

369 **ILLUSTRATIONS**

370 Figure 1

371 Map of the prevalence of asthma ever. The symbols indicate prevalence values of <5% (blue
372 squares), 5 to <10% (green circle), 10 to <20% (yellow diamonds) and $\geq 20\%$ (red stars).

373

374 Figure 2

375 Map of the prevalence of current wheeze. The symbols indicate prevalence values of <5%
376 (blue squares), 5 to <10% (green circle), 10 to <20% (yellow diamonds) and $\geq 20\%$ (red stars).

377

378 Figure 3

379 Map of the prevalence of hay fever ever. The symbols indicate prevalence values of <5%
380 (blue squares), 5 to <10% (green circle), 10 to <20% (yellow diamonds) and $\geq 20\%$ (red stars).

381

382 Figure 4

383 Map of the prevalence of eczema ever. The symbols indicate prevalence values of <5% (blue
384 squares), 5 to <10% (green circle), 10 to <20% (yellow diamonds) and $\geq 20\%$ (red stars).

385

386 Figure 5

387 Rank correlation values and scatter plots of prevalence of the three conditions at the centre
388 level. The dashed line is the identity line. Rank correlation coefficient and 95%CI is shown in
389 each graph.

390

391 Web Figure 1

392 Ranking of centres for the symptom prevalences of current wheeze, asthma ever, hay fever
393 ever and eczema ever.

394

395 Web Figure 2
396 Ranking of centres for the symptom prevalences of current wheeze, asthma ever, hay fever
397 ever and eczema ever by sex (males on left).

398

399 Web Figure 3
400 Rank correlation values and scatter plots of prevalence of the three conditions at the centre
401 level by sex (males on left). The dashed line is the identity line. Rank correlation coefficient
402 and 95%CI is shown in each graph.

403

404 Web Figure 4
405 Rank correlation comparing centre prevalence (%) of reporting current wheeze, asthma
406 ever, severe asthma symptoms, hay fever ever and eczema ever between the three age
407 groups (children, adolescents, adults) included in GAN Phase I. The dashed line is the identity
408 line. Rank correlation coefficient and 95%CI is shown in each graph.

409

410 **TABLES**

411 Table 1
412 Symptom prevalence of asthma, hay fever and eczema in centres grouped by Gross National
413 Income (GNI).

414

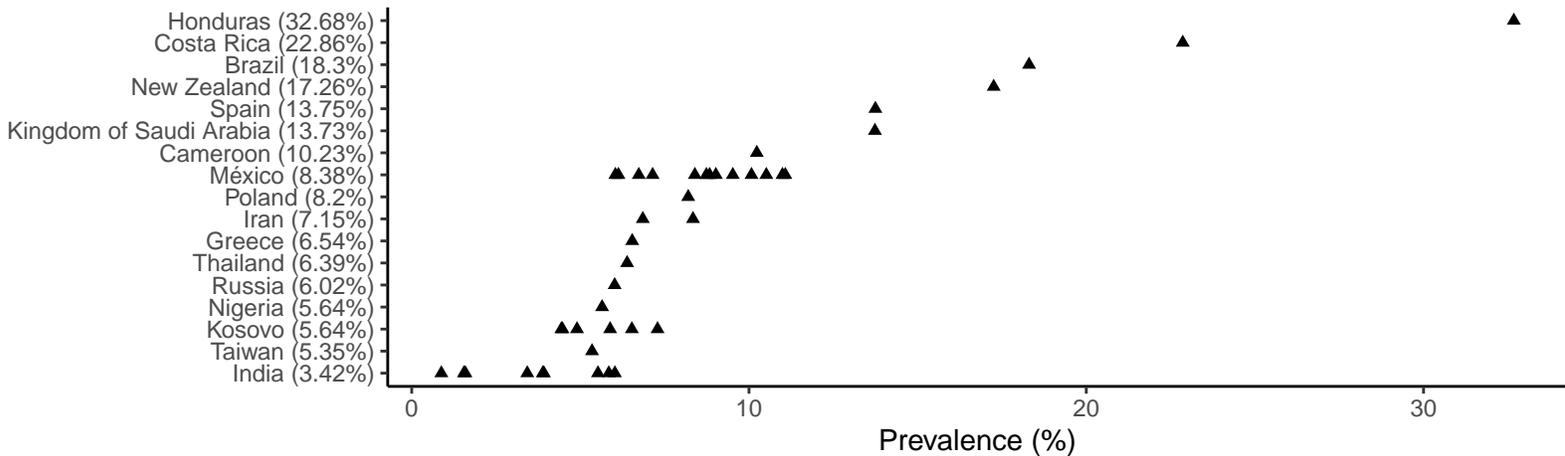
415 Web Table 1
416 Demographic summary by centre.

417

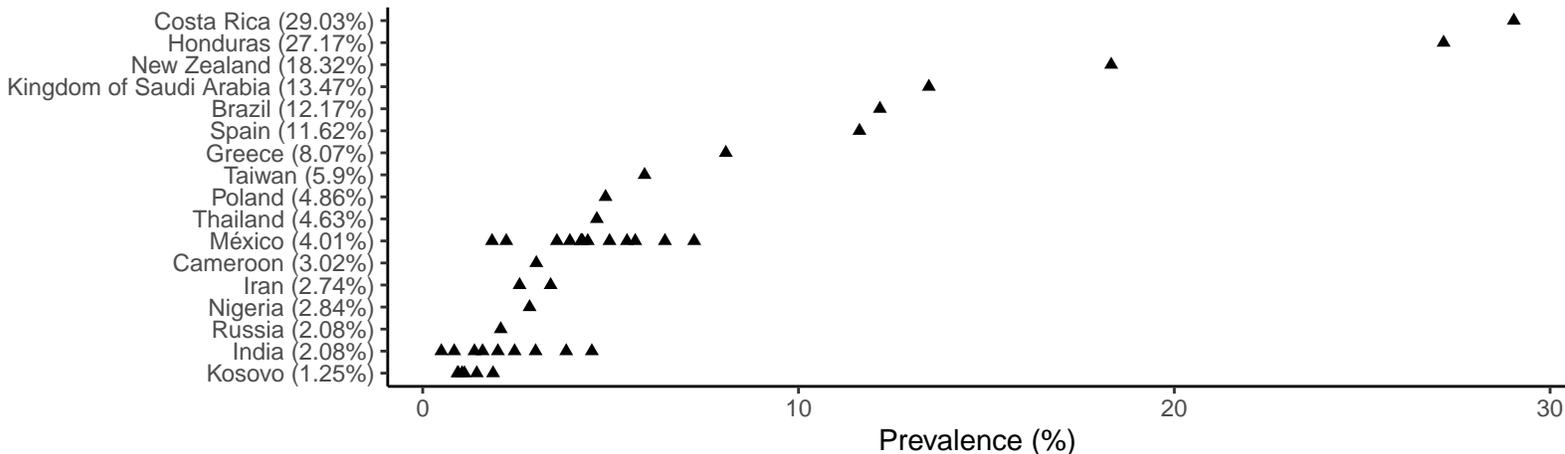
418 Web Table 2
419 Symptom prevalence of asthma, hay fever and eczema by centre.

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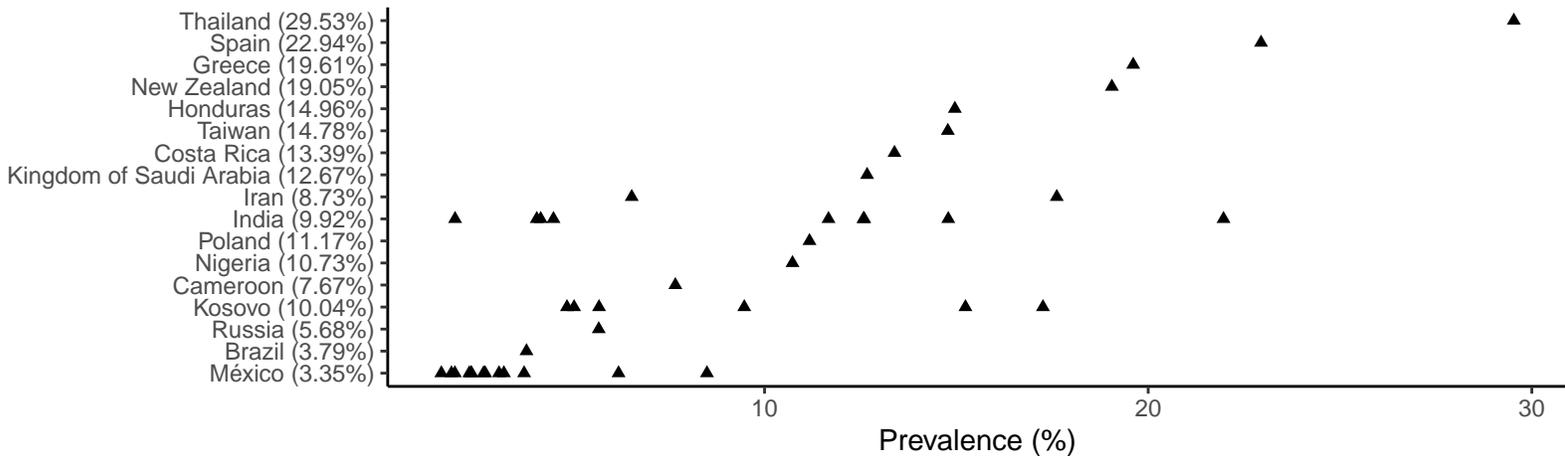
Current wheeze



