Appendices

Maps and Graphs

As well as the maps, a variety of other graphs were developed in consultation with the writing groups and Steering Committee to present the data from both Phase One and Phase Three. The most common graphs used were ranked prevalence scatter plots and simple scatter plots. I hope you find these maps and graphs useful and enjoyable to view. As a geographer by training, I particularly enjoyed the process of developing and preparing the maps and feel that they provide a unique and valuable means of viewing and interpreting the ISAAC worldwide data.

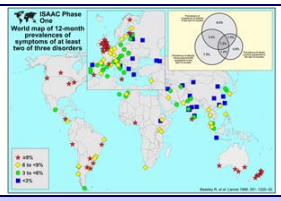
Maps

Phase One Worldmaps

Asthma Rhinoconjunctivitis Eczema Synthesis

The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee. *Worldwide variation in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and atopic eczema ISAAC.* The Lancet 1998; 351(9111): 1225-32.

Figure 6: World map of 12-month prevalences of symptoms of at least two of three disorders Venn diagram shows overall proportions of children with symptoms of asthma, allergic rhinoconjunctivitis, or atopic eczema, or combinations of symptoms Lancet 1998; 351(9111): 1231



Asthma

The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee. *Worldwide variations in the prevalence of asthma symptoms the International Study of Asthma and Allergies in Childhood (ISAAC).* Eur Respir J 1998; 12(2): 315-335.

Figure1 World map for the 13–14 yr old age group, showing the percentage of children who answered "yes" to the written question "Have you had wheezing or whistling in the chest in the last 12 months?" Eur Respir J 1998; 12(2): 321

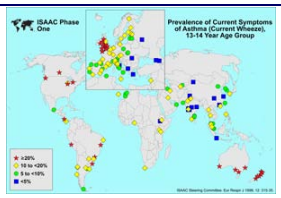


Figure3 World map for the 6–7 yr old age group, showing the percentage of parents who answered "yes" to the written question "Has your child had wheezing or whistling in the chest in the last 12 months?" Eur Respir J 1998; 12(2): 325

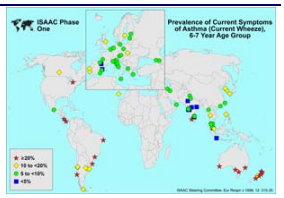
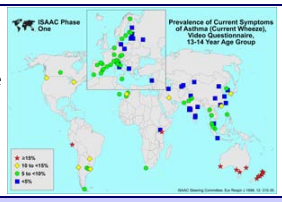


Figure 5 World map for the 13–14 yr old age group, for the video scene showing a person wheezing while at rest The percentage of children who answered "yes" to the question "Has your breathing ever been like this in the last year?" is shown for each centre, with distinct colour symbols used for different prevalence ranges Eur Respir J 1998; 12(2): 328



Rhinoconjunctivitis

Strachan D, Sibbald B, Weiland S, Aït-Khaled N, Anabwani G, Anderson HR, Asher MI, Beasley R, Björkstén B, Burr M, Clayton T, Crane J, Ellwood P, Keil U, Lai C, Mallol J, Martinez F, Mitchell E, Montefort S, Pearce N, Robertson C, Shah J, Stewart A, von Mutius E, Williams H. *Worldwide Variations in prevalence of symptoms of allergic rhinoconjunctivitis in children the International Study of Asthma and Allergies in Childhood (ISAAC).* Pediatr Allergy Immunol 1997; 8(4): 161-76.

Figure 5 Global map of the prevalence of rhinoconjunctivitis in 6-7-year-old children in ISAAC centres Pediatr Allergy Immunol 1997; 8(4): 166

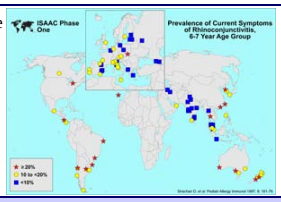
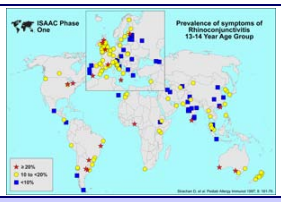


Figure6 Global map of the prevalence of rhinoconjunctivitis in 13-14-year-old children in ISAAC centres Pediatr Allergy Immunol 1997; 8(4): 166



Eczema

Williams H, Robertson C, Stewart A, Aït-Khaled N, Anabwani G, Anderson HR, Asher MI, Beasley R, Björkstén B, Burr M, Clayton T, Crane J, Ellwood P, Keil U, Lai C, Mallol J, Martinez F, Mitchell E, Montefort S, Pearce N, Shah J, Sibbald B, Strachan D, von Mutius E and Weiland S. *Worldwide variations in the prevalence of symptoms of atopic eczema in the international study of asthma and allergies in childhood.* J Allergy Clin Immunol 1999; 103(1 Pt 1): 125-38.

Figure1 Global map of symptoms of atopic eczema in the last 12 months in 458,623 children aged 13 to 14 years in 153 centers in 56 countries J Allergy Clin Immunol 1999;103:127

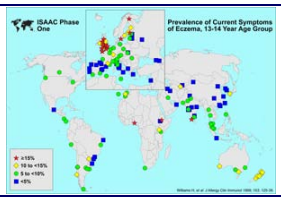
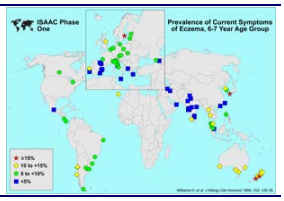


Figure2 Global map of symptoms of atopic eczema in the last 12 months in 256,410 children in aged 6 to 7 years in 90 centers in 37 countries J Allergy Clin Immunol 1999;103:127



Appendices
ISAAC Maps
List of Centres
Summary of publications
List of Publications
References
Steering Committee
Photos

The full size versions of all these maps and graphs are available at: http://isaac.auckland.ac.nz/story/methods/maps.php

The ISAAC Story

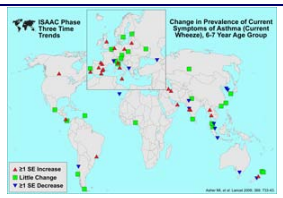
The full size versions of all these maps and graphs are available at: http://isaac.auckland.ac.nz/story/methods/maps.php

Phase Three Time Trends

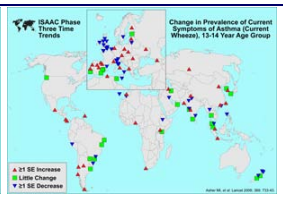
Asthma Rhinoconjunctivitis Eczema

Asher MI, Montefort S, Björkstén B, Lai CKW, Strachan DP, Weiland SK, Williams H, and the ISAAC Phase Three Study Group. *Worldwide time trends in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and eczema in childhood ISAAC Phases One and Three repeat multicountry cross-sectional surveys.* The Lancet 2006; 368(9537): 733-743.

Figure 2: World map showing direction of change in prevalence of asthma symptoms for 6–7 year age-group and 13–14 year age-group Each symbol represents a centre Blue triangle=prevalence reduced by =1 SE per year Green square=little change (<1 SE) Red triangle=prevalence increased by =1 SE per year Lancet 2006; 368(9537): 738

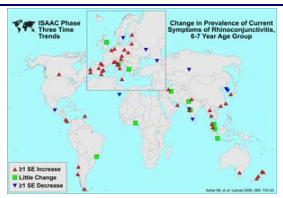


6-7 years

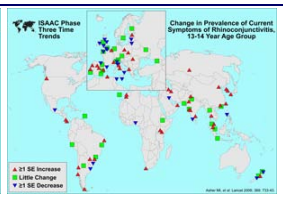


13-14 years

Figure 3: World map showing direction of change in prevalence of allergic rhinoconjunctivitis symptoms for 6–7 year age-group and 13–14 year age-group Each symbol represents a centre Blue triangle=prevalence reduced by =1 SE per year Green square=little change (<1 SE) Red triangle=prevalence increased by =1 SE per year Lancet 2006; 368(9537): 739

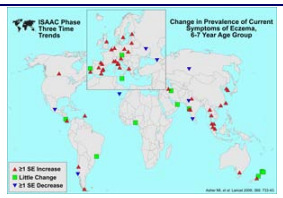


6-7 years

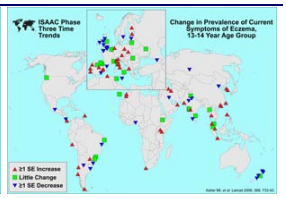


13-14 years

Figure 4: World map showing direction of change in prevalence of eczema symptoms for 6–7 year age-group and 13–14 year age-group Each symbol represents a centre Blue triangle=prevalence reduced by =1 SE per year Green square=little change (<1 SE) Red triangle=prevalence increased by =1 SE per year Lancet 2006; 368(9537): 740



6-7 years



13-14 years

Eczema

Williams H, Stewart A, von Mutius E, Cookson B, Anderson HR and the International Study of Asthma and Allergies in Childhood (ISAAC) Phase One and Three Study groups. *Is eczema really on the increase worldwide?* J Allergy Clin Immunol 2008; 121(4): 947-54.

Figure2 World maps of flexural eczema symptoms in the last year showing changes in the prevalence of eczema symptoms for 13- to 14-year-olds (A) and 6- to 7-year-olds (B) in consecutive prevalence surveys conducted 5 to 10 years apart J Allergy Clin Immunol 2008; 121(4): 951-2

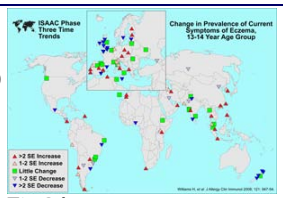


Fig.2A

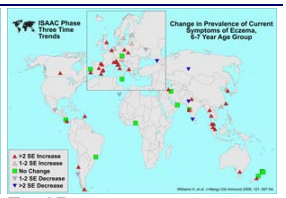


Fig.2B

Phase Three Worldmaps

Asthma

Lai CKW, Beasley R, Crane J, Foliaki S, Shah J, Weiland S, and the ISAAC Phase Three Study Group. *Global variation in the prevalence and severity of asthma symptoms Phase Three of the International Study of Asthma and Allergies in Childhood (ISAAC).* Thorax 2009; 64: 476–483.

Figure 1 Prevalence of current wheeze according to the written questionnaire in the 13–14 year age group Thorax 2009; 64: 478

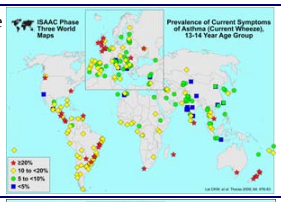


Figure 2 Prevalence of symptoms of severe asthma according to the written questionnaire in the 13–14 year age group Thorax 2009; 64: 479

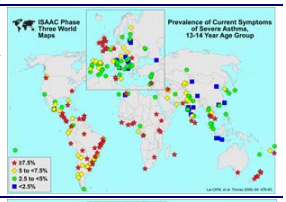


Figure 3 Prevalence of current wheeze in the 6–7 year age group Thorax 2009; 64: 480

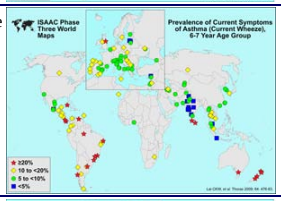


Figure 4 Prevalence of symptoms of severe asthma in the 6–7 year age group Thorax 2009; 64: 481

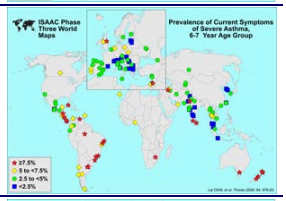


Figure S1 Prevalence of symptoms of severe asthma amongst wheezers in the past 12 months in 13-14 year age group Thorax 2009; 64: 476-483 online material

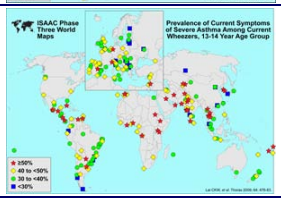


Figure S2 Prevalence of unreported asthma amongst wheezers with symptoms of severe asthma in the past 12 months in 13-14 year age group Thorax 2009; 64: 476-483 online material

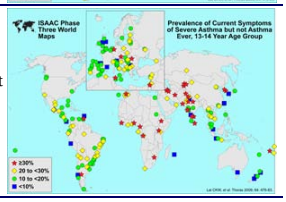
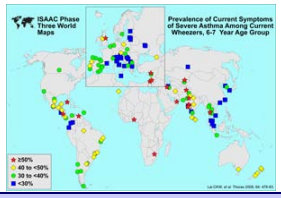


Figure S3 Prevalence of symptoms of severe asthma amongst wheezers in the past 12 months in 6-7 year age group Thorax 2009; 64: 476-483 online material



Rhinoconjunctivitis

Aït-Khaled N. Pearce N. Anderson HR. Ellwood P. Montefort S. Shah J. and the ISAAC Phase Three Study Group. *Global map of the prevalence of symptoms of rhinoconjunctivitis in children The International Study of Asthma and Allergies in Childhood (ISAAC) Phase Three.* Allergy 2009; 64: 123–148

Figure 1 Map of prevalence of current symptoms of rhinoconjunctivitis, 13- to 14-year age group Allergy 2009; 64: 133

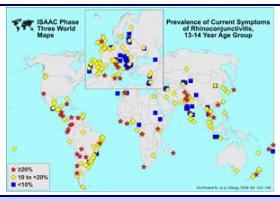
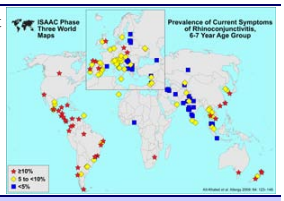


Figure 3 Map of prevalence of current symptoms of rhinoconjunctivitis, 6- to 7-year age group Allergy 2009; 64: 141



Eczema

Odhiambo J, Williams H, Clayton T, Robertson C, Asher MI, and the ISAAC Phase Three Study group. *Global variations in prevalence of eczema symptoms in children from ISAAC Phase Three.* J Allergy Clin Immunol. 2009;124(6):1251-8.

Figure1 World maps showing prevalence of current symptoms of eczema for the age group 6 to 7 years (A) and 13 to 14 years (B) Each symbol represents a center Allergy Clin Immunol 2009;124(6):1253

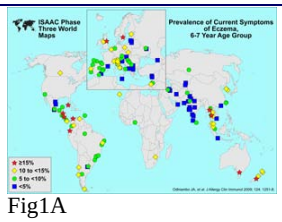


Fig1A

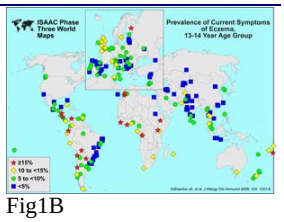


Fig1B

Figure E2 World maps showing prevalence of current symptoms of severe eczema for the age groups 6 to 7 years (A) and 13 to 14 years (B) Each symbol represents a center J Allergy Clin Immunol 2009;124(6):1258 e4

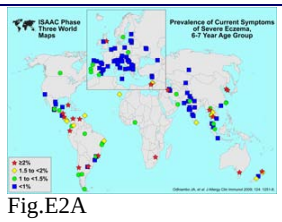


Fig.E2A

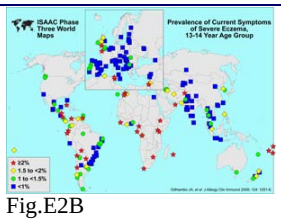


Fig.E2B

Graphs

Phase One Worldmap Papers

Asthma Rhinoconjunctivitis Eczema Synthesis

The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee. *Worldwide variation in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and atopic eczema ISAAC.* The Lancet 1998; 351(9111): 1225-32.

Figure 1: 12-month prevalences of self-reported asthma symptoms from written questionnaires

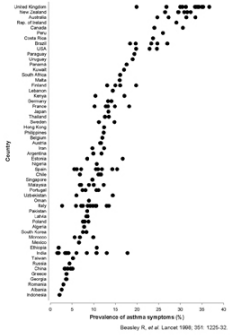
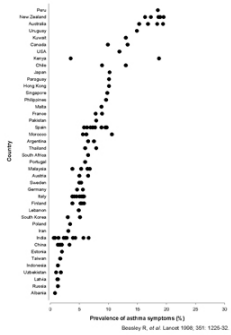


Figure 2: 12-month prevalences of asthma symptoms from video questionnaires



The full size versions of all these maps and graphs are available at: http://isaac.auckland.ac.nz/story/methods/maps.php

The full size versions of all these maps and graphs are available at: http://isaac.auckland.ac.nz/story/methods/maps.php

Figure 3: 12-month prevalences of allergic rhinoconjunctivitis symptoms

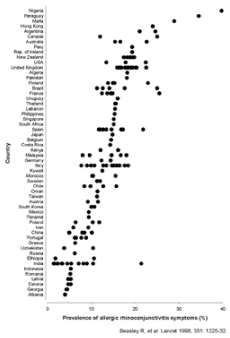


Figure 4: 12-month prevalences of atopic eczema symptoms

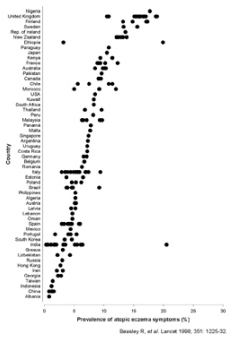
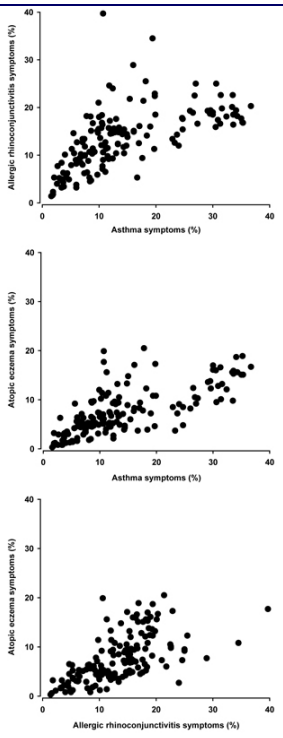


Figure 5: Scatter plots of 12-month prevalences of symptoms from written questionnaires



Beasley R, *et al.* Lancet 1998; 351: 1225-32.

Asthma

The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee. *Worldwide variations in the prevalence of asthma symptoms the International Study of Asthma and Allergies in Childhood (ISAAC).* Eur Respir J 1998; 12(2): 315-335.

Figure 2: Ranking of participating countries for the percentage who answered positively to the question "In the last 12 months, how often, on average, has your (child's) sleep been disturbed due to wheezing?: one or more nights per week" for: a) the 13–14 yr olds; and b) the 6–7 yr olds

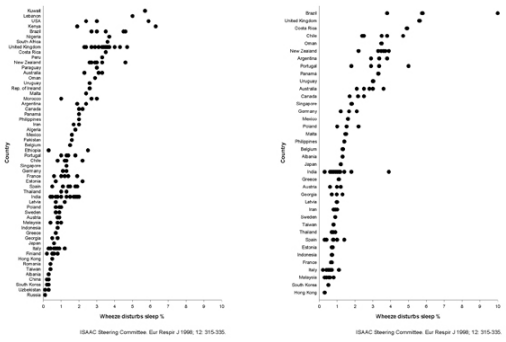


Figure 4: Scatter plots for centres for the percentage of children who have had "wheezing or whistling in the chest in the last 12 months" The x-axis shows self-reported wheezing in 13–14 yr olds and the y-axis wheezing reported by parents in 6–7 yr olds The line of identity is shown

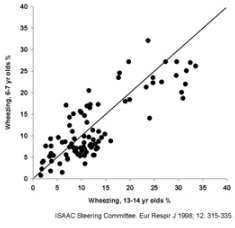
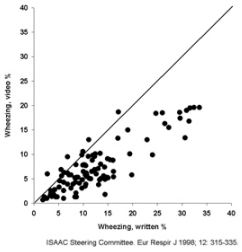


Figure 6: Scatter plots for the percentage of the 13–14 yr old age group responding "yes" for wheezing in the last year (video questionnaire) against "wheezing or whistling in the chest in the last 12 months" The x-axis shows wheezing for the written questionnaire and the y-axis wheezing for the video questionnaire The line of identity is shown



Rhinoconjunctivitis

Strachan D, Sibbald B, Weiland S, Aït-Khaled N, Anabwani G, Anderson HR, Asher MI, Beasley R, Björkstén B, Burr M, Clayton T, Crane J, Ellwood P, Keil U, Lai C, Mallol J, Martinez F, Mitchell E, Montefort S, Pearce N, Robertson C, Shah J, Stewart A, von Mutius E, Williams H. *Worldwide Variations in prevalence of symptoms of allergic rhinoconjunctivitis in children the International Study of Asthma and Allergies in Childhood (ISAAC).* Pediatr Allergy Immunol 1997; 8(4): 161-76.

Figure 1: Scatter plot comparing prevalence of hay fever and prevalence of rhinoconjunctivitis across ISAAC centres in 6-7-year-olds

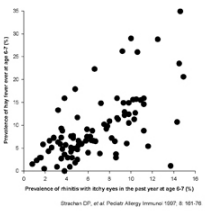


Figure 2: Scatter plot comparing prevalence of hay fever and prevalence of rhinoconjunctivitis across ISAAC centres in 13-14-year-olds

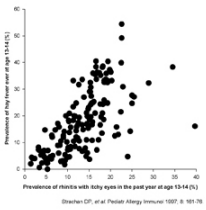


Figure 3: Scatter plot comparing the prevalence of rhinoconjunctivitis in each age group across ISAAC centres

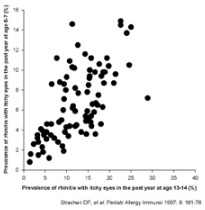
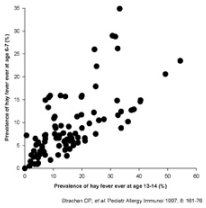


Figure 4: Scatter plot comparing the lifetime prevalence of hay fever in each age group across ISAAC centres

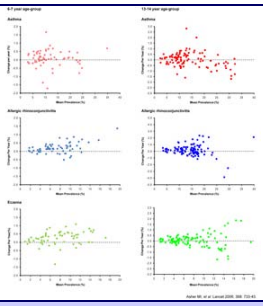


Phase Three Time Trends Papers

Asthma Rhinoconjunctivitis Eczema

Asher MI, Montefort S, Björkstén B, Lai CKW, Strachan DP, Weiland SK, Williams H, and the ISAAC Phase Three Study Group. *Worldwide time trends in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and eczema in childhood ISAAC Phases One and Three repeat multicountry cross-sectional surveys.* The Lancet 2006; 368(9537): 733-743.

Figure 1: Bland-Altman plots showing mean change in prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and eczema per year for 6–7 year age-group and 13–14 year age-group versus mean prevalence of Phases One and Three for each centre



Asthma

Pearce N, Aït-Khaled N, Beasley R, Mallol J, Keil U, Mitchell E, Robertson C, and the ISAAC Phase Three Study Group. *Worldwide trends in the prevalence of asthma symptoms Phase III of the International Study of Asthma and Allergies in Childhood (ISAAC).* Thorax 2007; 62(9): 758-66. view Article | view Editorial

Figure 1 Ranking plot showing the change per year in prevalence of current wheeze (wheeze in the past 12 months) in children aged 13–14 years for each centre by country, with countries ordered by their mean prevalence (for all centres combined) across phase I and phase III The plot also shows the confidence interval about zero change for a given level of prevalence (ie, the mean prevalence across phases I and III) given a sample size of 3000 and no cluster sampling effect

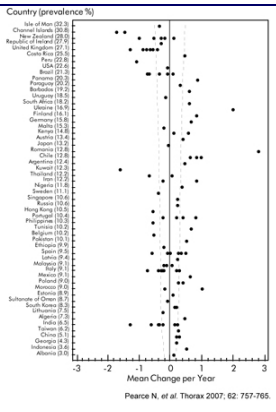
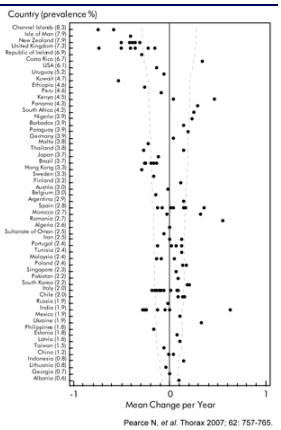


Figure 2 Ranking plot showing the change per year in prevalence of >4 attacks of wheezing in the previous 12 months in children aged 13–14 years for each centre by country, with countries ordered by their average prevalence (for all centres combined) across phase I and phase III The plot also shows the confidence interval about zero change for a given level of prevalence (ie, the mean prevalence across phases I and III) given a sample size of 3000 and no cluster sampling effect



The full size versions of all these maps and graphs are available at: http://isaac.auckland.ac.nz/story/methods/maps.php

The full size versions of all these maps and graphs are available at: http://isaac.auckland.ac.nz/story/methods/maps.php

Figure 3 Ranking plot showing the change per year in the lifetime prevalence of asthma ("asthma ever") in children aged 13–14 years for each centre by country, with countries ordered by their mean prevalence (for all centres combined) across phase I and phase III The plot also shows the confidence interval about zero change for a given level of prevalence (ie, the mean prevalence across phases I and III) given a sample size of 3000 and no cluster sampling effect

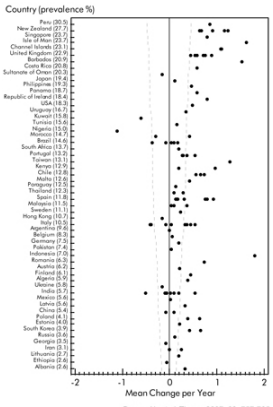


Figure 4 Ranking plot showing the change per year in prevalence of current wheeze (wheeze in the past 12 months) using the video questionnaire in children aged 13–14 years for each centre by country, with countries ordered by their mean prevalence (for all centres combined) across phase I and phase III The plot also shows the confidence interval about zero change for a given level of prevalence (ie, the mean prevalence across phases I and III) given a sample size of 3000 and no cluster sampling effect

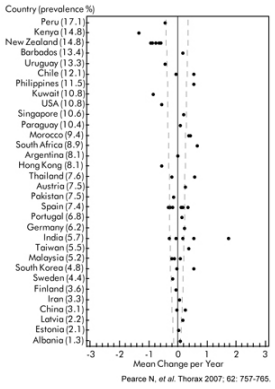


Figure 5 Ranking plot showing the change per year in the prevalence of current wheeze (wheeze in the past 12 months) in children aged 6–7 years for each centre by country, with countries ordered by their mean prevalence (for all centres combined) across phase I and phase III The plot also shows the confidence interval about zero change for a given level of prevalence (ie, the mean prevalence across phases I and III) given a sample size of 3000 and no cluster sampling effect

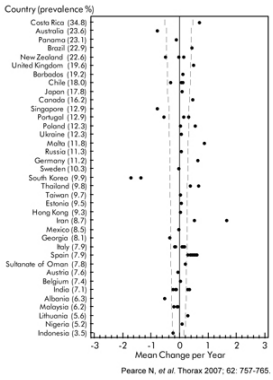


Figure 6 Ranking plot showing the change per year in prevalence of >4 attacks of wheezing in the previous 12 months in children aged 6–7 years for each centre by country, with countries ordered by their mean prevalence (for all centres combined) across phase I and phase III The plot also shows the confidence interval about zero change for a given level of prevalence (ie, the mean prevalence across phases I and III) given a sample size of 3000 and no cluster sampling effect

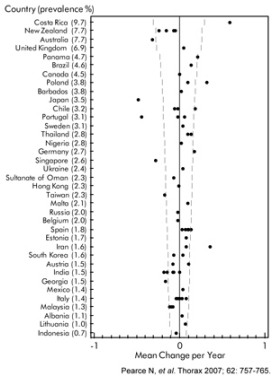
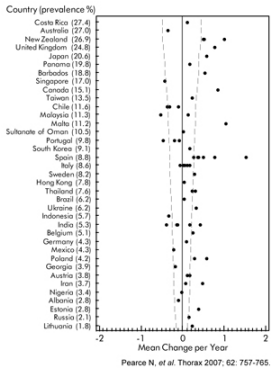


Figure 7 Ranking plot showing the change per year in the lifetime prevalence of asthma ("asthma ever") in children aged 6–7 years for each centre by country, with countries ordered by their mean prevalence (for all centres combined) across phase I and phase III The plot also shows the confidence interval about zero change for a given level of prevalence (ie, the mean prevalence across phases I and III) given a sample size of 3000 and no cluster sampling effect



Rhinoconjunctivitis

Björkstén B, Clayton T, Ellwood P, Stewart A, Strachan D, and the ISAAC Phase Three Study Group. *Worldwide time trends for symptoms of rhinitis and conjunctivitis Phase III of the International Study of Asthma and Allergies in Childhood.* Pediatr Allergy Immunol 2008; 19(2): 110-24. view full article

Figure 1: Ranking plot showing the change per year of symptoms of rhinitis in 13- to 14-yr-old children for each centre by country, with countries ordered by their average prevalence (for all centres combined) across Phase I and Phase III The plot also shows the confidence interval about zero change for a given level of prevalence, given a sample size of at least 3000 and no cluster sampling effect

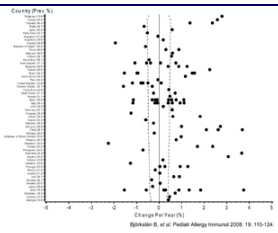


Figure 2: Ranking plot showing the change per year of symptoms of rhinitis in 6- to 7-yr-old children for each centre by country, with countries ordered by their average prevalence (for all centres combined) across Phase I and Phase III (c f Fig 1)

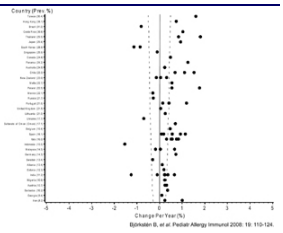


Figure 3: Ranking plot showing the change per year of symptoms of rhinoconjunctivitis (affirmative responses to both the questions 'In the past 12 months, have you had a problem with sneezing or a runny or blocked nose, when you DID NOT have a cold or 'the flu'?' and 'In the past 12 months, has this nose problem been accompanied by itchy-watery eyes?') in 13- to 14-yr-old children for each centre by country, with countries ordered by their average prevalence (for all centres combined) across Phase I and Phase III (c f Fig 1)

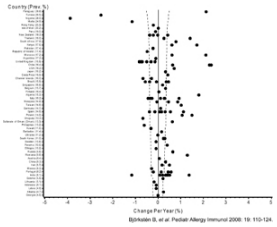


Figure 4: Ranking plot showing the change per year of symptoms of rhinoconjunctivitis (affirmative responses to both the questions 'In the past 12 months, have you had a problem with sneezing or a runny or blocked nose, when you DID NOT have a cold or 'the flu'?' and 'In the past 12 months, has this nose problem been accompanied by itchy-watery eyes?') in 6- to 7- yr-old children for each centre by country, with countries ordered by their average prevalence (for all centres combined) across Phase I and Phase III (c f Fig 1)

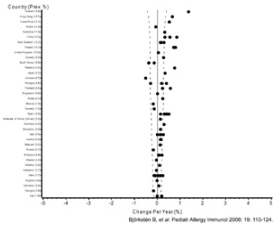
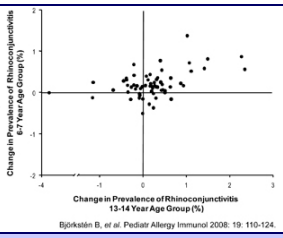


Figure 5: Scatter plot showing the change per year of symptoms of rhinoconjunctivitis for the 13–14 yr age group and the 6–7 yr age group for centres which included both age groups



Eczema

Williams H, Stewart A, von Mutius E, Cookson B, Anderson HR and the International Study of Asthma and Allergies in Childhood (ISAAC) Phase One and Three Study groups. *Is eczema really on the increase worldwide?* J Allergy Clin Immunol 2008; 121(4): 947-54.

Figure 1 Ranking plots depicting annual change in eczema prevalence (defined as symptoms of flexural eczema in the last year) between the 2 ISAAC surveys on the horizontal axis against average prevalence between the 2 surveys on the vertical axis A, Children 13 to 14 years old B, Children 6 to 7 years old Countries are ordered by ascending average prevalence The dashed lines denote 95% CIs about zero change for a given prevalence level, given a sample size of 3000 and no cluster sampling effect Red diamond points denote countries that used English-language questionnaires

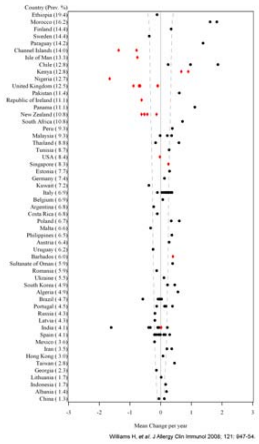


Fig.1A

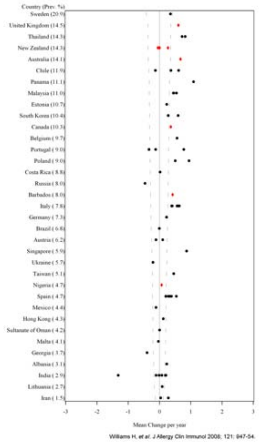


Fig.1B

Figure E1 Ranking plots of changes in symptoms of severe eczema for 13- and 14-year-olds ordered by average prevalence

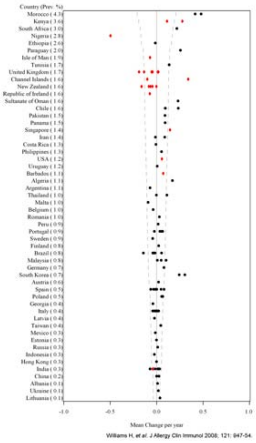
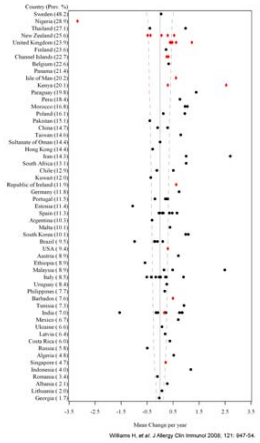


Figure E2 Ranking plots of changes in symptoms of reporting the disease label of eczema for 13- and 14-yearolds ordered by average prevalence



Appendices
ISAAC Maps
List of Centres
Summary of publications
List of Publications
References
Steering Committee
Photos

The full size versions of all these maps and graphs are available at: http://isaac.auckland.ac.nz/story/methods/maps.php

The full size versions of all these maps and graphs are available at: http://isaac.auckland.ac.nz/story/methods/maps.php

Figure E3 Ranking plots of changes in symptoms of severe eczema for 6- and 7-year olds ordered by average prevalence

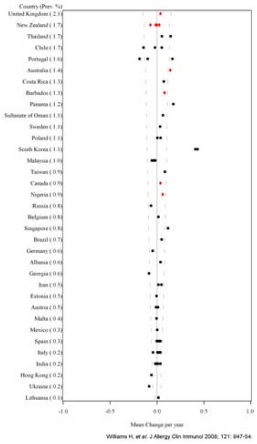
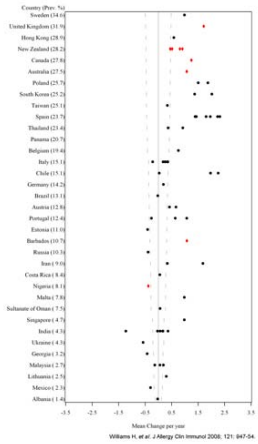


Figure E4 Ranking plots of changes in symptoms of reporting the disease label of eczema for 6- and 7-year olds ordered by average prevalence



Phase Three Worldmap Papers

Rhinoconjunctivitis

Aït-Khaled N. Pearce N. Anderson HR. Ellwood P. Montefort S. Shah J. and the ISAAC Phase Three Study Group. *Global map of the prevalence of symptoms of rhinoconjunctivitis in children The International Study of Asthma and Allergies in Childhood (ISAAC) Phase Three.* Allergy 2009; 64: 123–148

Figure 2 Prevalence of current symptoms of rhinoconjunctivitis, 13- to 14-year age group Countries are ordered by average prevalence

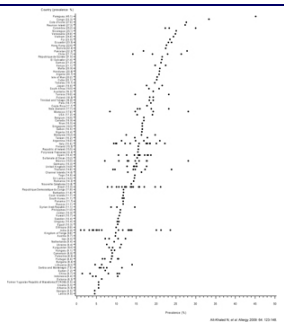


Figure 4 Prevalence of current symptoms of rhinoconjunctivitis, 6- to 7-year age group Countries are ordered by average prevalence

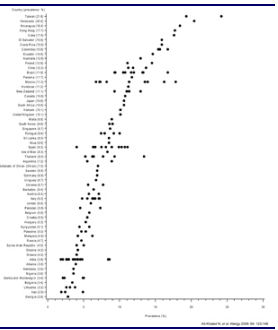
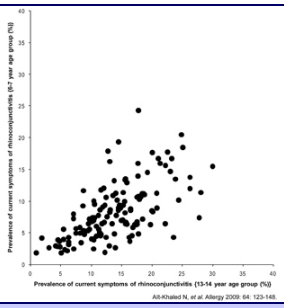


Figure 5 Scatter plot of prevalence of current symptoms of rhinoconjunctivitis, both age groups



Eczema

Odhiambo J, Williams H, Clayton T, Robertson C, Asher MI, and the ISAAC Phase Three Study group. *Global variations in prevalence of eczema symptoms in children from ISAAC Phase Three.* J Allergy Clin Immunol. 2009;124(6):1251-8.

FIG 2 Ranked prevalence plots of current symptoms of eczema for the age group 6 to 7 years (A) and 13 to 14 years (B) Each symbol represents a center Countries are ordered by average prevalence

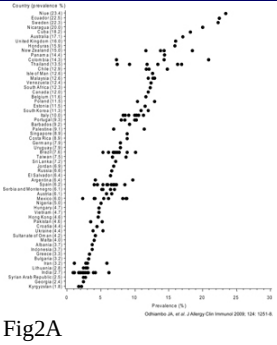


Fig2A

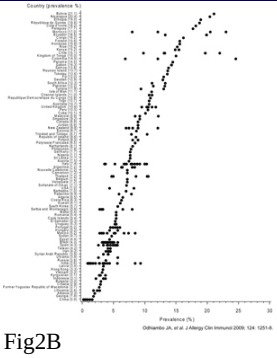


Fig2B

FIG E3 Ranked prevalence plots of current symptoms of eczema for the age groups 6 to 7 years (A) and 13 to 14 years (B) Each symbol represents a center Regions are ordered by average prevalence

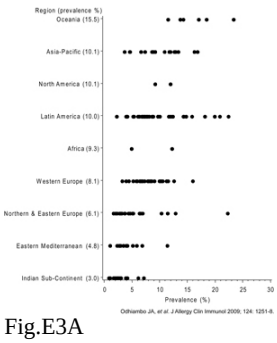


Fig.E3A

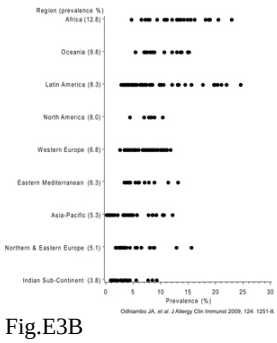


Fig.E3B

FIG E4 Ranked prevalence plots of current symptoms of severe eczema for the age groups 6 to 7 years (A) and 13 to 14 years (B) Each symbol represents a center Countries are ordered by average prevalence

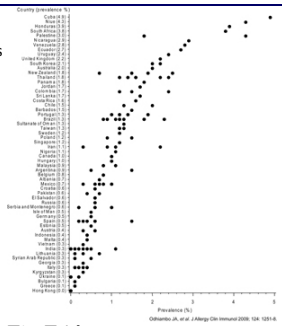


Fig.E4A

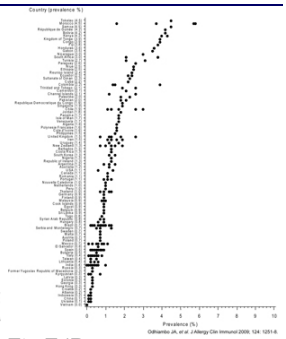


Fig.E4B

FIG E5 Ranked prevalence plots of lifetime reported "eczema" for the age groups 6 to 7 years (A) and 13 to 14 years (B) Each symbol represents a center Countries are ordered by average prevalence

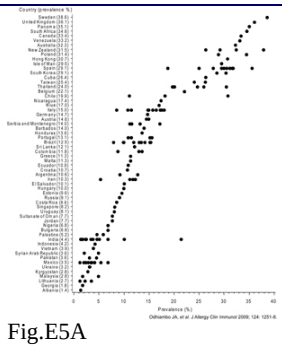


Fig.E5A

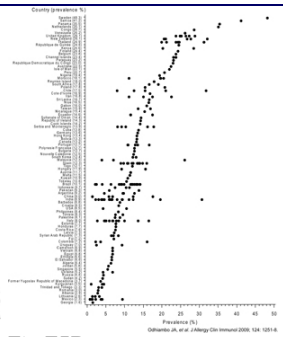


Fig.E5B

FIG E6 Scatter plots illustrating prevalence by sex for current symptoms of eczema (A), current symptoms of severe eczema (B), and lifetime reported "eczema" (C) for the age group 6 to 7 years, and current symptoms of eczema (D), current symptoms of severe eczema (E), and lifetime reported "eczema" (F) for the age group 13 to 14 years Each symbol represents a center The line of equality is shown on each plot

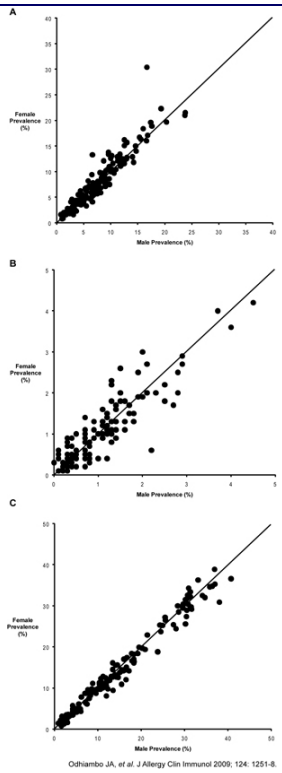


Fig E6A-C

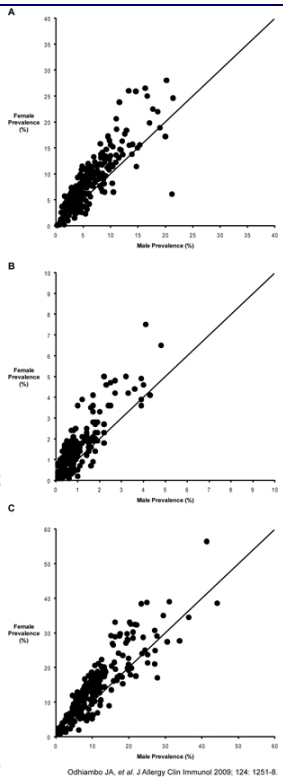


Fig E6D-F

Appendices
ISAAC Maps
List of Centres
Summary of publications
List of Publications
References
Steering Committee
Photos

The full size versions of all these maps and graphs are available at: http://isaac.auckland.ac.nz/story/methods/maps.php

ISAAC Centres

Over three hundred centres in 105 countries participated in the three phases of ISAAC. These centres are listed by region,country then centre and Phase showing Principal Investigator and number of children.

All ISAAC centres by region

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
Africa				
Algeria				
	Algiers - Phase One	Dr A Bezzaoucha	1173	
	West Algiers - Phase One	professor Badia Benhabylès	2024	
	Wilaya of Algiers - Phase Three	Professor Badia Benhabylès	4203	
		Country Total	**7400**	
Cameroon				
	Yaounde - Phase Three	Professor Christopher Kuaban	2983	
		Country Total	**2983**	
Congo				
	Brazzaville - Phase Three	Professor Joseph M'Boussa	1012	
		Country Total	**1012**	
Cote d'Ivoire				
	Urban Cote d Ivoire - Phase Three	Dr Bernard Ngoran Koffi	3342	
		Country Total	**3342**	
Ethiopia				
	Addis Ababa - Phase One	Associate Professor Kibrebeal Melaku	2951	
	Addis Ababa - Phase Three	Associate Professor Kibrebeal Melaku	3195	
	Jima - Phase One	Professor Berhane Seyoum	3027	
		Country Total	**9173**	
Gabon				
	Port-Gentil - Phase Three	Dr Isabelle Ekoume Hypolite	3166	
		Country Total	**3166**	
Ghana				
	Kintampo - Phase Two	Dr Emmanuel OD Addo-Yobo	1354	
		Country Total	**1354**	
Kenya				
	Eldoret - Phase One	Dr Fabian O Esamai	3024	
	Eldoret - Phase Three	Dr Fabian O Esamai	3289	
	Nairobi - Phase One	Dr Joseph A Odhiambo	3243	
	Nairobi - Phase Three	Dr Lucy Ng'ang'a	3023	
		Country Total	**12579**	
Morocco				
	Benslimane - Phase Three	Professor Zoubida Bouayad	1008	
	Boulmene - Phase Three	Professor Zoubida Bouayad	1254	
	Casablanca - Phase One	Professor Zoubida Bouayad	3183	
	Casablanca - Phase Three	Professor Zoubida Bouayad	1777	
	Marrakech - Phase One	Professor Zoubida Bouayad	2900	
	Marrakech - Phase Three	Professor Zoubida Bouayad	1689	
	Rabat - Phase One	Professor Abedelkrim Bennis	3276	
		Country Total	**15087**	
Nigeria				
	Ibadan - Phase One	Professor Babatunde O Onadeko	3057	1696
	Ibadan - Phase Three	Professor Babatunde O Onadeko	3142	2396
		Country Total	**6199**	**4092**
République de Guinée				
	Conakry - Phase Three	Professeur Oumou Younoussa Sow	3115	
		Country Total	**3115**	
Republique Democratique du Congo				
	Kinshasa - Phase Three	Prof Dr Jean-Marie Kayembe	2930	
		Country Total	**2930**	
Reunion Island				
	Reunion Island - Phase Three	Dr Isabella Annesi-Maesano	2362	
		Country Total	**2362**	
South Africa				
	Cape Town - Phase One	Dr Hugo Nelson	5173	
	Cape Town - Phase Three	Professor Heather J Zar	5037	
	Polokwane - Phase Three	Professor Kuku Voyi	4660	3480
		Country Total	**14870**	**3480**

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
Sudan				
	Khartoum - Phase Three	Professor Omer Abdel Aziz Musa	2896	
		Country Total	**2896**	
Togo				
	Lome - Phase Three	Professor Osseni Tidjani	3090	
		Country Total	**3090**	
Tunisia				
	Grand Tunis - Phase Three	Professeur Faouzia Khaldi	6119	
	Sousse - Phase One	Professeur Mohamed Jerray	3020	
	Sousse - Phase Three	Professeur Mohamed Jerray	3042	
		Country Total	**12181**	
		Regional Total	**103739**	**7572**
Asia-Pacific				
China				
	Beijing - Phase One	Professor Yu-Zhi Chen	4167	
	Beijing - Phase Two	Professor Yu-Zhi Chen	4214	
	Beijing - Phase Three	Professor Yu-Zhi Chen	3530	
	Chongqing - Phase One	Professor Kun-Hua Chen	4296	
	Guangzhou - Phase One	Professor Nan-Shan Zhong	3855	
	Guangzhou - Phase Two	Professor Nan-Shan Zhong	3510	
	Guangzhou - Phase Three	Professor Nan-Shan Zhong	3514	
	Shanghai - Phase One	Dr Mao Bao-Shan	3483	
	Tibet - Phase Three	Assistant Professor Osamu Kunii	2878	
	Tong Zhou - Phase Three	Professor Yu-Zhi Chen	3542	
	Wulumuqi - Phase One	Professor Man-Lin Xiao	3207	
	Wulumuqi(9) - Phase Three	Dr Qiao Li Pan	3884	
		Country Total	**44080**	
Indonesia				
	Bali - Phase Three	Professor Putu Konthen	2569	
	Bandung - Phase One	Prof Dr Karnen Baratawidjaja	2249	1390
	Bandung - Phase Three	Prof Dr Cissy B Kartasasmita	2826	2503
	Semarang - Phase Three	Dr Winarto Suprihati	2435	
		Country Total	**10079**	**3893**
Japan				
	Fukuoka - Phase One	Professor Sankei Nishima	2827	2896
	Fukuoka - Phase Three	Dr Hiroshi Odajima	2520	2958
	Tochigi - Phase Three	Professor Makino Sohei	4466	
		Country Total	**9813**	**5854**
Malaysia				
	Alor Setar - Phase One	Dr Keng Hwang Teh	3298	2978
	Alor Setar - Phase Three	Dr Keng Hwang Teh	2941	3786
	Ipoh - Phase One	Dr Lim Wee Yeong	3313	2506
	Klang Valley - Phase One	Associate Professor Jessie de Bruyne	6079	3109
	Klang Valley - Phase Three	Associate Professor Jessie de Bruyne	3025	3044
	Kota Bharu - Phase One	Associate Professor Ban Seng Quah	3113	3819
	Kota Bharu - Phase Three	Associate Professor Ban Seng Quah	2989	3157
	Muar - Phase One	Dr Kok Wai Chum	2833	2873
		Country Total	**27591**	**25272**
Philippines				
	Metro Manila - Phase Three	Professor Felicidad Cua-Lim	3658	3698
	Metro Manilla - Phase One	Professor Felicidad Cua-Lim	3207	3558
		Country Total	**6865**	**7256**
SAR China				
	Hong Kong - Phase Two	Dr Christopher Lai	3011	
	Hong Kong 13-14 - Phase One	Dr Christopher Lai	4666	
	Hong Kong 13-14 - Phase Three	Professor Gary Wong	3321	
	Hong Kong 6-7 - Phase One	Professor Yu Lung Lau		3618
	Hong Kong 6-7 - Phase Three	Professor Yu Lung Lau		4448
		Country Total	**10998**	**8066**
Singapore				
	Singapore - Phase One	Professor Bee-Wah Lee	4206	2353
	Singapore - Phase Three	Associate Professor Daniel Yam Thiam Goh	4217	5389
		Country Total	**8423**	**7742**

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
South Korea				
	Provincial Korea - Phase One	Dr Sang-Il Lee	6990	5527
	Provincial Korea - Phase Three	Professor Ha-Baik Lee	7375	4258
	Seoul - Phase One	Dr Sang-Il Lee	2993	2582
	Seoul - Phase Three	Professor Ha-Baik Lee	2888	1760
		Country Total	**20246**	**14127**
Taiwan				
	Taipei - Phase One	Professor Kue-Hsiung Hsieh DECEASED	11400	4806
	Taipei - Phase Three	Dr Jing-Long Huang	6378	4832
	Taoyuan - Phase Three	Dr Chun-Chieh Kao	3190	3293
		Country Total	**20968**	**12931**
Thailand				
	Bangkok - Phase One	Dr Pakit Vichyanond	3713	3629
	Bangkok - Phase Three	Dr Pakit Vichyanond	4669	4209
	Chantaburi - Phase Three	Dr Thanong Prasarnphanich	2901	3321
	Chiang Mai - Phase One	Associate Professor Muthita Trakultivakorn	3927	3828
	Chiang Mai - Phase Three	Associate Professor Muthita Trakultivakorn	3538	3106
	Chiangrai - Phase Three	Dr Rawee Nettagul	1809	1677
	Khon Kaen - Phase Three	Associate Professor Jamaree Teeratakulpisarn	3410	2658
	Nakorn Pathom - Phase Three	Dr Aree Kongpanichkul	6975	1821
		Country Total	**30942**	**24249**
Vietnam				
	Ho Chi Minh City - Phase Three	Dr Baïch Vaên Cam	4240	3879
		Country Total	**4240**	**3879**
		Regional Total	**194245**	**113269**
Eastern Mediterranean				
Egypt				
	Cairo - Phase Three	Dr Maggie Louis Naguib	3047	
		Country Total	**3047**	
Iran				
	Birjand - Phase Three	Dr Mohammed-Reza Masjedi	2829	2693
	Rasht - Phase One	Dr Mohammed-Reza Masjedi	3182	3013
	Rasht - Phase Three	Dr Mohammed-Reza Masjedi	3004	3057
	Tehran - Phase One	Dr Mohammed-Reza Masjedi	2691	2456
	Tehran - Phase Three	Dr Mohammed-Reza Masjedi	3119	3008
	Zanjan - Phase Three	Dr Mohammed-Reza Masjedi	2805	2777
		Country Total	**17630**	**17004**
Jordon				
	Amman - Phase Three	Dr Faisal Abu-Ekteish	2447	2598
		Country Total	**2447**	**2598**
Kuwait				
	Kuwait - Phase One	Dr Jawad A al-Momen	1056	
	Kuwait - Phase Three	Dr Jawad A al-Momen	2882	
		Country Total	**3938**	
Lebanon				
	Beirut - Phase One	Dr Fuad M Ramadan	2993	
		Country Total	**2993**	
Malta				
	Malta - Phase One	Professor Stephen Montefort	4184	3493
	Malta - Phase Three	Professor Stephen Montefort	4136	3795
		Country Total	**8320**	**7288**
Pakistan				
	Islamabad - Phase Three	Dr Mohammad Osman Yusuf	4066	3966
	Karachi - Phase One	Dr Zulfiqar A Bhutta	1829	
	Karachi - Phase Three	Dr Naseeruddin Mahmood	2999	2113
		Country Total	**8894**	**6079**
Palestine				
	North Gaza - Phase Three	Mr Shaban Mortaja	3627	3575
	Ramallah - Phase Two	Dr Nuha El Sharif	2304	
	Ramallah - Phase Three	Dr Nuha El Sharif	3929	3754
		Country Total	**9860**	**7329**

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
Sultanate Of Oman				
	Al-Khod - Phase One	Associate Professor Bazdawi Al-Riyami	3174	3891
	Al-Khod - Phase Three	Associate Professor Omar Al-Rawas	3747	4130
		Country Total	**6921**	**8021**
Syria				
	Aleppo - Phase Three	Dr Khaldoun Tabbah	3063	
	Lattakia - Phase Three	Professor Yousser Mohammad	3010	2373
	Tartous - Phase Three	Dr Samira Mohammad	2995	2734
		Country Total	**9068**	**5107**
		Regional Total	**73118**	**53426**
Indian Sub-Continent				
India				
	Akola - Phase One	Dr Ramesh M Maheshwari	2138	2030
	Bangalore - Phase Three	Professor Sylvan Rego	3440	2959
	Bikaner - Phase Three	Professor Mohammed Sabir	3059	
	Bombay (16) - Phase One	Dr Mohan Keshav Joshi	4225	3967
	Bombay (17) - Phase One	Dr Uday Anath Pai	2226	1148
	Bombay (18) - Phase One	Dr Kalyani Raghavan	3178	3568
	Borivali - Phase One	Dr Vasant A Khatav	3878	1672
	Borivali - Phase Three	Dr Vasant A Khatav	1004	900
	Chandigarh - Phase One	Professor Lata Kumar	3139	2891
	Chandigarh - Phase Three	Dr Meenu Singh	3122	
	Chennai (3) - Phase Three	Dr Gururaj Setty	2181	1116
	Davangere - Phase Three	Dr P S Suresh Babu	2945	3043
	Jaipur - Phase Three	Professor Virendra Singh	3607	2545
	Jodhpur - Phase One	Dr K C Jain	1094	1104
	Jodhpur - Phase Three	Dr K C Jain	2341	2114
	Kottayam - Phase One	Dr T U Sukumaran	2047	2156
	Kottayam - Phase Three	Dr T U Sukumaran	3685	2619
	Lucknow - Phase Three	Professor Shally Awasthi	3000	3000
	Ludhiana - Phase Three	Professor Jugesh Chhatwal	3108	3225
	Madras (2) - Phase One	Dr Sarela Rajajee	1903	1466
	Madras (3) - Phase One	Dr N Somu	3086	2491
	Mumbai (16) - Phase Two	Dr Jayant Shah	1658	
	Mumbai (16) - Phase Three	Dr Mohan Keshav Joshi	1881	2865
	Mumbai (18) - Phase Three	Dr Asha Vijaykumar Pherwani	2982	4862
	Mumbai (29) - Phase Three	Dr Sumant Narayan Mantri	1829	1833
	Nagpur - Phase Three	Dr Sundeep Salvi	4150	4294
	New Delhi (7) - Phase One	Dr Kamlesh Chopra	3026	2938
	New Delhi (7) - Phase Three	Professor S K Sharma	3469	3706
	Neyveli - Phase One	Dr G Jayaraj	3281	1498
	Orissa - Phase One	Dr Pradeep Kumar Kar	1248	1520
	Pimpri - Phase Three	Dr Sundeep Salvi	3128	3838
	Pune - Phase One	Dr Neeta Milind Hanumante	2702	3248
	Pune - Phase Three	Dr Neeta Milind Hanumante	1983	2711
	Rasta Peth - Phase Three	Associate Professor Sheila Bhave	3065	3147
		Country Total	**92808**	**80474**
Sri Lanka				
	Sri Lanka - Phase Three	Dr Kirthi D Gunasekera	3717	3345
		Country Total	**3717**	**3345**
		Regional Total	**96525**	**83819**
Latin America				
Argentina				
	Buenos Aires - Phase One	Dr Natalio Salmun	2996	3005
	Córdoba - Phase One	Dr Carlos E Baena-Cagnani	3042	
	Córdoba - Phase Three	Dr Carlos E Baena-Cagnani	3445	982
	Neuquén - Phase Three	Professor Gustavo Enrique Zabert	3172	1930
	Rosario - Phase One	Dr Natalio Salmun	3008	3007
	Rosario City - Phase Three	Prof Dr Carlos D Crisci	3099	2952
	Salta - Phase Three	Dr Maximiliano Gómez	3000	
		Country Total	**21762**	**11876**

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
Bolivia				
	Santa Cruz - Phase Three	Dr Rosario Pinto-Vargas	3257	
		Country Total	**3257**	
Brasil				
	Aracaju - Phase Three	Dr Jackeline Machado Motta Franco	3043	2443
	Belo Horizonte - Phase Three	Associate Professor Paulo Augusto M Camargos	3088	
	Brasília - Phase Three	Dr Wellington G Borges	3009	
	Caruaru - Phase Three	Assistant Professor Almerinda Silva	3026	
	Curitiba - Phase One	Professor Nelson Rosário	3004	
	Curitiba - Phase Three	Professor Nelson Rosário	3628	
	Feira de Santana - Phase Three	Associate Professor Leda de Freitas Souza	1732	440
	Itajaí - Phase Three	Dr Cláudia dos Santos Dutra Bernhardt	2737	1511
	Maceió - Phase Three	Professor Francisco José Passos	2746	1990
	Manaus Amazonas - Phase Three	Dra Maria do Socorro Cardoso	3009	3011
	Nova Iguaçu - Phase Three	Associate Professor Antônio José Ledo Aves Cunha	3185	3249
	Passo Fundo - Phase Three	Dr Arnaldo C Porto Neto	2949	
	Porto Alegre - Phase One	Professor Renato Stein	3195	2846
	Porto Alegre - Phase Three	Dr Gilberto B Fischer	3007	
	Recife - Phase One	Dr Patricia Gomes M Bezerra	3086	1410
	Recife - Phase Three	Dr Murilo de Britto	2865	
	Rural Santa Maria - Phase Three	Professor Dirceu Solé	3057	
	Salvador - Phase One	Associate Professor Leda de Freitas Souza	3162	
	Salvador - Phase Three	Associate Professor Leda de Freitas Souza	3020	1069
	Santa Maria - Phase Three	Professor Dirceu Solé	3065	
	Santo Andre - Phase Three	Associate Professor Neusa Wandalsen	3232	2167
	São Paulo - Phase One	Professor Dirceu Solé	3007	3005
	São Paulo - Phase Three	Professor Dirceu Solé	3161	3047
	São Paulo West - Phase Three	Dr Antonio Carlos Pastorino	3181	3312
	Uruguaiana - Phase Two	Professor Renato Stein	1971	
	Vitória da Conquista - Phase Three	Associate Professor Leda de Freitas Souza	1679	399
		Country Total	**75844**	**29899**
Chile				
	Calama - Phase Three	Dr Luis Alberto Vera Benavides	1618	
	Central Santiago - Phase One	Dr Ignacío Sanchez	2944	1458
	Chiloe - Phase Three	Dra Amanda Contreras	3000	
	Punta Arenas - Phase One	Dr Lidia Amarales	3482	3060
	Punta Arenas - Phase Three	Dr Lidia Amarales	3044	3052
	South Santiago - Phase One	Dra Eliana Cortez	3051	3182
	South Santiago - Phase Three	Dr Pedro Aguilar	3026	3075
	Valdivia - Phase One	Dr Mario A Calvo	3231	3138
	Valdivia - Phase Three	Dr Mario A Calvo	3105	3183
		Country Total	**26501**	**20148**
Colombia				
	Barranquilla - Phase Three	Dr Alfonso M Cepeda	3204	3209
	Bogotá - Phase Three	Dr Gustavo Aristizábal	3830	3256
	Cali - Phase Three	Dr Gustavo A Ordoñez	3100	3005
		Country Total	**10134**	**9470**
Costa Rica				
	Costa Rica - Phase One	Dr Manuel E Soto-Quirós	3200	2942
	Costa Rica - Phase Three	Dr Manuel E Soto-Quirós	2436	3234
		Country Total	**5636**	**6176**
Cuba				
	La Habana - Phase Three	Dra Patricia Varona Peréz	3026	1803
		Country Total	**3026**	**1803**
Ecuador				
	Guayaquil - Phase Three	Dr César Bustos	3082	
	Pichincha - Phase Two	Dr Phillip Cooper	894	
	Quito - Phase Three	Dr Sergio Barba	3014	3055
		Country Total	**6990**	**3055**
El Salvador				
	San Salvador - Phase Three	Dr Margarita Figueroa Colorado	3260	1365
		Country Total	**3260**	**1365**
Honduras				
	San Pedro Sula - Phase Three	Dr Agustin Bueso-Engelhardt	2675	1907
		Country Total	**2675**	**1907**

