	<u>included</u>	<u>Total</u>			
	N	5	1	6			
	NS	4	1	5			
	Wt	72.02	80.34	152.36			
Het	Chi	10.15	0.00	10.23			
Het	df	4	0	5			
Het	P	*	N.S.	(*)			
Fixed	RR	1.43	1.36	1.39			
	RRl	1.13	1.10	1.19			
	RRu	1.80	1.70	1.63			
	P	++	++	+++			
Random	RR	1.36	1.36	1.40			
	RRl	0.88	1.10	1.06			
	RRu	2.10	1.70	1.85			
	P	N.S.	++	+			
Between	Chi			0.08			
Between	df			1			
Between	P			N.S.			
<u>Exposed group : when Exposed</u>							
		<u>life</u>	<u>adult</u>	<u>child</u>	<u>current</u>	<u>unspec</u>	<u>Total</u>
	N				6		6
	NS				5		5
	Wt				152.36		152.36
Het	Chi				10.23		10.23
Het	df				5		5
Het	P				(*)		(*)
Fixed	RR				1.39		1.39
	RRl				1.19		1.19
	RRu				1.63		1.63
	P				+++		+++
Random	RR				1.40		1.40
	RRl				1.06		1.06
	RRu				1.85		1.85
	P				+		+
Between	Chi						
Between	df						
Between	P						N.S.

Appendix Table A10 - 4

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Unadjusted

REF	NRR	X	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STTYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI
JAAKK3	4	x	b	c	Never	21	63	Eu:Fin	1997	2003	CC	ons	0	Work	NotWork	current	non
JANSON	3		b	c	<1yr	20	48	multi	1990	2001	CS	prv	10	Work	NotWork	current	non
LARSS2	4		b	l	Never	15	64	Eu:Est	1995	2003	CS	prv	5	Work	NotWork	current	non
NHANE3	2		b	c	Non	17	99	US:nat	1988	2002	CS	prv	0	Work	NotWork	current	non
ORYSZC	3		m	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Work	NotWork	current	non
ORYSZC	4		f	c	NevReg	25	54	Eu:Fra	*	2000	CC	prv	0	Work	NotWork	current	non

Appendix Table A10 - 5

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
Unadjusted

REF	NRR	SEX	ADJ	Numbers		Non-exposed		RR	95.00%CI
				Exposed Case	Control	Case	Control		
JAAKK3	4	b	0	34	41	184	415	1.87 (	1.15- 3.04)
JANSON	3	b	10	-	-	-	-	1.90 (	1.25- 2.88)
LARSS2	4	b	5	-	-	-	-	1.13 (	0.80- 1.59)
NHANE3	2	b	0	114	2069	326	8072	1.36 (	1.10- 1.70)
ORYSZC	3	m	0	3	7	13	24	0.79 (	0.17- 3.59)
ORYSZC	4	f	0	4	13	30	42	0.43 (	0.13- 1.45)
Subtotal ORYSZC								0.55 (	0.21- 1.41)
Partial Totals				155	2130	553	8553		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
JAAKK3	4	b	0	0.63	16.22	1.46	0.0117
JANSON	3	b	10	0.64	22.06	2.20	0.0026
LARSS2	4	b	5	0.12	32.57	1.35	0.4855
NHANE3	2	b	0	0.31	80.34	0.02	0.0054
ORYSZC	3	m	0	-0.23	1.68	0.53	0.7614
ORYSZC	4	f	0	-0.84	2.60	3.55	0.1742
Subtotal ORYSZC				-1.73	4.29	4.08	

N 6
NS 5

Wt 155.48
Het Chi 9.11
Het df 5
Het P N.S.
Fixed RR 1.39
RR1 1.18
RRu 1.62
P +++
Random RR 1.38
RR1 1.07
RRu 1.79
P +
Asymm P N.S.

Appendix Table A10 - 6

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
Lifetime/Current Asthma
 Unadjusted

	N	6			
	NS	5			
	Wt	155.48			
	Het Chi	9.11			
	Het df	5			
	Het P	N.S.			
Fixed	RR	1.39			
	RRl	1.18			
	RRu	1.62			
	P	+++			
Random	RR	1.38			
	RRl	1.07			
	RRu	1.79			
	P	+			
Asymm	P	N.S.			
			<u>Sex</u>		
		both	male	female	Total
	N	4	1	1	6
	NS	4	1	1	5
	Wt	151.19	1.68	2.60	155.48
	Het Chi	4.93	0.00	0.00	9.11
	Het df	3	0	0	5
	Het P	N.S.	N.S.	N.S.	N.S.
Fixed	RR	1.42	0.79	0.43	1.39
	RRl	1.21	0.17	0.13	1.18
	RRu	1.67	3.59	1.45	1.62
	P	+++	N.S.	N.S.	+++
Random	RR	1.46	0.79	0.43	1.38
	RRl	1.17	0.17	0.13	1.07
	RRu	1.82	3.59	1.45	1.79
	P	+++	N.S.	N.S.	+
Between	Chi				4.18
Between	df				2
Between	P				N.S.