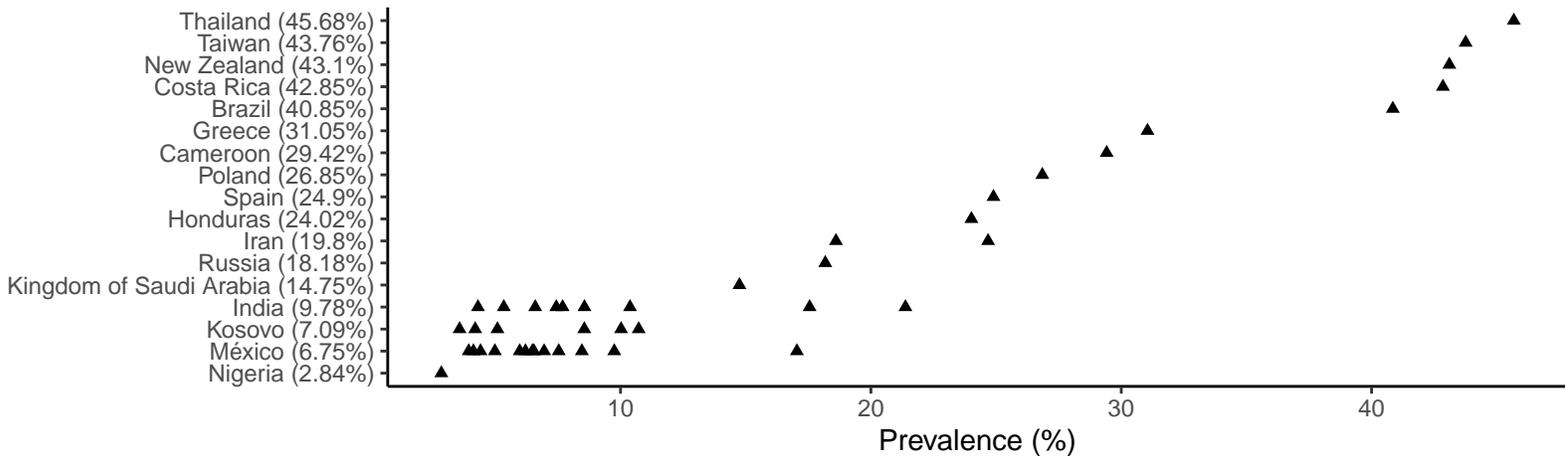
Asthma ever



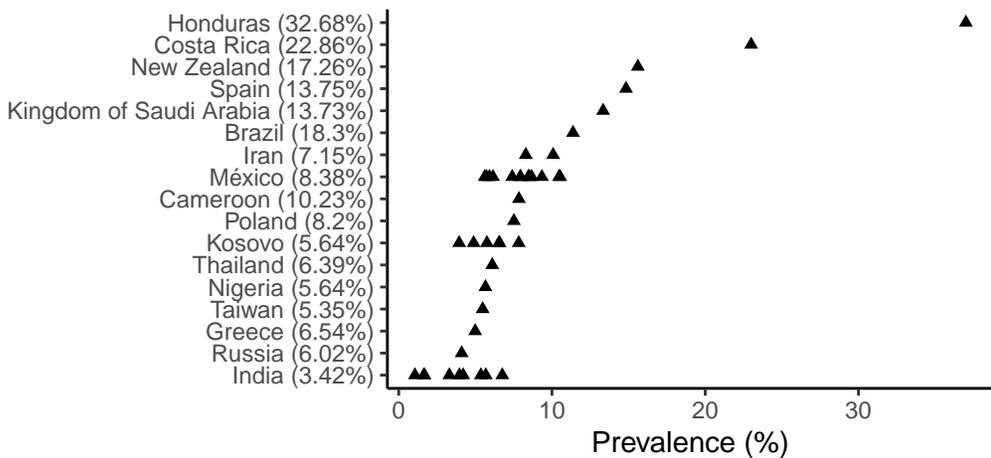
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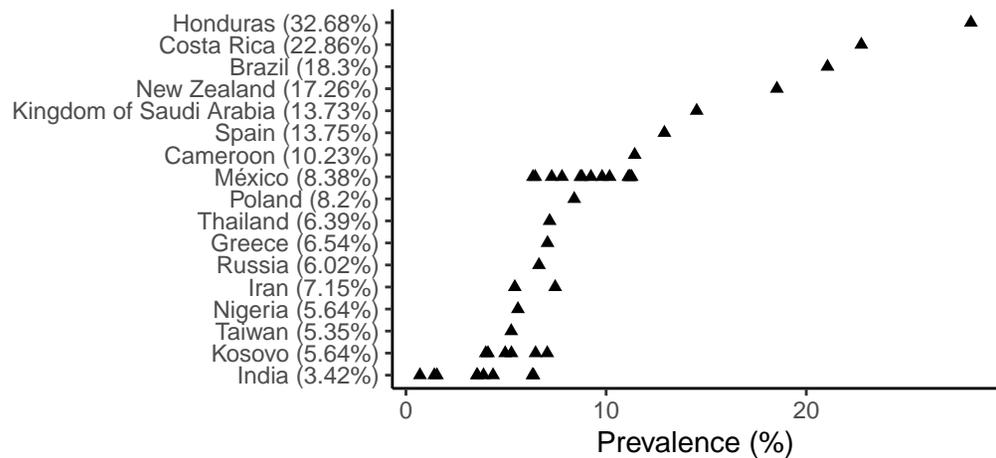
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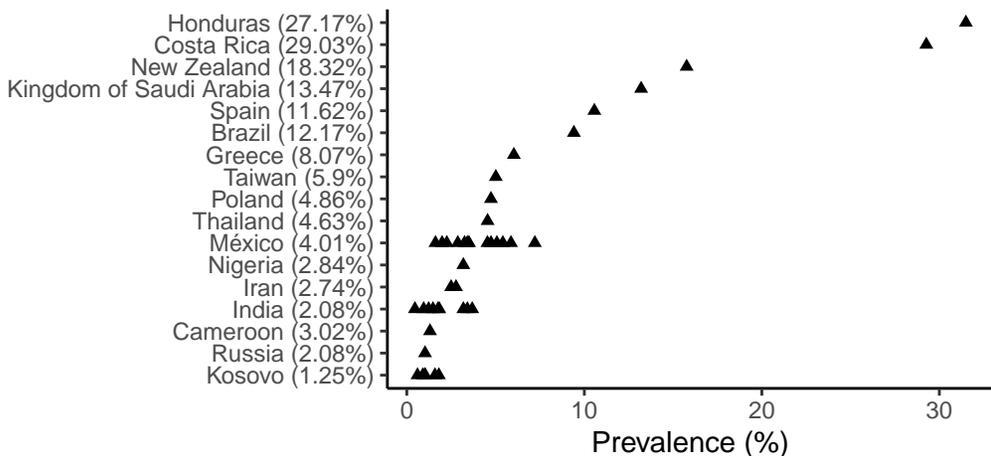
Current wheeze



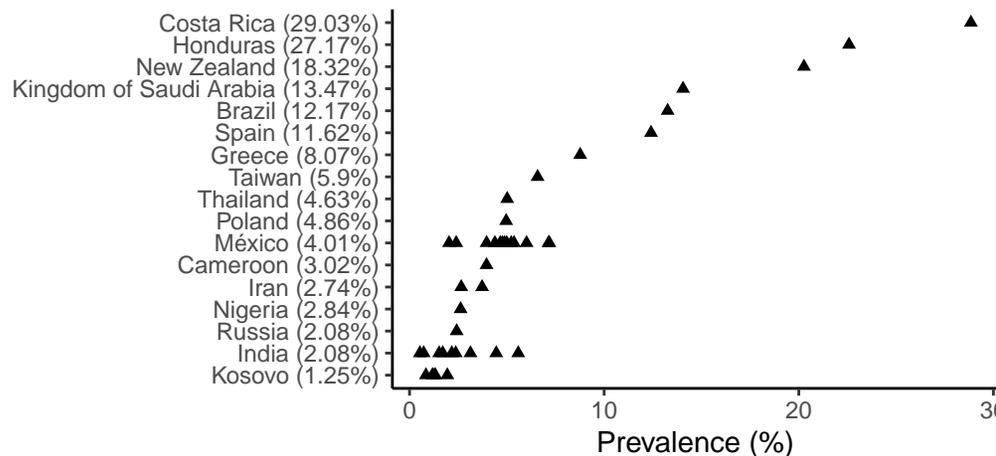
Current wheeze



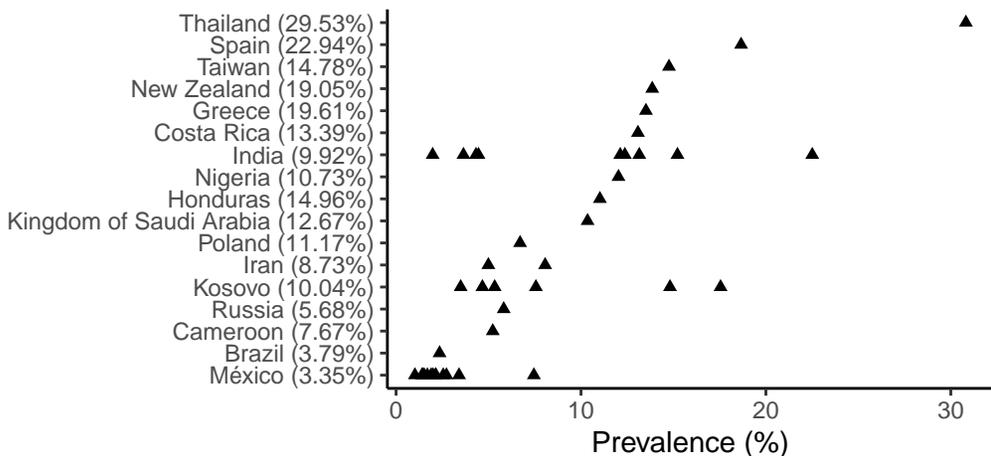
Asthma ever



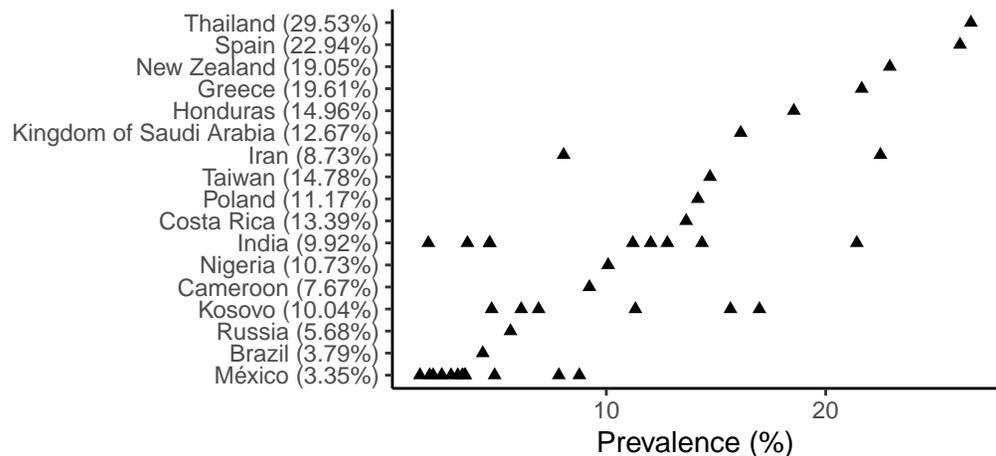
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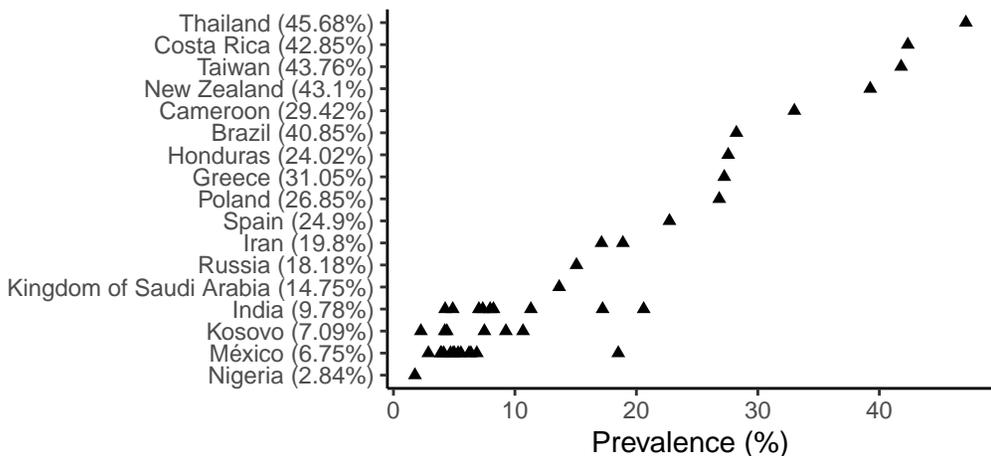
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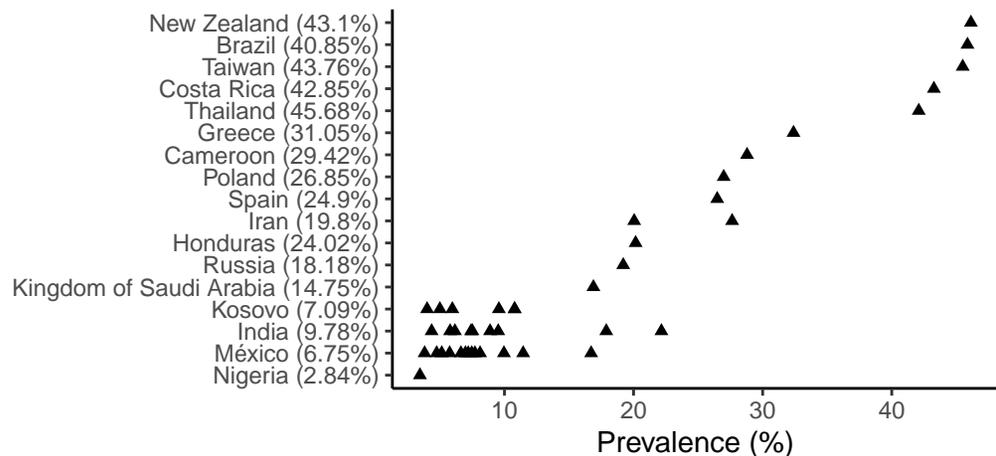
