

**Table S2: Determinants of cumulative asthma incidence, including interval exposure variables (smoking, BMI and occupational exposure)**

<u>Variables</u>	<u>Model 1*</u> OR (95% CI) N= 5128	<u>Model 2**</u> OR (95% CI) N= 5124	<u>Model 3***</u> OR (95% CI) N= 4235	<u>Model 4****</u> OR (95% CI) N= 4235
Female sex	<b>1.99</b> (1.54 - 2.57)	<b>2.00</b> (1.54 - 2.58)	<b>2.14</b> (1.61 - 2.84)	<b>2.12</b> (1.60 - 2.83)
Age (years)	<b>0.98</b> (0.97 - 0.99)	<b>0.98</b> (0.97 - 0.99)	<b>0.98</b> (0.97 - 1.00)	<b>0.98</b> (0.97 - 1.00)
Atopy	<b>3.04</b> (2.40 - 3.85)	<b>3.06</b> (2.42 - 3.88)	<b>3.35</b> (2.58 - 4.34)	<b>3.35</b> (2.59 - 4.34)
Never-smoker (reference)	1	1	1	1
Former-smoker	<b>1.38</b> (1.06 - 1.78)	<b>1.46</b> (1.10 - 1.94)	<b>1.57</b> (1.16 - 2.12)	<b>1.58</b> (1.17 - 2.13)
Current-smoker	0.94 (0.67 - 1.32)	1.16 (0.69 - 1.96)	1.32 (0.73 - 2.37)	1.33 (0.73 - 2.40)
BMI	<b>1.05</b> (1.02 - 1.09)	<b>1.06</b> (1.02 - 1.09)	<b>1.04</b> (1.01 - 1.09)	<b>1.04</b> (1.00 - 1.09)
Parental asthma	<b>1.87</b> (1.37 - 2.55)	<b>1.87</b> (1.38 - 2.55)	<b>1.85</b> (1.32 - 2.60)	<b>1.86</b> (1.33 - 2.61)
Early-life respiratory infection	1.27 (0.83 - 1.94)	1.28 (0.84 - 1.95)	1.43 (0.91 - 2.26)	1.44 (0.92 - 2.27)
Occupational exposure	1.26 (0.97 - 1.63)	1.26 (0.98 - 1.63)	<b>1.39</b> (1.05 - 1.84)	<b>1.42</b> (1.06 - 1.91)
Intermediate education (reference)	1	1	1	1
Low education	<b>0.34</b> (0.17 - 0.67)	<b>0.34</b> (0.17 - 0.68)	<b>0.31</b> (0.13 - 0.71)	<b>0.30</b> (0.13 - 0.71)
Higher education	1.02 (0.78 - 1.34)	1.02 (0.78 - 1.33)	1.13 (0.85 - 1.50)	1.13 (0.85 - 1.50)
Smoking interval	-	0.81 (0.54 - 1.22)	0.66 (0.42 - 1.03)	0.66 (0.42 - 1.03)
BMI interval	-	-	1.04 (0.99 - 1.08)	1.04 (0.99 - 1.08)
Occupational exposure interval	-	-	-	0.93 (0.69 - 1.26)

\*Model 1: final model additionally adjusting for study area

\*\*Model 2: model 1, additionally adjusting for interval smoking (never = consistent never smoker across all surveys, current = current smoker at SAPALDIA3, ex-smoker = smoker at SAPALDIA1 or SAPALDIA2 but not at SAPALDIA3)

\*\*\*Model 3: model 2, additionally adjusting for interval BMI (0=no change, 1=change)

\*\*\*\*Model 4: model 3, additionally adjusting for interval occupational exposure (change in occupational exposure from SAPALDIA1-SAPALDIA3)