Asthma definition (lifetime/current)
lifetime current Total

	N	1	5	6
	NS	1	4	5
	Wt	32.57	122.91	155.48
	Het Chi	0.00	7.41	9.11
	Het df	0	4	5
	Het P	N.S.	N.S.	N.S.
Fixed	RR	1.13	1.46	1.39
	RRl	0.80	1.23	1.18
	RRu	1.59	1.74	1.62
	P	N.S.	+++	+++
Random	RR	1.13	1.46	1.38
	RRl	0.80	1.06	1.07
	RRu	1.59	2.01	1.79
	P	N.S.	+	+
Between	Chi			1.71
Between	df			1
Between	P			N.S.

Appendix Table A10 - 6

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Unadjusted

		Continent			Total
		NAmer	Europe	Oth/Mult	
	N	1	4	1	6
	NS	1	3	1	5
	Wt	80.34	53.07	22.06	155.48
Het	Chi	0.00	6.27	0.00	9.11
Het	df	0	3	0	5
Het	P	N.S.	(*)	N.S.	N.S.
Fixed	RR	1.36	1.24	1.90	1.39
	RRl	1.10	0.95	1.25	1.18
	RRu	1.70	1.63	2.88	1.62
Random	P	++	N.S.	++	+++
	RR	1.36	1.16	1.90	1.38
	RRl	1.10	0.71	1.25	1.07
	RRu	1.70	1.90	2.88	1.79
	P	++	N.S.	++	+
Between	Chi				2.84
Between	df				2
Between	P				N.S.

		Start year of study			Total
		<1990	1990-99	unknown	
	N	1	3	2	6
	NS	1	3	1	5
	Wt	80.34	70.85	4.29	155.48
Het	Chi	0.00	4.63	0.38	9.11
Het	df	0	2	1	5
Het	P	N.S.	(*)	N.S.	N.S.
Fixed	RR	1.36	1.49	0.55	1.39
	RRl	1.10	1.18	0.21	1.18
	RRu	1.70	1.88	1.41	1.62
Random	P	++	+++	N.S.	+++
	RR	1.36	1.55	0.55	1.38
	RRl	1.10	1.08	0.21	1.07
	RRu	1.70	2.23	1.41	1.79
	P	++	+	N.S.	+
Between	Chi				4.10
Between	df				2
Between	P				N.S.

		Study type			Total
		CC	Pr	CS	
	N	3		3	6
	NS	2		3	5
	Wt	20.51		134.97	155.48
Het	Chi	5.50		3.57	9.11
Het	df	2		2	5
Het	P	(*)		N.S.	N.S.
Fixed	RR	1.45		1.38	1.39
	RRl	0.94		1.16	1.18
	RRu	2.23		1.63	1.62
Random	P	(+)		+++	+++
	RR	0.99		1.39	1.38
	RRl	0.37		1.09	1.07
	RRu	2.67		1.78	1.79
	P	N.S.		++	+
Between	Chi				0.04
Between	df				1
Between	P				N.S.

Appendix Table A10 - 6

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Unadjusted

		<u>Ex smokers</u>		Total
		excluded	included	
	N	5	1	6
	NS	4	1	5
	Wt	75.13	80.34	155.48
Het	Chi	9.08	0.00	9.11
Het	df	4	0	5
Het	P	(*)	N.S.	N.S.
Fixed	RR	1.41	1.36	1.39
	RRl	1.12	1.10	1.18
	RRu	1.77	1.70	1.62
	P	++	++	+++
Random	RR	1.34	1.36	1.38
	RRl	0.90	1.10	1.07
	RRu	2.00	1.70	1.79
	P	N.S.	++	+
Between	Chi			0.04
Between	df			1
Between	P			N.S.

Appendix Table A10 - 7

Adults - Meta-analysis of Workplace Exposure (preferring most recent)
 Lifetime/Current Asthma
 Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	BECKE2	JEDRYC	LARSS1	MISHRA		NG PILOTT	PLATTS	RAHERI	THORN							
2	ROBBIN															
3	KRONQV	SAPALD														

Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP
JANSON	JANSON	p	JANSON/RAHERI

Adjusted - insufficient data for metaanalysis

REF	NRR	SEX	AST	SMOK	AGEL	AGEH	LOC	BEGYR	PUBYR	STYP	ONS	ADJ	EXPOS	UNEXsrce	EXPOS-time	UNEXTI	RR	SIG
KRONQV	3	b	1	Never	15	65	Eu:Swe	1996	1999	CS	prv	4	Work	NotWork	current	non	*	n
SAPALD	6	b	1	<20pks	18	60	Eu:Swi	1991	1994	CS	prv	8	Work	None	current	non	*	n