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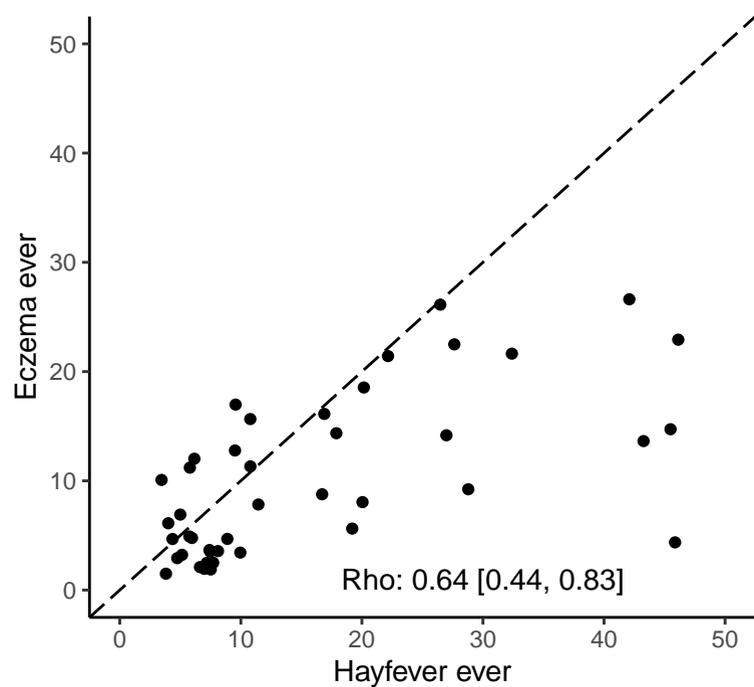
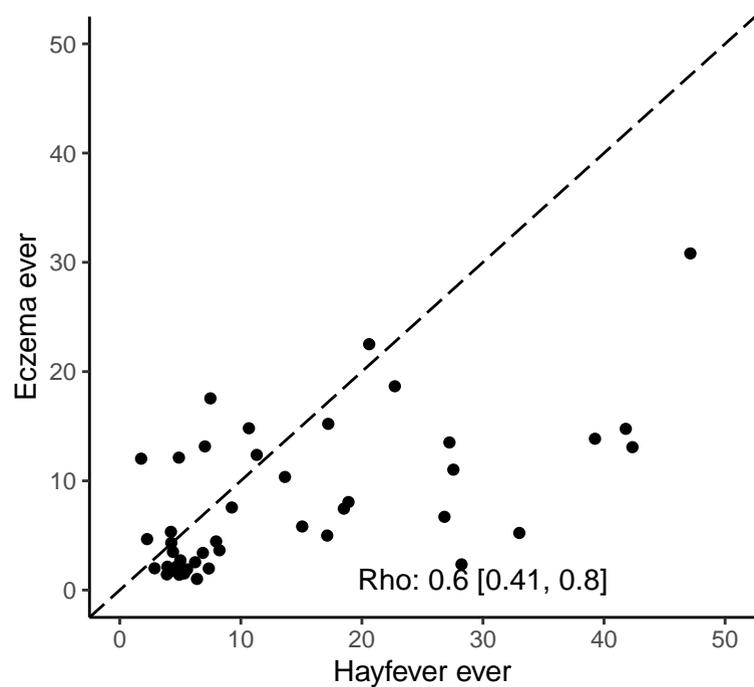
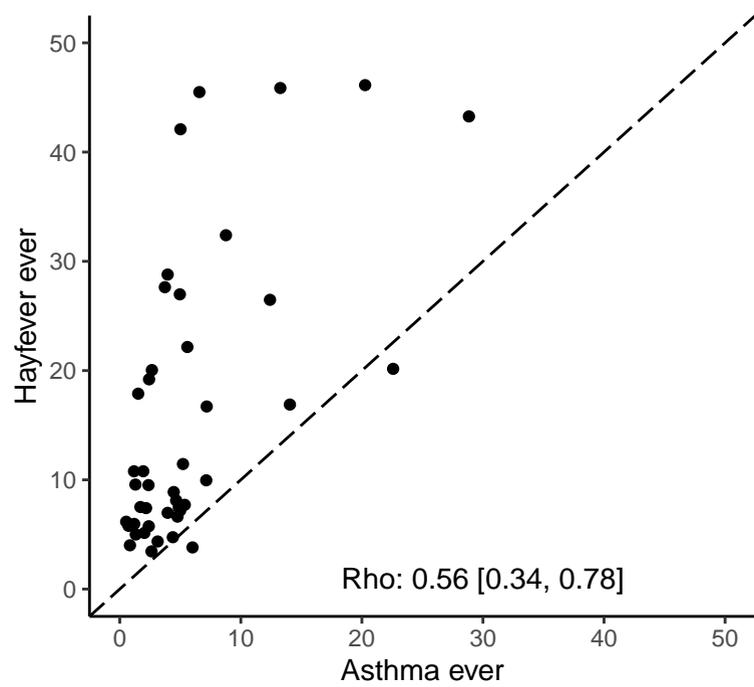
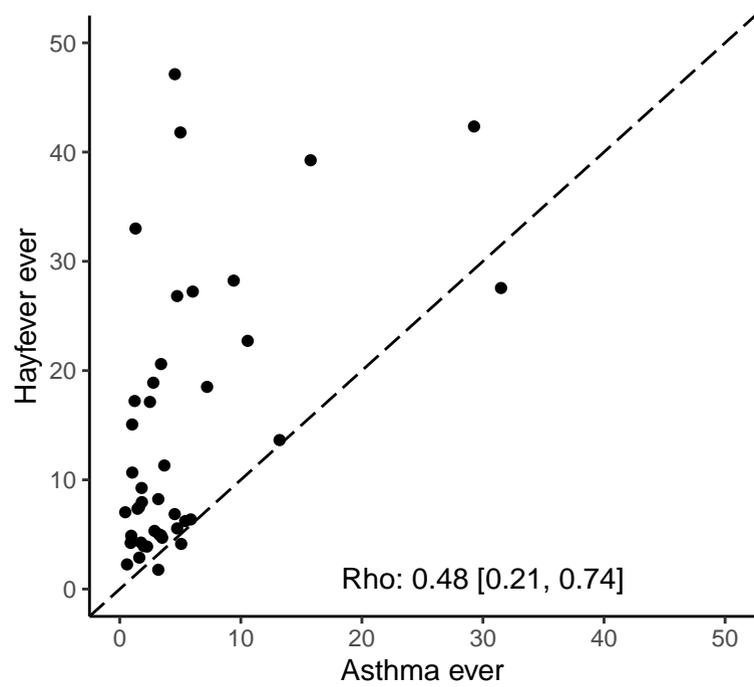
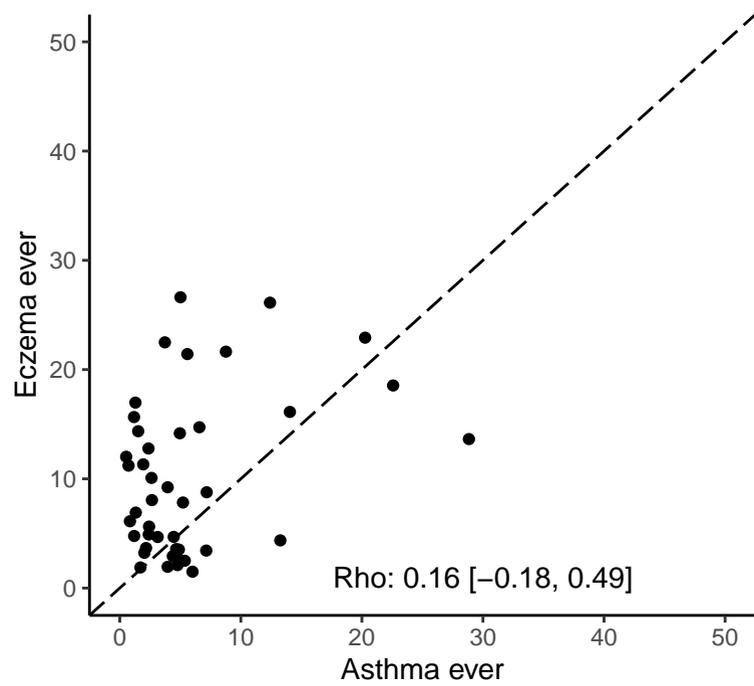
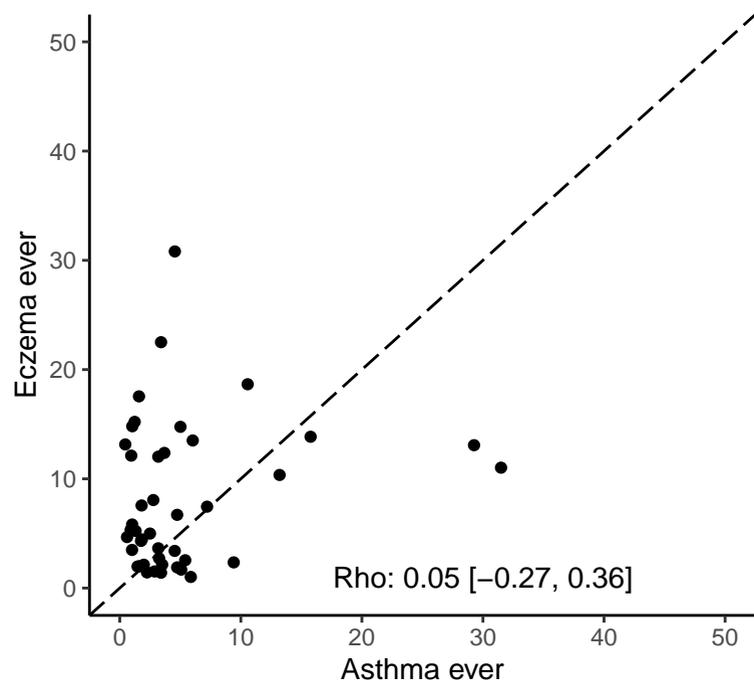


Hayfever ever

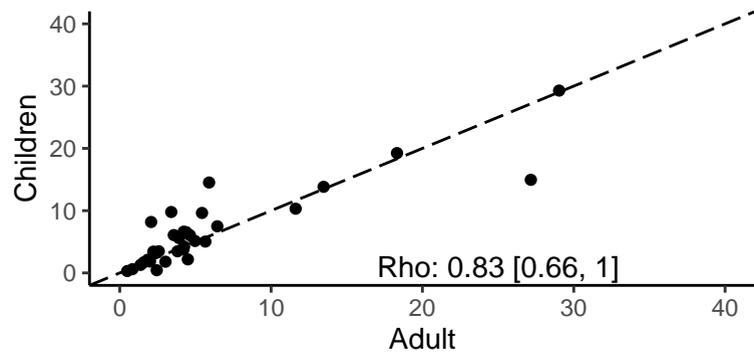


Hayfever ever

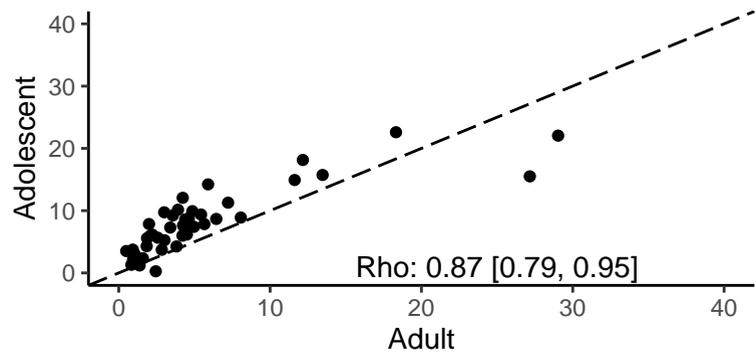




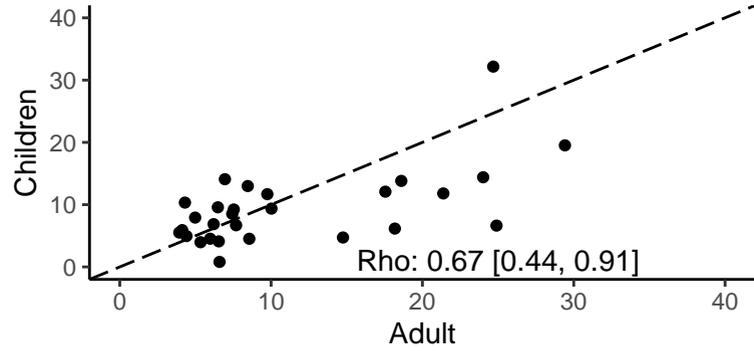
Asthma ever



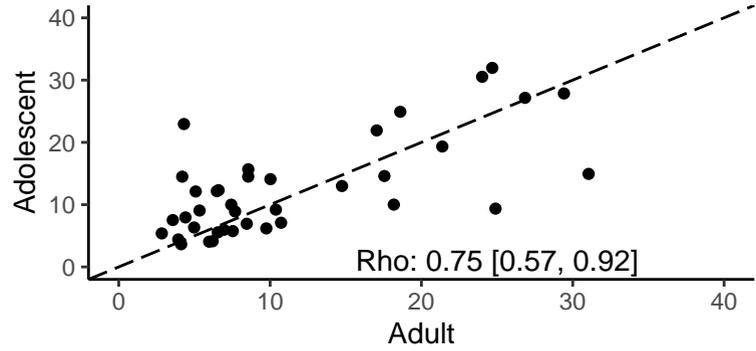
Asthma ever



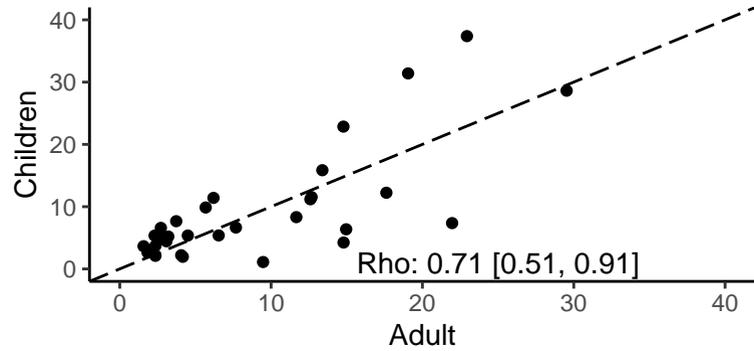
Hayfever ever



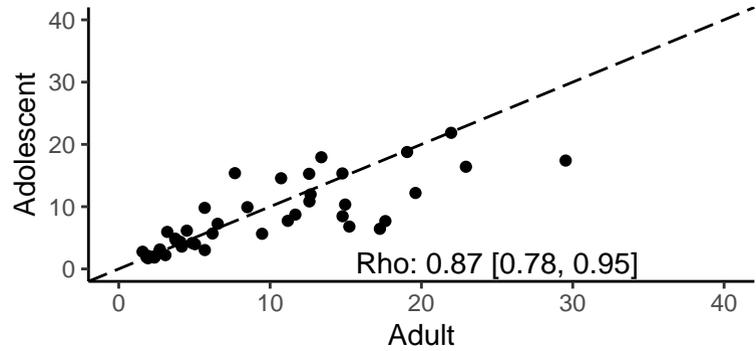
Hayfever ever



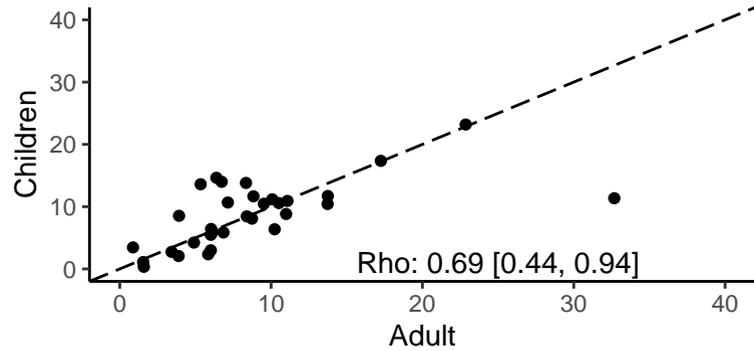
Eczema ever



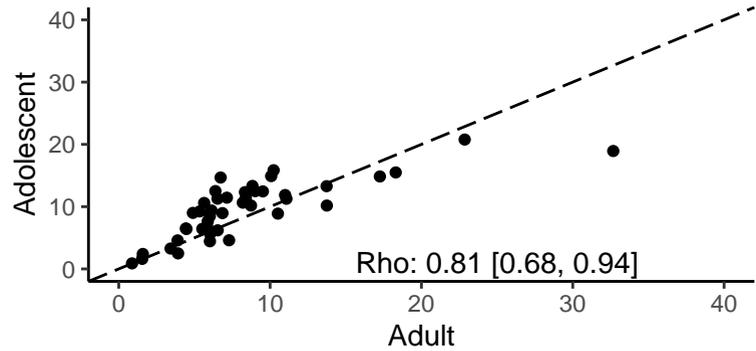
Eczema ever



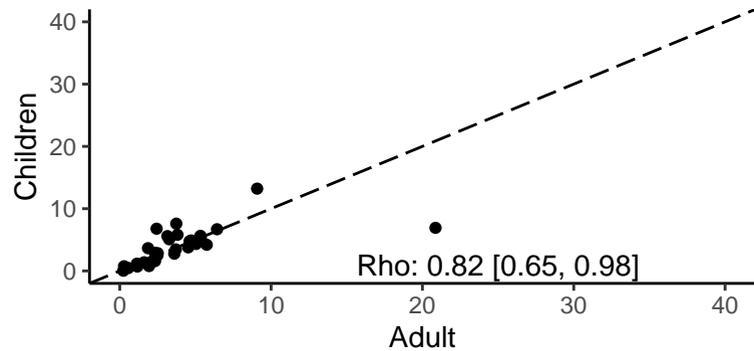
Current wheeze



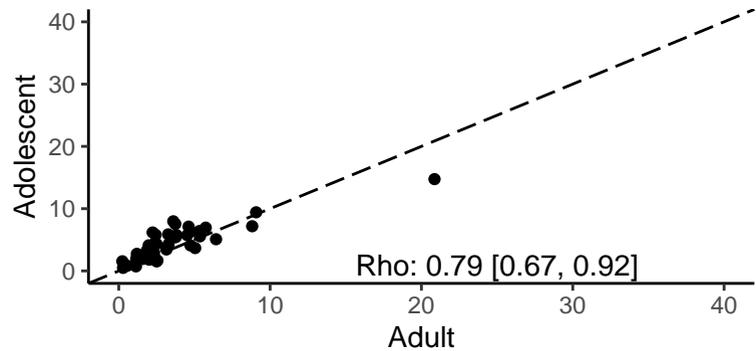
Current wheeze



Severe asthma symptoms



Severe asthma symptoms



Web Table 1 : Demographic summary by centre.

Country	Centre	Proportion female	Mean age (years)	Standard deviation age (years)
Cameroon	Yaounde	0.53	36.2	8.1
Nigeria	Ibadan	0.62	43.5	9.9
Taiwan	Taipei	0.54	43.0	6.7
Thailand	Bangkok	0.26	42.4	6.8
Iran	Yazd	0.50	36.0	6.1
Iran	Karaj	0.66	39.9	6.7
Kingdom of Saudi Arabia	Kingdom of Saudi Arabia	0.40	38.5	12.2
India	Kottayam	0.50	40.9	7.1
India	New Delhi (7)	0.50	39.9	3.9
India	Chandigarh	0.50	37.0	5.5
India	Bikaner	0.50	35.5	6.7
India	Jaipur	0.50	36.5	6.3
India	Lucknow	0.50	36.5	6.3
India	Kolkata	0.52	41.3	6.7
India	Pune	0.50	35.9	6.5
India	Mysuru (Mysore)	0.50	38.2	6.4
Brazil	Uruguaiiana	0.72	42.0	9.0
Costa Rica	Costa Rica	0.55	35.3	4.2
Honduras	Tegucigalpa	0.49	-	-
México	Monterrey	0.80	33.9	8.8
México	México City (North Area)	0.63	37.6	8.8
México	Mexicali	0.60	36.8	8.2
México	Ciudad Victoria	0.60	38.4	7.6
México	San Luis Potosí	0.58	38.0	8.1
México	Tijuana	0.62	34.4	8.1
México	Toluca Urban Area	0.58	34.9	7.1
México	Toluca Rural	0.55	35.8	7.6
México	Ciudad Juárez	0.62	37.2	8.5
México	Michoacan	0.67	34.2	7.5
México	Córdoba	0.60	38.2	8.5
México	Aguascalientes	0.86	37.4	7.7
México	Matamoros	0.62	34.7	7.9
Kosovo	Prishtina	0.50	42.9	6.6
Kosovo	Gjakova	0.50	43.4	6.6
Kosovo	Peja	0.51	39.7	6.9
Kosovo	Prizren	0.51	42.2	6.1
Kosovo	Gjilan	0.52	43.4	5.6
Kosovo	Ferizaj	0.50	42.2	6.3
Poland	Katowice	0.56	38.1	5.5
Russia	Tyumen	0.75	37.0	6.3
New Zealand	Auckland	0.58	39.6	8.3
Greece	Athens	0.74	46.3	5.3
Spain	Cartagena	0.57	42.7	6.4

Web Table 2: Symptom prevalence of asthma, hay fever and eczema by centre.

			Total	Current wheeze	Asthma ever	Severe asthma symptoms*	Severe asthma among population†	Eczema ever	Hay fever ever
Country	Centre	Mean date collection	N	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Africa and Eastern Mediterranean*									
Cameroon	Yaounde	2019-01	860	88 (10.2%)	26 (3%)	31 (35.2%)	31 (3.6%)	66 (7.7%)	253 (29.4%)
Nigeria	Ibadan	2018-05	2321	131 (5.6%)	66 (2.8%)	52 (39.7%)	52 (2.2%)	249 (10.7%)	66 (2.8%)
Iran	Yazd	2020-06	4773	327 (6.9%)	123 (2.6%)	102 (31.2%)	102 (2.1%)	312 (6.5%)	888 (18.6%)
Iran	Karaj	2020-02	1175	98 (8.3%)	40 (3.4%)	37 (37.8%)	37 (3.1%)	207 (17.6%)	290 (24.7%)
Kingdom of Saudi Arabia	Kingdom of Saudi Arabia	2019-03	6786	932 (13.7%)	914 (13.5%)	364 (39.1%)	364 (5.4%)	860 (12.7%)	1001 (14.8%)
	Regional Total	2019-07	15915	1576 (9.9%)	1169 (7.3%)	586 (37.2%)	586 (3.7%)	1694 (10.6%)	2498 (15.7%)
South-East Asia and Western Pacific									
India	Kottayam	2017-11	6940	418 (6%)	265 (3.8%)	174 (41.6%)	174 (2.5%)	289 (4.2%)	594 (8.6%)
India	New Delhi (7)	2017-12	9449	83 (0.9%)	231 (2.4%)	27 (32.5%)	27 (0.3%)	425 (4.5%)	407 (4.3%)
India	Chandigarh	2017-10	10386	407 (3.9%)	143 (1.4%)	118 (29%)	118 (1.1%)	1536 (14.8%)	1823 (17.6%)
India	Bikaner	2017-12	10495	167 (1.6%)	52 (0.5%)	25 (15%)	25 (0.2%)	1322 (12.6%)	692 (6.6%)
India	Jaipur	2017-11	8933	522 (5.8%)	402 (4.5%)	173 (33.1%)	173 (1.9%)	1962 (22%)	1910 (21.4%)
India	Lucknow	2017-10	11820	183 (1.5%)	99 (0.8%)	67 (36.6%)	67 (0.6%)	1379 (11.7%)	631 (5.3%)
India	Kolkata	2017-11	7823	432 (5.5%)	235 (3%)	168 (38.9%)	168 (2.1%)	984 (12.6%)	812 (10.4%)
India	Pune	2017-10	8000	311 (3.9%)	160 (2%)	93 (29.9%)	93 (1.2%)	325 (4.1%)	615 (7.7%)
India	Mysuru (Mysore)	2017-11	11178	383 (3.4%)	178 (1.6%)	180 (47%)	180 (1.6%)	216 (1.9%)	831 (7.4%)
New Zealand	Auckland	2018-08	3002	518 (17.3%)	550 (18.3%)	193 (37.3%)	193 (6.4%)	572 (19.1%)	1294 (43.1%)

Taiwan	Taipei	2017-10	9690	518 (5.3%)	572 (5.9%)	181 (34.9%)	181 (1.9%)	1432 (14.8%)	4240 (43.8%)
Thailand	Bangkok	2017-08	5418	346 (6.4%)	251 (4.6%)	132 (38.2%)	132 (2.4%)	1600 (29.5%)	2475 (45.7%)
	Regional Total	2017-11	103134	4288 (4.2%)	3138 (3%)	1531 (35.7%)	1531 (1.5%)	12042 (11.7%)	16324 (15.8%)
America									
Brazil	Uruguaiana	2017-12	896	164 (18.3%)	109 (12.2%)	79 (48.2%)	79 (8.8%)	34 (3.8%)	366 (40.8%)
Costa Rica	Costa Rica	2018-01	3272	748 (22.9%)	950 (29%)	297 (39.7%)	297 (9.1%)	438 (13.4%)	1402 (42.8%)
Honduras	Tegucigalpa	2018-06	254	83 (32.7%)	69 (27.2%)	53 (63.9%)	53 (20.9%)	38 (15%)	61 (24%)
México	Monterrey	2018-04	2118	191 (9%)	153 (7.2%)	80 (41.9%)	80 (3.8%)	180 (8.5%)	361 (17%)
México	México City (North Area)	2016-04	5231	550 (10.5%)	260 (5%)	264 (48%)	264 (5%)	324 (6.2%)	510 (9.7%)
México	Mexicali	2016-02	2436	164 (6.7%)	157 (6.4%)	91 (55.5%)	91 (3.7%)	75 (3.1%)	206 (8.5%)
México	Ciudad Victoria	2016-02	6239	551 (8.8%)	274 (4.4%)	238 (43.2%)	238 (3.8%)	147 (2.4%)	387 (6.2%)
México	San Luis Potosí	2016-04	2835	238 (8.4%)	111 (3.9%)	105 (44.1%)	105 (3.7%)	77 (2.7%)	197 (6.9%)
México	Tijuana	2015-12	1397	133 (9.5%)	79 (5.7%)	66 (49.6%)	66 (4.7%)	22 (1.6%)	55 (3.9%)
México	Toluca Urban Area	2016-02	6162	372 (6%)	137 (2.2%)	143 (38.4%)	143 (2.3%)	230 (3.7%)	307 (5%)
México	Toluca Rural	2016-01	7587	465 (6.1%)	140 (1.8%)	189 (40.6%)	189 (2.5%)	203 (2.7%)	313 (4.1%)
México	Ciudad Juárez	2016-02	2611	287 (11%)	111 (4.3%)	150 (52.3%)	150 (5.7%)	48 (1.8%)	156 (6%)
México	Michoacan	2016-08	2232	195 (8.7%)	94 (4.2%)	101 (51.8%)	101 (4.5%)	43 (1.9%)	146 (6.5%)
México	Córdoba	2016-04	2839	286 (10.1%)	120 (4.2%)	131 (45.8%)	131 (4.6%)	91 (3.2%)	184 (6.5%)
México	Aguascalientes	2016-04	2907	322 (11.1%)	158 (5.4%)	155 (48.1%)	155 (5.3%)	67 (2.3%)	219 (7.5%)
México	Matamoros	2016-03	1316	94 (7.1%)	47 (3.6%)	43 (45.7%)	43 (3.3%)	31 (2.4%)	58 (4.4%)
	Regional Total	2016-06	50332	4842 (9.6%)	2969 (5.9%)	2185 (45.1%)	2185 (4.3%)	2048 (4.1%)	4928 (9.8%)
Europe									
Kosovo	Prishtina	2017-08	2006	118 (5.9%)	21 (1%)	35 (29.7%)	35 (1.7%)	101 (5%)	102 (5.1%)
Kosovo	Gjakova	2018-06	1352	60 (4.4%)	15 (1.1%)	18 (30%)	18 (1.3%)	206 (15.2%)	145 (10.7%)
Kosovo	Peja	2017-06	1816	89 (4.9%)	34 (1.9%)	36 (40.4%)	36 (2%)	172 (9.5%)	182 (10%)

Kosovo	Prizren	2017-03	2712	177 (6.5%)	39 (1.4%)	65 (36.7%)	65 (2.4%)	468 (17.3%)	232 (8.6%)
Kosovo	Gjilan	2017-06	1835	82 (4.5%)	17 (0.9%)	22 (26.8%)	22 (1.2%)	89 (4.9%)	77 (4.2%)
Kosovo	Ferizaj	2017-09	1372	100 (7.3%)	13 (0.9%)	35 (35%)	35 (2.6%)	78 (5.7%)	49 (3.6%)
Poland	Katowice	2018-01	2220	182 (8.2%)	108 (4.9%)	73 (40.1%)	73 (3.3%)	248 (11.2%)	596 (26.8%)
Russia	Tyumen	2019-05	2360	142 (6%)	49 (2.1%)	55 (38.7%)	55 (2.3%)	134 (5.7%)	429 (18.2%)
Greece	Athens	2020-02	1897	124 (6.5%)	153 (8.1%)	38 (30.6%)	38 (2%)	372 (19.6%)	589 (31%)
Spain	Cartagena	2015-12	6961	957 (13.7%)	809 (11.6%)	330 (34.5%)	330 (4.7%)	1597 (22.9%)	1733 (24.9%)
	Regional Total	2017-07	24531	2031 (8.3%)	1258 (5.1%)	707 (34.8%)	707 (2.9%)	3465 (14.1%)	4134 (16.9%)

* Proportion of severe asthma symptoms among those with current wheeze.

† Proportion of severe asthma symptoms among all participants.

P-values comparing frequencies of symptoms within each region carried out using Chi-square test had $p < 0.0001$ for all comparisons with no adjustment for multiple testing.