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
Mexico				
	Ciudad de México (1) - Phase Three	Dra Blanca E Del-Río-Navarro	3891	3205
	Ciudad de México (3) - Phase Three	Dra Mercedes Barragán-Meijueiro	3474	3493
	Ciudad de México (4) - Phase Three	Dra Nelly Ramírez-Chanona	2662	895
	Ciudad Victoria - Phase Three	Dr Roberto García-Almaráz	3122	2603
	Cuernavaca - Phase One	Professor Isabelle Romieu	3102	3097
	Cuernavaca - Phase Three	Professor Isabelle Romieu	1431	2579
	Mérida - Phase Three	Dr Manuel Baeza-Bacab	3019	2896
	Mexicali Valley - Phase Three	Dr J Valente Merida-Palacio	2988	2568
	Monterrey - Phase Three	Dr Sandra Nora González-Díaz	3006	3030
	Toluca - Phase Three	Dr Francisco J Linares-Zapién	3021	3235
	Villahermosa - Phase Three	Dr Sergio Romero-Tapia	3109	2678
		Country Total	**32825**	**30279**
Nicaragua				
	Managua - Phase Three	Dr José Félix Sánchez	3263	3286
		Country Total	**3263**	**3286**
Panamá				
	David-Panamá - Phase One	Dr Gherson Cukier	2885	3043
	David-Panamá - Phase Three	Dr Gherson Cukier	3183	2942
		Country Total	**6068**	**5985**
Paraguay				
	Asunción - Phase One	Dr Jaime A Guggiari-Chase	2966	
	Asunción - Phase Three	Dr Jaime A Guggiari-Chase	3000	
		Country Total	**5966**	
Peru				
	Lima - Phase One	Dr Pascual Chiarella	3158	
	Lima - Phase Three	Dr Pascual Chiarella	3022	2244
		Country Total	**6180**	**2244**
Uruguay				
	Montevideo - Phase One	Dra Dolores Holgado	3072	3071
	Montevideo - Phase Three	Dra Dolores Holgado	3177	
	Paysandú - Phase Three	Dra María Cristina Lapides	1738	1512
		Country Total	**7987**	**4583**
Venezuela				
	Caracas - Phase Three	Dr Oscar Aldrey	3000	2999
		Country Total	**3000**	**2999**
		Regional Total	**224374**	**135075**
North America				
Barbados				
	Barbados - Phase One	Dr Malcolm E Howitt	3533	3289
	Barbados - Phase Three	Dr Malcolm E Howitt	2498	2759
		Country Total	**6031**	**6048**
Canada				
	Hamilton - Phase One	Professor Malcolm R Sears		3337
	Saskatoon - Phase One	Dr Brett Taylor	1901	2418
	Saskatoon - Phase Three	Professor Donna Rennie	1200	1255
	Vancouver - Phase Three	Professor Alex Ferguson	2853	
		Country Total	**5954**	**7010**
Trinidad and Tobago				
	St Augustine - Phase Three	Dr Michelle A Monteil	3512	2611
	Tobago - Phase Three	Dr Michelle A Monteil	1464	550
		Country Total	**4976**	**3161**
USA				
	Chapel Hill - Phase Three	Dr Karin Yeatts	128443	
	Chicago (3) - Phase One	Professor Victoria Persky	1422	
	Chicago (4) - Phase One	Professor Victoria Persky	3756	
	Sarasota - Phase Three	Dr Hugh H Windom	1245	
	Seattle - Phase One	Professor Gregory J Redding	2330	
	Seattle - Phase Three	Professor Gregory J Redding	2422	
		Country Total	**139618**	
		Regional Total	**156579**	**16219**

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
Northern and Eastern Europe				
Albania				
	Tiranë - Phase One	Professor Alfred Priftanji	2957	2981
	Tiranë - Phase Two	Professor Alfred Priftanji	1052	
	Tiranë - Phase Three	Professor Alfred Priftanji	2983	2896
		Country Total	**6992**	**5877**
Bulgaria				
	Sofia - Phase Three	Dr Todor Popov	1926	1181
		Country Total	**1926**	**1181**
Croatia				
	Rijeka - Phase Three	Dr Kristina Lah Tomulic	2194	1633
		Country Total	**2194**	**1633**
Estonia				
	Narva - Phase One	Dr Mall-Anne Riikjärv	1424	
	Tallinn - Phase One	Dr Mall-Anne Riikjärv	3560	3070
	Tallinn - Phase Two	Dr Mall-Anne Riikjärv	971	
	Tallinn - Phase Three	Dr Mall-Anne Riikjärv	3603	2385
		Country Total	**9558**	**5455**
Finland				
	Helsinki - Phase One	Dr Merja Kajosaari	2855	
	Kuopio County - Phase One	Dr Juha Pekkanen	2878	
	Kuopio County - Phase Three	Dr Juha Pekkanen	3051	
	Lappland Area - Phase One	Dr Leena Soininen	3077	
	Turku and Pori County - Phase One	Dr Turku Antti Koivikko	3085	
		Country Total	**14946**	
Georgia				
	Kutaisi - Phase One	Dr Nino Khetsuriani	3297	3356
	Kutaisi - Phase Three	Dr Maia Gotua	2650	2666
	Tbilisi - Phase One	Professor Amiran Gamkrelidze	3449	3414
	Tbilisi - Phase Two	Dr Maia Gotua	1012	
		Country Total	**10408**	**9436**
Hungary				
	Svábhegy - Phase Three	Dr Györgyi Zsigmond	4219	2451
	Szeged - Phase Three	Dr Zoltán Novák	2899	
		Country Total	**7118**	**2451**
Iceland				
	Reykjavik - Phase Two	Dr Michael Clausen	937	
		Country Total	**937**	
Kyrgyzstan				
	Balykchi - Phase Three	Dr Imanalieva Cholpon	1382	729
	Bishkek - Phase Three	Dr Imanalieva Cholpon	5048	3146
	Jalalabat - Phase Three	Professor Shairbek Sulaimanov	2404	1664
		Country Total	**8834**	**5539**
Latvia				
	Riga - Phase One	Dr Marcis Leja	3004	3003
	Riga - Phase Two	Dr Vija Svabe	908	
	Riga - Phase Three	Dr Vija Svabe	1283	
	Rural Latvia - Phase One	Dr Marcis Leja	3145	
		Country Total	**8340**	**3003**
Lithuania				
	Kaunas - Phase One	Professor Jurgis Bojarskas	1600	1878
	Kaunas - Phase Three	Associate Professor Jolanta Kudzyte	2723	2772
	Panevezys - Phase Three	Professor Jurgis Bojarskas	1187	1176
	Siauliai - Phase Three	Professor Jurgis Bojarskas	3516	1341
		Country Total	**9026**	**7167**
Poland				
	Krakow (1993) - Phase One	Associate Professor Grzegorz Lis	3750	
	Kraków (1995) - Phase One	Associate Professor Grzegorz Lis	2786	2264
	Kraków (1995) - Phase Three	Associate Professor Grzegorz Lis	2545	2497
	Poznan - Phase One	Associate Professor Anna Brêborowicz	3631	2710
	Poznan - Phase Three	Associate Professor Anna Brêborowicz	1875	1999
		Country Total	**14587**	**9470**

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
Republic of Macedonia				
	Skopje - Phase Three	Assoc Prof Emilija Vlaski	3026	
		Country Total	**3026**	
Romania				
	Cluj - Phase One	Professor Diana Deleanu	3396	
	Cluj - Phase Three	Professor Diana Deleanu	3019	
		Country Total	**6415**	
Russia				
	Moscow - Phase One	Professor Rakhim M Khaitov, Director of the Institute of Immunology	3411	
	Novosibirsk - Phase One	Prof Dr Elena G Kondiourina	3654	3637
	Novosibirsk - Phase Three	Prof Dr Elena G Kondiourina	3769	2730
		Country Total	**10834**	**6367**
Serbia and Montenegro				
	Belgrade - Phase Three	Dr Zorica Zivkovic MD, Phd	3228	1932
	Nis - Phase Three	Asst Professor Snezana Zivanovic	1207	1002
	Novi Sad - Phase Three	Dr Mila Hadnadjev	1171	1044
	Podgorica - Phase Three	Dr Omer Adzovic	1014	933
	Sombor - Phase Three	Dr Eva Panic	1105	1029
		Country Total	**7725**	**5940**
Sweden				
	Linköping - Phase One	Professor N-I Max Kjellman	2496	1329
	Linköping - Phase Two	Dr Lennart Bråbäck	907	
	Linköping - Phase Three	Dr Hartmut Vogt	2679	2089
	Stockholm/Uppsala - Phase One	Dr Tony Foucard	3075	3029
	Östersund - Phase Two	Dr Lennart Bråbäck	1195	
		Country Total	**10352**	**6447**
Ukraine				
	Kharkiv - Phase One	Associate Professor Viktor Ognev	3311	2971
	Kharkiv - Phase Three	Associate Professor Viktor Ognev	2428	1950
	Rural Kharkiv - Phase Three	Associate Professor Viktor Ognev	3968	3000
		Country Total	**9707**	**7921**
Uzbekistan				
	Samarkand - Phase One	Professor Tamara Aripova	1758	
	Tashkent - Phase One	Professor Tamara Aripova	2904	
		Country Total	**4662**	
		Regional Total	**147587**	**77887**
Oceania				
Australia				
	Adelaide - Phase One	Dr Declan Kennedy	3030	3063
	Melbourne - Phase One	Professor Colin F Robertson	2759	2840
	Melbourne - Phase Three	Professor Colin F Robertson	2192	2968
	Perth - Phase One	Professor Louis Landau	3650	2192
	Sydney 13-14 - Phase One	Professor Adrian Bauman	2839	
	Sydney 6-7 - Phase One	Dr Jennifer Peat		2804
		Country Total	**14470**	**13867**
Cook Islands				
	Rarotonga - Phase Three	Dr Roro Daniel	445	
		Country Total	**445**	
Fiji				
	Suva - Phase Three	Dr Rosalina Sa'aga-Banuve	3093	
		Country Total	**3093**	
French Polynesia				
	Polynesie Francaise - Phase Three	Dr Isabella Annesi-Maesano	4289	
		Country Total	**4289**	

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
New Zealand				
	Auckland - Phase One	Professor M Innes Asher ONZM	3206	3526
	Auckland - Phase Three	Professor M Innes Asher ONZM	2870	3541
	Bay of Plenty - Phase One	Dr Chris Moyes	2813	2681
	Bay of Plenty - Phase Three	Dr Chris Moyes	1976	2150
	Christchurch - Phase One	Associate Professor Philip Pattemore	3191	3318
	Christchurch - Phase Three	Associate Professor Philip Pattemore	3116	3315
	Hawkes Bay - Phase One	Dr David Barry	3550	3338
	Hawkes Bay - Phase Two	Professor Julian Crane	1320	
	Nelson - Phase One	Dr Richard MacKay	1839	1868
	Nelson - Phase Three	Dr Richard MacKay	2305	1867
	Wellington - Phase One	Professor Julian Crane	4424	3838
	Wellington - Phase Three	Professor Neil Pearce	3050	2537
		Country Total	**33660**	**31979**
Niue				
	Niue Island - Phase Three	Ms Moka Magatogia	79	47
		Country Total	**79**	**47**
Nouvelle Caledonie				
	Nouvelle Caledonie - Phase Three	Dr Isabella Annesi-Maesano	7247	
		Country Total	**7247**	
Samoa				
	Apia - Phase Three	Ms Peone Fuimaono	2986	
		Country Total	**2986**	
Tokelau				
	Tokelau - Phase Three	Dr Tekie Iosefa	66	
		Country Total	**66**	
Tonga				
	Nuku alofa - Phase Three	Dr Sunia Foliaki	2671	
		Country Total	**2671**	
		Regional Total	**69006**	**45893**
Western Europe				
Austria				
	Kärnten - Phase One	Associate Professor Gerald Haidinger		5264
	Kärnten - Phase Three	Associate Professor Gerald Haidinger		4847
	Salzburg - Phase One	Dr Josef Riedler	3371	3658
	Urfahr-Umgebung - Phase One	Associate Professor Gerald Haidinger	1515	2129
	Urfahr-Umgebung - Phase Three	Associate Professor Gerald Haidinger	1439	2029
		Country Total	**6325**	**17927**
Belgium				
	Antwerp - Phase One	Professor Paul Vermeire	1515	6533
	Antwerp - Phase Three	Professor Joost Weyler	3250	5645
		Country Total	**4765**	**12178**
Channel Islands				
	Guernsey - Phase One	Dr David Jeffs	1170	
	Guernsey - Phase Three	Dr Peter Standring	1248	
	Jersey - Phase One	Dr Richard Grainger	1135	
	Jersey - Phase Three	Ms Rosie Goulding	773	
		Country Total	**4326**	
France				
	Crétail - Phase Two	Dr Isabella Annesi-Maesano	1400	
	Marseille - Phase One	Professor Denis Charpin	3494	
	Montpellier - Phase One	Professor Philippe Godard	3384	
	Pessac - Phase One	Professor André Taytard	3302	3202
	Strasbourg - Phase One	Dr Christine Kopferschmitt-Kubler	5403	
	West Marne - Phase One	Dr Isabella Annesi-Maesano	2961	
		Country Total	**19944**	**3202**
Germany				
	Dresden - Phase Two	Professor W Leopold	3023	
	Greifswald - Phase One	Professor Axel Kramer	3169	2853
	Munich - Phase Two	Professor Erika von Mutius	3301	
	Münster - Phase One	Prof Dr Ulrich Keil	4003	3739
	Münster - Phase Three	Prof Dr Ulrich Keil	4132	3830
		Country Total	**17628**	**10422**

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
Greece				
	Athens - Phase One	Associate Professor Christina Gratziou	2561	1654
	Athens - Phase Two	Associate Professor Christina Gratziou	985	
	Thessaloniki - Phase Two	Associate Professor John Tsanakas	1018	
	Thessaloniki - Phase Three	Associate Professor John Tsanakas	1228	
		Country Total	**5792**	**1654**
Isle Of Man				
	Isle of Man - Phase One	Dr Peter Powell	1467	
	Isle of Man - Phase Three	Dr Andreea Steriu	1716	1096
		Country Total	**3183**	**1096**
Italy				
	Ascoli Piceno - Phase One	Professor Sergio Bonini	1130	
	Bari - Phase Three	Dr Lucio Armenio	1287	1943
	Colleferro-Tivoli - Phase Three	Dr Valerio Dell'Orco	1361	1143
	Cosenza - Phase One	Dr Enea Bonci	1068	
	Cosenza - Phase Three	Dr Enea Bonci	925	
	Cremona - Phase One	Mr Franca Rusconi	1201	1392
	Emilia-Romagna - Phase One	Dr Marco Biocca	3961	4472
	Emilia-Romagna - Phase Three	Dr Claudia Galassi	1347	2265
	Empoli - Phase One	Ms Lucia Chetoni	1046	1434
	Empoli - Phase Three	Dr M G Petronio	1229	1152
	Firenze - Phase One	Dr Elisabetta Chellini	1171	1138
	Firenze - Phase Three	Dr Elisabetta Chellini	1383	1036
	Frosinone - Phase One	Mr Roberto Ronchetti	1147	
	Mantova - Phase Three	Dr Gabriele Giannella	1114	1288
	Milano - Phase One	Dr Luigi Bisanti	3373	3616
	Milano - Phase Three	Dr Luigi Bisanti	1410	2249
	Palermo - Phase Three	Dr Stefania La Grutta	1221	
	Roma - Phase One	Dr Francesco Forastiere	3323	4027
	Roma - Phase Two	Dr Francesco Forastiere	1354	
	Roma - Phase Three	Dr Francesco Forastiere	1325	2224
	Siena - Phase One	Ms Elisabetta Renzoni	1181	
	Siena - Phase Three	Dr Piersante Sestini	1082	
	Torino - Phase One	Dr Giovannino Ciccone	1242	1429
	Torino - Phase Three	Dr Giovannino Ciccone	1180	2361
	Trento - Phase One	Dr Silvano Piffer	4426	
	Trento - Phase Three	Dr Silvano Piffer	1311	2359
	Verona - Phase One	Professor Attilio Boner	2208	2076
	Viterbo - Phase One	Mr Guiseppe Corbo		1231
		Country Total	**44006**	**38835**
	Netherlands - Phase Three	Professor Rutger Engels	6896	
	Netherlands (Utrecht) - Phase Two	Professor Bert Brunekreef, PhD	3541	
		Country Total	**10437**	
Norway				
	Tromsø - Phase Two	Dr Wenche Nystad	3669	
		Country Total	**3669**	
Portugal				
	Coimbra - Phase Three	Dr M Lourdes Chiera	1177	
	Funchal - Phase One	Dr Fernando D Borges	3532	1797
	Funchal - Phase Three	Dra Rita Câmara	3161	1819
	Lisbon - Phase One	Dr José E Rosado Pinto	3030	2143
	Lisbon - Phase Three	Dr José E Rosado Pinto	3024	2477
	Portimao - Phase One	Dr Carlos Nunes	1058	1189
	Portimao - Phase Three	Dr Carlos Nunes	1109	1069
	Porto - Phase One	Dr José M Lopes dos Santos	3131	
	Porto - Phase Three	Dr José M Lopes dos Santos	3336	2464
		Country Total	**22558**	**12958**
Republic of Ireland				
	Republic of Ireland - Phase One	Professor Luke Clancy	3147	
	Republic of Ireland - Phase Three	Professor Luke Clancy	3089	
		Country Total	**6236**	

Country	Centre	Principal Investigator	Number 13-14 years	Number 6-7 years
Netherlands				
Spain				
	A Coruña - Phase Three	Dr Angel López-Silvarrey Varela	2979	3016
	Almeria - Phase Two	Dr José Batlles-Garrido	1126	
	Almeria - Phase Three	Dr José Batlles-Garrido	4051	3349
	Asturias - Phase Three	Dr Ignacio Carvajal-Urueña	4184	3193
	Barcelona - Phase One	Dr Rosa M Busquets	3031	
	Barcelona - Phase Three	Dr Rosa M Busquets	3066	3002
	Bilbao - Phase One	Dr Alfonso Delgado Rubio	3212	3019
	Bilbao - Phase Three	Dr Carlos González Díaz	3401	3157
	Cádiz - Phase One	Dr Andrés Rabadán Asensio	3270	
	Cartagena - Phase One	Professor Luis García-Marcos	3017	3335
	Cartagena - Phase Two	Professor Luis García-Marcos	1429	
	Cartagena - Phase Three	Professor Luis García-Marcos	3998	2948
	Castellón - Phase One	Dr Alberto Arnedo-Pena	3094	3594
	Castellón - Phase Three	Dr Alberto Arnedo-Pena	4024	3915
	Madrid - Phase One	Dr Gloria García-Hernández	3321	2442
	Madrid - Phase Two	Dr Gloria García-Hernández	981	
	Madrid - Phase Three	Dr Gloria García-Hernández	2652	2347
	Pamplona - Phase One	Professor Francisco Guillén-Grima	3040	2996
	Pamplona - Phase Three	Professor Francisco Guillén-Grima	2932	3176
	San Sebastián - Phase Three	Professor Eduardo G Pérez-Yarza	1195	926
	Valencia - Phase One	Professor Maria M Morales-Suárez-Varela	3179	3940
	Valencia - Phase Two	Professor Maria M Morales-Suárez-Varela	1362	
	Valencia - Phase Three	Professor Maria M Morales-Suárez-Varela	3132	3398
	Valladolid - Phase One	Professor Alfredo Blanco-Quirós	3178	
	Valladolid - Phase Three	Professor Alfredo Blanco-Quirós	2944	
		Country Total	**71798**	**51753**
Turkey				
	Ankara - Phase Two	Dr Yildiz Saraçlar	2976	
		Country Total	**2976**	
United Kingdom				
	Anglia and Oxford - Phase One	Professor H Ross Anderson	2324	
	North east and Yorkshire - Phase One	Professor H Ross Anderson	3709	
	North Thames - Phase One	Professor H Ross Anderson	2220	
	North Thames - Phase Three	Professor H Ross Anderson	2356	
	North West - Phase One	Professor H Ross Anderson	3029	
	Scotland - Phase One	Professor H Ross Anderson	4444	
	Scotland - Phase Three	Dr Jane B Austin	4662	
	South and West - Phase One	Professor H Ross Anderson	2707	
	South Thames - Phase One	Professor H Ross Anderson	2297	
	South Thames - Phase Three	Professor H Ross Anderson	2432	
	Sunderland - Phase One	Dr Mohammad H Shamssain	2092	1864
	Sunderland - Phase Three	Dr Mohammad H Shamssain	2193	1843
	Surrey/Sussex - Phase One	Professor David Strachan	2114	
	Surrey/Sussex - Phase Three	Professor David Strachan	5082	
	Trent - Phase One	Professor H Ross Anderson	2207	
	Wales - Phase One	Professor H Ross Anderson	2351	
	Wales - Phase Three	Dr Michael Burr	2501	
	West Midlands - Phase One	Professor H Ross Anderson	2219	
	West Sussex - Phase Two	Professor David Strachan	1056	
		Country Total	**51995**	**3707**
		Region Total	**275638**	**153732**
		Global Total	**1340811**	**686892**

ISAAC Journal Information

The below table shows the journals that have published articles by ISAAC collaborators. It shows the journal, its impact factor (if available) and the number of ISAAC articles the journal has published. This information is also available at http://isaac.auckland.ac.nz/publications/journalSummary.php.

Journal Name	Website	Impact Factor 2010	Number of Original ISAAC Articles Published	Number of Letters About ISAAC	Number of Editorials About ISAAC
Acta clinica Belgica	http://www actaclinicabelgica be/	0 532	1		
Acta Paediatrica	http://www wiley com/bw/journal asp?ref=0803-5253	1 955	4		
Acta Paediatrica Japonica	http://onlinelibrary wiley com/journal/10 1111/%28ISSN%291442-200X		1		
Allergologia et Immunopathologia	http://www elsevier es/revistas/ctl_servlet?_f=7032&revistaid=105	0 779	19		
Allergologie	http://www dustri com/nc/de/deutschsprachige-zeitschriften/mag/allergologie html	0 143	5		
Allergology International	http://ai jsaweb jp/past html		2		
Allergy	http://www3 interscience wiley com/journal/118519659/home	6 297	24	1	
Allergy and Asthma Proceedings	http://www oceansidepubl com/aap/index htm	1 735	5		
Allergy and Clinical Immunology	www hhpub com		1		
Allergy Asthma and Clinical Immunology	http://e-aair org/index php		2		
Allergy Asthma and Immunology Research	2004-2009: http://www swetswise com/eAccess/viewTitleIssues do?titleID=267852 2009:http://www aacijournal com/		1		
Allergy Hypersensitivity Asthma	No Website		1		
American Journal of Public Health	http://www ajph org/	3 85	1		
American Journal of Respiratory and Critical Care Medicine	http://www atsjournals org/	10 191	6		1
Anales de pediatria (Barcelona)	http://www elsevier es/revistas/ctl_servlet?_f=7032&revistaid=37	0 57	5		
Anales del sistema sanitario de Navarra	http://www cfnavarra es/SALUD/ANALES/default html	0 252	1		
Anales Espanoles de Pediatria	Continued by Anales de pediatria (Barcelona)		4		
Annals of Allergy, Asthma and Immunology	http://www annallergy org/issues	2 801	6		
Annals of Epidemiology	http://www annallergy org	3 238	1		
Annals of Tropical Paediatrics: International Child Health	http://www ingentaconnect com/content/maney/atp	0 966	3		
Archives De Pediatrie	http://www elsevier com/wps/find/journaldescription cws_home/505820/description#description	0 305	1		
Archives of Disease in Childhood	http://adc bmjjournals com	2 616	7		
Archives of pediatrics and adolescent medicine	http://archpedi ama-assn org/	4 029	1		
Archivos de bronconeumologia	http://www archbronconeumol org/bronco_eng/ctl_servlet?_f=1		2		
Asian Pacific Journal of Allergy and Immunology	http://www allergythai org/index php?name=AsianPacificJournalofAllergyandImmunology	0 172	3		
Asthma	no Website		1		
Atencion primaria	http://www elsevier es/revistas/ctl_servlet?_f=7232&revistaid=27	0 619	1		
Australasian Epidemiologist	http://www aea asn au/journal_aims htm		1		
Australian and New Zealand journal of public health	http://www3 interscience wiley com/journal/117969397/home	1 529	1		
Australian Family Physician	http://www racgp org au/afp/	0 647	1		
BMC public health	http://www biomedcentral com/bmcpublichealth/	2 364	1		
British Journal of Dermatology	http://www wiley com/bw/journal asp?ref=0007-0963&site=1	4 351	2		
British Medical Journal	http://www bmj com/	13 471	3		
Bulletin de l'Académie nationale de médecine	http://www academie-medecine fr/le_bulletin cfm?langue=fr	0 316	1		
Cadernos de Saúde Pública	http://www scielo br/scielo php?script=sci_serial&pid=0102-311X&lng=en&nrm=iso	0 987	1		
Canadian Medical Association Journal	http://www cmaj ca/	9 015	2		
Chest	http://www chestjournal org/	6 519	1		
Childrens Pulmonology	No Website		6		
Clinical and Experimental Allergy	http://www3 interscience wiley com/journal/117999818/home	4 195	25		
Clinics	http://www scielo br/scielo php?script=sci_serial&pid=1807-5932&lng=en&nrm=iso	1 422	1		
Cough	http://www coughjournal com		1		
Current Allergy and Clinical Immunology	http://www allergysa org/allsa htm	0 196	1		
Current Opinion in Allergy and Clinical Immunology	http://journals lww com/co-allergy/pages/default aspx	3 431	1		
East African Medical Journal	http://www ajol info/journal_index php?jid=53		3		
Eastern Mediterranean Health Journal	http://www emro who int/publications/emhj/index asp		1	1	
Environmental Health	http://www ehjournal net/	2 45	2		
Environmental Health Perspectives	http://www ehponline org	6 087	2		
Epidemiologia e Prevenzione	http://www epidemiologiaeprevenzione it/cms/?q=node/4	0 636	20		
Epidemiology	http://journals lww com/epidem/pages/default aspx	5 866	5		
Ethiopian medical journal	http://www emaethiopia org/journal aspx		1		
European journal of clinical nutrition	http://www nature com/ejcn/index html	2 561	1		

Journal Name	Website	Impact Factor 2010	Number of Original ISAAC Articles Published	Number of Letters About ISAAC	Number of Editorials About ISAAC
European Journal of Epidemiology	http://www springerlink com/content/102883/	4 535	2		
European Respiratory Journal	http://erj ersjournals com/	5 922	36		
Georgian medical news	http://www geomednews org/		2		
Gesundheitswesen	http://www thieme-connect com/ejournals/toc/gesu		1		
Health and place	http://www elsevier com/wps/find/journaldescription cws_home/30519/description#description	2 694	1		
Indian Paediatrics	http://indianpediatrics net/	0 9	1		
International Archives of Allergy and Immunology	http://content karger com/ProdukteDB/produkte asp?Aktion=JournalHome&ProduktNr=224161	2 235	4		
International Journal of Biometeorlogy	http://springerlink metapress com/content/100429/	1 805	3		
International journal of chronic obstructive pulmonary disease	http://www dovepress com/articles php?pa=overview&journal_id=6		1		
International Journal of Epidemiology	http://ije oxfordjournals org/	5 759	6		
International journal of obesity	http://www nature com/ijo/index html	2 654	1		
International Journal of Occupational and Environmental Health	http://www ijoeh com/index php/ijoeh	1	1		
International Journal of Tuberculosis and Lung Disease	http://www ingentaconnect com/content/iuatld/ijtld	2 557	7		3
Iranian Journal of Allergy, Asthma and Immunology	http://www iaari hbi ir/journal/	0 742	2		
Irish Medical Journal	http://www imj ie/		3		
Jornal de Pediatria	http://www scielo br/scielo php?script=sci_serial&pid=0021-7557&lng=en&nrm=iso	1 065	7		
Journal Medical Libanais	http://lebanesemedicaljournal org/index html		1		
Journal of Allergy and Clinical Immunology	http://www jacionline org/	9 273	8	2	
Journal of Asthma	http://informahealthcare com/loi/jas	1 341	14	1	
Journal of Investigational Allergology and Clinical Immunology	http://www jiaci org/index htm	1 489	15		
Journal of Investigative Dermatology	http://www nature com/jid/	6 27	0		1
Journal of Isfahan Medical School	http://journals mui ac ir/jims		1		
Journal of Korean medical science	http://jkms org/	0 832	1		
Journal of Paediatrics and Child Health	http://www wiley com/bw/journal asp?ref=1034-4810&site=1	1 221	3		
Journal of Shahid Sadoughi University of Medical Sciences and Health Services	No Website		1		
Journal of the European Academy of Dermatology and Venereology	http://onlinelibrary wiley com/journal/10 1111/%28ISSN%291468-3083	3 309	0	1	
Journal of the Medical Association of Thailand	http://www mat or th/journal/all php		1		
Journal of the National Medical Association	http://www nmanet org/index php/Publications_Sub/jnma	1 104	1		
Journal of the Royal Society of Health	http://rsh sagepub com/		1		
Journal of tropical pediatrics	http://tropej oxfordjournals org/	1 248	1		
Journal Romanian Society Allergology & Clinical Immunology	no Website		1		
Korean Journal of Preventative Medicine	http://prevent richis org/		1		
La Tunisie médicale	http://www latunisiemedicale com/		1		
Leukotriene Research and Clinical Review	No Website		1		
Macedonian Journal of Medical Science	http://www mjms ukim edu mk/MJMS_Archive htm		2		
Maedica A Journal of Clinical Medicine	http://www maedica org		1		
Maternal and child health journal	http://www springerlink com/content/105600/		1		
Medical Journal of Australia	http://www mja com au/	2 684	2		
Medical Principals and Practice	http://content karger com/ProdukteDB/produkte asp?Aktion=JournalHome&ProduktNr=224259	1 069	2		
Medicina Clinica	http://www elsevier es/revistas/ctl_servlet?_f=7032&revistaid=2	1 413	3		
Medicina-Lithuania	http://medicina kmu lt/main-e htm	0 446	1		
Monaldi archives for chest disease	http://archest fsm it/pne/index html		1		
Monatsschrift Kinderheilkunde	http://www springerlink com/content/0026-9298	0 231	1		
Nature	http://www nature com/nature/index html	36 101	1		
New England Journal of Medicine	http://www nejm org	53 484	1		
NZ Medical Journal	http://www nzma org nz/journal/		4		
Occupational Environmental Medicine	http://oem bmj com/	3 494	4		
Otolaryngologia polska	http://www otolaryngologia org pl/orl2/otol_pol/teksty php		1		
Otolaryngology - Head and Neck Surgery	http://www journals elsevierhealth com/periodicals/ymhn	1 565	1		
Paediatric respiratory reviews	http://www journals elsevierhealth com/periodicals/yprrv/home	2 676	1		

Journal Name	Website	Impact Factor 2010	Number of Original ISAAC Articles Published	Number of Letters About ISAAC	Number of Editorials About ISAAC
Pediatric Allergy and Immunology	http://www wiley com/bw/journal asp?ref=0905-6157	2 874	40		
Pediatric Allergy and Respiratory Disease (Korea)	http://www kapard or kr/		1		
Pediatric Asthma, Allergy and Immunology	http://www liebertonline com/doi/abs/10 1089/pai 2004 17 244		1		
Pediatric Clinics of North America	http://www pediatric theclinics com/	2 204	1		
Pediatric Pulmonology	http://www3 interscience wiley com/journal/39249/home	2 239	12	2	
Pediatrics	http://pediatrics aappublications org/	5 391	1		
Pharmacoepidemiology and drug safety	http://www3 interscience wiley com/journal/5669/home	2 339	1		
Pneumologia (Bucharest, Romania)	http://www pneumologia eu/US/EN-home htm		1		
Pneumologie	http://www thieme-connect de/ejournals/toc/pneumologie		1		
Pneumonologia i Alergologia Polska	http://www pneumonologia viamedica pl/		5		
Preventive medicine	http://www elsevier com/wps/find/journaldescription cws_home/622934/description	3 299	1		
Primary Care Respiratory Journal	http://www thepcrj org		1		
Przeglad Lekarski	http://www wple net/plek/przeglad_lekarski htm		2		
Respiratory Medicine	http://www elsevier com/wps/find/journaldescription cws_home/623069/description#description	2 525	3		
Respiratory Research	http://respiratory-research com/	2 859	4		
Respirology	http://www wiley com/bw/journal asp?ref=1323-7799	1 865	4		
Revista alergia México	http://www imbiomed com mx/1/1/articulos php?method=showIndex&id_revista=12		2		
Revista De Saude Publica	http://www scielo br/scielo php?script=sci_arttext&pid=S0034-89102000000600016&lng=en&nrm=iso	0 862	1		
Revista Medica de Chile	http://www scielo cl/scielo php?script=sci_serial&lng=en&pid=0034-9887&nrm=iso	0 366	2		
Revista panamericana de salud pública	http://www scielosp org/scielo php?pid=1020-4989&script=sci_serial		1		
Revista Portuguesa de Pneumologia	http://www scielo oces mctes pt/scielo php?script=sci_issues&pid=0873-2159&lng=en&nrm=iso	0 355	1		
Revue d'épidémiologie et de santé publique	http://www sciencedirect com/science/journal/03987620	1 247	1		
Revue des Maladies Respiratoires	http://www sciencedirect com/science/journal/07618425	0 426	11		
Revue francaise d'allergologie et d'immunologie clinique	http://www sciencedirect com/science/journal/03357457	0 212	6		
Rhinology	http://www rhinologyjournal com/	0 803	1		
Salud Publica de Mexico	http://bvs insp mx/rsp/inicio/		3		
Scandinavian Journal of Work Environment and Health	http://www sjweh fi/	3 54	1		
Sozial- und Präventivmedizin	http://www springerlink com/content/109374/		2		
TABIB-E-SHARGH	No Website		1		
Tanaffos	http://nritld ac ir/tanaffosjournal/tabid/1362/language/en-US/Default aspx		2		
The Journal of the Association of Physicians of India	http://www japi org/		0	1	
The Lancet	http://www thelancet com/journals/lancet/issue/current	33 633	5	1	1
Thorax	http://thorax bmj com/	6 525	13		2
Toxicology Letters	http://www elsevier com/wps/find/journaldescription cws_home/505519/description#description	3 581	1		
Wiener Klinische Wochenschrift	http://www springerlink com/content/112448/	0 747	3		
World Journal of Pediatrics	http://www springerlink com/content/121086/	0 945	1		
Zhonghua er ke za zhi Chinese journal of pediatrics	http://www wanfangdata com/CMAJ/browse asp		2		
Zhonghua jie he he hu xi za zhi Chinese Journal of Tuberculosis and Respiratory Disease	http://www wanfangdata com/CMAJ/browse asp		1		
Zhonghua yi xue za zhi National Medical Journal of China	http://www cmj org/		2		

ISAAC Publications

Abramidze T, Gotua M, Rukhadze M, Gamkrelidze A *ISAAC I and III in Georgia: time trends in prevalence of asthma and allergies.* Georgian Med News 2006 Aug;(137):80-2

Abramidze T, Gotua M, Rukhadze M, Gamkrelidze A *Prevalence of asthma and allergies among adolescents in Georgia: comparison between two surveys.* Georgian Med News 2007 Mar;(144):38-41

Abu-Ekteish F, Otoom S, Shehabi I *Prevalence of asthma in Jordan: Comparison between Bedouins and urban schoolchildren using the International Study of Asthma and Allergies in Childhood phase III protocol.* Allergy Asthma Proc 2009; 30(2):181-185

Agabiti N, Mallone S, Forastiere F, Corbo GM, Ferro S, Renzoni E, Sestini P, Rusconi F, Ciccone G, Viegi G, Chellini E, Piffer S *The impact of parental smoking on asthma and wheezing. SIDRIA Collaborative Group.Studi Italiani sui Disturbi Respiratori nell'Infanzia e l'Ambiente.* Epidemiology 1999 Nov;10(6):692-8

Aguinaga Ontoso I, Arnedo Peña A, Bellido J, Guillén-Grima F, Morales Suárez-Varela MM *The prevalence of asthma-related symptoms in 13-14-year-old children from 9 Spanish populations. The Spanish Group of the ISAAC Study (International Study of Asthma and Allergies in Childhood).[Spanish].* Med Clin (Barc) 1999; 112(5): 171-5 (published erratum appears in Med Clin (Barc) 1999; 112(13):494)

Aït-Khaled N, Odhiambo J, Pearce N, Adjoh KS, Annesi-Maesano I, Benhabyles B, Bouhayad Z, Bahati E, Camara L, Catteau C, Asma El S, Esamai FO, Hypolite IE, Melaku K, Musa OA, Ng'ang'a L, Onadeko BO, Saad O, Jerray M, Kayembe JM, Koffi NB, Khaldi F, Kuaban C, Voyi K, M'Boussa J, Sow O, Tijani O, Zar HJ *Prevalence of symptoms of asthma, rhinitis and eczema in 13- to 14-year-old children in Africa: the International Study of Asthma and Allergies in Childhood Phase III.* Allergy 2007; 62(3), 247-258

Aït-Khaled N, Pearce N, Anderson HR, Ellwood P, Montefort S, Shah J, and the ISAAC Phase Three Study Group *Global map of the prevalence of symptoms of rhinoconjunctivitis in children: The International Study of Asthma and Allergies in Childhood (ISAAC) Phase Three.* Allergy 2009; 64: 123–148

Al-Rawas OA, Al-Riyami BM, Al-Maniri AA, Al-Riyami AA *Trends in asthma prevalence and severity in Omani schoolchildren: Comparison between ISAAC phases I and III.* Respirology 2008 Sep;13(5):670-3 Epub May 2008

Al-Riyami BM, Al-Rawas OA, Al-Riyami AA, Jasim LG, Mohammed AJ *A relatively high prevalence and severity of asthma, allergic rhinitis and atopic eczema in schoolchildren in the Sultanate of Oman.* Respirology 2003 Mar;8(1):69-76

Anandan C, Nurmatov U, van Schayck OCP, Sheikh A *Is the prevalence of asthma declining? Systematic review of epidemiological studies* Allergy 2010; 65(2): 152-167

Anderson HR, Gupta R, Kapetanakis V, Asher MI, Clayton T, Robertson CF, Strachan DP, and the ISAAC Steering Committee *International correlations between indicators of prevalence, hospital admissions and mortality for asthma in children.* Int J Epidemiol 2008; 37(3):573-82

Anderson HR, Poloniecki JD, Strachan DP, Beasley R, Björkstén B, Asher MI, and the ISAAC Phase One Study Group *Immunization and symptoms of atopic disease in children: Results from the International Study of Asthma and Allergies in Childhood.* Am J Publ Health 2001; 91(7): 1126-9

Anderson HR, Ruggles R, Pandey KD, Kapetenakis V, Brunekreef B, Lai CKW, Strachan DP, Weiland SK, and the ISAAC Phase One Study Group *Ambient particulate pollution and the world-wide prevalence of asthma, rhinoconjunctivitis and eczema in children: Phase One of the International Study of Asthma and Allergies in Childhood (ISAAC).* Occup Environ Med 2010; 67(5): 293-300 doi:10 1136/oem 2009 048785 epub: 9 October 2009

Anderson HR, Ruggles R, Strachan DP, Austin JB, Burr M, Jeffs D, Standring P, Steriu A, Goulding R *Trends in prevalence of symptoms of asthma, hay fever, and eczema in 12-14 year olds in the British Isles, 1995-2002: a questionnaire survey.* BMJ 2004; 328(7447): 1052-3

Annesi-Maesano I, Caillaud D, Lavaud F, Moreau D, Le Moullec Y, Taytard A, Pauli G, Charpin D *Exposure to fine air particles and occurrence of allergic diseases: Results of ISAAC-France phase 2.* Rev Fr Allergol Immunol Clin 2008; 48(6):427-433Oct

Annesi-Maesano I, Caillaud D, Lavaud F, Moreau D, Le Moullec Y, Taytard A, Pauli G, Charpin D *Exposure to fine air particles and occurrence of allergic diseases: Results of ISAAC-France phase 2.* Arch Pediatr 2009; 16(3):299-305

Annesi-Maesano I, Moreau D, Caillaud D, Lavaud F, Le Moullec Y, Taytard A, Pauli G, Charpin D *Residential proximity fine particles related to allergic sensitisation and asthma in primary school children* Respir Med 2007; 101: 1721–1729

Annesi-Maesano I, Oryszczyn MP, Lanteaume A, Berlier M, Kopferschmitt Kubler MC, Godard P *Prevalence and severity of allergic rhinitis in adolescents.* Rev Mal Respir 1997; 14(suppl 4): 4S23-4S31 [in French]

Annesi-Maesano I, Oryszczyn MP *Rhinitis in adolescents. Results of the ISAAC survey.* Rev Fr Allergol Immunol Clin 1998; 38(4):283-289

Annus T, Björkstén B, Mai XM, Nilsson L, Riikjärv MA, Sandin A, Bråbäck L *Wheezing in relation to atopy and environmental factors in Estonian and Swedish schoolchildren.* Clin Exp Allergy 2003; 31(12): 1846-53

Annus T, Montgomery SM, Riikjärv MA, Björkstén B *Atopic disorders among Estonian schoolchildren in relation to tuberculin reactivity and the age at BCG vaccination.* Allergy 2004; 59(10): 1068–1073

Annus T, Riikjärv MA, Rahu K, Björkstén B *Modest increase in seasonal allergic rhinitis and eczema over 8 years among Estonian schoolchildren.* Pediatr Allergy Immunol 2005; 16(4): 315-20

Anonymous *Correction: Asthma and other allergic diseases in 13-14-year-old schoolchildren in Urmia: an ISAAC study* East Med HealthJ 2009; 15(6):1364

Anonymous *Correction: Liao M-F, Liao M-N, Lin S-N, et al. Prevalence of allergic diseases of schoolchildren in central taiwan. From ISAAC surveys 5 years apart. (J Asthma. 2009;46(6):541-5.)* J Asthma Aug 2010; 47(6): 699–699

Anonymous *Asthma and respiratory symptoms in 6-7 yr old Italian children: gender, latitude, urbanization and socioeconomic factors. SIDRIA (Italian Studies on Respiratory Disorders in Childhood and the Environment).* Eur Respir J 1997; 10(8): 1780-6

Anonymous *Frequency of childhood asthma in various Italian regions.Results from ISAAC. Collaborating group of ISRDCE (Italian Studies of Respiration Disorders in Childhood and the Environment).[in Italian].* Epidemiol Prev 1997; 21(4): 235-42 [Italian]

Anonymous *Prevalence of symptoms suggestive of allergic rhinitis and atopic dermatitis in adolescents (Spanish ISAAC Study Group).[Spanish].* An Esp Pediatr 1999; 51(4): 369-76

Anonymous *Italian Studies on Respiratory Disorders in Children and the Environment. Second phase. Summary.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):6-8 [Italian]

Arnedo A, Bellido JB, Pac MR, Artero A, Campos JB, Museros L, Puig-Barbera J, Tosca R, Tornador E *[Incidence of asthma and risk factors in a cohort of schoolchildren aged from 6-7 years old to 14-15 years old in Castellon (Spain) following the International Study of Asthma and Allergies in Childhood (ISAAC)].* Med Clin (Barc) 2007 Jun 30;129(5):165-70 Spanish

Arnedo Peña A, Bellido-Blasco J, Puig-Barbera J, Artero-Civera A, Campos-Cruanes JB, Pac-Sa MR, Villamarin-Vazquez JL, Felis-Dauder C *[Domestic water hardness and prevalence of atopic eczema in Castellon (Spain) school children].[Spanish].* Salud Publica Mex 49(4):295-301, 2007 Jul-Aug

Arnedo Peña A, García-Marcos L, Blanco-Quirós A, Martínez Gimeno A, Aguinaga Ontoso I, González Díaz C, Díaz Vazquez C, Busquets-Monge R, Morales Suárez-Varela MM, Batllés-Garrido J, López-Silvarrey Varela A, García de Andoin N *[Time trends in prevalence of symptoms of allergic rhinitis in 13-14 year-old schoolchildren in 8 areas of Spain between 1993-1994 and 2001-2002 according to the International Study of Asthma and Allergies in Childhood (ISAAC)].[Spanish].* Med Clin (Barc) 2004; 123(13): 490-5

Arnedo Peña A, García-Marcos L, Carvajal Urueña I, Busquets Monge R, Morales Suárez-Varela MM, Miner Canflanca I, Batllés-Garrido J, Blanco Quirós A, López-Silvarrey Varela A, García Hernández G, Aguinaga Ontoso I, González Díaz C *Air Pollution and Recent Symptoms of Asthma, Allergic Rhinitis, and Atopic Eczema in Schoolchildren Aged Between 6 and 7 Years.[Article in Spanish].* Arch Bronconeumol 2009;45(5):224-9 Epub Feb 2009

Arnedo Peña A, García-Marcos L, García HG, et al *Time trends and geographical variations in the prevalence of symptoms of allergic rhinitis in 6-7-year-old children from eight areas of Spain according to the ISAAC.[article in spanish].* An Pediatr (Barc) 2005; 62(3):229-236

Arnedo Pena A, Puig-Barbera J, Bellido-Blasco JB, Pac-Sa MR, Campos-Cruanes JB, Artero-Sivera A, Museros-Recatala L *Risk factors and prevalence of asthma in schoolchildren in Castellon (Spain): a cross-sectional study.* Allergol Immunopathol (Madr) 2009; 37(3):135-142

Arnedo-Pena A, García-Marcos L, Fernández-Espinar JF, Bercedo-Sanz A, Aguinaga-Ontoso I, González-Díaz C, Carvajal-Urueña I, Busquet-Monge R, Suárez-Varela MM, de Andoín NG, Batlles-Garrido J, Blanco-Quirós A, López-Silvarrey Varela A, García-Hernández G *Sunny hours and variations in the prevalence of asthma in schoolchildren according to the International Study of Asthma and Allergies (ISAAC) Phase III in Spain* Int J Biometeorol 2011; 55(3): 423-434

Asher I *World Asthma Day: reflections on ISAAC [Editorial]* Int J Tuberc Lung Dis 2011; 15(5):569

Asher MI *Recent perspectives on global epidemiology of asthma in childhood* Allergol Immunopathol (Madr) 2010; 38(2):83-7

Asher MI, Barry D, Clayton T, Crane J, D'Souza W, Ellwood P, Ford RPK, Mackay R, Mitchell EA, Moyes C, Pattemore P, Pearce N, Stewart AW *The burden of symptoms of asthma, allergic rhinoconjunctivitis and atopic eczema in children and adolescents in 6 New Zealand centres: ISAAC Phase One.* NZ Med J 2001; 114: 114-20

Asher MI, Keil U, Anderson HR, Beasley R, Crane J, Martinez F, Mitchell EA, Pearce N, Sibbald B, Stewart AW, Strachan D, Weiland SK, Williams HC *International study of asthma and allergies in childhood (ISAAC): rationale and methods.* Eur Respir J 1995; 8: 483-91

Asher MI, Montefort S, Björkstén B, Lai CKW, Strachan DP, Weiland SK, Williams H, and the ISAAC Phase Three Study Group *Worldwide time trends in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and eczema in childhood: ISAAC Phases One and Three repeat multicountry cross-sectional surveys.* Lancet 2006; 368(9537): 733-743

Asher MI, on behalf of the ISAAC Steering Committee *Rising trend of asthma prevalence among Turkish schoolchildren (ISAAC phases 1 and 111)', Ones et al, December 2006.(Letter to the Editor in Journal of Allergy May 2008).* Allergy 2008; 63(9): 1249

Asher MI, Stewart AW, Clayton T, Crane J, Ellwood P, MacKay R, Mitchell E, Moyes C, Pattemore PK, Pearce N *Has the prevalence and severity of symptoms of asthma changed among children in New Zealand? ISAAC Phase Three.* NZ Med J 2008; 121(1284): 52-63

Asher MI, Stewart AW, Mallol J, Montefort M, Lai CKW, Aït-Khaled N, Odhiambo J, and the ISAAC Phase One Study Group *Which population level environmental factors are associated with asthma, rhinoconjunctivitis and eczema? A review of the ecological analyses of ISAAC Phase One.* Respiratory Research 2010; 11(8):

Asher MI, Weiland SK, on behalf of the ISAAC Steering Committee *The International Study of Asthma and Allergies in Childhood (ISAAC).* Clin Exp Allergy 1998; 28 Suppl 5: 52-66

Asher MI *ISAAC International Study of Asthma and Allergies in Childhood.(Letter to the Editor).* Pediatr Pulmonol 2007; (42)1: 100

Austin JB, Kaur B, Anderson HR, Burr M, Harkins LS, Strachan DP, Warner JO *Hay fever, eczema, and wheeze: a nationwide UK study (ISAAC, international study of asthma and allergies in childhood).* Arch Dis Child 1999; 81(3): 225-30

Austin JB, Selvaraj S, Godden D, Russell G *Deprivation, smoking and quality of life in asthma.* Arch Dis Child 2005; 90(3): 253-7

Awasthi S, Kalra E, Roy S, Awasthi S *Prevalence and risk factors of asthma and wheeze in school-going children in Lucknow, North India.* Indian Pediatr 2004; 41: 1205-10

Baena-Cagnani CE, Patiño CM, Cuello MN, Minervini MC, Fernández AM, Garip CM, Salvucci KD, Sancho ML, Corelli S, Gómez RM *Prevalence and severity of asthma and wheezing in an adolescent population.* Int Arch Allergy Immunol 1999; 118: 245-6

Barragan-Meijueiro MM, Morfin-Maciel B, Nava-Ocampo AA *A Mexican population-based study on exposure to paracetamol and the risk of wheezing, rhinitis, and eeczema in childhood.* J Investig Allergol Clin Immunol 2006 16(4):247-52

Batllés-Garrido J, Torres-Borrego J, Bonillo-Perales A, Rubí-Ruiz T, González-Jiménez Y, Momblán De Cabo J, Aguirre-Rodríguez J, Jiménez Liria R, Losillas-Maldonado A, Torres-Daza M *Prevalence and factors linked to atopic eczema in 10- and 11-year-old schoolchildren. Isaac 2 in Almeria, Spain* Allergol Immunopathol(Madr) 2010; 38(4): 174–180 epub May

Batllés-Garrido J, Torres-Borrego J, Rubí-Ruiz T, Bonillo-Perales A, González-Jiménez Y, Momblán De Cabo J, Aguirre-Rodríguez J, Losillas-Maldonado A, Torres-Daza M *Prevalence and factors linked to atopy in 10-and 11-year-old children in Almería, Spain* Allergol Immunopathol (Madr) 2010; 38(1):13-9

Batlles-Garrido J, Torres-Borrego J, Rubí-Ruiz T, Bonillo-Perales A, González-Jiménez Y, Momblán-De Cabo J, Aguirre-Rodríguez J, Losillas-Maldonado A, Torres-Daza M *Prevalence and factors linked to allergic rhinitis in 10 and 11-year-old children in Almería. Isaac Phase II, Spain* Allergol Immunopathol (Madr) 2010;38(3):135-41

Beasley R, Clayton T, Crane J, von Mutius E, Lai CKW, Montefort S, Stewart A, for the ISAAC Phase Three Study Group *Association between paracetamol use in infancy and childhood, and risk of asthma, rhinoconjunctivitis, and eczema in children aged 6-7 years: analysis from Phase Three of the ISAAC programme.* Lancet 2008; 372(9643): 1039-48

Beasley R, Ellwood P, Asher I *International patterns of the prevalence of pediatric asthma the ISAAC program.* Pediatr Clin North Am 2003; 50(3): 539-53 Copyright© Elsevier 2003

Beasley R, Lai CKW, Crane J, Pearce N *The video questionnaire - one approach to the identification of the asthmatic phenotype.* Clin Exp Allergy 1998; 28(Suppl 1): 8-12

Beasley RW, Clayton TO, Crane J, Lai CKW, Montefort SR, von Mutius E, Stewart AW, and the ISAAC Phase Three Study Group *Acetaminophen Use and Risk of Asthma, Rhinoconjunctivitis and Eczema in Adolescents: ISAAC Phase Three* Am J Resp Crit Care Med 2011; 183(2): 171-178 epub 13 August 2010

Behbehani NA, Abal A, Syabbalo NC, Abd Azeem A, Shareef E, Al-Momen J *Prevalence of asthma, allergic rhinitis, and eczema in 13- to 14-year-old children in Kuwait: an ISAAC study.International Study of Asthma and Allergies in Childhood.* Ann Allergy Asthma Immunol 2000; 85(1): 58-63

Behrens T, Maziak W, Weiland SK, Rzehak P, Siebert E, Keil U *Symptoms of asthma and the home environment.The ISAAC I and III cross-sectional surveys in Munster, Germany.* Int Arch Allergy Immunol 2005 May;137(1):53-61

Behrens T, Maziak W, Weiland SK, Siebert E, Rzehak P, Keil U *The use of synthetic bedding in children.Do strategies of change influence associations with asthma?* J Asthma 2005 Apr;42(3):203-6

Behrens T, Taeger D, Maziak W, Duhme H, Rzehak P, Weiland SK, Keil U *Self-reported traffic density and atopic disease in children.Results of the ISAAC Phase III survey in Muenster, Germany.* Pediatr Allergy Immunol 2004; 15(4): 331-9

Beimfohr C, Maziak W, von Mutius E, Hense HW, Leupold W, Hirsch T, Keil U, Weiland SK *The use of anti-asthmatic drugs in children: results of a community-based survey in Germany.* Pharmacoepidemiol Drug Saf 2001 Jun-Jul;10(4):315-21

Bellasio M, Pistelli R, Rusconi F, Caranci N, Frasca G, De Sario M, Rana M, La Grutta S, Galassi C; Gruppo Collaborativo SIDRIA-2 *Access to health care for asthma in Italian children and adolescents.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):70-6 [Italian]

Berti G, Migliore E, Cadum E, Ciccone G, Bugiani M, Galassi C, Biggeri A, Viegi G; Gruppo Collaborativo SIDRIA-2 *Outdoor risk factors and adverse effects on respiratory health in childhood.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):62-6 [Italian]

Bisanti L, Russo A, Migliore E, Galassi C, Caranci N, Mirabelli D, Agabiti N, Dell'Orco V, Armenio L; Gruppo Collaborativo SIDRIA-2 *Respiratory and allergic disorders in children: differences in socio-economic status.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):32-5 [Italian]

Björkstén B, Aït-Khaled N, Asher MI, Clayton TO, Robertson C, the ISAAC Phase Three Study Group *Global analysis of breast feeding and risk of symptoms of asthma, rhinoconjunctivitis and eczema in 6—7 year old children: ISAAC Phase Three.* Allergol Immunopathol (Madr); 2011 doi:10 1016/j aller 2011 02 005 Epub ahead of print

Björkstén B, Clayton T, Ellwood P, Stewart A, Strachan D, and the ISAAC Phase Three Study Group *Worldwide time trends for symptoms of rhinitis and conjunctivitis: Phase III of the International Study of Asthma and Allergies in Childhood.* Pediatr Allergy Immunol 2008; 19(2): 110-24

Björkstén B, Dumitrascu D, Foucard T, Khetsuriani N, Khaitov R, Leja M, Lis G, Pekkanen J, Priftanji A, Riikjärv MA *Prevalence of childhood asthma, rhinitis and eczema in Scandinavia and Eastern Europe.* Eur Respir J 1998; 12(2): 432-7

Björkstén B *Epidemiology of pollution-induced airway disease in Scandinavia and Eastern Europe [Review].* Allergy 1997; 52(38 Suppl): 23-5; discussion 35-6

Blanco-Quirós A, García-Marcos L, Garrote JA, et al *Antibody levels to Bordetella pertussis in 10-yr-old children with atopy and atopic asthma.* Pediatr Allergy Immunol 2005; 16(8):637-640

Bolte G , Schmidt M, von Mutius E, Maziak M, Keil U, Nasca P, Weiland SK *The relation of fetal growth with asthma, allergies and serum IgE levels in children at age 5-7 years.* Clin Exp Allergy 2004; 34(3):381-8

Bolte G, Kompauer I, Fobker M, Cullen P, Keil U, Mutius E, Weiland SK *Fatty acids in serum cholesteryl esters in relation to asthma and lung function in children.* Clin Exp Allergy 2006 Mar;36(3):293-302

Borges WG, Burns DA, Felizola ML, Oliveira BA, Hamu CS, Freitas VC *Prevalence of allergic rhinitis among adolescents from Distrito Federal, Brazil: comparison between ISAAC phases I and III.* J Pediatr (Rio J) 2006 Mar-Apr;82(2):137-43

Bouayad BZ, Aichane A, Afif A, Benouhoud N, Trombati N, Chan-Yeung M, Aït-Khaled N *Prevalence and trend of self-reported asthma and other allergic disease symptoms in Morocco: ISAAC Phase I and III.* Int J Tuberc Lung Dis 2006; 10(4): 371-7

Braun-Fahrländer C, Gassner M, Grize L, Minder CE, Varonier HS, Vuille JC, Wüthrich B, Sennhauser FH *Comparison of responses to an asthma symptom questionnaire (ISAAC core questions) completed by adolescents and their parents.SCARPOL-Team.Swiss Study on Childhood Allergy and Respiratory Symptoms with respect to Air Pollution.* Pediatr Pulmonol 1998; 25(3):159-66

Braun-Fahrländer C, Wüthrich B, Gassner M, Grize L, Sennhauser FH, Varonier HS, Vuille JC *Validation of a rhinitis symptom questionnaire (ISAAC core questions) in a population of Swiss school children visiting the school health services.SCARPOL-team.Swiss Study on Childhood Allergy and Respiratory Symptom with respect to Air Pollution and Climate.International Study of Asthma and Allergies in Childhood.* Pediatr Allergy Immunol 1997; 8(2): 75-82

Brêborowicz A, Swiatly A, Alkiewicz J, Moczko J *Use of a video questionnaire for assessment of asthma prevalence in school children as part of the ISAAC epidemiological study.[Polish].* Pneumonol Alergol Pol 1998; 66(7-8): 368-72

Brito RdCCM, da Silva GAP, Motta MEFA Brito MCA *The association of rhinoconjunctivitis and asthma symptoms in adolescents* Rev Port Pneumol 2009; 15(4): 613-628

Britto MCA, Bezerra P, Giovannino Ciccone M, Brito RCCM, Rego JC, Burity EF, Alves JGB *Asthma in schoolchildren from Recife, Brazil.Prevalence comparison: 1994-95 and 2002.* J Pediatr (Rio J) 2004; 80(5):391-400

Brunekreef B, Stewart AW, Anderson HR, Lai CKW, Pearce NE, and the Phase Three Study Group *Self Reported Truck Traffic on the Street of Residence and Symptoms of Asthma and Allergic Disease: A Global Relationship in ISAAC Phase Three.* Environ Health Perspect 2009; 117(11): 1791-98 Epub July 2009

Bråbäck L, Kjellman NI, Sandin A, Björkstén B *Atopy among schoolchildren in northern and southern Sweden in relation to pet ownership and early life events* Pediatr Allergy Immunol 2001;12:4-10

Burr ML, Anderson HR, Austin JB, Harkins LS, Kaur B, Strachan DP, Warner JO *Respiratory symptoms and home environment in children: a national survey.* Thorax 1999; 54: 27-32

Burr ML, Emberlin JC, Treu R, Cheng S, Pearce NE, and the ISAAC Phase One Study Group *Pollen counts in relation to the prevalence of allergic rhinoconjunctivitis, asthma and atopic eczema in the International Study of Asthma and Allergies in Childhood (ISAAC).* Clin Exp Allergy 2003; 33(12): 1675-80

Busquets Monge RM, Vall Combelles O, Checa Vizcaino MA, García Algar O *[Epidemiological features of exercise-induced bronchial hyperresponsiveness in children aged 13-14 years old in Barcelona (Spain)].* An Esp Pediatr 2002 Apr;56(4):298-303 Spanish

Busquets RM, Anto JM, Sunyer J, Sancho N, Vall O *Prevalence of asthma-related symptoms and bronchial responsiveness to exercise in children aged 13-14 yrs in Barcelona, Spain.* Eur Respir J 1996; 9(10): 2094-8

Büchele G, Genuneit J, Weinmayr G, Björkstén B, Gehring U, von Mutius E, Priftanji A, Stein RT, Addo-Yobo EO, Priftis KN, Shah JR, Forastiere F, Svabe V, Crane J, Nystad W, García-Marcos L, Saraçlar Y, El-Sharif N, Strachan DP and the ISAAC Phase Two Study Group *International Variations in Bronchial Responsiveness in Children: Findings From ISAAC Phase Two* Pediatr Pulmonol 2010; 45(8): 796–806

Büchele G, Rzehak P, Weinmayr G, Keil U, Leupold W, von Mutius E, Weiland SK *Assessing bronchial responsiveness to hypertonic saline using the stepwise protocol of Phase II of the International Study of Asthma and Allergies in Childhood (ISAAC II).* Pediatr Pulmonol 2007 Feb;42(2):131-40

Büchele G, Weinmayr G, Genuneit J, Nagel G, Kleiner A, Peter R *Atopic diseases in childhood and adolescence: Worldwide frequencies and trends.A literature review on the International Study on Asthma and Allergies in Childhood (ISAAC).* Allergologie 2008; 31(2):48-55

Camelo-Nunes IC, Wandalsen GF, Melo KC, Naspitz CK, Solé D *[Prevalence of atopic eczema and associated symptoms in school children].* J Pediatr (Rio J) 2004 Jan-Feb;80(1):60-4 Portuguese

Cameron L, Depner M, Kormann M, Klopp N, Illig T, von Mutius E, Kabesch M *Genetic variation in CRTh2 influences development of allergic phenotypes.* Allergy 2009; 64(10): 1478-1485

Carter E, Debley J, Redding G *Changes in asthma prevalence and impact on health and function in Seattle middle-school children: 1995 versus 2003.* Ann Allergy Asthma Immunol 2005; 94(6):634-639

Carter E, Debley J, Redding G *Chronic productive cough in school children: prevalence and associations with asthma and environmental tobacco smoke exposure.* Cough 2006, 2:11

Carvajal-Urueña I, García-Marcos L, Busquets-Monge R, Morales Suárez-Varela MM, García de Andoin N, Batllés-Garrido J, Blanco-Quirós A, López-Silvarrey A, García-Hernández G, Guillén-Grima F, González Díaz C, Bellido-Blasco J *Geographic variation in the prevalence of asthma symptoms in Spanish children and adolescents.International Study of Asthma and Allergies in Childhood (ISAAC) Phase 3, Spain.* Arch Bronconeumol 2005 Dec;41(12):659-66

Carvalho N, Fernández-Benitez M, Cascante L, Aguinaga I, Guillén F *International Study of Asthma and Allergies in Childhood.Results on rhinitis of first phase in Pamplona, Spain.* Allergol Immunopathol (Madr) 2000 Jul-Aug;28(4):207-12

Casagrande RRD, Pastorino AC, Souza RGL, Leone C, Sole D, Jacob CMA *Asthma prevalence and risk factors in schoolchildren of the city of Sao Paulo, Brazil.* Rev Saude Publica 2008; 42(3):517-523

Cassol V, Rizzato TM, Teche SP, Basso DF, Centenaro DF, Maldonado M, Moraes EZ, Hirakata VN, Solé D, Menna-Barreto SS *Obesity and its relationship with asthma prevalence and severity in adolescents from southern Brazil.* J Asthma 2006 Feb;43(1):57-60

Cassol VE, Rizzato TM, Teche SP, Basso DF, Hirakata VN, Maldonado M, Colpo E, Solé D *[Prevalence and severity of asthma among adolescents and their relationship with the body mass index].* J Pediatr (Rio J) 2005 Jul-Aug;81(4):305-9 Portuguese

Celedon JC, Soto-Quirós ME, Silverman EK, Hanson L, Weiss ST *Risk factors for childhood asthma in Costa Rica.* Chest 120(3):785-90, 2001 Sep

Cesaroni G, Farchi S, Davoli M, Forastiere F, Perucci CA *Individual and area-based indicators of socioeconomic status and childhood asthma.* Eur Respir J 2003 Oct;22(4):619-24 Italian

Chan HH, Pei A, Van Krevel C, Wong GW, Lai CK *Validation of the Chinese translated version of ISAAC core questions for atopic eczema.* Clin Exp Allergy 2001; 31(6): 903-7

Charpin D, Annesi-Maesano I, Godard P, Kopferschmitt Kubler MC, Oryszczyn MP, Peray P, Quoix E, Raherison C, Taytard A, Vervloet D *ISAAC survey.General presentation of the survey.[in French].* Rev Mal Respir 1997; 14(suppl 4): 4S7-4S14

Charpin D, Annesi-Maesano I, Godard P, Kubler MCK, Oryszczyn MP, Ray P, Quoix E, Raherison C, Taytard A, Vervloet D *General description of the ISAAC study.* Rev Fr Allergol Immunol Clin 1998; 38(4):275-282

Charpin D, Pénard-Morand C, Raherison C, Kopferschmitt C, Lavaud F, Caillaud D, Annesi-Maesano I *Long-term exposure to urban air pollution measured through a dispersion model and the risk of asthma and allergy in children* Bull Acad Natl Med 2009; 193(6): 1317-1328

Chellini E, Talassi F, Ciccone G, Bisanti L, Rusconi F, Piffer S, Biggeri A, Petronio MG, Sestini P, Forastiere F, De Sario M, Pistelli R, Corbo G, Viegi G; Gruppo Collaborativo SIDRIA-2 *Changes in social characteristics and risk factors for asthma and allergies among children and adolescents in Italy.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):80-5 [Italian]

Chellini E, Talassi F, Corbo G, Berti G, De Sario M, Rusconi F, Piffer S, Caranci N, Petronio MG, Sestini P, Dell'Orco V, Bonci E, Armenio L, La Grutta S; Gruppo Collaborativo SIDRIA-2 *Environmental, social and demographic characteristics of children and adolescents, resident in different Italian areas.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):14-23 [Italian]

Chen YZ, Ma Y, Wang HY, Wang HJ, Zhao J, Cao L, Li S, Wong GW, Zhong NS, Fok TF, Lai CK *[Individual allergens as risk factors for asthma and bronchial hyperresponsiveness in Chinese children].[Chinese].* Zhonghua Erke Zazhi 2003 Jul 41(7):538-41

Chen YZ, Wang HY, Wang HJ, Ma Y, Li S, Zhao J, Zhong NS, Huang YJ, Huo TH, Lai QW *[Prevalence of respiratory and atopic disorders in Chinese school children].* Chin J Tuberc Respir Dis 2003 Mar;26(3):143-7 Chinese

Chereches-Panta P, Man SC, Dumitrascu D, Mirestean I, Iacob D, Ichim GE, Nanulescu MV *Epidemiological Survey 6 Years Apart: Increased Prevalence of Asthma and Other Allergic Diseases in Schoolchildren Aged 13-14 Years in Cluj-Napoca, Romania (Based on Isaac Questionnaire)* Maedica 2011; 6(1): 10-16

Chereches-Panta P, Popa MD, Iacob D, Muresan M, Man SC, Farcau M, Indolean C, Ichim GE, Mirestean I, David L, Nanulescu MV *[Increase of the prevalence of bronchial asthma and related symptoms in students in Cluj-Napoca.Epidemiologic study with a five-years interval].* Pneumologia 2004 Jan-Mar;53(1):47-52

Chew FT, Goh DY, Lee BW *Geographical comparison of the prevalence of childhood asthma and allergies in Singapore.* Ann Trop Paediatr 1999; 19(4): 383-90

Chew FT, Goh DY, Lee BW *Under-recognition of childhood asthma in Singapore: evidence from a questionnaire survey.* Ann Trop Paediatr 1999; 19(1): 83-91

Choi S-W, Ju Y-S, Kim D-S, Kim J-Y, Kwon H-J, Kang D-H, Lee S-I, Cho S-H *Reliability and Validity of the Korean Version of ISAAC Questionnaire* Korean J Prev Med 1998; 31(3): 361-371 [Korean]

Ciccone G, Forastiere F, Agabiti N, Biggeri A, Bisanti L, Chellini E, Corbo G, Dell'Orco V, Dalmasso P, Volante TF, Galassi C, Piffer S, Renzoni E, Rusconi F, Sestini P, Viegi G *Road traffic and adverse respiratory effects in children. SIDRIA Collaborative Group.* Occup Environ Med 1998 Nov;55(11):771-8

Clausen M, Kristjansson S, Haraldsson A, Björkstén B *High prevalence of allergic diseases and sensitization in a low allergen country.* Acta Paediatr 2008 Jul 9; 97(9): 1216-1220

Corbo GM, Forastiere F, De Sario M, Brunetti L, Bonci E, Bugiani M, Chellini E, La Grutta S, Migliore E, Pistelli R, Rusconi F, Russo A, Simoni M, Talassi F, Galassi C, Sidria-2 Collaborative Group *Wheeze and asthma in children: associations with body mass index, sports, television viewing, and diet.* Epidemiology 2008 Sep;19(5):747-55

Corbo GM, Forastiere F, Rusconi F, De Sario M, Biggeri A, Russo A, Chellini E, Brunetti L; Gruppo Collaborativo SIDRIA-2 *Dietary habits, life styles and respiratory symptoms in childhood. Epidemiol Prev.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):42-6 [Italian]

Crane J, Mallol J, Beasley R, Stewart A, Asher MI, on behalf of the ISAAC Phase One Study Group *Agreement between written and video questions for comparing asthma symptoms in ISAAC.* Eur Respir J 2003; 21(3): 455-61

da Silva ER, Sly PD, de Pereira MU, Pinto LA, Jones MH, Pitrez PM, Stein RT *Intestinal helminth infestation is associated with increased bronchial responsiveness in children.* Pediatr Pulmonol 2008; 43(7):662–665

Daures JP, Raherison C, Annesi-Maesano I, Berlier A, Lanteaume A, Taytard A *Prevalence of asthma or signs suggestive of rhinitis in adolescents (13-14 years) in the ISAAC survey.[in French].* Rev Mal Respir 1997; 14(suppl 4): 4S41-4S46

De Britto MC, Bezerra PG, Ferreira OS, Maranhao IC, Trigueiro GA *Asthma prevalence in schoolchildren in a city in north-east Brazil.* Ann Trop Paediatr 2000 Jun;20(2):95-100

De Sario M, Di Domenicantonio R, Corbo G, Forastiere F, Pistelli R, Rusconi F,Sammarro S, Serra MG, Compagnucci P, Perucci CA *Characteristics of early transient, persistent, and late onset wheezers at 9 to 11 years of age.* J Asthma 2006 Oct;43(8):633-8

De Sario M, Forastiere F, Viegi G, Simoni M, Chellini E, Piccioni P, Indinnimeo L, Brunetti L; Gruppo Collaborativo SIDRIA-2 *Parental smoking and respiratory disorders in childhood.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):52-6 [Italian]

De Sario M, Galassi C, Biggeri A, Bisanti L, Ciccone G, Piffer S, Chellini E, Petronio MG, Sestini P, Rusconi F, Pistelli R, Corbo G, Viegi G, Forastiere F; Gruppo Collaborativo SIDRIA-2 *Trends in the frequency of asthma and allergies.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):86-90 [Italian]

Debley JS, Carter ER, Redding GJ *Prevalence and impact of gastroesophageal reflux in adolescents with asthma: a population-based study.* Pediatr Pulmonol 2006 May;41(5):475-81

Del-Río-Navarro B, Berber A, Blandón-Vijil V, Ramírez-Aguilar M, Romieu I, Ramírez-Chanona N, Heras-Acevedo S, Serrano-Sierra A, Barraza-Villareal A, Baeza-Bacab M, Sienra-Monge JJ *Identification of asthma risk factors in Mexico City in an International Study of Asthma and Allergy in Childhood survey.* Allergy Asthma Proc 2006 Jul-Aug;27(4):325-33

Del-Río-Navarro B, Del-Río-Chivardi JM, Berber A, Sienra-Monge JJ, Rosas-Vargas MA, Baeza-Bacab M *Asthma prevalence in children living in north Mexico City and a comparison with other Latin American cities and world regions.* Allergy Asthma Proc 2006 Jul-Aug;27(4):334-40

Del-Río-Navarro BE, Hernández-Román MP, Espinola Reyna G, Berber A, escalante-Domínguez AJ, González-Reyes M, Rosas-Vargas MA, Pérez-Lopez J, Baeza-Bacab M, Sienra-Monge JJ *A comparative study of bronchodilator reversibility with albuterol, between asthma symptomatic and asymptomatic children according to ISAAC questionnaire in Mexico City.* Allergol Immunopathol (Madr) 2004 Nov-Dec;32(6):334-9

Del-Río-Navarro BE, Ito-Tsuchiya FM, Berber A, Zepeda-Ortega B, Sienra-Monge JJ, García-Almaraz R, Baeza-Bacab M *Study of the relationship between acetaminophen and asthma in Mexican children aged 6 to 7 years in 3 Mexican cities using ISAAC methodology.* J Investig Allergol Clin Immunol 2008;18(3):194-201

Del-Río-Navarro BE, Luna-Pech JA, Berber A, Zepeda-Ortega B, Avila-Castañon L, Del-Río-Chivardi JM, Baeza-Bacab M, Sienra-Monge JJ *Factors associated with allergic rhinitis in children from northern Mexico City.* J Investig Allergol Clin Immunol 2007; 17(2): 77-84

Depner M, Kormann MS, Klopp N, Illig T, Vogelberg C, Weiland SK, von Mutius E, Combadiere C, Kabesch M *CX3CR1 Polymorphisms Are Associated with Atopy but Not Asthma in German Children.* Int Arch Allergy Immunol 2007 ;144(1):91-94 Epub May 2007

Di Domenicantonio R, De Sario M, Sammarro S, Compagnucci P, Forastiere F, Pistelli R, Serra MG, Corbo G, Agabiti N, Perucci CA *Asthma and allergies in childhood in Rome: Italian contribution to the ISAAC II.* Epidemiol Prev 2003 Jul-Aug;27(4):226-33 [Italian]

Droma Y, Kunii O, Yangzom Y, Shan M, Pingzo L, Song P *Prevalence and severity of asthma and allergies in schoolchildren in Lhasa, Tibet.* Clin Exp Allergy 2007 Sep;37(9):1326-33

Duhme H, Weiland SK, Keil U, Kraemer B, Schmid M, Stender M, Chambless L *The association between self-reported symptoms of asthma and allergic rhinitis and self-reported traffic density on street of residence in adolescents.* Epidemiology 1996; 7(6): 578-82

Duhme H, Weiland SK, Rudolph P, Wienke A, Kramer A, Keil U *Asthma and allergies among children in West and East Germany: a comparison between Münster and Greifswald using the ISAAC phase I protocol.* Eur Respir J 1998; 11(4): 840-7

Đurica S *Prevalence rate of asthma, rhinitis and eczema in school children of Pancevo.* Child Pulmonol 2002; 10(1-2): 57-60

Eder W, A Gamper, G Oberfeld, J Riedler *Clinical follow-up of an epidemiological study of asthma and allergies in children [Klinische Nachuntersuchung einer epidemiologischen Studie über Asthma und Allergien im Kindesalter.](article in German).* Wien Klin Wochenschr 1998; 110(19):678-685

Eder W, Gamper A, Oberfeld G, Riedler J *Prevalence and severity of bronchial asthma, allergic rhinitis and atopic dermatitis in Salzburg school children.[German].* Wien Klin Wochenschr 1998; 110(19): 669-77

Edginton ME, O'Brien R, El Sony A, Roldan A, Srinath S *Informed consent [Editorial].* Int J Tuberc Lung Dis 2010 Aug;14(8): 938-938
In response to: Ellwood P, Asher MI, Stewart AW and the ISAAC Phase III Study Group The impact of the method of consent on response rates in the ISAAC time trends study Int J Tuberc Lung Dis 2010 Aug;14(8):1059-65

El Sharif N, Douwes J, Hoet PH, Doekes G, Nemery B *Concentrations of domestic mite and pet allergens and endotoxin in Palestine.* Allergy 2004; 59(6): 623-31

El-Sharif N, Abdeen Z, Barghuthy F, Nemery B *Familial and environmental determinants for wheezing and asthma in a case-control study of school children in Palestine.* Clin Exp Allergy 2003; 33(2): 176-86

El-Sharif N, Abdeen Z, Qasrawi R, Moens G, Nemery B *Asthma prevalence in children living in villages, cities and refugee camps in Palestine.* Eur Respir J 2002; 19(6):1026-34

El-Sharif N, Douwes J, Hoet P, Nemery B *Childhood asthma and indoor aeroallergens and endotoxin in Palestine: a case-control study.* J Asthma 2006; 43(3): 241-7

El-Sharif NA, Nemery B, Barghuthy F, Mortaja S, Qasrawi R, Abdeen Z *Geographical variations of asthma and asthma symptoms among schoolchildren aged 5 to 8 years and 12 to 15 years in Palestine: the International Study of Asthma and Allergies in Childhood (ISAAC).* Ann Allergy Asthma Immunol 2003 Jan;90(1):63-71

Ellison-Loschmann L, Gray M, Cheng S, Pearce N *Follow-up study of asthma severity in Maori adolescents.* Aust Epidemiol September 2008; 15(2): 4-10

Ellison-Loschmann L, Pattemore PK, Asher MI, Clayton TO, Crane J, Ellwood P, Mackay RJ, Mitchell EA, Moyes C, Pearce N, Stewart AW *Ethnic differences in time trends in asthma prevalence in New Zealand: ISAAC Phases I and III.* Int J Tuberc Lung Dis 2009; 13(6):775-782

Ellwood P, Asher MI, Beasley R, Clayton TO, Stewart AW, and the ISAAC Steering Committee *The International Study of Asthma and Allergies in Childhood (ISAAC): Phase Three rationale and methods.* Int J Tuberc Lung Dis 2005; 9(1): 10-6

Ellwood P, Asher MI, Beasley R, Clayton TO, Stewart AW, on behalf of the ISAAC Steering Committee and the ISAAC Phase Three Study Group *ISAAC Phase Three Manual.* Auckland July 2000 ISBN 0-473-06910-5

Ellwood P, Asher MI, Björkstén B, Burr M, Pearce N, Robertson CF, and the ISAAC Phase One Study Group *Diet and asthma, allergic rhinoconjunctivitis and atopic eczema symptom prevalence: An ecological analysis of the International Study of Asthma and Allergies in Childhood (ISAAC) data.* Eur Respir J 2001; 17(3): 436-443

Ellwood P, Asher MI, Stewart AW and the ISAAC Phase III Study Group *The impact of the method of consent on response rates in the ISAAC time trends study.* Int J Tuberc Lung Dis 2010 Aug;14(8):1059-65

Ellwood P, Williams H, Aït-Khaled N, Björkstén B, Robertson C, and the ISAAC Phase III Study Group *Translation of questions: The International Study of Asthma and Allergies in Childhood (ISAAC) experience.* Int J Tuberc Lung Dis September 2009; 13(9): 1174-1182

Enarson DA *Fostering a spirit of critical thinking: the ISAAC story.[Editorial].* Int J Tuberc Lung Dis 2005; 9(1): 1
In response to: Ellwood P, Asher MI, Beasley R, Clayton TO, Stewart AW, and the ISAAC Steering Committee The International Study of Asthma and Allergies in Childhood (ISAAC): Phase Three rationale and methods Int J Tuberc Lung Dis 2005; 9(1): 10-6

Erwin EA, Wickens K, Custis NJ, Siebers R, Woodfolk J, Barry D, Crane J, Platts-Mills TA *Cat and dust mite sensitivity and tolerance in relation to wheezing among children raised with high exposure to both allergens.* J Allergy Clin Immunol 2005; 115(1): 74-9

Esamai F, Anabwani GM *Prevalence of asthma, allergic rhinitis and dermatitis in primary school children in Uasin Gishu district, Kenya.* E Afr Med J 1996; 73(7): 474-8

Esamai F, Ayaya S, Nyandiko W *Prevalence of asthma, allergic rhinitis and dermatitis in primary school children in Uasin Gishu district, Kenya.* E Afr Med J 2002; 79(10): 514-8

Fabre Ortiz D, Varona Pérez P, Suárez Medina R *[Prevalence of asthma in Cuban adolescents by different clinical criteria].* Rev Alerg Mex 2005 May-Jun;52(3):132-7 Spanish

Fadaizadeh L, Keyvan S, Najafizadeh K, Masjedi MR *Evaluation of Agreement between Video and Written Questionnaires for Asthma Symptoms Amoung Children of Tehran: ISAAC Study.* Journal of Shahid Sadoughi University of Medical Sciences and Health Services, summer 2008; 16(2):36-43

Appendices
ISAAC Maps
List of Centres
Summary of Publications
List of Publications
References
Steering Committee
Photos

Fadaizadeh L, Salek S, Najafizadeh K, Masjedi MR *Prevalence and Severity of Asthma Symptoms in Students of Tehran and Rasht: Phase III ISAAC Study* Tanaffos (2008) 7(3), 31-36

Falade AG, Ige OM, Yusuf BO, Onadeko MO, Onadeko BO *Trends in the Prevalence and Severity of Symptoms of Asthma, Allergic Rhinoconjunctivitis, and Atopic Eczema.* J Natl Med Assoc 2009;101(5):414-418

Falade AG, Olawuyi F, Osinusi K, Onadeko BO *Prevalence and severity of symptoms of asthma, allergic rhino-conjunctivitis and atopic eczema in secondary school children in Ibadan, Nigeria.* E Afr Med J 1998; 75(12): 695-8

Falade AG, Olawuyi JF, Osinusi K, Onadeko BO *Prevalence and severity of symptoms of asthma, allergic rhinoconjunctivitis, and atopic eczema in 6- to 7 - year-old Nigerian primary school chldren: The International study of Asthma and Allergies in Childhood.* Med Princ Pract 2004; 13(1): 20-25

Farchi S, Forastiere F, Agabiti N, Corbo G, Pistelli R, Fortes C, Dell'Orco V, Perucci CA *Dietary factors associated with wheezing and allergic rhinitis in children.* Eur Respir J 2003 Nov;22(5):772-80

Farquhar H, Stewart A, Mitchell E, Crane J, Eyers S, Weatherall M, Beasley R *The role of paracetamol in the pathogenesis of asthma* Clin Exp Allergy, 2010; 40(1): 32-41

Felizola MLBM *Prevalência de asma brônquica em escolares do Distrito Federal e sua relação com o nível sócio-econômico.* Masters thesis, Federal University of Brasilía, Distrito Federal, 1999

Fernández Benitez M, Guillén F, Marin B, Pajaron MJ, Brun C, Aguinaga I, Esteban MA, García B, Martínez González MA, Notivol P, Santos MA, Zapata MA *International study of asthma and allergies in childhood.Results of the first phase of the I.S.A.A. C.project in Pamplona, Spain.* J Investig Allergol Clin Immunol 1996; 6(5): 288-93

Fernandez-Benitez M, Antnon J, Grima FG *Risk factors associated to the prevalence of asthma in adolescence.* Allergol Immunopathol (Madr) 2007; 35(5):193-196

Ferrari FP, Rosário Filho NA, Ribas LF, Callefe LG *[Prevalence of asthma in schoolchildren in Curitiba - ISAAC].* J Pediatr (Rio J) 1998 Jul-Aug;74(4):299-305 Portuguese

Flohr C, Nagel G, Weinmayr G, Kleiner A, Strachan DP, Williams HC and the ISAAC Phase Two Study Group *Lack of evidence for a protective effect of prolonged breastfeeding on childhood eczema: lessons from the International Study of Asthma and Allergies in Childhood (ISAAC) Phase Two* Br J Dermatol 2011; DOI: 10 1111/j 1365-2133 2011 10588 x

Flohr C, Weiland SK, Weinmayr G, Björkstén B, Bråbäck L, Brunekreef B, Büchele G, Clausen M, Cookson WOC, von Mutius E, Strachan DP, Williams HC, and the ISAAC Phase Two Study Group *The role of atopic sensitization in flexural eczema: Findings from the International Study of Asthma and Allergies in Childhood Phase Two.* J Allergy Clin Immunol 2008; 121(1): 141-7

Flohr C, Weinmayr G, Weiland SK (deceased), Addo-Yobo E, Annesi-Maesano I, Björkstén B, Bråbäck L, Büchele G, Chico M, Cooper P, Clausen M, El-Sharif N, Martínez Gimeno A, Mathur RS, von Mutius E, Morales Suárez-Varela MM, Pearce N, Svabe V, Wong GWK, Yu M, Zhong NS, Williams HC and the ISAAC Phase Two Study Group *How well do questionnaires perform compared with physical examination in detecting flexural eczema? Findings from the International Study of Asthma and Allergies in Childhood (ISAAC) Phase Two.* Br J Dermatol 2009; 161(4): 846-853 Epub 27 May

Flohr C, Williams HC *Childhood eczema according to the International Study of Asthma and Allergies in Childhood (ISAAC) questionnaire tool – response to Czarnobilska et al.* J Eur Acad Dermatol Venereol 2011; epub May 14, DOI: 10 1111/j 1468-3083 2011 04126 x

Flohr C *What can we learn about eczema from the International Study of Asthma and Allergies in Childhood (ISAAC)?* Allergologie 2010; 33(6): 242–250

Flohr C *Recent perspectives on the global epidemiology of childhood eczema* Allergol Immunopathol (Madr) 2011;39(3):174-182

Fok AOL, Wong GWK *What have we learnt from ISAAC phase III in the Asia-Pacific rim?* Curr Opin Allergy Clin Immunol 2009; 9(2):116-122

Foliaki S, Annesi-Maesano I, Daniel R, Fakakovikaetau T, Magatongia M, Tuuau-Potai N, Waqatakirewa L, Cheng SK, Pearce N *Prevalence of symptoms of childhood asthma, allergic rhinoconjunctivitis and eczema in the Pacific: The International Study of Asthma and Allergies in Childhood (ISAAC).* Allergy 2007; 62(3), 259-64

Foliaki S, Annesi-Maesano I, Tuuau-Potai N, Waqatakirewa L, Cheng S, Douwes J, Pearce N *Risk factors for symptoms of childhood asthma, allergic rhinoconjunctivitis and eczema in the Pacific: an ISAAC Phase III study.* Int J Tuberc Lung Dis 2008; 12(7): 799-806

Foliaki S, Kildegaard Nielsen S, Björkstén B, von Mutius E, Cheng S, Pearce N, and the ISAAC Phase One Study Group *Antibiotic sales and the prevalence of symptoms of asthma, rhinitis, and eczema: The International Study of Asthma and Allergies in Childhood (ISAAC).* Int J Epidemiol 2004; 33(3): 558-63

Foliaki S, Pearce N, Björkstén B, Mallol J, Montefort S, von Mutius E and the ISAAC Phase Three Study Group *Antibiotic use in infancy and risk of symptoms of asthma, rhinoconjunctivitis and eczema in 6 to 7 year old children: ISAAC Phase Three.* J Allergy Clin Immunol 2009;124(5):982-9

Forastiere F, Galassi C, Biggeri A, Richiardi L, Baussano I, Simoni M, Viegi G; Gruppo Collaborativo SIDRIA-2 *The proportion of respiratory disorders in childhood attributable to preventable and not preventable risk factors.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):67-9 [Italian]

Forastiere F, Pistelli R, Sestini P, Fortes C, Renzoni E, Rusconi F, Dell'Orco V, Ciccone G, Bisanti L *Consumption of fresh fruit rich in vitamin C and wheezing symptoms in children. SIDRIA Collaborative Group, Italy (Italian Studies on Respiratory Disorders in Children and the Environment).* Thorax 2000 Apr;55(4):283-8

Franco JM, Gurgel R, Sole D, França VL, Brabin B and the Brazilian Isaac Group *Socio-environmental conditions and geographical variability of asthma prevalence in Northeast Brazil* Allergol Immunopathol (Madr) 2009; 37(3):116-121

Fuso L, de Rosa M, Corbo GM, Valente S, Forastiere F, Agabiti N, Pistelli R *Repeatability of the ISAAC video questionnaire and its accuracy against a clinical diagnosis of asthma.* Respir Med 2000 Apr;94(4):397-403

Galassi C, Biggeri A, Ciccone G, Forastiere F, SIDRIA Phase 1 Collaborative Group *Environment and respiratory diseases in childhood: the Italian experience.* Int J Occup Environ Health 2005 Jan-Mar;11(1):103-6

Galassi C, De Sario M, Biggeri A, Bisanti L, Chellini E, Ciccone G, Grazia Petronio M, Piffer S, Sestini P, Rusconi F, Viegi G, Forastiere F *Changes in prevalence of asthma and allergies among children and adolescents in Italy, 1994-2002.* Pediatrics 2006; 117(1):34-42

Galassi C, Forastiere F, Biggeri A, Gabellini C, De Sario M, Ciccone G, Biocca M, Bisanti L *SIDRIA second phase: objectives, study design and methods.* Epidemiol Prev 2005; 29(2 Suppl):9-13 [Italian]

García E, Aristizabal G, Vasquez C, Rodríguez-Martínez CE, Sarmiento OL, Satizabal CL *Prevalence of and factors associated with current asthma symptoms in school children aged 6-7 and 13-14 yr old in Bogota, Colombia.* Pediatr Allergy Immunol 2008 Jun;19(4):307-14 Epub Jan 2008

García-Marcos Alvarez L, Martínez Torres A, Batllés-Garrido J, Morales Suárez-Varela MM, García Hernández G, Escribano Montaner A *[International Study of Asthma and Allergies in Childhood (ISAAC) Phase II: Methodology and results of the participation rate in Spain].* An Esp Pediatr 2001 Nov;55(5):400-5 Spanish

García-Marcos L, Arnedo Peña A, Busquets-Monge R, Morales Suárez-Varela MM, García de Andoin N, Batllés-Garrido J, Blanco-Quirós A, López-Silvarrey Varela A, García-Hernández G, Aguinaga-Ontoso I, González Díaz C, García-Merino A *How the presence of rhinoconjunctivitis and the severity of asthma modify the relationship between obesity and asthma in children 6-7 years old.* Clin Exp Allergy 2008 Jul;38(7):1174-8 Epub 2008 May 6

García-Marcos L, Batllés-Garrido J, Blanco-Quirós A, García-Hernández G, Guillén-Grima F, González Díaz C, García-Merino A, Arnedo Peña A, Busquets-Monge RM, Morales Suárez-Varela MM, López-Silvarrey-Varela A, García-Andoin N *Influence of two different geo-climatic zones on the prevalence and time trends of asthma symptoms among Spanish adolescents and schoolchildren.* Int J Biometeorol 2009 Jan;53(1):53-60 Epub 2008 Oct 30

García-Marcos L, Canflanca IM, Garrido JB, et al *Relationship of asthma and rhinoconjunctivitis with obesity, exercise and Mediterranean diet in Spanish schoolchildren.* Thorax 2007; 62(6):503-508

García-Marcos L, Castro-Rodríguez JA, Morales Suárez-Varela MM, Batlles Garrido J, Hernandez GG, Gimeno AM, González AL, Ruíz TR, Torres AM *A different pattern of risk factors for atopic and non-atopic wheezing in 9-12-year-old children.* Pediatr Allergy Immunol 2005; 16(6):471-477

García-Marcos L, Garcia-Hernández G, Morales Suárez-Varela MM, Batlles Garrido J, Castro-Rodríguez JA *Asthma attributable to atopy: does it depend on the allergen supply?* Pediatr Allergy Immunol 2007; 18(3):181-187

García-Marcos L, González-Díaz C, Garvajal-Urueña I, Pac-Sa MR, Busquets-Monge RM, Suárez-Varela MM, Batlles-Garrido J, Blanco-Quirós A, Varela Á L-S, García-Hernández G, Aguinaga-Ontoso I *Early exposure to paracetamol or to antibiotics and eczema at school age: modification by asthma and rhinoconjunctivitis.* Pediatr Allergy Immunol 2010; 21(7): 1036-1042 Epub 28 Jun

García-Marcos L, Morales Suárez-Varela MM, Canflanca IM, et al *BCG immunization at birth and atopic diseases in a homogeneous population of Spanish schoolchildren.* Int Arch Allergy Immunol 2005; 137(4):303-309

García-Marcos L, Quirós AB, Hernández GG, et al *Stabilization of asthma prevalence among adolescents and increase among schoolchildren (ISAAC phases I and III) in Spain.* Allergy 2004; 59(12):1301-1307

García-Marcos L, Ruiz TR, García-Hernández G, Morales Suárez-Varela MM, Valverde-Molina J, Sánchez-Solis M *Asthma and rhinoconjunctivitis comorbidity: United airway disease or inherited target organs?* Pediatr Allergy Immunol 2010; 21 (1): e142-e148 E pub 7 Apr 2009

García-Marcos L, Sánchez-Solis M, Martínez-Torres AE, et al *Phadiatop compared to skin-prick test as a tool for diagnosing atopy in epidemiological studies in schoolchildren.* Pediatr Allergy Immunol 2007; 18(3):240-244

Gehring U, Strikwold M, Schram-Bijkerk D, Weinmayr G, Genuneit J, Nagel G, Wickens K, Siebers R, Crane J, Doekes G, Di Domenicantonio R, Nilsson L, Priftanji A, Sandin A, El-Sharif N, Strachan D, van Hage M, von Mutius E, Brunekreef B, and the ISAAC Phase Two Study Group *Asthma and allergic symptoms in relation to house dust endotoxin: Phase Two of the International Study on Asthma and Allergies in Childhood (ISAAC II).* Clin Exp Allergy 2008; 38: 1911–1920

Genuneit J, Cantelmo JL, Weinmayr G, Wong GWK, Cooper PJ, Riikjärv MA, Gotua M, Kabesch M, von Mutius E, Forastiere F, Crane J, Nystad W, El Sharif N, Batllés-Garrido J, García-Marcos L, García-Hernández G, Morales Suárez-Varela MM, Nilsson L, Bråbäck L, Saraçlar Y, Weiland SK, Cookson WOC, Strachan DP, Moffatt MF, ISAAC Phase Two Study Group *A multi-centre study of candidate genes for wheeze and allergy. The International Study of Asthma and Allergies in Childhood Phase Two.* Clin Exp Allergy 2009 Dec; 39(12): 1875-1888

Genuneit J, Weinmayr G, Radon K, Dressel H, Windstetter D, Rzehak P, Vogelberg C, Leupold W, Nowak D, von Mutius E, Weiland SK *Smoking and the incidence of asthma during adolescence: Results of a large cohort study in Germany.* Thorax 2006 Jul; 61(7):572-8

Goh DY, Chew FT, Quek SC, Lee BW *Prevalence and severity of asthma, rhinitis, and eczema in Singapore schoolchildren.* Arch Dis Child 1996; 74(2): 131-5

Gómez M, Vollmer WM, Caceres ME, Jossen R, Baena-Cagnani CE *Adolescent smokers are at greater risk for current asthma and rhinitis* Int J Tuberc Lung Dis 2009; 13(8):1023-1028

González Díaz C, Sánchez González E, García-Marcos L, Morato Rodríguez MD, Molina Zelaia I, Burgaleta Sagaseta A, Zaballa Gorordo J, Delgado Rubio A *Prevalence and severity of asthma in 13-14-year-old children in Bilbao.[Spanish].* An Esp Pediatr 1998; 48(6): 608-14

González-Díaz SN, Del Río-Navarro BE, Pietropaolo-Cienfuegos DR, Escalante-Domínguez AJ, García-Almaraz RG, Mérida-Palacio V, Berber A *Factors associated with allergic rhinitis in children and adolescents from northern Mexico: International Study of Asthma and Allergies in Childhood Phase IIIB* Allergy Asthma Proc 2010; 31(4): 53-62

Grupo ISAAC Espana *[Aims and methods of the ISAAC study (International Study of Asthma and Allergy in Childhood)].* An Sist Sanit Navar 1997 Jan-Apr;20(1):57-69 Spanish

Appendices
ISAAC Maps
List of Centres
Summary of Publications
List of Publications
References
Steering Committee
Photos

Gutiérrez-Delgado RI, Barraza-Villarreal A, Escamilla-Núñez MC, Solano-González M, Moreno-Macías H, Romieu I *Food consumption and asthma in school children in Cuernavaca, Morelos, Mexico. [Consumo de alimentos y asma en niños escolares de Cuernavaca]* Salud Publica Mex 2009; 51(3): 202-211

Habbick BF, Pizzichini MM, Taylor B, Rennie D, Senthilselvan A, Sears MR *Prevalence of asthma, hay fever and eczema in children in two canadian cities: the ISAAC study.* CMAJ 1999; 160: 1824-1829

Hadnadjev M *Frequency of children's asthma, allergic rhinitis and ezcema in Novi Sad.* Child Pulmonol 2002; 10(1-2): 51-55

Haidinger G, Waldhor T, Meusburger S, Suss G, Vutuc C *The prevalence of childhood asthma and of allergies in 7 districts of Upper Austria - ISAAC III.* Allergologie 2008; 31(1):17-22

Haileamlak A, Lewis SA, Britton J, Venn AJ, Woldemariam D, Hubbard R, Williams HC *Validation of the International Study of Asthma and Allergies in Children (ISAAC) and U.K. Criteria for atopic eczema in Ethiopian children.* Br J Dermatol 2005; 152(4): 735-41

Hirsch T, Weiland SK, von Mutius E, Safeca AF, Grafe H, Csaplovics E, Duhme H, Keil U, Leupold W *Inner city air pollution and respiratory health and atopy in children.* Eur Respir J 1999 Sep;14(3):669-77

Holgate T *The Acetaminophen Enigma in Asthma [Editorial]* Am J Resp Crit Care Med 2011; 183(2): 147-151
In response to: Beasley RW, Clayton TO, Crane J, Lai CKW, Montefort SR, von Mutius E, Stewart AW, and the ISAAC Phase Three Study Group Acetaminophen Use and Risk of Asthma, Rhinoconjunctivitis and Eczema in Adolescents: ISAAC Phase Three Am J Resp Crit Care Med 2011; 183(2): 171-178

Hong SJ, Kim SW, Oh JW, Rah YH, Ahn YM, Kim KE, Koh YY, Lee SI *The validity of the ISAAC written questionnaire and the ISAAC video questionnaire (AVQ 3.0) for predicting asthma associated with bronchial hyperreactivity in a group of 13-14 year old Korean schoolchildren.* J Korean Med Sci 2003 Feb;18(1):48-52

Hong SJ, Lee MS, Lee SY, Ahn KM, Oh JW, Kim KE, Lee JS, Lee HB, for the Korean ISAAC Study Group, Korean Academy of Pediatric Allergy and Respiratory Disease, Seoul, Korea *High body mass index and dietary pattern are associated with childhood asthma.* Pediatr Pulmonol 2006 Dec;41(12):1118-24

Hong SJ, Lee MS, Sohn MH, Shim JY, Han YS, Park KS, Ahn YM, Son BK, Lee HB, Korean ISAAC Study Group *Self-reported prevalence and risk factors of asthma among Korean adolescents: 5-year follow-up study, 1995-2000.* Clin Exp Allergy 2004 Oct;34(10):1556-62

Ibargoyen-Roteta N, Aguinaga-Ontoso I, Fernández-Benitez M, Marin-Fernández B, Guillén-Grima F, Serrano-Monzo I, Hermoso-de-mendoza J, Brun-Sandiumetge C, Ferrer-Nadal A, Irujo-Andueza A *Role of the home environment in rhinoconjunctivitis and eczema in schoolchildren in Pamplona, Spain.* J Investig Allergol Clin Immunol 2007; 17(3): 137-44

ISAAC *ISAAC Coding and Data Transfer Manual.* Auckland/Münster August 1993

ISAAC *ISAAC Manual (2nd Edition).* Auckland/Münster December 1993

ISAAC *ISAAC Phase II Modules.* Münster, Germany May 1998

Jeffs D, Grainger R, Powell P *Is childhood allergy more common amongst an island population?* J R Soc Health 2000 Dec;120(4):236-41

Jenkins MA, Clarke JR, Carlin JB, Robertson CF, Hopper JL, Dalton MF, Holst DP, Choi K, Giles GG *Validation of questionnaire and bronchial hyperresponsiveness against respiratory physician assessment in the diagnosis of asthma.* Int J Epidemiol 1996; 25(3): 609-16n

Jouaville LF, Annesi-Maesano I, Nguyen LT, Bocage AS, Bedu M, Caillaud D *Interrelationships among asthma, atopy, rhinitis and exhaled nitric oxide in a population-based sample of children.* Clin Exp Allergy 2003 Nov;33(11):1506-11

Kabesch M, Depner M, Dahmen I, Weiland SK, Vogelberg C, Niggemann B, Lau S, Illig T, Klopp N, Wahn U, Reinhardt D, von Mutius E, Nickel R *Polymorphisms in eosinophil pathway genes, asthma and atopy.* Allergy 2007 Apr;62(4):423-8

Kabesch M, Schedel M, Carr D, Woitsch B, Fritsch C, Weiland SK, von Mutius E *IL-4/IL-13 pathway genetics strongly influence serum IgE levels and childhood asthma.* J Allergy Clin Immunol 2006; 117(2):269-74

Kabir Z, Manning PJ, Holohan J, Goodman PG, and Clancy L *Prevalence of Symptoms of Severe Asthma and Allergies in Irish School Children: An ISAAC Protocol Study, 1995–2007* Int J Environ Res Public Health 2011; 8(8): 3192-3201

Kabir Z, Manning PJ, Holohan J, Goodman PG, Clancy L *Active smoking and second-hand-smoke exposure at home among Irish children, 1995–2007.* Arch Dis Child 2010; 95: 42–45

Kaur B, Anderson HR, Austin J, Burr M, Harkins LS, Strachan DP, Warner JO *Prevalence of asthma symptoms, diagnosis, and treatment in 12-14 year old children across Great Britain (International Study of Asthma and Allergies in Childhood, ISAAC UK).* BMJ 1998; 316(7125): 118-24

Keil U, Pearce N *International Asthma and Allergy Study* Lancet 1992; 340(8810):46

Keil U, Weiland SK, Duhme H, Chambless L *The International Study of Asthma and Allergies in Childhood (ISAAC): objectives and methods; results from German ISAAC centres concerning traffic density and wheezing and allergic rhinitis.* Toxicol Lett 1996; 86(2-3): 99-103

Khaitov RM, Luss LV, Aripova TU, Lysikova IV, Ilyina NI *Prevalence of bronchial asthma, allergic rhinitis and allergodermatitis symptoms in children by ISAAC criteria.* Allergy, asthma and clinical immunology 1998; 9: 58-69

Khaldi F, Fakhfakh R, Mattoussi N, Ben Ali B, Zouari S, Khemiri M *Prevalence and severity of asthma, allergic rhinoconjunctivitis and atopic eczema in "Grand Tunis" schoolchildren: ISAAC.* Tunis Med 2005 May;83(5):269-73

Kim JH, Ellwood PE, Asher MI *Diet and asthma: looking back, moving forward.* Respir Res 2009; 10:49

Ko FWS, Wang HY, Wong GWK, Leung TF, Hui DSC, Chan DPS, Zhong NS, Lai CKW *Wheezing in Chinese schoolchildren: disease severity distribution and management practices, a community-based study in Hong Kong and Guangzhou.* Clin Exp Allergy 2005; 35(11): 1449-56

Koffi N, Aka J, Nigue L, Kouassi B, Ngom A, Amon-Dick F, Nibaud A, Fadiga A, Aka-Danguy E *Prévalence des maladies allergiques de l'enfant : résultants de l'enquête ISAAC - Côte d'Ivoire phase I.[French].* Rev Fr Allergol Immunol Clin 2000; 40(5):539-47

Kopferschmitt Kubler MC, Nisand G, Raherison C, Tunon De Lara M, Taytard A, Pauli G *Rhinitis in 6-7 year-old children.The ISAAC survey.[in French].* Rev Mal Respir 1997; 14(suppl 4): 4S15-4S21

Kudzyte J, Griska E, Bojarskas J *Time trends in the prevalence of asthma and allergy among 6-7-year-old children. Results from ISAAC phase I and III studies in Kaunas, Lithuania.* Medicina (Kaunas) 2008; 44(12):944-952

Kuhlisch W, Hirsch T, Olunczek U, Vollheim B, Gross B, Düring I, Weiland SK, Leupold W *Validation and subjective reports of exposure to traffic by traffic count, NO2 dispersion modeling and measuring NO2 emissions.[article in german].* Soz Praventivmed 2002; 47(2): 116-23

Kuschnir FC, Alves da Cunha AJ *Environmental and socio-demographic factors associated to asthma in adolescents in Rio de Janeiro, Brazil.* Pediatr Allergy Immunol 2007; 18(2): 142-8

Kuschnir FC, Cunha AJ, Braga Dde A, Silveira HH, Barroso MH, Aires ST *Asthma in 13-14-year-old schoolchildren in the city of Nova Iguaçu, Rio de Janeiro State, Brazil: prevalence, severity, and gender differences.[Portuguese].* Cad Saúde Pública 2007; 23(4): 919-26

Kuschnir FC, da Cunha ALA *Association of Overweight with Asthma Prevalence in Adolescents in Rio de Janeiro, Brazil* Journal of Asthma 2009; 46(9): 928 - 932

Kuyucu S, Saraçlar Y, Tuncer A, Geyik PO, Adalioglu G, Akpinarli A, Sekerel BE, Sumbuloglu V *Epidemiologic characteristics of rhinitis in Turkish children: the International Study of Asthma and Allergies in Childhood (ISAAC) phase 2.* Pediatr Allergy Immunol 2006 Jun;17(4):269-77

Kuyucu S, Saraçlar Y, Tuncer A, Saçkesen C, Adalioglu G, Sümbüloglu V, Sekerel BE *Determinants of atopic sensitization in Turkish school children: Effects of pre and post-natal events and maternal atopy.* Pediatr Allergy Immunol 2004; 15(1): 62–71

Lai C, Pearce N *The contribution of ISAAC to the understanding of asthma.* Leukotriene Res & Clin Rev 2001; 2: 1-4

Lai CKW, Beasley R, Crane J, Foliaki S, Shah J, Weiland S, and the ISAAC Phase Three Study Group *Global variation in the prevalence and severity of asthma symptoms: Phase Three of the International Study of Asthma and Allergies in Childhood (ISAAC).* Thorax 2009; 64: 476–483 Epub Feb 2009

Lai CKW, Chan JKW, Wong G, Ho A, Choy D, Lau J, Leung R *Comparison of the ISAAC video questionaire (AVQ3.0) with the ISAAC written questionnaire for estimating asthma associated with bronchial hyperreactivity.* Clin Exp Allergy 1997; 27: 540-545

Lau YL, Karlberg J *Prevalence and risk factors of childhood asthma, rhinitis and eczema in Hong Kong.* J Paediatr Ch Health 1998; 34(1): 47-52

Lee H-B, Shin S-A, Oh J-W *New Patterns of Childhood Asthma Pevalence in Six Asian Countries: Comparison of ISAAC Phases I and III* Pediatr Allergy Respir Dis(Korea) 2008; 18: 70-77

Lee SI *Prevalence of Childhood Asthma in Korea: International Study of Asthma and Allergies in Childhood.* Allergy Asthma Immunol Res 2010 Apr;2(2):61-64

Lee SL, Wong W, Lau YL *Increasing prevalence of allergic rhinitis but not asthma among children in Hong Kong from 1995 to 2001 (Phase 3 International Study of Asthma and Allergies in Childhood).* Pediatr Allergy Immunol 2004; 15(1): 72-8

Leung R, Wong G, Lau J, Ho A, Chan JK, Choy D, Douglass C, Lai CK *Prevalence of asthma and allergy in Hong Kong schoolchildren: an ISAAC study.* Eur Respir J 1997; 10(2): 354-60

Lewis, S *ISAAC - a hypothesis generator for asthma? [Editorial].* Lancet 1998; 351(9111): 1220-1221
In response to : The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee Worldwide variation in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and atopic eczema: ISAAC Lancet 1998; 351(9111): 1225-32

Liese AD, Hirsch T, von Mutius E, Keil U, Leupold W, Weiland SK *Inverse association of overweight and breast feeding in 9 to 10-y-old children in Germany.* Int J Obes Relat Metab Disord 2001 Nov;25(11):1644-50

Lima RG, Pastorino AC, Casagrande RR, Solé D, Leone C, Jacob CM *Prevalence of asthma, rhinitis and eczema in 6 - 7 years old students from the western districts of São Paulo City, using the standardized questionnaire of the "International Study of Asthma and Allergies in Childhood" (ISAAC)-phase IIIB.* Clinics 2007 Jun;62(3):225-34

Lis G, Brêborowicz A, Cichocka-Jarosz E, Sobkowiak P, Gazurek D, Swiatly A, Alkiewicz J, Pietrzyk JJ *[The prevalence of allergic rhinitis and conjunctivitis in school children from Krakow and Poznan--ISAAC study (International Study of Asthma and Allergies in Childhood)].[Polish].[English Abstract.Journal Article.Multicenter Study].* Otolaryngol Pol 58(6):1103-9, 2004

Lis G, Brêborowicz A, Cichocka-Jarosz E, Swiatly A, Glodzik I, Gazurek D, Sobkowiak P, Alkiewicz J, Pietrzyk JJ *[Increasing prevalence of asthma in school children--ISAAC study (International Study of Asthma and Allergies in Children)].* Pneumonol Alergol Pol 2003;71(7-8):336-43 Polish

Lis G, Brêborowicz A, Swiatly A, Pietrzyk JJ, Alkiewicz J, Moczko J *Prevalence of allergic diseases in schoolchildren in Krakow and Poznan (based on a standardized ISAAC questionnaire).[in Polish].* Pneumonol Alergol Pol 1997; 65(9-10): 621-7

Lis G, Cichocka-Jarosz E, Gazurek D, Szczerbinski T, Glodzik I, Sawiec P, Bialoruska B *[Relationships between atopy and bronchial hyper-reactivity in Polish school age children].* Przegl Lek 2002;59(10):780-4 Polish

Lis G, Pietrzyk JJ, Cichocka-Jarosz E, Szczerbinski T, Kwinta P *Bronchial asthma: do boys or girls have the highest incidence? [in Polish].* Przegl Lek 1997; 54(9): 602-6

Lis G, Pietrzyk JJ *Evaluation of hyperresponsiveness to the exercise challenge test in school children.[in Polish].* Pneumonol Alergol Pol 1997; 65(1-2): 53-60

Lis G, Pietrzyk JJ *[The effect of air pollution on the prevalence of asthma in schoolchildren from Krakow].[in Polish].* Pneumonol Alergol Pol 1997; 65(9-10): 611-20

Lombardi E, Simoni M, La Grutta S, Viegi G, Bisanti L, Chellini E, Dell'Orco V, Migliore E, Petronio MG, Pistelli R, Rusconi F, Sestini P, Forastiere F, Galassi C and the SIDRIA-2 Collaborative Group *Effects of pet exposure in the first year of life on respiratory and allergic symptoms in 7-yr-old children.The SIDRIA-2 study.* Pediatr Allergy Immunol 2010; 21(2): 268 - 276 Epub 2 July 2009

López-Silvarrey Varela A, González Barcala FJ, Paz Esquete JJ, Pérez Castro TR, Valdes Cuadrado L, Castro Iglesias A *[Prevalence of asthma and rhinitis symptoms in A Coruna (Spain)].* An Pediatr (Barc) 2007 Feb;66(2):146-53 Spanish

Luss LV, Aripova TU, Ilyina NI, Lysikova IV *Prevalence of bronchial asthma symptoms (ISAAC programme result).[Russian]* Asthma 2000; 1(1): 52–59

Lysikova IV *Prevalence of allergic diseases in children: multicentre investigation results in the framework of International Study of Asthma and Allergies in Childhood (ISAAC).[Russian]* Medical sci candidate's thesis on speciality 14 00 36 (Allergology and immunology), Moscow, 1999

Ma Y, Zhao J, Han ZR, Chen YZ, Leung TF, Wong GWK *Very Low Prevalence of Asthma and Allergies in Schoolchildren From Rural Beijing, China.* Pediatr Pulmonol 2009; 44(8):793-799

Mai X-M, Nilsson L, Bråbäck L, Sandin A, Kjellman N-IM, Björkstén B *High body mass index, asthma and allergy in Swedish schoolchildren participating in the International Study of Asthma and Allergies in Childhood: Phase II.* Acta Paediatr 2003; 92(10): 1144-48

Mai X-M, Nilsson L, Kjellman N-IM, Björkstén B *Hypertonic saline challenge tests in the diagnosis of bronchial hyperresponsiveness and asthma in children.* Pediatr Allergy Immunol 2002; 13(5): 361-7

Maia JGS *Prevalência de asma e sintomas asmáticos em escolares no município de Monte Claros, MG.* Masters thesis, Federal University of São Paulo-Escola Paulista de Medicina, São Paulo, 2002

Maier WC, Arrighi HM, Morray B, Llewellyn C, Redding GJ *Indoor risk factors for asthma and wheezing among Seattle school children.* Environ Health Perspec 1997; 105(2):208-14

Mallol J, Aguirre V, Aguilar P, Calvo M, Amarales L, Arellano P, Palma R *[Changes in the prevalence of asthma in Chilean school age children between 1994 and 2002.International Study of Asthma and Allergies in Childhood (ISAAC)--Chile phases I and III].* Rev Med Chil 2007 May;135(5):580-6 Epub Jul 2007 Spanish

Mallol J, Asher MI, Williams H, Clayton T, Beasley R on behalf of the ISAAC Steering Committee *ISAAC findings in children aged 14 years: an overview.* Allergy Clin Immunol Int 1999; 11: 176-82

Mallol J, Castro-Rodriguez JA, Cortez E, Souza V, Aguirre P, Aguilar L, Barrueto *Heightened bronchial hyperresponsiveness in the absence of heightened atopy in children with current wheezing and low income status.* Thorax 2008; 63(2):167-171

Mallol J, Castro-Rodríguez JA, Cortez E *Effects of active tobacco smoking on the prevalence of asthma-like symptoms in adolescents.* Int J Chron Obstruct Pulmon Dis 2007;2(1):65-9

Mallol J, Castro-Rodríguez JA *Differences in prevalence of asthma, rhinitis, and eczema between parental and self-completed questionnaires in adolescents.* Pediatr Pulmonol 41(5):482-7, 2006 May

Mallol J, Cortez E, Amarales L, Sánchez I, Calvo M, et al *Prevalence of asthma in Chilean schoolchildren.Descriptive study from 24,470 children: ISAAC-Chile.* Rev Med Chil 2000; 128: 279-85

Mallol J, Solé D, Asher MI, Clayton T, Stein R, Soto-Quíroz M, on behalf of the Latin American ISAAC Collaborators Group *Prevalence of asthma symptoms in Latin America: The International Study of Asthma and Allergies in Childhood (ISAAC).* Pediatr Pulmonol 2000; 30: 439-44

Mallol J, Solé D, Asher MI, Clayton T, Stein R, Soto-Quíroz M, on behalf of the Latin American ISAAC Collaborators Group *The Authors reply to comment by Renz-Polster H and Wall M.* Pediatr Pulmonol 2001; 32(3): 264

Mallol J, Solé D, Baeza-Bacab M, Aguirre-Camposano V, Soto-Quiros M, Baena-Cagnani C and the Latin American ISAAC Group *Regional variation in asthma symptom prevalence in Latin American children.* J Asthma 2010; 47(6):644-50

Mallol J *[Satellite symposium: Asthma in the World. Asthma among children in Latin America]* Allergol Immunopathol (Madr) 2004 May-Jun;32(3):100-3 Spanish

Manning P, Goodman P, Kinsella T, Lawlor M, Kirby B, Clancy L *Bronchitis symptoms in young teenagers who actively or passively smoke cigarettes.* Ir Med J 2002 Jul-Aug;95(7):202-4

Manning PJ, Curran K, Kirby B, Taylor MR, Clancy L *Asthma, hay fever and eczema in Irish teenagers (ISAAC protocol).* Ir Med J 1997; 90(5): 110-2

Manning PJ, Goodman P, O'Sullivan A, Clancy L *Rising prevalence of asthma but declining wheeze in teenagers (1995-2003): ISAAC protocol.* Ir Med J 2007 Nov-Dec;100(10):614-5

Martignon G, Catteau C, Debotte G, Duffaud B, Lebot F, Annesi-Maesano I *Childhood allergies in Reunion Island: is there any difference with metropolitan.* Rev Epidemiol Sante Publique 2004 Apr;52(2):127-37 French

Martin Fernández-Mayoralas D, Martin Caballero JM, García-Marcos AL *Association between atopic dermatitis, allergic rhinitis and asthma in schoolchildren aged 13-14 years old.[article in spanish].* An Pediatr (Barc) 2004; 60(3):236-242

Martin Fernández-Mayoralas D, Martin Caballero JM, García-Marcos AL *Prevalence of atopic dermatitis in schoolchildren from Cartagena (Spain) and relationship with sex and pollution.[article in spanish].* An Pediatr (Barc) 2004; 60(6):555-560

Masjedi MR, Fadaizadeh L, Najafizadeh K, Dokouhaki P *Prevalence and Severity of Asthma Symptoms in Children of the Tehran-ISAAC Study* Pediatric Asthma, Allergy and Immunology Winter 2004, 17(4): 244-250

Masjedi MR, Fadaizadeh L, Najafizadeh K, Dokouhaki P *A Study of the Prevalence and Severity of Rhinitis in Children in Tehran: ISAAC Study* Journal of Isfahan Medical School (I U M S) Spring 2005; 23(76):36-41

Masjedi MR, Fadaizadeh L, Najafizadeh K, Dokouhaki P *Prevalence and Severity of Asthma Symptoms in Children of Tehran-International Study of Asthma and Allergies in Childhood (ISAAC).* Iran J Allergy Asthma Immunol 2004 Mar;3(1):25-30

Mata Fernández C, Fernández-Benitez M, Pérez Miranda M, Guillén-Grima F *Validation of the Spanish version of the Phase III ISAAC questionnaire on asthma.* J Investig Allergol Clin Immunol 2005; 15(3): 201-10

Maziak W, Behrens T, Brasky TM, Duhme H, Rzehak P, Weiland SK, Keil U *Are asthma and allergies in children and adolescents increasing? Results from ISAAC phase I and phase III surveys in Munster, Germany.* Allergy 2003; 58(7): 572-9

Maziak W, von Mutius E, Beimfohr C, Hirsch T, Leupold W, Keil U, Weiland SK *The management of childhood asthma in the community.* Eur Respir J 2002 Dec; 20(6): 1476-82

Maziak W, von Mutius E, Keil U, Hirsch T, Leupold W, Rzehak P, Behrens T, Weiland SK *Predictors of health care utilization of children with asthma in the community.* Pediatr Allergy Immunol 2004;15(2):166-71

Melaku K, Berhane Y *Prevalence of wheeze and asthma related symptoms among school children in Addis Ababa, Ethiopia.* Ethiop Med J 1999 Oct;37(4):247-54

Mercer MJ, Joubert G, Ehrlich RI, Nelson H, Poyser MA, Puterman A, Weinberg EG *Socioeconomic status and prevalence of allergic rhinitis and atopic eczema symptoms in young adolescents.* Pediatr Allergy Immunol 2004; 15(3): 234-41

Migliore E, Berti G, Galassi C, Pearce N, Forastiere F, Calabrese R, Armenio L, Biggeri A, Bisanti L, Bugiani M, Cadum E, Chellini E, Dell'Orco V, Giannella G, Sestini P, Corbo G, Pistelli R, Viegi G, Ciccone G, Sidria- Collaborative Grp *Respiratory symptoms in children living near busy roads and their relationship to vehicular traffic: results of an Italian multicenter study (SIDRIA 2).* Environ Health 2009 Jun 18; 8:27

Migliore E, Bugiani M, Berti G, Ciccone G, Russo A, Galassi C, Talassi F, Pistelli R; Gruppo Collaborativo SIDRIA-2 *Prevalence of asthma and allergies among migrant children and adolescents in Italy.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):36-41 [Italian]

Migliore E, Pearce N, Bugiani M, Galletti G, Biggeri A, Bisanti L, Caranci N, Dell'Orco V, De Sario M, Sestini P, Piffer S, Viegi G, Forastiere F, Galassi C, Ciccone G, SIDRIA-2 Collaborative Group *Prevalence of respiratory symptoms in migrant children to Italy: the results of SIDRIA-2 study.* Allergy 2007 Mar; 62(3):293-300

Mitchell EA, Stewart AW, Clayton TO, Asher MI, Ellwood P, Mackay R, Moyes C, Pattemore PK, Pearce N *Cross-sectional survey of risk factors for asthma in 6–7-year-old children in New Zealand: International Study of Asthma and Allergy in Childhood Phase Three.* J Paediatr Ch Health 2009 June; 45(6): 375–383

Mitchell EA, Stewart AW, on behalf of the ISAAC Phase One Study Group *The ecological relationship of tobacco smoking to the prevalence of symptoms of asthma and other atopic diseases in children: The International Study of Asthma and Allergies in Childhood (ISAAC).* Eur J Epidemiol 2001; 17(7): 667-73

Miyake Y, Ohya Y, Sasaki S, Miyamoto S, Matsunaga I, Yoshida T, Hirota Y, Oda H *Was the prevalence of Japanese childhood atopic eczema symptoms overestimated in the ISAAC study?* J Allergy Clin Immunol 2004; 113(3):571-571

Moffatt MF, Gut IG, Demenais F, Strachan DP, Bouzigon E, Heath S, von Mutius E, Farrall M, Lathrop M, Cookson WO for the GABRIEL Consortium *A large-scale, consortium-based genomewide association study of asthma* N Engl J Med 2010; 363(13): 1211-21

Moffatt MF, Kabesch M, Liang L, Dixon AL, Strachan D, Heath S, Depner M, von Berg A, Bufe A, Rietschel E, Heinzmann A, Simma B, Frischer T, Willis-Owen SA, Wong KC, Illig T, Vogelberg C, Weiland SK, von Mutius E, Abecasis GR, Farrall M, Gut IG, Lathrop GM, Cookson WO *Genetic variants regulating ORMDL3 expression contribute to the risk of childhood asthma.* Nature 2007 Jul 26;448(7152):470-3 Epub July 2007

Moghadam M, Jou S *Prevalence of Asthma Symptoms among 13-14 years old Children in Birjand* TABIB-E-SHARGH Fall 2004; 6(3):183-192

Mohammad Y, Tabbah K, Mohammad S, Yassine F, Clayton T and Hassan M *International Study of Asthma and Allergies in Childhood: phase 3 in the Syrian Arab Republic* East Med Health J 2010; 16(7): 710-716

Montefort S, Ellul P, Montefort M, Caruana S, Agius Muscat H *A decrease in the prevalence and improved control of allergic conditions in 13- to 15-yr-old Maltese children (ISAAC).* Pediatr Allergy Immunol 2010; 22(1): e107-e111

Montefort S, Ellul P, Montefort M, Caruana S, Muscat HA *Increasing prevalence of asthma, allergic rhinitis but not eczema in 5- to 8-yr-old Maltese children (ISAAC).* Pediatr Allergy Immunol 2009; 20(1):67-71

Montefort S, Lenicker HM, Caruna S, Agius Muscat H *Asthma, rhinitis and eczema in Maltese 13-15 year-old schoolchildren -- prevalence, severity and associated factors [ISAAC].International Study of Asthma and Allergies in Childhood.* Clin Exp Allergy 1998; 28(9): 1089-99

Montefort S, Muscat HA, Caruana S, Lenicker H *Allergic conditions in 5-8-year-old Maltese schoolchildren: Prevalence, severity, and associated risk factors [ISAAC].* Pediatr Allergy Immunol 2002 Apr;13(2):98-104

Monteil MA, Joseph G, Changkit C, Wheeler G, Antoine RM *Comparison of prevalence and severity of asthma among adolescents in the Caribbean islands of Trinidad and Tobago: results of a nationwide cross-sectional survey.* BMC Pub Health 2005 Sep 14;5:96

Morales Suárez-Varela M, García-Marcos L, Kogan MD, Costa Ferreira J, Martínez Gimeno A, Aguinaga Ontoso I, González Díaz C, Arnedo Pena A, Domínguez Aurrecoechea B, Busquets Monge RM; Blanco Quiros A, Batlles Garrido J, García de Andoain N, López-Silvarrey Varela Á, García Merino A, Gimeno Clemente N, Llopis González A *Diet and Prevalence of Atopic Eczema in 6 to 7-Year-Old Schoolchildren in Spain: ISAAC Phase III* J Investig Allergol Clin Immunol 2010; 20(6): 469-475

Morales Suárez-Varela MM, García-Marcos AL, González DC, et al *Prevalence of atopic eczema and nutritional factors in 6-7 year old children.[article in spanish].* Aten Primaria 2007; 39(7):355-360

Morales Suárez-Varela MM, García-Marcos Alvarez L, Kogan MD, González AL, Gimeno AM, Ontoso IA, Díaz CG, Arnedo Peña A, Aurrecoechea BD, Monge RM, Quirós AB, Garrido JB, Canflanca IM, López-Silvarrey Varela A *Climate and prevalence of atopic eczema in 6- to 7-year-old school children in Spain.ISAAC phase III.* Int J Biometeorol 2008 Nov;52(8):833-40 Epub 2008 Sep 9

Morales Suárez-Varela MM, García-Marcos L, Kogan MD, Llopis González A, Martínez Gimeno A, Aguinaga Ontoso I, González Díaz C, Arnedo Peña A, Domínguez Aurrecoechea B, Busquets Monge RM, Blanco Quirós A, Batllés-Garrido J, Miner Canflanca I, López-Silvarrey Varela A, Gimeno Clemente N *Parents' smoking habit and prevalence of atopic eczema in 6-7 and 13-14 year-old schoolchildren in Spain.ISAAC Phase III.* Allergol Immunopathol (Madr) 2008 Nov;36(6):336-342

Morales Suárez-Varela MM, González AL, Martínez Selva MI *Socioeconomic risk factors in the prevalence of asthma and other atopic diseases in children 6 to 7 years old in Valencia Spain.* Eur J Epidemiol 1999; 15(1): 35-40

Morandi JLB *Avaliação da prevalência e gravidade da asma em escolares no Município de Duque de Caxias, RJ.* Masters thesis, Federal University of Rio de Janeiro, Rio de Janeiro, 2001

Appendices
ISAAC Maps
List of Centres
Summary of Publications
List of Publications
References
Steering Committee
Photos

Morfín-Maciel B, Barragan-Meijueiro Mde L, Nava-Ocampo AA *Individual and family household smoking habits as risk factors for wheezing among adolescents.* Prev Med 2006 Aug;43(2):98-100 Epub May 2006

Moyes CD, Waldon J, Ramadas D, Crane J, Pearce N *Respiratory symptoms and environmental factors in schoolchildren in the Bay of Plenty.* NZ Med J 1995; 108(1007): 358-61

Nagel G, Büchele G, Weinmayr G, Björkstén B, Chen Y-Z, Wang H, Nystad W, Saraçlar Y, Bråbäck L, Batllés-Garrido J, García-Hernández G, Weiland SK, and the ISAAC Phase Two Study Group *Effect of Breastfeeding on Asthma, Lung function, and Bronchial Hyperreactivity in ISAAC-Phase-Two.* Eur Respir J 2009; 33: 993–1002; Epub 2009 Jan22

Nagel G, Weinmayr G, Kleiner A, García-Marcos, Strachan DP, the ISAAC Phase Two Study Group *Effect of diet on asthma and allergic sensitisation in the International Study on Allergies and Asthma in Childhood (ISAAC) Phase Two.* Thorax 2010; 65(6): 516-522 doi:10 1136/thx 2009 128256

Najafizadeh K, Fadaizadeh L, Salek S *Prevalence and Severity of Asthmatic Symptoms in Rasht Students: A Report from ISAAC Study.* TANAFFOS 2008; 7(1):40-46

Nanulescu MV, Chereches-Panta P *Tendinta prevalentei astmului bronsic la scolarul de vârsta 13-14 ani în municipiul Cluj-Napoca, în perioada 1994/1995-2000/2001. [Asthma prevalence trend in the school age 13-14 years in Cluj-Napoca, during 1994/1995 - 2000/2001]* J Rom Soc Allergol Clin Immunol 2005; 2(3): 26-31 (CNCSIS B+)

Newson RB, Shaheen SO, Chinn S, Burney PG *Paracetamol sales and atopic disease in children and adults: an ecological analysis.* Eur Respir J 2000; 16(5): 817-23

Nguyen L, Raherison C, Vernejoux JM, Tunon-De-Lara JM, Taytard A *[Impact of smoking habits on the every day life of asthmatic adolescents].* Rev Mal Respir 2002 Jun;19(3):301-9

Nicolai T, Carr D, Weiland SK, Duhme H, von Ehrenstein O, Wagner C, von Mutius E *Urban traffic and pollutant exposure related to respiratory outcomes and atopy in a large sample of children.* Eur Respir J 2003; 21(6):956-63

Nilsson L, Castor O, Löfman O, Magnusson A, Kjellman N-IM *Allergic disease in teenagers in relation to urban or rural residence at various stages of childhood.* Allergy 1999; 54(7): 716-721

Odhiambo J, Williams H, Clayton T, Robertson C, Asher MI, and the ISAAC Phase Three Study group *Global variations in prevalence of eczema symptoms in children from ISAAC Phase Three* J Allergy Clin Immunol Dec 2009;124(6):1251-8

Owayed A, Behbehani N, Al-Momen J *Changing prevalence of asthma and allergic diseases among Kuwaiti children.An ISAAC Study (Phase III).* Med Princ Pract 2008;17(4):284-9 Epub Jun 2008

Pac-Sa MR, Museros-Recatala L, Arnedo Peña A, Bellido-Blasco JB, Puig-Barbera J, Artero-Sivera A, Campos-Cruanes JB, Aguinaga-Ontoso I *[Risk factors for symptoms of allergic rhinitis in adolescents in Castellon, Spain].* Rev Panam Salud Publica 2008 May;23(5):333-40 Spanish

Palmer LJ, Valinsky L, Pikora T, Landau LI *Do regular check-ups and preventive drug use reduce asthma severity in school children?* Aust Fam Phys 2004; 33(7): 573-6

Palmer LJ, Valinsky L, Pikora T, Zubrick SR, Landau LI *Environmental factors and asthma and allergy in schoolchildren from Western Australia.* Eur Resp J 1999; 14(6):1351-7

Papadopoulou A, Hatziagorou E, Matziou VN , Grigoropoulou DD, Panagiotakos DB, Tsanakas JN, Gratziou C, Priftis KN *Comparison in asthma and allergy prevalence in the two major cities in Greece: the ISAAC phase II survey* Allergol Immunopathol(Madr) 2011; epub ahead of print

Partridge MR *Has ISAAC told us as much as it can? Where now?[Editorial].* Thorax 2009; 64(6):462-463
In response to: Lai CKW, Beasley R, Crane J, Foliaki S, Shah J, Weiland S, and the ISAAC Phase Three Study Group Global variation in the prevalence and severity of asthma symptoms: Phase Three of the International Study of Asthma and Allergies in Childhood (ISAAC) Thorax 2009; 64: 476–483 Epub Feb 2009

Pastorino AC, Kuschnir FC, Arruda LK, Casagrande RR, de Souza RG, Dias GA, Silveira HH, da Cunha AJ, Jacob CM, Solé D *Sensitisation to aeroallergens in Brazilian adolescents living at the periphery of large subtropical urban centres.* Allergol Immunopathol (Madr) 2008 Jan-Feb;36(1):9-16

Pastorino AC, Rimazza RD, Leone C, Castro AP, Solé D, Jacob CM *Risk factors for asthma in adolescents in a large urban region of Brazil.* J Asthma 2006 Nov;43(9):695-700

Patel SP, Järvelin MR, Little MP *Systematic review of worldwide variations of the prevalence of wheezing symptoms in children.* Environmental Health 2008; 7: 57

Pattemore PK, Ellison-Loschmann L, Asher MI, Barry DMJ, Clayton TO, Crane J, D'Souza WJ, Ellwood P, Ford RPK, Mackay RJ, Mitchell EA, Moyes C, Pearce N, Stewart AW *Asthma prevalence in European, Maori, and Pacific children in New Zealand: ISAAC study.* Pediatr Pulmonol 2004; 37(5): 433-42

Pearce N *SIDRIA in the international context.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):94-6 [Italian]

Pearce N, Aït-Khaled N, Beasley R, Mallol J, Keil U, Mitchell E, Robertson C, and the ISAAC Phase Three Study Group *Worldwide trends in the prevalence of asthma symptoms: Phase III of the International Study of Asthma and Allergies in Childhood (ISAAC).* Thorax 2007; 62(9): 758-66

Pearce N, Sunyer J, Cheng S, Chinn S, Björkstén B, Burr M, Keil U, Anderson HR, Burney P, on behalf of the ISAAC Steering Committee and the European Community Respiratory Health Survey *Comparison of asthma prevalence in the ISAAC and the ECRHS.* Eur Respir J 2000; 16(3): 420-6

Pearce N, Weiland S, Keil U, Langridge P, Anderson HR, Strachan D, Bauman A, Young L, Gluyas P, Ruffin D, Crane J, Beasley R *Self-reported prevalence of asthma symptoms in children in Australia, England, Germany and New Zealand: an international comparison using the ISAAC protocol.* Eur Respir J 1993; 6: 1455-61

Pekkanen J, Remes ST, Husman T, Lindberg M, Kajosaari M, Koivikko A, Soininen L *Prevalence of asthma symptoms in video and written questionnaires among children in four regions of Finland.* Eur Respir J 1997; 10(8): 1787-94

Pénard-Morand C, Charpin D, Raherison C, Kopferschmitt C, Caillaud D , Lavaud F, and Annesi-Maesano I *Long-term exposure to background air pollution related to respiratory and allergic health in schoolchildren* Clin Exp Allergy 2005; 35(10): 1279–1287

Pénard-Morand C, Raherison C, Charpin D, Kopferschmitt C, Lavaud F, Caillaud D, Annesi-Maesano I *Long-term exposure to proximity air pollution and asthma and allergies in urban children* Eur Respir J Jan 2010; 36(1): 33-40 Epub January

Pénard-Morand C, Raherison C, Kopferschmitt C, Caillaud D, Lavaud F, Charpin D, Bousquet J, Annesi-Maesano I *Prevalence of food allergy and its relationship to asthma and allergic rhinitis in schoolchildren* Allergy 2005; 60(9): 1165 - 1171

Pereira MU, Sly PD, Pitrez PM, Jones MH, Escouto D, Dias AC, Weiland SK, Stein RT *Non-atopic asthma is associated with helminth infections and bronchiolitis in poor children.* Eur Respir J 2007; 29:1154-1160

Peroni DG, Piacentini GL, Zizzo MG, Boner Al *Prevalence of asthma and respiratory symptoms in childhood in an urban area of north-east Italy.* Monaldi Arch Chest Dis 1998 Apr;53(2):134-7

Perucci CA *Public health implications.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):92-3 [Italian]

Petry C, Pereira MU, Pitrez PM, Jones MH, Stein RT *[The prevalence of symptoms of sleep-disordered breathing in Brazilian schoolchildren].* J Pediatr (Rio J) 2008 Mar-Apr;84(2):123-9

Phankingthongkum S, Daengsuwan T, Visitsunthorn N, Thamlikitkul V, Udompunthuruk S, Vichyanond P *How do Thai children and adolescents describe asthma symptoms?* Pediatr Allergy Immunol 2002 Apr;13(2):119-24

Pierdomenico R, Bonini S *Prevalence of paediatric asthma in Central Italy [Abstract]* Allergy 1997; 52(s37): 188

Pinto JE *I.S.A.A. C.World Project: epidemiology in the Cape Verde and Madeira Islands.* J Investig Allergol Clin Immunol 1997; 7(5): 292-3

Pinto JR, Almeida MM *Epidemiology of asthma in schoolchildren in Portuguese speaking regions.* Rev Fr Allergol Immunol Clin 2005; 45(7):547-549

Pinto LA, Depner M, Klopp N, Illig T, Vogelberg C, von Mutius E, Kabesch M *MMP-9 gene variants increase the risk for non- atopic asthma in children.* Respir Res Feb 2010; 11: 23

Pinto LA, Steudemann L, Depner M, Klopp N, Illig T, Weiland SK, von Mutius E, Kabesch M *STAT1 gene variations, IgE regulation and atopy.* Allergy 2007 Dec; 62(12):1456-61

Pizzichini MM, Rennie D, Senthilselvan A, Taylor B, Habbick BF, Sears MR *Limited agreement between written and video asthma symptom questionnaires.* Pediatr Pulmonol 2000; 30(4): 307-12

Porto Neto AC, D'Agostini Annes R, Wolff NMM, Klein AP, dos Santos FC, Dullius JL, Gressler M, Muller LS, Angonese CF, Menna-Barreto S *Prevalence and Severity of Asthma, Rhinitis, and Atopic Eczema in 13- to 14-Year-Old Schoolchildren from Southern Brazil.* Allergy Asthma Clin Immunol 2006; 2(1): 3-10

Poyser MA, Nelson H, Ehrlich RI, Bateman ED, Parnell S, Putermanz A, Weinberg E *Socioeconomic deprivation and asthma prevalence and severity in young adolescents.* Eur Respir J 2002; 19(5): 892-8

Prestes EX *Prevalência de asma em escolares de 13 a 14 anos na cidade de Belém.* Masters thesis, Federal University of São Paulo-Escola Paulista de Medicina, São Paulo, 2002

Priftanji A, Strachan D, Burr M, Sinamati J, Shkurti A, Grabocka E, Kaur B, Fitzpatrick S *Asthma and allergy in Albania and the UK.* Lancet 2001; 358(9291):1426-7

Prodanovic H, Raherison C, Vernejoux JM, Tunon de Lara JM, Taytard A *[Does the presence of a pet at home influence the prevalence of asthma and rhinitis?].* Rev Mal Respir 2002 Dec;19(6):735-40

Quah BS, Razak AR, Hassan MH *Prevalence of asthma, rhinitis and eczema among schoolchildren in Kelantan, Malaysia* Acta Paediatr Jpn 1997;39(3):329-35

Quah BS, Wan-Pauzi I, Ariffin N, Mazidah AR *Prevalence of asthma, eczema and allergic rhinitis: Two surveys, 6 years apart, in Kota Bharu, Malaysia.* Respirology 2005; 10(2):244-249

Quoix E, Hedelin G, Kopferschmitt Kubler MC, Berlier M, Charpin D, Pauli G, Groupe ISAAC France *Comparison between written and video questionnaires for assessment of asthma prevalence in adolescents.[in French].* Rev Mal Respir 1997; 14(suppl 4): 4S61-4S66

Radon K, Huemmer S, Dressel H, Windstetter D, Weinmayr G, Weiland SK, Riu E, Vogelberg C, Leupold W, von Mutius E, Goldberg M, Nowak D *Do respiratory symptoms predict job choices in teenagers?* Eur Respir J 2006 Apr; 27(4):774-8

Radon K, Riu E, Dressel H, Windstetter D, Weinmayr G, Weiland S, Vogelberg C, Scharrer EM, Leupold W, von Mutius E, Nowak D *Adolescents' jobs and the course of dermatitis symptoms throughout puberty.* Scand J Work Environ Health 2006 Apr;32:132-7

Raherison C, Tunon De Lara JM, Taytard A, Kopferschmitt Kubler MC, Quoix E, Pauli G *Prevalence of asthma in children.[in French].* Rev Mal Respir 1997; 14(suppl 4): 4S33-4S39

Raherison C, Tunon De Lara JM, Vernejoux JM, Taytard A *Management of asthma in a school population in Bordeaux.[in French].* Rev Mal Respir 1997; 14(suppl 4): 4S67-4S72

Raherison C, Tunon-de-Lara JM, Vernejoux JM, Taytard A *Practical evaluation of asthma exacerbation self-management in children and adolescents.* Respir Med 2000 Nov;94(11):1047-52

Ramadan FM, Khoury MN, Hajjar TA, Mroueh SM *Prevalence of allergic diseases in children in Beirut: comparison to worldwide data.* J Med Liban 1999; 47(4): 216-21

Ramadour M, Burel C, Lanteaume A, Vervloet D, Charpin D, Dutau H, Brisse F *Prevalence of asthma and rhinitis in relation to long-term exposure to gaseous air pollutants* Allergy 2000; 55(12): 1163–1169

Randriamanantany ZA, Annesi-Maesano I, Moreau D, Raherison C, Charpin D, Kopferschmitt C, Lavaud F, Taytard A, De Blay F, Caillaud D *Alternaria sensitization and allergic rhinitis with or without asthma in the French Six Cities study* Allergy 2010; 65: 368–375

Remes ST, Korppi M, Kajosaari M, Koivikko A, Soininen L, Pekkanen J *Prevalence of allergic rhinitis and atopic dermatitis among children in four regions of Finland.* Allergy 1998; 53(7): 682-689

Appendices
ISAAC Maps
List of Centres
Summary of Publications
List of Publications
References
Steering Committee
Photos

Remes ST, Pekkanen J, Soininen L, Kajosaari M, Husman T, Koivikko A *Does heredity modify the association between farming and allergy in children?* Acta Paediatr 2002;91(11):1163-9

Renz H, von Mutius E, Illi S, Wolkers F, Hirsch T, Weiland SK *T(H)1/T(H)2 immune response profiles differ between atopic children in eastern and western Germany.* J Allergy Clin Immunol 2002; 109(2): 338-42

Renzoni E, Forastiere F, Biggeri A, Viegi G, Bisanti L, Chellini E, Ciccone G, Corbo G, Galassi C, Rusconi F, Sestini P *Differences in parental- and self-report of asthma, rhinitis and eczema among Italian adolescents. SIDRIA collaborative group.Studi Italiani sui Disordini Respiratori dell' Infanzia e l'Ambiente.* Eur Respir J 1999 Sep;14(3):597-604

Richardson D, Rzehak P, Klenk J, Weiland SK *Analyses of Case-Control Data for Additional Outcomes.* Epidemiology 2007 Jul;18(4):441-5

Riedi CA, Rosario NA *Prevalence of allergic conjunctivitis: a missed opportunity?* Allergy 2010; 65(1):131-132

Riedi CA, Rosário NA, Ribas LF, Backes AS, Kleiniibing GF, Popija M, Reisdorfer S *Increase in prevalence of rhinoconjunctivitis but not asthma and atopic eczema in teenagers.* J Investig Allergol Clin Immunol 2005;15(3):183-8

Riedler J, Gamper A, Eder W, Oberfeld G *Prevalence of bronchial hyperresponsiveness to 4.5% saline and its relation to asthma and allergy symptoms in Austrian children* Eur Respir J 1998; 11: 355–360

Riedler J, Reade T, Dalton M, Holst D, Robertson CF *Hypertonic saline challenge in an epidemiologic survey of asthma in children* Am J Respir Crit Care Med 1994; 150:1632-1639

Riikjärv MA, Annus T, Bråbäck L, Rahu K, Björkstén B *Similar prevalence of respiratory symptoms and atopy in Estonian schoolchildren with changing life style over 4 years.* Eur Respir J 2000; 16(1): 86-90

Rios JLM *Prevalência de asma em escolares e poluição atmosférica em dois municípios do Rio de Janeiro.* Masters thesis, Federal University of Rio de Janeiro, Rio de Janeiro, 2001

Riu E, Dressel H, Windstetter D, Weinmayr G, Weiland S, Vogelberg C, Leupold W, von Mutius E, Nowak D, Radon K *First months of employment and new onset of rhinitis in adolescents.* Eur Respir J 2007 Sep;30(3):549-55 Epub May 2007

Robertson CF, Dalton MF, Peat JK, Haby MM, Bauman A, Kennedy JD, Landau LI *Asthma and other atopic diseases in Australian children.Australian arm of the International Study of Asthma and Allergy in Childhood.* Med J Aust 1998; 168(9): 434-8

Robertson CF, Roberts MF, Kappers JH *Asthma prevalence in Melbourne schoolchildren: have we reached the peak?* Med J Aust 2004; 180(6): 273-6

Romieu I, Werneck G, Ruiz Velasco S, White M, Hernández M *Breastfeeding and asthma among Brazilian children.* J Asthma 2000;37(7):575-83

Rosado-Pinto J, Gaspar A, Morais-Almeida M *Epidemiology of asthma and allergic diseases in Portuguese speaking regions.* Rev Fr Allergol Immunol Clin 2006; 46(3):305-308

Rosenlund M, Forastiere F, Porta D, De Sario M, Badaloni, Perucci CA *Traffic-related air pollution in relation to respiratory symptoms, allergic sensitisation and lung function in schoolchildren.* Thorax 2009;64(7):573-80

Rusconi F, Gagliardi L, Galassi C, Forastiere F, Brunetti L, La Grutta S, Piffer S, Talassi F; the SIDRIA-2 Collaborative Group *Paracetamol and antibiotics in childhood and subsequent development of wheezing/asthma: association or causation?* Int J Epidemiol 2011; 40(3): 662-667

Rusconi F, Galassi C, Bellasio M, Piffer S, Lombardi E, Bonci E, Armenio L; Gruppo Collaborativo SIDRIA-2 *Risk factors in the pre-, perinatal and early life (first year) for wheezing in young children.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):47-51 [Italian]

Rusconi F, Galassi C, Corbo GM, Forastiere F, Biggeri A, Ciccone G, Renzoni E *Risk factors for early, persistent, and late-onset wheezing in young children. SIDRIA Collaborative Group.* Am J Respir Crit Care Med 1999 Nov;160(5 Pt1):1617-22

Rusconi F, Galassi C, Forastiere F, Bellasio M, De Sario M, Ciccone G, Brunetti L, Chellini E, Corbo G, La Grutta S, Lombardi E, Piffer S, Talassi F, Biggeri A, Pearce N *Maternal complications and procedures in pregnancy and at birth and wheezing phenotypes in children.* Am J Respir Crit Care Med 2007 Jan1;175(1):16-21 Epub Sep 2006

Rydjord B, Marton JH, Stromsnes H, Granum B, Bolle R, Nystad W, Hetland G *Mould-specific immunoglobulin antibodies quantified by flow cytometry reflect mould exposure in Norwegian children.* Clin Exp Allergy 38(3):430-7, 2008 Mar

Rzehak P *ISAAC Phase II Coding and Data Transfer Manual* Muenster/Ulm, Germany October 2000

Rzehak, P *[Trends and Risk Factors for Asthma and Allergies in Young Persons in Münster: Methodological Aspects and Results of the ISAAC I and III Studies, 1994/1995 and 1999/2000].[in German].* Shaker Verlag, Aachen ISBN 3-8322-3972-3 2005

Sandin A, Annus T, Björkstén B, Nilsson L, Riikjärv MA, van Hage-Hamsten M, Bråbäck L *Prevalence of self-reported food allergy and IgE antibodies to food allergens in Swedish and Estonian schoolchildren.* Eur J Clin Nutr 2005 Mar;59(3):399-403

Saraçlar Y, Kuyucu S, Tuncer A, Sekerel B, Saçkesen C, Kocabas C *Prevalence of asthmatic phenotypes and bronchial hyperresponsiveness in Turkish schoolchildren: an International Study of Asthma and Allergies in Childhood (ISAAC) study.* Ann Allergy Asthma Immunol 2003 Nov;91(5):477-84 Erratum in: Ann Allergy Asthma Immunol 2004 Jan;92(1):87

Schedel M, Depner M, Schoen C, Weiland SK, Vogelberg C, Niggemann B, Lau S, Illig T, Klopp N, Wahn U, von Mutius E, Nickel R, Kabesch M *The role of polymorphisms in ADAM33, a disintegrin and metalloprotease 33, in childhood asthma and lung function in two German populations.* Respir Res 2006 Jun 19;7:91

Schedel M, Pinto LA, Schaub B, Rosenstiel P, Cherkasov D, Cameron L, Klopp N, Illig T, Vogelberg C, Weiland SK, von Mutius E, Lohoff M, Kabesch M *IRF-1 gene variations influence IgE regulation and atopy.* Am J Respir Crit Care Med 177(6):613-21, 2008 Mar 15

Schernhammer ES, Vutuc C, Waldhör T, Haidinger G *Time trends of the prevalence of asthma and allergic disease in Austrian children.* Pediatr Allergy Immunol 2008 Mar;19(2):125-31 Epub Dec 2007

Selnes A, Nystad W, Bolle R, Lund E *Diverging prevalence trends of atopic disorders in Norwegian children.Results from three cross-sectional studies.* Allergy 2005 Jul;60(7):894-9

Sestini P, Ciarleglio G, Forastiere F, Giannella G, Battisti L, Gentilini M, Dell'Orco V, La Grutta S; Gruppo Collaborativo SIDRIA-2 *Asthma attacks at school in Italian adolescents.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):77-9 [Italian]

Sestini P, De Sario M, Bugiani M, Bisanti L, Giannella G, Kaisermann D, Frasca G, Lombardi E, Petronio MG, Dell'Orco V, Indinnimeo L, Brunetti L, La Grutta S, Gruppo Collaborativo SIDRIA-2 *[Frequency of asthma and allergies in Italian children and adolescents: results from SIDRIA-2].* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):24-31 [Italian]

Shah AA *International Study of Asthma and Allergies in Childhood (ISAAC).* J Assoc Physicians India 1994 Mar;42(3):265

Shamssain M *Trends in the prevalence and severity of asthma, rhinitis and atopic eczema in 6-to 7-and 13-to 14-yr-old children from the north-east of England.* Pediatr Allergy Immunol 2007; 18(2):149-153

Shamssain MH, Shamsian N *Prevalence and severity of asthma, rhinitis, and atopic eczema: the north east study.* Arch Dis Child 1999; 81(4): 313-7

Shamssain MH, Shamsian N *Prevalence and severity of asthma, rhinitis, and atopic eczema in 13- to 14-year-old schoolchildren from the northeast of England.* Ann Allergy Asthma Immunol 2001 Apr;86(4):428-32

Sharma SK, Banga A *Prevalence and risk factors for wheezing in children from rural areas of north India.* Allergy Asthma Proc 2007; 28(6): 647-53

Shaw R, Woodman K, Ayson M, Dibdin S, Winkelmann R, Crane J, Beasley R, Pearce N *Measuring the prevalence of bronchial hyper-responsiveness in children.* Int J Epidemiol 1995; 24(3): 597-602

Shaw RA, Crane J, Pearce N, et al *Comparison of a video questionnaire with the IUATLD written questionnaire for measuring asthma prevalence.* Clin Exp Allergy 1992; 22(5): 561-568

Shirtcliffe P, Weatherall M, Beasley R, on behalf of the ISAAC Phase One Study Group *An inverse correlation between estimated tuberculosis notification rates and asthma symptoms.* Respirology 2002; 7(2): 153-5

Simoni M, Lombardi E, Berti G, Rusconi F, La Grutta S, Piffer S, Petronio MG, Galassi C, Forastiere F, Viegi G, SIDRIA-2 Collaborative Group *Mould/dampness exposure at home is associated with respiratory disorders in Italian children and adolescents: the SIDRIA-2 Study.* Occup Environ Med 2005 Sep;62(9):616-22

Simoni M, Lombardi E, Berti G, Rusconi F, La Grutta S, Piffer S, Petronio MG, Galassi C, Forastiere F, Viegi G; Gruppo Collaborativo SIDRIA-2 *Effects of indoor exposures on respiratory and allergic disorders.* Epidemiol Prev 2005 Mar-Apr;29(2 Suppl):57-61 [Italian]

Smiljanic S, Radic S, Živkovic Z *Asthma and allergies in childhood.* Child Pulmonol 2002; 10(1-2): 61-63

Solé D, Camelo-Nunes IC, Vana AT, Yamada E, Werneck F, de Freitas LS, Sologuren MJ, Britto M, Rosário Filho NA, Stein RT, Naspitz CK *Prevalence of rhinitis and related-symptoms in schoolchildren from different cities in Brazil.* Allergol Immunopathol (Madr) 2004 Jan-Feb;32(1):7-12

Solé D, Camelo-Nunes IC, Wandalsen GF, Mallozi MC, Naspitz CK, Brazilian ISAAC's Group *Is the prevalence of asthma and related symptoms among Brazilian children related to socioeconomic status?.* J Asthma 45(1):19-25, 2008 Jan-Feb

Solé D, Camelo-Nunes IC, Wandalsen GF, Mallozi MC, Naspitz CK, for members of the Brazilian ISAAC Group *Prevalence of atopic eczema and related symptoms in Brazilian schoolchildren: results from the International Study of Asthma and Allergies in Childhood (ISAAC) Phase 3.* J Investig Allergol Clin Immunol 2006; 16(6): 367-76

Solé D, Camelo-Nunes IC, Wandalsen GF, Melo KC, Naspitz CK *Is rhinitis alone or associated with atopic eczema a risk factor for severe asthma in children?.[Journal Article].* Pediatr Allergy Immunol 2005 Mar; 16(2):121-5

Solé D, Camelo-Nunes IC, Wandalsen GF, Pastorino AC, Jacob CMA, González C, Wandalsen NF, Rosário Filho NA, Fischer GB, Naspitz CK *Prevalence of symptoms of asthma, rhinitis, and atopic eczema in Brazilian adolescents related to exposure to gaseous air pollutants and socioeconomic status.* J Investig Allergol Clin Immunol 2007; 17(1): 6-13

Solé D, Camelo-Nunes IC, Wandalsen GF, Rosário Filho NA, Naspitz CK, Brazilian ISAAC's Group *Prevalence of rhinitis among Brazilian schoolchildren: ISAAC phase 3 results.* Rhinology 2007 Jun;45(2):122-8

Solé D, Camelo-Nunes IC, Wandalsen GF, Sarinho E, Sarinho S, Britto M, Rosário NA, de Freitas Souza LS, Stein R, Fischer GB, Naspitz CK *Ecological correlation among prevalence of asthma symptoms, rhinoconjunctivitis and atopic eczema with notifications of tuberculosis and measles in the Brazilian population.* Pediatr Allergy Immunol 2005 Nov;16(7):582-6

Solé D, Cassol VE, Silva AR, Teche SP, Rizzato TM, Bandim LC, Sarinho ES, Camelo-Nunes IC *Prevalence of symptoms of asthma, rhinitis, and atopic eczema among adolescents living in urban and rural areas in different regions of Brazil.* Allergol Immunopathol (Madr) 2007 Nov-Dec;35(6):248-53

Solé D, Mallol J, Camelo-Nunes IC, Wandalsen GF and Latin American ISAAC Study Group *Prevalence of rhinitis-related symptoms in Latin American children – Results of the International Study of Asthma and Allergies in Childhood (ISAAC) Phase Three* Pediatr Allergy Immunol 2010; 21 (1): e127-e136 E pub 24 Sept 2009

Solé D, Mallol J, Wandalsen GF, Aguirre V and the Latin American ISAAC Phase 3 Study Group *Prevalence of Symptoms of Eczema in Latin America: Results of the International Study of Asthma and Allergies in Childhood (ISAAC) Phase 3.* J Investig Allergol Clin Immunol 2010; 20(4): 311-323

Solé D, Melo KC, Camelo-Nunes IC, Freitas LS, Britto M, Rosário NA, Jones M, Fischer GB, Naspitz CK *Changes in the prevalence of asthma and allergic diseases among Brazilian schoolchildren (13-14 years old): comparison between ISAAC Phases One and Three.* J Trop Pediatr 2007 Feb;53(1):13-21 Epub Sep 2006

Solé D, Vanna AT, Yamada E, Rizzo MCV, Naspitz CK *International Study of Asthma and Allergies in Childhood (ISAAC) written questionnaire: Validation of the asthma component among Brazilian children.* J Investig Allergol Clin Immunol 1998; 8(6): 376-382

Solé D, Wandalsen GF, Camelo-Nunes IC, Naspitz CK, Naspitz CK, Brazilian ISAAC's Group *Prevalence of symptoms of asthma, rhinitis, and atopic eczema among Brazilian children and adolescents identified by the International Study of Asthma and Allergies in Childhood (ISAAC) - Phase 3.* J Pediatr (Rio J) 2006; 82(5): 341-6

Appendices
ISAAC Maps
List of Centres
Summary of Publications
List of Publications
References
Steering Committee
Photos

Solé D, Yamada E, Vana AT, Costa-Carvalho BT, Naspitz CK *Prevalence of asthma and related symptoms in school-age children in Sao Paulo, Brazil--International Study of Asthma and Allergies in Children (ISAAC).* J Asthma 1999;36(2):205-12

Solé D, Yamada E, Vana AT, Werneck G, Solano de Freitas L, Sologuren MJ, Britto M, Rosário Filho NA, Stein RT, Mallol J *International Study of Asthma and Allergies in Childhood (ISAAC): prevalence of asthma and asthma-related symptoms among Brazilian schoolchildren.* J Investig Allergol Clin Immunol 2001; 11(2): 123-8

Soto-Quirós ME, Silverman EK, Hanson LA, Weiss ST, Celedon JC *Maternal history, sensitization to allergens, and current wheezing, rhinitis, and eczema among children in Costa Rica.* Pediatr Pulmonol 2002 Apr;33(4):237-43

Soto-Quirós ME, Soto-Martínez M, Hanson LA *Epidemiological studies of the very high prevalence of asthma and related symptoms among school children in Costa Rica from 1989 to 1998.* Pediatr Allergy Immunol 2002 Oct;13(5):342-9

Souter MA, Mills NA, Mahadevan M, Ellwood P, Asher MI, Clayton TO, Douglas RG *The prevalence of atopic symptoms in children with otitis media with effusion.* Otolaryngol Head Neck Surg 2009; 141(1): 104-107

Stavrik B, Vlaski E, Isjanovska R, Seckova L, Kimovska M *Influence of diet on asthma in childhood.* Mac J Med 2005; 51(1-2): 24-34

Stewart AW, Asher MI, Clayton TO, Crane J, D'Souza W, Ellwood PE, Ford RPK, Mitchell EA, Pattemore PK, Pearce N *The effect of season-of-response to ISAAC questions about asthma, rhinitis and eczema in children.* Int J Epidemiol 1997; 26: 126-36

Stewart AW, Mitchell EA, Pearce N, Strachan DP, Weiland SK, on behalf of the ISAAC Steering Committee *The relationship of per capita gross national product to the prevalence of symptoms of asthma and other atopic diseases in children (ISAAC).* Int J Epidemiol 2001; 30: 173-9

Strachan D, Sibbald B, Weiland S, Aït-Khaled N, Anabwani G, Anderson HR, Asher MI, Beasley R, Björkstén B, Burr M, Clayton T, Crane J, Ellwood P, Keil U, Lai C, Mallol J, Martinez F, Mitchell E, Montefort S, Pearce N, Robertson C, Shah J, Stewart A, von Mutius E, Williams H *Worldwide Variations in prevalence of symptoms of allergic rhinoconjunctivitis in children: the International Study of Asthma and Allergies in Childhood (ISAAC).* Pediatr Allergy Immunol 1997; 8(4): 161-76

Sugiyama S, Sugiyama T, Toda M, Yukawa T, Makino S, Fukuda T *Prevalence of asthma, rhinitis and eczema among 13–14-year-old schoolchildren in Tochigi, Japan.* Allergol Int 2000; 49(3): 205–211

Sugiyama T, Sugiyama K, Toda M, Yukawa T, Makino S, Fukuda T *Risk factors for asthma and allergic diseases among 13–14-year-old schoolchildren in Japan.* Allergol Int 2002; 51(2): 139–150

Tabak C, Wijga AH, de Meer G, Janssen NAH, Brunekreef B, Smit HA *Diet and asthma in Dutch school children (ISAAC-2).* Thorax 2006; 61(12): 1048-53

Tatto-Cano MI, Sanin-Aguirre LH, González V, Ruiz-Velasco S, Romieu I *Prevalence of asthma, rhinitis and eczema in school children in the city of Cuernavaca, Mexico.[in Spanish].* Salud Publica Mex 1997; 39(6): 497-506

Teeratakulpisarn J, Pairojkul S, Heng S *Survey of the prevalence of asthma, allergic rhinitis and eczema in schoolchildren from Khon Kaen, Northeast Thailand.an ISAAC study.International Study of Asthma and Allergies in Childhood.* Asian Pac J Allergy Immunol 2000 Dec;18(4):187-94

Teeratakulpisarn J, Wiangnon S, Kosalaraksa P, Heng S *Surveying the prevalence of asthma, allergic rhinitis and eczema in school-children in Khon Kaen, Northeastern Thailand using the ISAAC questionnaire: phase III.* Asian Pac J Allergy Immunol 2004 Dec;22(3):175-81

The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee *Worldwide variation in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and atopic eczema: ISAAC.* Lancet 1998; 351(9111): 1225-32

The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee *Worldwide variations in the prevalence of asthma symptoms: the International Study of Asthma and Allergies in Childhood (ISAAC).* Eur Respir J 1998; 12(2): 315-335

Thornley S, Stewart A, Marshall R, Jackson R *Per capita sugar consumption is associated with severe childhood asthma: an ecological study of 53 countries* Prim Care Respir J 2011; 20(1): 75-78

Tornador-Gaya E, Tosca-Segura R, Arnedo Peña A, Puig-Barbera J, Bellido-Blasco JB, Pac-Sa MR, Artero-Civera A, Campos-Cruanes JB, Museros-Recatala L *[Incidence of allergic rhinitis in a cohort of schoolchildren between 1994 and 2002 in Castellon (Spain), following the ISAAC study].* An Pediatr (Barc) 2007 Feb;66(2):154-8 Spanish

Town GI, Fitzgerald JM *Asthma: improved understanding and insights into the challenges of achieving asthma control [Editorial]* Thorax 2010;65(9):758e-759 doi:10 1136/thx 2010 146274
In response to: Pearce N et al Worldwide trends in the prevalence of asthma symptoms: phase III of the International Study of Asthma and Allergies in Childhood (ISAAC) Thorax 2007; 62(9): 758-66 And:
Nagel G et al Effect of diet on asthma and allergic sensitisation in the International Study on Allergies and Asthma in Childhood (ISAAC) Phase Two Thorax 2010; 65(6): 516-522 doi:10 1136/thx 2009 128256

Trakultivakorn M, Sangsupawanich S, Vichyanond P *Time trends of the prevalence of asthma, rhinitis and eczema in Thai children-ISAAC (International Study of Asthma and Allergies in Childhood) Phase Three.* J Asthma 2007; 44(8): 609-11

Trakultivakorn M *Prevalence of asthma, rhinitis, and eczema in Northern Thai children from Chiang Mai (International Study of Asthma and Allergies in Childhood, ISAAC).* Asian Pac J Allergy Immunol 1999; 17(4): 243-8

Tunon De Lara JM, Kopferschmitt Kubler MC, Raherison C, Quoix E, Taytard A, Annesi-Maesano I *Prevalence of atopic dermatitis and atopy in general in children.[in French].* Rev Mal Respir 1997; 14(suppl 4): 4S47-4S54

Vanna AT, Yamada E, Arruda LK, Naspitz CK, Solé D *International Study of Asthma and Allergies in Childhood: validation of the rhinitis symptom questionnaire and prevalence of rhinitis in schoolchildren in Sao Paulo, Brazil.* Pediatr Allergy Immunol 2001; 12(2): 95-101

Vellinga A, Droste JH, Vermeire PA, Desager K, De Backer WA, Nelen VJ, Weyler JJ *Changes in respiratory and allergic symptoms in schoolchildren from 1996 to 2002, results from the ISAAC surveys in Antwerp (Belgium).* Acta Clin Belg 2005 Sep-Oct;60(5):219-25

Vervloet D, Godard P, Taytard A, Oryszczyn MP, Tunon De Lara JM, Pauli G, Groupe ISAAC France *Prevalence of atopic dermatitis in teenagers.[in French].* Rev Mal Respir 1997; 14(suppl 4): 4S55-4S60

Vichyanond P, Jirapongsananuruk O, Visitsunthorn N, Tuchinda M *Prevalence of asthma, rhinitis and eczema in children from the Bangkok area using the ISAAC (International Study for Asthma and Allergy in Children) questionnaires.* J Med Assoc Thai 1998; 81(3): 175-84

Violante R, Del-Río Navarro BE, Berber A, Ramírez Chanona N, Baeza Bacab M, Sienra Monge JJ *Obesity risk factors in the ISAAC (International Study of Asthma and Allergies in Childhood) in Mexico City.* Rev Alerg Mex 2005 Jul-Aug;52(4):141-5

Vlaski E, Stavric K, Isjanovska R, Seckova L, Kimovska M *Overweight hypothesis in asthma and eczema in young adolescents.* Allergol Immunopathol (Madr) 2006; 34(5): 199-205

Vlaski E, Stavric K, Isjanovska R, Seckova L, Kimovska M *Socioeconomic status hypothesis in asthma and eczema in young adolescents.* All Hype Asthma 2006; 4(2): 17-23

Vlaski E, Stavric K, Isjanovska R, Seckova L, Kimovska M *Acetaminophen Intake and Risk of Asthma, Hay Fever and Eczema in Early Adolescence.* Iran J Allergy Asthma Immunol 2007; 6(3): 143-149

Vlaski E, Stavric K, Isjanovska R, Seckova L, Kostovski A, Kimovska M *Prevalence and severity of asthma, allergic rhinitis and eczema in school children in Skopje (International Study of Asthma and Allergies in Childhood phase 3).* Mac J Med 2005; 51(1-2): 12-23

Vlaski E, Stavric K, Seckova L, Kimovska M, Isjanovska R *Influence of physical activity and television-watching time on asthma and allergic rhinitis among young adolescents: preventive or aggravating?* Allergol Immunopathol (Madr) 2008; 36(5): 247-53

Vlaski E, Stavric K, Seckova L, Kimovska M, Isjanovska R *Do household tobacco smoking habits influence asthma, rhinitis and eczema among 13–14 year-old adolescents?* Allergol Immunopathol (Madr) 2011;39(1):39-44 epub 22 Sept 2010

Vogelberg C, Hirsch T, Radon K, Dressel H, Windstetter D, Weinmayr G, Weiland SK, von Mutius E, Nowak D, Leupold W *Leisure time activity and new onset of wheezing during adolescence in Germany.* Eur Respir J 2007 Oct;30(4):672-6 Epub Jun 2007

von Ehrenstein OS, Maier EM, Weiland SK, Carr D, Hirsch T, Nicolai T, Roscher AA, von Mutius E *Alpha1 antitrypsin and the prevalence and severity of asthma.* Arch Dis Child 2004 Mar;89(3):230-1

von Ehrenstein OS, von Mutius E, Maier E, Hirsch T, Carr D, Schaal W, Roscher AA, Olgemoller B, Nicolai T, Weiland SK *Lung function of school children with low levels of alpha1-antitrypsin and tobacco smoke exposure.* Eur Respir J 2002; 19(6): 1099-106

von Mutius E, Illi S, Hirsch T, Leupold W, Keil U, Weiland SK *Frequency of infections and risk of asthma, atopy and airway hyperresponsiveness in children.* Eur Respir J 1999 Jul;14(1):4-11

von Mutius E, Pearce N, Beasley R, Cheng S, von Ehrenstein O, Björkstén B, Weiland S, on behalf of the ISAAC Steering Committee *International patterns of tuberculosis and the prevalence of symptoms of asthma, rhinitis and eczema.* Thorax 2000; 55(6): 449-453

von Mutius E, Weiland SK, Keil U and the ISAAC Steering Committee *The International Study of Asthma and Allergies in Childhood (ISAAC): study design and methods of phase II.* Allergologie 1999; 22(5):283-288

von Mutius E *Epidemiology of asthma: ISAAC--International Study of Asthma and Allergies in Childhood.* Pediatr Allergy Immunol 1996; 7(9 Suppl): 54-6

von Mutius E *ISAAC, the world-wide study of asthma and allergies in childhood [German].* Pneumologie 1999; 53(2): 101-2

Wang H-Y, Pizzichini MMM, Becker AB, Duncan JM, Ferguson AC, Greene JM, Rennie DC, Senthilselvan A, Taylor BW, Sears MR *Disparate geographic prevalences of asthma, allergic rhinoconjunctivitis and atopic eczema among adolescents in five Canadian cities.* Pediatr Allergy Immunol 2010; 21(5): 867–877

Wang HY, Chen YZ, Ma Y, Wong GW, Lai CK, Zhong NS *[Disparity of asthma prevalence in Chinese schoolchildren is due to differences in lifestyle factors].* Zhonghua Er Ke Za Zhi 2006 Jan;44(1):41-5 Chinese

Wang HY, Wong GW, Chen YZ, Ferguson A, Greene J, Ma Y, Zhong NS, Lai CKW, Sears M *Prevalence of asthma among Chinese adolescents living in Canada and in China.* CMAJ 2008 179: 1133-1142

Wang HY, Zheng JP, Zhong NS *[Time trends in the prevalence of asthma and allergic diseases over 7 years among adolescents in Guangzhou city].* Zhonghua Yi Xue Za Zhi 2006 Apr 18;86(15):1014-20

Wang XS, Shek LP, Ma S, Soh SE, Lee BW, Goh DYT *Time trends of co-existing atopic conditions in Singapore school children: prevalence and related factors.* Pediatr Allergy Immunol 2010; 21 (1): e137-e141 E pub 21 Apr 2009

Wang XS, Tan TN, Shek LP, Chng SY, Hia CP, Ong NB, Ma S, Lee BW, Goh DY *The prevalence of asthma and allergies in Singapore; data from two ISAAC surveys seven years apart.* Arch Dis Child 2004 May;89(5):423-6

Weber AS, Haidinger G *The prevalence of atopic dermatitis in children is influenced by their parents' education: results of two cross-sectional studies conducted in Upper Austria.* Pediatr Allergy Immunol 2010; 21(7): 1028–1035 Epub 27 Apr

Weiland SK, Björkstén B, Brunekreef B, Cookson WO, von Mutius E, Strachan DP, and the ISAAC Phase Two Study Group *Phase II of the International Study of Asthma and Allergies in Childhood (ISAAC II): rationale and methods.* Eur Respir J 2004; 24(3): 406-12

Weiland SK, Hüsing A, Strachan D, Rzehak P, Pearce N, and the ISAAC Phase One Study Group *Climate and the prevalence of symptoms of asthma, allergic rhinitis and atopic eczema in children.* Occup Environ Med 2004; 61(7): 609-15

Weiland SK, Kugler J, von Mutius E, et al *The language of pediatric asthma patients: verbal descriptors of symptoms in Germany.[in German].* Monatsschr Kinderheilkd 1993; 141: 878-882

Weiland SK, Mundt KA, Rückmann A and Keil U *Self Reported Wheezing and Allergic Rhinitis in Children and Traffic Density on Street of Residence* Ann Epidemiol 1994; 4(3):243-247

Weiland SK, von Mutius E, Hirsch T, Duhme H, Fritzsch C, Werner B, Hüsing A, Stender M, Renz H, Leupold W, Keil U *Prevalence of respiratory and atopic disorders among children in the East and West of Germany five years after unification.* Eur Respir J 1999; 14(4): 862-70

Weiland SK, von Mutius E, Hüsing A, Asher MI, on behalf of the ISAAC Steering Committee *Intake of trans fatty acids and prevalence of childhood asthma and allergies in Europe.* Lancet 1999; 353(9169): 2040-1

Weiland SK, von Mutius E, Keil U, on behalf of the ISAAC Steering Committee *The International Study of Asthma and Allergies in Childhood (ISAAC): rational methods and outlook.* Allergologie 1999; 22(5):275-282

Weinmayr G, Forastiere F, Weiland SK, Rzehak P, Abramidze T, Annesi-Maesano I, Björkstén B, Brunekreef B, Büchele G, Cookson WO, von Mutius E, Pistelli R, Strachan DP, and the ISAAC Phase Two Study Group *International variation in prevalence of rhinitis and its relation with sensitization to perennial and seasonal allergens.* Eur Respir J 2008; 32: 1250–1261

Weinmayr G, Genuneit J, Nagel G, Björkstén B, van Hage M, Priftanji A, Cooper P, Rijkjärv M-A, von Mutius E, Tsanakas J, Forastiere F, Doekes G, Garrido JB, Morales Suárez-Varela MM, Bråbäck L, Strachan DP, the ISAAC Phase Two Study Group *International variations in associations of allergic markers and diseases in children: ISAAC Phase Two.* Allergy 2010; 65(6): 766–775 epub 21 Dec 2009 DOI:10 1111/j 1398-9995 2009 02283 x

Weinmayr G, Weiland SK, Björkstén B, Brunekreef B, Büchele G, Cookson WO, García-Marcos L, Gotua M, Gratziou C, van Hage M, von Mutius E, Riikjärv MA, Rzehak P, Stein RT, Strachan DP, Tsanakas J, Wickens K, Wong GW, and the ISAAC Phase Two Study Group *Atopic sensitization and the international variation of asthma symptom prevalence in children.* Am J Respir Crit Care Med 2007; 176(6): 565-74

Wellie O, Duhme H, Streit U, von Mutius E, Keil U, Weiland SK *Application of geographical information systems in epidemiological studies exemplified by the ISAAC study in Munich.* Gesundheitswesen 2000 Aug-Sep;62(8-9):423-30 German

Werneck G, Ruiz S, Hart R, White M, Romieu I *Prevalence of asthma and other childhood allergies in Brazilian schoolchildren.* J Asthma 1999 Dec;36(8):677-90

Wichmann J, Wolvaardt JE, Maritz C, Voyi KVV *Household conditions, eczema symptoms and rhinitis symptoms: relationship with wheeze and severe wheeze in adolescents living in the Polokwane area, South Africa.* J Asthma 2007; 44(8): 659-66

Wichmann J, Wolvaardt JE, Maritz C, Voyi KVV *Association between household living conditions and eczema in adolescents living in Limpopo Province, South Africa.* Curr All & Clin Immunol 2007; 20(3): 142-149

Wichmann J, Wolvaardt JE, Maritz C, Voyi KVV *Association between children's household living conditions and eczema in the Polokwane area, South Africa.* Health Place 2008 Jun;14(2):323-35 Epub Aug 2007

Wichmann J, Wolvaardt JE, Maritz C, Voyi KVV *Household Conditions, Eczema Symptoms and Rhinitis Symptoms: Relationship with Wheeze and Severe Wheeze in Children Living in the Polokwane Area, South Africa.* Matern Child Health J 2009; 13(1):107-118 Epub Jan 2008

Wickens K, Barry D, Friezema A, Rhodius R, Bone N, Purdie G, Crane J *Fast foods - are they a risk factor for asthma?.* Allergy 2005; 60(12): 1537-41

Wickens K, Barry D, Friezema A, Rhodius R, Bone N, Purdie G, Crane J *Obesity and asthma in 11-12 year old New Zealand children in 1989 and 2000.* Thorax 2005; 60(1): 7-12

Wickens K, Crane J, Kemp T, Lewis S, D'Souza W, Sawyer G, Stone L, Tohill S, Kennedy J, Slater T, Rains N, Pearce N *A case-control study of risk factors for asthma in New Zealand children.* Aust N Z J Pub Health 2001;25(1):44-9

Wickens K, de Bruyne J, Calvo M, Choon-Kook S, Jayaraj G, Lai CK, Lane J, Maheshwari R, Mallol J, Nishima S, Purdie G, Siebers R, Sukumaran T, Trakultivakorn M, Crane J *The determinants of dust mite allergen and its relationship to the prevalence of symptoms of asthma in the Asia-Pacific region.* Pediatr Allergy Immunol 2004 Feb; 15(1):55-61

Wickens K, Pearce N, Siebers R, Ellis I, Patchett K, Sawyer G, Stone L, Tohill S, Kennedy J, Slater T, Lewis S, Fitzharris P, Crane J *Indoor environment, atopy and the risk of the asthma in children in New Zealand.* Pediatr Allergy Immunol 1999 Aug;10(3):199-208

Wickens KL, Crane J, Kemp TJ, Lewis SJ, D'Souza WJ, Sawyer GM, Stone ML, Tohill SJ, Kennedy JC, Slater TM, Pearce NE *Family Size, Infections, and Asthma Prevalence in New Zealand Children.* Epidemiology 1999;10:699-705

Wieringa MH, Weyler JJ, Van Bever HP, Nelen VJ, Vermeire PA *Gender differences in respiratory, nasal and skin symptoms: 6-7 versus 13-14-year-old children.* Acta Paediatr 1999; 88(2):147-9

Wilkie AT, Ford RP, Pattemore P, Schluter PJ, Town I, Graham P *Prevalence of childhood asthma symptoms in an industrial suburb of Christchurch.* NZ Med J 1995; 108(1000): 188-90

Williams H, Isaac Steering Comm *Was the prevalence of Japanese childhood atopic eczema symptoms overestimated in the ISAAC study? - Reply.* J Allergy Clin Immunol 2004; 113(3):571-572

Williams H, Robertson C, Stewart A, Aït-Khaled N, Anabwani G, Anderson HR, Asher MI, Beasley R, Björkstén B, Burr M, Clayton T, Crane J, Ellwood P, Keil U, Lai C, Mallol J, Martinez F, Mitchell E, Montefort S, Pearce N, Shah J, Sibbald B, Strachan D, von Mutius E, Weiland S *Worldwide variations in the prevalence of symptoms of atopic eczema in the international study of asthma and allergies in childhood.* J Allergy Clin Immunol 1999; 103(1 Pt 1): 125-38

Williams H, Stewart A, von Mutius E, Cookson B, Anderson HR, and the ISAAC Phase One and Three Study groups *Is eczema really on the increase worldwide?* J Allergy Clin Immunol 2008; 121(4): 947-54

Williams HC *Eczema across the World: The Missing Piece of the Jigsaw Revealed [editorial]* J Investig Dermatol 2011; 131 :12–14 doi:10 1038/jid 2010 333

Wong GW, Hui DS, Chan HH, Fok TF, Leung R, Zhong NS, Chen YZ, Lai CK *Prevalence of respiratory and atopic disorders in Chinese schoolchildren.* Clin Exp Allergy 2001 Aug;31(8):1225-31

Wong GW, Ko FW, Hui DS, Fok TF, Carr D, von Mutius E, Zhong NS, Chen YZ, Lai CK *Factors associated with difference in prevalence of asthma in children from three cities in China: multicentre epidemiological survey.* BMJ 2004; 329(7464): 486

Wong GW, Leung TF, Fok TF *ISAAC and risk factors for asthma in the Asia-Pacific.* Paediatr Respir Rev 2004;5 Suppl A:S163-9 Review

Wong GW, Li ST, Hui DS, Fok TF, Zhong NS, Chen YZ, Lai CK *Individual allergens as risk factors for asthma and bronchial hyperresponsiveness in Chinese children.* Eur Respir J 2002 Feb;19(2):288-93

Wong GWK, Hui DSC, Tam CM, Chan HH, Fok TF, Chan-Yeung M, Lai CKW *Asthma, atopy and tuberculin responses in Chinese schoolchildren in Hong Kong.* Thorax 2001; 56(10): 770–773

Wong GWK, Leung TF, Ko FWS, Lee KKM, Lam P, Hui DSC, Fok TF, Lai CKW *Declining asthma prevalence in Hong Kong Chinese schoolchildren.* Clin Exp Allergy 2004; 34(10): 1550-5

Yamada E, Vanna AT, Naspitz CK, Solé D *International Study of Asthma and Allergies in Childhood (ISAAC): validation of the written questionnaire (eczema component) and prevalence of atopic eczema among Brazilian children.* J Investig Allergol Clin Immunol 2002; 12(1):34-41

Yan DC, Ou LS, Tsai TL, Wu WF, Huang JL *Prevalence and severity of symptoms of asthma, rhinitis, and eczema in 13- to 14-year-old children in Taipei, Taiwan.* Ann Allergy Asthma Immunol 2005 Dec;95(6):579-85

Yarnell JW, Stevenson MR, MacMahon J, Shields M, McCrum EE, Patterson CC, Evans AE, Manning PJ, Clancy L *Smoking, atopy and certain furry pets are major determinants of respiratory symptoms in children: the International Study of Asthma and Allergies in Childhood Study (Ireland).* Clin Exp Allergy 2003 Jan;33(1):96-100

Yeatts K, Shy C, Sotir M, Music S, Herget C *Health consequences for children with undiagnosed asthma-like symptoms.* Arch Pediatr Adolesc Med 2003 Jun;157(6):540-4

Yeatts K, Shy C, Wiley J, Music S *Statewide adolescent asthma surveillance.* J Asthma 2000 Aug;37(5):425-34

Zacharasiewicz A, Zidek T, Haidinger G, Waldhör T, Suess G, Vutuc C *Indoor factors and their association to respiratory symptoms suggestive of asthma in Austrian children aged 6-9 years.* Wien Klin Wochenschr 1999 Nov 12;111(21):882-6

Zacharasiewicz A, Zidek T, Haidinger G, Waldhör T, Vutuc C, Zacharasiewicz A, Goetz M, Pearce N *Symptoms suggestive of atopic rhinitis in children aged 6-9 years and the indoor environment.* Allergy 2000 Oct;55(10):945-50

Zar HJ, Ehrlich RI, Workman L, Weinberg EG *The changing prevalence of asthma, allergic rhinitis and atopic eczema in African adolescents from 1995 to 2002.* Pediatr Allergy Immunol 2007; 18(7): 560-5

Zeilinger S, Pinto LA, Nockher WA, Depner M, Klopp N, Illig T, von Mutius E, Renz H, Kabesch M *The effect of BDNF gene variants on asthma in German children.* Allergy 2009 Dec; 64(12): 1790-1794

Zhao J, Ma Y, Chen YZ, Han ZR *Prevalence of allergic respiratory disorders and skin prick test in Beijing urban and suburban children: a comparative study.* Zhonghua Yi Xue Za Zhi 2003; 83(21):1879-81

Zhao T, Wang HJ, Chen Y, Xiao M, Duo L, Liu G, Lau Y, Karlberg J *Prevalence of childhood asthma, allergic rhinitis and eczema in Urumqi and Beijing.* J Paediatr Ch Health 2000; 36(2): 128-33

Zidek T, Haidinger G, Zacharasiewicz A, Waldhör T, Vutuc C *[Prevalence of smoking habits of Upper Austria students of the 7th and 8th grade and effect of smoking habits of family and peers].* Soz Praventivmed 2000;45(4):174-81 German

Zutavern A, Hirsch T, Leupold W, Weiland SK, Keil U, von Mutius E *Atopic dermatitis, extrinsic atopic dermatitis and the hygiene hypothesis: results from a cross-sectional study.* Clin Exp Allergy 2005;35:1301-1308

Živanovic S, Jovanovic-Slavkovic M, Mileusnic-Milenovic R, Perovic L, Nikolic S, Stojanovic-Milojkovic L, Kovacevic S, Brankovic S, Coni? M *Prevalence rate of asthma, rhinitis and eczema in children in Nis.* Child Pulmonol 2002; 10(1-2): 45-50

Živcovic Z *Prevalence of childhood asthma, rhinitis and eczema in Belgrade area and Serbia.* Child Pulmonol 2002; 10(1-2): 27-43

Živkovic Z, Vukašinovic Z, Cerovic S, Radulovic S, Živanovic S, Panic E, Hadnadjev M and Adžovic O *Prevalence of childhood asthma and allergies in Serbia and Montenegro.* World J Pediatr 2010; 6(4): 331-336 epub May

Živkovic Z, Živanovic S, Panic E *International study of asthma and allergies in childhood (phase 3) in Yugoslavia.* Child Pulmonol 2001; 9(1-2): 41-44

References

Enarson D. *Fostering a spirit of critical thinking the ISAAC story.* Int J Tuberc Lung Dis 2005;9:1.

Pawankar R, Baena-Cagnani CE, Bousquet J, et al. *State of World Allergy Report 2008 Allergy and Chronic Respiratory Diseases.* World Allergy Organisation Journal. 2008(Supplement 1):s4-s17.

World Health Organisation. *Global Alliance against chronic respiratory diseases (GARD) basket a package of information, surveillance tools and guidelines, to be offered as a service to countries.* Geneva: World Health Organisation; 2008

Aït-Khaled N, Pearce N, Anderson HR, Ellwood P, Montefort S, Shah J, and the ISAAC Phase Three Study Group. *Global map of the prevalence of symptoms of rhinoconjunctivitis in children The International Study of Asthma and Allergies in Childhood (ISAAC) Phase Three.* Allergy 2009; 64: 123–148.

Anderson HR, Gupta R, Kapetanakis V, Asher MI, Clayton T, Robertson CF, Strachan DP, and the ISAAC Steering Committee. *International correlations between indicators of prevalence, hospital admissions and mortality for asthma in children.* Int J Epidemiol 2008; 37(3):573-82.

Anderson HR, Poloniecki JD, Strachan DP, Beasley R, Björkstén B, Asher MI, and the ISAAC Phase One Study Group. *Immunization and symptoms of atopic disease in children Results from the International Study of Asthma and Allergies in Childhood.* Am J Publ Health 2001; 91(7): 1126-9.

Anderson HR, Ruggles R, Pandey KD, Kapetenakis V, Brunekreef B, Lai CKW, Strachan DP, Weiland SK, and the ISAAC Phase One Study Group. *Ambient particulate pollution and the world-wide prevalence of asthma, rhinoconjunctivitis and eczema in children Phase One of the International Study of Asthma and Allergies in Childhood (ISAAC).* Occup Environ Med 2010; 67(5): 293-300. doi:10.1136/oem.2009.048785. epub: 9 October 2009.

Asher MI, Montefort S, Björkstén B, Lai CKW, Strachan DP, Weiland SK, Williams H, and the ISAAC Phase Three Study Group. *Worldwide time trends in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and eczema in childhood ISAAC Phases One and Three repeat multicountry cross-sectional surveys.* Lancet 2006; 368(9537): 733-743.

Asher MI, Stewart AW, Mallol J, Montefort M, