

Prevalence of allergic rhinitis in children and adults in different regions of China												
Regions of China	n (%)	Year of study	Dermatophagoides pteronyssinus	Dermatophagoides farinae	Blomia tropicalis	cat dander	dog dander	timothy grass	Populus nigra	Ambrosia artemisifolia	Artemisia vulgaris	Alternaria alternata
General	Total	2008	1054 (45.4)	1033 (44.5)	559 (24.1)	197 (8.5)	85 (3.7)	41 (1.8)	68 (2.9)	40 (1.7)	169 (7.4)	163 (7.0)
		2018	1458 (52.1)‡	1446 (51.7)‡	860 (30.7)‡	203 (7.3)	166 (5.9)‡	74 (2.6)	117 (4.2)†	146 (5.2)‡	295 (10.5)‡	169 (6.0)
	Children	2008	633 (62.7)**	618 (61.4)**	334 (33.2)**	105 (10.4)**	17 (1.7)**	20 (2.0)	30 (3.0)	10 (1.0)*	30 (3.0)**	130 (12.9)**
		2018	793 (65.4)**	789 (65.1)**	421 (34.7)**	106 (8.7)**	76 (6.3)‡	33 (2.7)	68 (5.6)‡**	56 (4.6)‡	82 (6.8)‡**	145 (12.0)**
	Adults	2008	421 (32.0)	415 (31.6)	225 (17.1)	92 (7.0)	68 (5.2)	21 (1.6)	38 (2.9)	30 (2.3)	139 (10.6)	33 (2.5)
		2018	665 (41.9)‡	657 (41.4)‡	439 (27.7)‡	97 (6.1)	90 (5.7)	41 (2.6)	49 (3.1)	90 (5.7)†	213 (13.4)†	24 (1.5)
North	Total	2008	260 (30.3)	248 (28.9)	135 (15.7)	56 (6.5)	30 (3.5)	20 (2.4)	22 (2.6)	19 (2.2)	87 (10.1)	48 (5.6)
		2018	392 (39.0)‡	375 (37.4)‡	207 (20.6)‡	82 (8.1)	70 (7.0)‡	68 (6.8)‡	94 (9.3)‡	116 (11.6)‡	272 (27.1)‡	61 (6.1)
	Children	2008	138 (54.8)**	135 (53.6)**	59 (23.4)**	26 (10.3)**	4 (1.6)	5 (2.0)	5 (2.0)	2 (0.8)	23 (9.1)	27 (10.7)**
		2018	169 (56.4)**	167 (55.8)**	82 (27.3)**	35 (11.5)*	23 (7.6)‡	25 (8.2)‡	38 (12.7)‡*	37 (12.4)‡	59 (19.7)‡**	47 (15.5)**
	Adults	2008	122 (20.1)	113 (18.6)	76 (12.5)	30 (4.9)	26 (4.3)	15 (2.5)	17 (2.8)	17 (2.8)	64 (10.5)	21 (3.5)
		2018	222 (31.6)‡	208 (29.5)‡	125 (17.7)	47 (6.7)	47 (6.7)	44 (6.2)†	56 (7.9)‡	79 (11.2)‡	213 (30.3)‡	15 (2.1)
East	Total	2008	127 (48.9)α	121 (46.5)α	71 (27.1)α	29 (11.1)α	20 (7.6)α	8 (2.9)	14 (5.2)α	0 (0.0)α	11 (4.2)α	30 (11.5)α
		2018	203 (55.2)α	195 (53.1)α	115 (31.5)α	19 (5.1)‡	22 (5.9)	8 (2.3)α	16 (4.3)α	5 (1.4)α	12 (3.1)α	36 (9.8)α
	Children	2008	95 (62.9)**	92 (60.9)**	50 (32.8)*α	11 (7.3)**	4 (2.7)**	0 (0.0)**	2 (1.2)**	0 (0.0)	2 (1.3)**α	27 (18.2)**α
		2018	147 (66.3)**α	145 (65.2)**α	73 (33.0)	8 (3.6)α	13 (5.8)	4 (1.7)α	4 (1.7)**α	2 (1.0)α	3 (1.4)**α	33 (14.9)**
	Adults	2008	32 (29.4)α	29 (26.6)α	21 (19.3)	18 (16.3)α	16 (14.3)α	8 (7.0)α	12 (10.8)α	0 (0.0)α	9 (8.3)	3 (2.3)
		2018	55 (38.2)	50 (34.5)	42 (29.1)α	11 (7.3)‡	9 (6.1)‡	4 (3.1)	12 (8.4)	3 (1.9)α	8 (5.8)α	3 (1.9)
Central	Total	2008	182 (47.6)α	176 (46.0)α	105 (27.4)α	32 (8.3)	16 (4.2)	6 (1.5)	11 (2.8)	3 (0.8)α	25 (6.4)α	6 (1.5)α
		2018	296 (57.9)‡α	285 (55.7)‡α	185 (36.2)‡α	28 (5.5)	24 (4.7)	6 (1.2)α	7 (1.4)α	9 (1.8)α	17 (3.4)α	22 (4.3)†
	Children	2008	115 (61.5)**	112 (59.9)**	62 (33.2)**α	15 (8.1)	3 (1.7)*	3 (1.5)	7 (3.6)	0 (0.0)	7 (3.7)*α	6 (3.0)*αβ
		2018	168 (64.8)**α	165 (63.5)**α	98 (37.8)α	23 (8.7)**	16 (6.1)†	2 (0.9)α	5 (1.8)α	2 (0.9)α	4 (1.4)*α	22 (8.5)‡**αβ
	Adults	2008	67 (34.4)α	64 (32.8)α	43 (21.8)α	17 (8.5)β	13 (6.5)β	3 (1.5)β	4 (2.0)β	3 (1.5)	18 (9.0)	0 (0.0)α
		2018	128 (50.8)‡αβ	119 (47.6)‡αβ	87 (34.6)‡α	6 (2.2)‡αβ	8 (3.2)	4 (1.5)α	3 (1.0)αβ	7 (2.8)α	14 (5.5)α	0 (0.0)α
Southern coast	Total	2008	500 (61.0)αβγ	487 (59.4)αβγ	248 (30.3)α	90 (11.0)α	25 (3.1)β	12 (1.5)	26 (3.2)	19 (2.4)	47 (5.7)α	52 (6.3)
		2018	642 (70.1)‡αβγ	629 (68.7)‡αβγ	416 (45.5)‡αβγ	67 (7.3)‡	46 (5.1)†	6 (0.7)α	16 (1.7)α	23 (2.5)α	8 (0.9)‡αβγ	27 (2.9)‡α
	Children	2008	299 (71.7)**αβγ	293 (70.3)**αβγ	162 (38.9)**αβγ	60 (14.4)**βγ	7 (1.7)*	11 (2.7)**α	17 (4.1)	10 (2.4)	20 (4.7)α	50 (11.9)**γ
		2018	341 (79.2)‡**αβγ	335 (78.0)‡**αβγ	210 (48.8)‡**αβγ	37 (8.6)‡	21 (4.9)‡	3 (0.6)‡α	8 (1.8)‡α	8 (1.8)α	3 (0.8)‡α	18 (4.3)‡**αβγ

Adults	2008	201 (49.9) <sup>αβγ′</sup>	194 (48.2) <sup>αβ′γ′</sup>	86 (21.4) <sup>α′</sup>	30 (7.5) <sup>β′</sup>	18 (4.5) <sup>β′</sup>	1 (0.3) <sup>αβ′</sup>	9 (2.3) <sup>β′</sup>	9 (2.3) <sup>β′</sup>	27 (6.8) <sup>α</sup>	2 (0.6) <sup>α′</sup>
	2018	302 (62.1) <sup>‡α′β′γ′</sup>	294 (60.5) <sup>‡α′β′γ′</sup>	207 (42.5) <sup>‡α′β′γ</sup>	30 (6.2) <sup>γ</sup>	25 (5.2)	4 (0.8) <sup>α′</sup>	8 (1.7) <sup>α′β′</sup>	16 (3.2) <sup>α′</sup>	4 (0.9) <sup>‡α′β′γ′</sup>	8 (1.7)

**Table 1 . Comparison of allergen sensitizations between 2008 and 2018 in children and adults in four regions of China.**

†P<0.05, ‡P<0.01 compared with 2008; \*P<0.05, \*\*P<0.01 compared with adults; αP < 0.05, α′P < 0.01 compared with North; βP < 0.05, β′P < 0.01 compared with East; γP < 0.05, γ′ P < 0.01 compared with Central