

## Supplementary material

### **S1. Formulas and definitions**

1. Natural direct effect (NDE):  $Y_{a,M(a^*)} - Y_{a^*,M(a^*)}$

This effect is the contrast between the counterfactual outcome if the individual were exposed at  $A = a$ , and the counterfactual outcome if the same individual were exposed at  $A = a^*$ , with the mediator assuming whatever value it would have taken at the reference value of the exposure  $A = a^*$ .

2. Natural Indirect Effect (NIE):  $g(E(Y(a|M(a))) - Y(a|M(a^*)))$

This effect is the contrast, having set the exposure at level  $A = a$ , between the counterfactual outcome if the mediator assumed whatever value it would have taken at a value of the exposure  $A = a$  and the counterfactual outcome if the mediator assumed whatever value it would have taken at a reference value of the exposure  $A = a^*$ .

3. Total Effect (TE):  $g(E(Y(a)) - Y(a^*))$

The sum of the NDE and the NIE, even in presence of exposure-mediator interaction.

**Table S2. Availability of potential mediators by wave**

Mediators	Wave available		
	9 Months	3 years	5 years
<b>1. Perinatal period characteristics</b>			
Maternal pre-pregnancy body mass index (BMI)	x	n/a	n/a
Breastfeeding duration	x	n/a	n/a
Birthweight	x	n/a	n/a
Gestation	x	n/a	n/a
Maternal smoking during pregnancy	x	n/a	n/a
Alcohol use during pregnancy	x	n/a	n/a
Ever seen a health professional for wheeze	✓	✓	✓
<b>2. Housing conditions</b>			
Damp/condensation	✓	✓	✓
Tenure	✓	✓	✓
Furry pets in household	x	✓	✓
Environmental tobacco smoke	✓	✓	✓
Access to garden	✓	✓	✓
<b>3. Potential exposure to infection</b>			
Sibling number in household	✓	✓	✓
Informal vs formal childcare	✓	✓	n/a <sup>a</sup>
<b>4. Neighbourhood characteristics</b>			
Volume of traffic	x	✓	x
Housing quality	x	✓	x
Rubbish on pavement	x	✓	x
Good area	x	✓	✓

<sup>a</sup> Children are in formal childcare/education by 5 years

**Table S3. Characteristics in omitted and analytical samples**

	Omitted sample <sup>a</sup>	Analytical sample
Asthma phenotype		
Never	73.8	76.8
Transient	10.0	8.0
Persistent	16.2	15.2
Maternal education qualification		
Degree plus	4.4	6.4
Diploma	25.4	36.4
A levels	14.1	16.7
GCSE A-C	26.9	26.1
GCSE D-G	8.7	6.1
None	20.5	8.3
Child's sex		
Female	48.2	49.4
Maternal age at birth		
14-24 years	32.7	24.2
Maternal ethnicity		
Mixed	2.1	0.7
Indian	2.3	1.8
Pakistani	10.5	3.1
Black	5.8	2.6
Other	2.4	1.3
Maternal atopy		
One	23.1	23.6
Both	7.1	6.8
Maternal pre-pregnancy BMI		
Underweight	5.4	4.4
Overweight	27.8	25.7
Obese	14.5	13.0
Breastfeeding at least 3 months		
Yes	79.3	74.6
Child's birth weight		
Healthy weight	8.6	6.0
Gestational age at birth		
Preterm	7.4	6.7
Maternal Smoking in pregnancy		
Yes	35.8	35.1
Alcohol consumption during pregnancy		
Any unit per week	7.8	10.3
Wheeze at 9 months		
Yes	4.8	3.6
Damp in the house		
Yes	16.1	14.4

**Table S3. (continued) Characteristics in omitted and analytical samples**

	Omitted sample <sup>a</sup>	Analytical sample
Tenure		
Own mortgage	40.3	60.0
Part rent/mortgage	0.3	0.5
Local authority	30.0	16.3
Housing association	9.7	6.8
Privately rented	11.0	7.9
Living with parents	4.2	4.1
Rent free	0.8	1.0
Furry pets		
Yes	35.6	41.0
Environmental tobacco smoke		
Yes	22.4	17.8
Garden access		
Yes, shared	5.5	3.5
No	19.2	10.1
Sibling number		
1	40.1	47.7
2 or more	38.0	27.5
Childcare		
Formal	7.1	13.9
Condition of buildings		
Fair condition	52.8	38.3
Poor condition	8.2	4.8
Bad condition	0.8	0.4
Volume of traffic		
Light	72.8	75.5
Moderate	17.5	14.8
Heavy	3.4	5.0
Litter in the street		
Some	31.3	21.7
Everywhere	3.8	2.0
Good area		
Good	39.4	38.6
Average	23.0	20.9
Poor	8.2	5.1
Very poor	5.8	2.6

<sup>a</sup> Omitted samples were still productive in MCS at age 14 but with item missingness (n=1,710)

**Table S4. Univariable relative risk ratios (RRR 95% CI) for transient and persistent asthma by sample characteristics (N=7,487)**

	Transient RRR	(95% CI)	Persistent RRR	(95% CI)
Maternal education qualification				
Diploma	0.90	0.65 1.24	1.08	0.82 1.44
A levels	1.00	0.69 1.45	1.14	0.82 1.57
GCSE A-C	1.09	0.76 1.56	1.29	0.95 1.76
GCSE D-G	1.43	0.87 2.33	1.65	1.05 2.58
None	0.92	0.56 1.51	1.73	1.11 2.69
Child's sex				
Female	0.83	0.69 0.99	0.73	0.63 0.85
Maternal age at birth				
14-24 years	1.23	0.95 1.59	1.18	0.97 1.43
Maternal ethnicity				
Mixed	0.50	0.15 1.69	0.76	0.32 1.81
Indian	0.51	0.22 1.19	0.93	0.56 1.52
Pakistani	0.54	0.29 1.01	1.13	0.86 1.49
Black	0.55	0.29 1.06	0.96	0.58 1.58
Other	0.83	0.32 2.17	0.59	0.29 1.19
Maternal atopy				
One	1.43	1.14 1.80	1.75	1.48 2.07
Both	1.54	1.06 2.25	2.63	2.03 3.40
Maternal pre-pregnancy BMI				
Underweight	0.94	0.54 1.63	1.59	1.04 2.43
Overweight	1.26	0.98 1.61	1.17	0.98 1.39
Obese	1.26	0.93 1.70	1.58	1.27 1.96
Breastfeeding at least 3 months				
Yes	0.82	0.64 1.06	0.82	0.70 0.97
Child's birth weight				
Healthy weight	0.77	0.50 1.20	0.44	0.33 0.60
Gestational age at birth				
Preterm	1.92	1.28 2.88	2.09	1.59 2.74
Maternal Smoking in pregnancy				
Yes	1.34	1.08 1.66	1.29	1.09 1.54
Alcohol consumption during pregnancy				
Any unit per week	0.93	0.68 1.27	1.16	0.90 1.50
Wheeze at 9 months				
Yes	2.24	1.35 3.72	3.04	2.10 4.39
Damp in the house				
Yes	0.96	0.73 1.28	1.45	1.17 1.79
Tenure				
Own mortgage	2.00	1.09 3.67	1.27	0.86 1.88
Part rent/mortgage	4.93	1.55 15.7	3.29	1.33 8.12
Local authority	2.98	1.50 5.94	2.27	1.47 3.50
Housing association	2.95	1.53 5.68	1.59	0.99 2.54
Privately rented	2.42	1.19 4.91	1.76	1.04 2.96

<sup>A</sup>reference category: Never had asthma

**Table S4. (continued) Univariable relative risk ratios (RRR 95% CI) for transient and persistent asthma by sample characteristics (N=7,487)**

	Transient RRR	(95% CI)		Persistent RRR	(95% CI)	
Living with parents	2.44	0.81	7.37	1.21	0.63	2.31
Rent free	2.10	0.59	7.46	1.00	0.33	3.02
Furry pets						
Yes	1.05	0.85	1.30	0.95	0.81	1.12
Environmental tobacco smoke						
Yes	1.03	0.78	1.35	1.02	0.81	1.28
Garden access						
Yes, shared	0.87	0.48	1.56	1.17	0.73	1.88
No	1.13	0.80	1.60	1.21	0.92	1.59
Sibling number						
1	1.09	0.85	1.39	0.83	0.70	1.00
2 or more	0.99	0.75	1.31	0.82	0.66	1.02
Childcare						
Formal	0.80	0.59	1.07	0.87	0.72	1.06
Condition of buildings						
Fair condition	1.10	0.86	1.40	1.42	1.22	1.65
Poor condition	1.46	0.87	2.46	1.84	1.20	2.81
Bad condition	3.39	1.07	10.77	1.81	0.35	9.30
Volume of traffic						
Light	1.08	0.66	1.78	1.34	0.86	2.09
Moderate	0.91	0.51	1.60	1.41	0.88	2.26
Heavy	1.04	0.49	2.22	1.72	1.04	2.85
Litter in the street						
Some	1.12	0.84	1.48	1.21	0.99	1.48
Everywhere	1.58	0.90	2.76	0.86	0.47	1.58
Good area						
Good	1.36	1.08	1.72	1.15	0.97	1.38
Average	1.43	1.09	1.88	1.12	0.90	1.40
Poor	1.32	0.77	2.26	1.49	1.05	2.11
Very poor	2.04	1.17	3.57	1.65	1.07	2.53

<sup>A</sup>reference category: Never had asthma

**Table S5. Characteristics of children with transient or persistent asthma in sample (N=7,487)**

	Never	Transient	Persistent	Total
Maternal education qualification				
Degree plus	6.6	6.5	5.4	6.4
Diploma	37.4	33.1	33.0	36.4
A levels	16.9	16.7	15.7	16.7
GCSE A-C	25.6	28.4	27.1	26.1
GCSE D-G	5.6	8.1	7.7	6.1
None	7.9	7.3	11.1	8.3
Child's sex				
Female	50.9	46.5	43.3	49.4
Maternal age at birth				
14-24 years	23.5	27.0	26.8	24.2
Maternal ethnicity				
Mixed	0.8	0.4	0.6	0.7
Indian	1.9	1.0	1.8	1.8
Pakistani	3.2	1.6	3.7	3.1
Black	2.8	1.6	2.7	2.6
Other	1.4	1.2	0.8	1.3
Maternal atopy				
One	21.8	27.3	30.2	23.6
Both	5.6	8.1	11.8	6.8
Maternal pre-pregnancy BMI				
Underweight	4.2	3.6	5.9	4.4
Overweight	25.3	29.3	26.2	25.7
Obese	12.2	13.9	16.7	13.0
Breastfeeding at least 3 months				
Yes	73.9	76.6	77.4	74.6
Child's birth weight				
Healthy weight	5.0	6.2	10.8	6.0
Gestational age at birth				
Preterm	5.5	10.1	11.0	6.7
Maternal Smoking in pregnancy				
Yes	33.6	40.7	39.7	35.1
Alcohol consumption during pregnancy				
Any unit per week	10.1	9.9	11.5	10.3
Wheeze at 9 months				
Yes	2.6	5.7	7.2	3.6
Damp in the house				
Yes	13.6	13.9	18.7	14.4
Tenure				
Own mortgage	61.4	57.8	54.2	60.0
Part rent/mortgage	0.5	0.3	0.7	0.5
Local authority	15.4	18.3	20.1	16.3
Housing association	6.6	8.1	6.7	6.8
Privately rented	7.5	7.9	10.3	7.9

**Table S5. (continued) Prevalence of asthma by sample characteristics (N=7,487)**

	Never	Transient	Persistent	Total
Living with parents	4.0	3.4	5.3	4.1
Rent free	0.9	2.2	1.0	1.0
Furry pets				
Yes	40.9	43.7	40.0	41.0
Environmental tobacco smoke				
Yes	17.7	18.2	18.0	17.8
Garden access				
Yes, shared	3.4	3.3	3.9	3.5
No	9.7	10.9	11.5	10.1
Sibling number				
1	47.8	50.3	45.8	47.7
2 or more	27.8	26.3	26.3	27.5
Childcare				
Formal	14.3	11.7	12.7	13.9
Condition of buildings				
Fair condition	37.1	38.5	44.1	38.3
Poor condition	4.3	5.9	6.6	4.8
Bad condition	0.3	0.9	0.4	0.4
Volume of traffic				
Light	75.4	77.3	75.0	75.5
Moderate	14.9	12.7	15.3	14.8
Heavy	4.7	5.0	6.0	5.0
Litter in the street				
Some	21.0	22.6	24.6	21.7
Everywhere	1.9	2.9	0.2	2.0
Good area				
Good	38.2	40.6	39.2	38.6
Average	20.6	23.3	20.9	20.9
Poor	4.9	5.0	6.4	5.1
Very poor	2.4	3.8	3.3	2.6



**Table S6. Relative risk ratios (RRR) for asthma phenotype by SEC adjusted for blocks of mediators including mediators available at all time points (N=7,284)**

	Baseline Model			Model 1			Model 2			Model 3			Model 4		
	RRR <sup>a</sup>	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI	
Transient asthma															
Diploma	0.85	0.61	1.18	0.79	0.57	1.09	0.78	0.56	1.08	0.78	0.56	1.08	0.77	0.55	1.08
A levels	0.89	0.62	1.28	0.78	0.54	1.14	0.78	0.54	1.15	0.78	0.53	1.14	0.76	0.51	1.12
GCSE A-C	1.00	0.68	1.48	0.83	0.55	1.23	0.80	0.53	1.19	0.80	0.53	1.19	0.77	0.52	1.16
GCSE D-G	1.25	0.72	2.15	1.01	0.59	1.72	1.03	0.60	1.76	1.02	0.59	1.76	0.99	0.58	1.69
None	0.94	0.57	1.57	0.75	0.44	1.30	0.72	0.41	1.27	0.72	0.41	1.28	0.69	0.40	1.21
Persistent asthma															
Diploma	1.01	0.77	1.34	0.93	0.66	1.32	0.93	0.66	1.32	0.93	0.66	1.32	0.93	0.66	1.32
A levels	1.04	0.75	1.45	0.93	0.61	1.40	0.92	0.61	1.39	0.93	0.61	1.41	0.93	0.61	1.41
GCSE A-C	1.22	0.89	1.67	1.00	0.68	1.46	1.00	0.69	1.46	1.02	0.69	1.51	1.01	0.69	1.49
GCSE D-G	1.48	0.93	2.35	1.17	0.65	2.11	1.18	0.65	2.14	1.19	0.66	2.16	1.17	0.65	2.12
None	1.73	1.08	2.77	1.45	0.85	2.47	1.43	0.84	2.43	1.48	0.87	2.52	1.46	0.86	2.50

<sup>a</sup>All models were adjusted for baseline confounders (child sex, maternal age at birth, maternal ethnicity, and maternal atopy). Degree plus is the reference category.

Model 1: Baseline model + perinatal characteristics (maternal pre-pregnancy BMI; breastfeeding duration; birth weight; gestation; maternal smoking during pregnancy; alcohol use during pregnancy; wheeze at 9 months, 3 & 5 years)

Model 2: Model 1 + housing conditions (damp at 9 months, 3 & 5 years; tenure at 9 months, 3 & 5 years; furry pets at 9 months & 3 years; environmental tobacco smoke at 9 months, 3 & 5 years; access to garden at 9 months, 3 & 5 years)

Model 3: Model 2 + potential exposure to infection (sibling number at 9 months, 3 & 5 years; childcare type at 9 months & 3 years)

Model 4: Model 3 + neighbourhood characteristics (volume of traffic; housing quality; rubbish; area rating at 3 & 5 years)

**Table S7. Relative risk ratios (RRR) for transient and persistent asthma compared to never by SEC adjusted for blocks of mediators (N=7,487)**

	Baseline Model			Model 1			Model 2			Model 3			Model 4			Model 5		
	RRR <sup>a</sup>	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI	
Transient asthma																		
Diploma	0.86	0.62	1.19	0.81	0.58	1.12	0.82	0.59	1.13	0.81	0.58	1.12	0.79	0.56	1.10	0.78	0.55	1.09
A levels	0.93	0.65	1.34	0.83	0.57	1.21	0.84	0.58	1.22	0.82	0.57	1.19	0.79	0.54	1.15	0.76	0.52	1.12
GCSE A-C	1.01	0.69	1.47	0.87	0.59	1.27	0.89	0.60	1.31	0.85	0.57	1.26	0.81	0.55	1.20	0.77	0.52	1.15
GCSE D-G	1.26	0.74	2.14	1.09	0.65	1.85	1.15	0.67	1.96	1.08	0.64	1.83	1.03	0.61	1.74	0.96	0.57	1.63
None	0.92	0.56	1.51	0.73	0.44	1.23	0.77	0.46	1.30	0.71	0.42	1.21	0.68	0.40	1.15	0.63	0.38	1.05
Persistent asthma																		
Diploma	1.03	0.78	1.36	0.96	0.72	1.27	0.96	0.73	1.28	0.96	0.73	1.27	0.95	0.72	1.26	0.95	0.72	1.26
A levels	1.08	0.78	1.50	0.96	0.69	1.35	0.98	0.70	1.38	0.97	0.69	1.36	0.96	0.68	1.35	0.95	0.67	1.33
GCSE A-C	1.24	0.91	1.70	1.09	0.79	1.51	1.12	0.82	1.55	1.10	0.80	1.52	1.10	0.79	1.53	1.08	0.78	1.49
GCSE D-G	1.50	0.95	2.35	1.34	0.85	2.12	1.43	0.91	2.25	1.35	0.86	2.13	1.36	0.85	2.15	1.31	0.83	2.07
None	1.71	1.07	2.74	1.35	0.86	2.12	1.44	0.92	2.26	1.35	0.86	2.10	1.37	0.87	2.16	1.31	0.82	2.09
Proportion attenuated (%) <sup>b</sup>				50.70			38.03			50.70			47.89			56.34		

<sup>a</sup> All models were adjusted for baseline confounders (child sex, maternal age at birth, maternal ethnicity, and maternal atopy). Degree plus is the reference category.

<sup>b</sup> Proportion of RRR of persistent asthma attenuated by comparison of baseline model with models 1-4 for lowest SECs ( $100 \times (\text{RRR-adjusted RRR}) / (\text{RRR}-1)$ )

Model 1: Baseline model + perinatal characteristics (maternal pre-pregnancy BMI; breastfeeding duration; birth weight; gestation; maternal smoking during pregnancy; alcohol use during pregnancy; wheeze

Model 2: Model 1 + environmental tobacco smoke

Model 3: Model 2 + housing conditions (damp; tenure; furry pets; access to garden)

Model 4: Model 3 + potential exposure to infection (sibling number; childcare type)

Model 5: Model 4 + neighbourhood characteristics (volume of traffic; housing quality; rubbish; area rating)

**Table S8. Relative risk ratios (RRR) for transient and persistent (two and three categorisations) asthma by SEC adjusted for blocks of mediators (N=7,487)**

	<u>Baseline Model</u>			<u>Model 1</u>			<u>Model 2</u>			<u>Model 3</u>			<u>Model 4</u>		
	RRR <sup>a</sup>	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI	
Transient asthma															
Diploma	0.86	0.62	1.19	0.81	0.58	1.12	0.81	0.58	1.12	0.79	0.56	1.10	0.78	0.55	1.09
A levels	0.93	0.65	1.34	0.83	0.57	1.21	0.82	0.57	1.19	0.79	0.54	1.15	0.76	0.52	1.12
GCSE A-C	1.01	0.69	1.47	0.87	0.59	1.27	0.85	0.58	1.26	0.81	0.55	1.20	0.77	0.52	1.15
GCSE D-G	1.26	0.74	2.14	1.09	0.65	1.85	1.08	0.64	1.83	1.03	0.61	1.74	0.96	0.57	1.63
None	0.92	0.56	1.51	0.73	0.44	1.23	0.71	0.42	1.21	0.68	0.40	1.15	0.63	0.38	1.05
Persistent asthma (twice)															
Diploma	0.99	0.68	1.46	0.93	0.63	1.37	0.94	0.64	1.38	0.94	0.64	1.38	0.94	0.64	1.38
A levels	1.01	0.64	1.61	0.94	0.58	1.50	0.95	0.59	1.52	0.96	0.59	1.54	0.94	0.59	1.51
GCSE A-C	1.13	0.73	1.74	1.04	0.67	1.61	1.06	0.69	1.65	1.10	0.70	1.70	1.07	0.69	1.66
GCSE D-G	1.73	1.00	2.99	1.64	0.94	2.87	1.73	0.99	3.03	1.80	1.02	3.17	1.73	0.99	3.05
None	1.57	0.86	2.88	1.32	0.75	2.34	1.40	0.80	2.43	1.48	0.84	2.61	1.42	0.79	2.53
Persistent asthma (3 times)															
Diploma	1.08	0.73	1.59	0.98	0.66	1.46	0.99	0.67	1.46	0.96	0.64	1.44	0.96	0.64	1.45
A levels	1.16	0.74	1.80	0.99	0.63	1.56	0.99	0.63	1.57	0.96	0.60	1.52	0.95	0.59	1.52
GCSE A-C	1.37	0.89	2.10	1.14	0.73	1.79	1.14	0.73	1.77	1.10	0.70	1.75	1.08	0.68	1.72
GCSE D-G	1.20	0.57	2.51	1.00	0.47	2.12	0.96	0.45	2.02	0.93	0.44	1.97	0.90	0.42	1.91
None	1.87	1.05	3.33	1.37	0.76	2.50	1.29	0.71	2.35	1.26	0.69	2.31	1.21	0.65	2.25

<sup>a</sup>All models were adjusted for baseline confounders (child sex, maternal age at birth, maternal ethnicity, and maternal atopy). Degree plus is the reference category.

Model 1: Baseline model + perinatal characteristics (maternal pre-pregnancy BMI; breastfeeding duration; birth weight; gestation; maternal smoking during pregnancy; alcohol use during pregnancy; wheeze

Model 2: Model 1 + housing conditions (damp; tenure; furry pets; environmental tobacco smoke; access to garden)

Model 3: Model 2 + potential exposure to infection (sibling number; childcare type)

Model 4: Model 3 + neighbourhood characteristics (volume of traffic; housing quality; rubbish; area rating)

**Table S9. Odds ratios (OR) for current asthma at 14 years (excluding prior reports) compared to none by SEC adjusted for blocks of mediators (N= 5,930)**

	<u>Baseline Model</u>			<u>Model 1</u>			<u>Model 2</u>			<u>Model 3</u>			<u>Model 4</u>		
	RRR <sup>a</sup>	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI	
Asthma at 14 years															
Diploma	0.94	0.55	1.60	0.88	0.51	1.51	0.87	0.51	1.49	0.85	0.49	1.49	0.84	0.48	1.47
A levels	0.70	0.36	1.39	0.63	0.31	1.28	0.61	0.30	1.25	0.59	0.28	1.23	0.57	0.27	1.20
GCSE A-C	0.50	0.26	0.96	0.44	0.22	0.88	0.42	0.21	0.84	0.40	0.20	0.82	0.39	0.19	0.80
GCSE D-G	1.19	0.48	2.93	1.07	0.44	2.62	1.04	0.42	2.56	0.98	0.39	2.43	0.93	0.38	2.26
None	0.87	0.41	1.84	0.77	0.36	1.64	0.72	0.32	1.61	0.66	0.29	1.50	0.63	0.28	1.44

<sup>a</sup> All models were adjusted for baseline confounders (child sex, maternal age at birth, maternal ethnicity, and maternal atopy). Degree plus is the reference category.

<sup>b</sup> Current asthma at 14 years was defined by any report of asthma (yes/no) at 14 years only (excluding [n= 3,099] those who had reported asthma at 7 or 11 years)

Model 1: Baseline model + perinatal characteristics (maternal pre-pregnancy BMI; breastfeeding duration; birth weight; gestation; maternal smoking during pregnancy; alcohol use during pregnancy; wheeze

Model 2: Model 1 + housing conditions (damp; tenure; furry pets; environmental tobacco smoke; access to garden)

Model 3: Model 2 + potential exposure to infection (sibling number; childcare type)

Model 4: Model 3 + neighbourhood characteristics (volume of traffic; housing quality; rubbish; area rating)

**Table S10. Longitudinal typologies of wheeze**

Longitudinal typologies of wheeze 0=no wheeze; 1=wheeze						
Typology #1 (analysis typology)	Typology #2	9m (taken to health prof. for wheeze)	3y (wheeze in last 12m)	5y (wheeze in last 12m)	7y (wheeze in last 12m)	Frequency
Never	Never	0	0	0	0	66.0% (7540)
Early remitting	Gone by seven	1	0	0	0	3.14 (359)
Early remitting	Gone by seven	1	1	0	0	1.05 (120)
Early remitting	Gone by seven	1	1	1	0	0.54 (62)
Early remitting	Gone by seven	0	1	0	0	8.7 (989)
Early remitting	Gone by seven	0	1	1	0	3.7 (418)
Persistent/relapsing	Late onset >3	0	0	1	1	2.9 (326)
Persistent/relapsing	Late onset >3	0	0	0	1	2.9 (336)
Persistent/relapsing	Always	0	1	1	1	3.82 (436)
Persistent/relapsing	Always	1	1	1	1	0.56 (64)
Persistent/relapsing	Relapse by seven	0	1	0	1	1.3 (149)
Persistent/relapsing	Relapse by seven	1	0	0	1	0.3 (34)
Persistent/relapsing	Relapse by seven	1	1	0	1	0.2 (26)
Persistent/relapsing	Relapse by seven	1	0	1	1	0.2 (22)
Transient/intermittent	Transient	0	0	1	0	4.4 (498)
Transient/intermittent	Intermittent	1	0	1	0	0.3 (39)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4771620/>