

Supplementary table 2: Odds ratios [95% confidence interval] for a child having wheeze in last 3 years, over given time periods, following adjustment for changing prevalences of asthma and covariates.

Covariate	Time period	Model A: n = 13445, Wheeze within last 3 years = 3200	Model B: n =13244, Wheeze within last 3 years =3159 ^a	Model C: n =9770 Wheeze within last 3 years =2444 ^b
Constant	1989-1999	0.11 [0.06, 0.20]*	0.11 [0.06, 0.20] *	0.13 [0.04, 0.33]*
	2004-2014	1.95 [0.67,5.62]	1.74 [0.59, 5.07]	2.06 [0.63, 6.69]
Wheeze rate/year	1989-1999	1.02 [1.01, 1.04]*	1.02 [1.09, 1.04] †	1.00 [0.98, 1.03]
	2004-2014	0.94 [0.91, 0.96]*	0.94 [0.92, 0.97]*	0.93 [0.90, 0.96]*
Age		0.98 [0.94, 1.03]	0.98 [0.93, 1.03]	1.01 [0.96, 1.07]
Male gender	1989-1999	1.01 [1.00, 1.02]*	1.01 [1.00, 1.02]*	1.01 [1.00, 1.01]*
	2004-2014	1.01 [1.00, 1.02]*	1.01 [1.00, 1.02]*	1.01 [1.00, 1.02] †
Deprivation 1	1989-1999	1.01 [1.00, 1.02]*	1.01 [1.01, 1.02]*	1.01 [1.00, 1.01]
	2004-2014	1.01 [1.00, 1.02]†	1.01 [1.00, 1.02] ‡	1.01 [1.00, 1.02]
Deprivation 2	1989-1999	1.01 [1.00, 1.02]*	1.01 [1.00, 1.01] ‡	1.00 [0.99, 1.01]
	2004-2014	1.00 [0.98, 1.01]	1.01 [1.00, 1.02] †	1.01 [1.00, 1.02] ‡
Deprivation 3	1989-1999	1.01 [1.00, 1.02]*	1.01 [1.00, 1.02]*	1.01 [1.00, 1.02] ‡
	2004-2014	1.01 [0.99, 1.02]*	1.00 [0.99, 1.02]	1.01 [0.99, 1.02]
Deprivation 4	1989-1999	1.01 [1.00, 1.02]	1.00 [0.98, 1.01]	1.00 [0.98, 1.01]
	2004-2014	1.00 [0.98, 1.01]	1.00 [0.98, 1.01]	1.00 [0.98, 1.01]
Deprivation 5 (Reference)	1989-1999	1	1	1
	2004-2014	1	1	1
Relative change in prevalence of childhood eczema	1989-1999	1.03 [1.02, 1.04]*	1.03 [1.02, 1.04]*	1.03 [1.02, 1.03]*
	2004-2014	1.03 [1.02, 1.04]*	1.03 [1.02, 1.04]*	1.03 [1.02, 1.04]*
Relative change in prevalence of parental smoking	1989-1999		1.01 [1.00, 1.02]*	1.01 [1.00, 1.02]*
	2004-2014		1.00 [1.00, 1.02] †	1.01 [1.00, 1.02] ‡
Relative change in prevalence of parental asthma	1989-1999			1.02 [1.01, 1.03]*
	2004-2014			1.01 [1.00, 1.01] ‡
Summary fit statistics for 50 imputed samples mean (min, max)				
AIC		14151.22 [14130.11, 14168.37]	13902.56 [13880.12, 13920.51]	10374.93 [10355.49, 10390.64]
		14117.22 [14096.11, 14134.37]	13864.56 [13842.12, 13882.51]	10332.93 [10313.49, 10348.64]
-2 Log L		14117.22 [14096.11, 14134.37]	13864.56 [13842.12, 13882.51]	10332.93 [10313.49, 10348.64]
		14117.22 [14096.11, 14134.37]	13864.56 [13842.12, 13882.51]	10332.93 [10313.49, 10348.64]
Generalised R²		0.286 [0.285, 0.287]	.288 [.287, .289]	0.280 [0.279, 0.282]
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*p<0.0001, †p<0.001, ‡p<0.05. ^a Limited to only 1989-2014, ^b Limited to only 1994-2014. Deprivation is in quintiles with 1 as most deprived and 5 as least deprived, AIC = Atkin Information Criteria, Log L = log likelihood.

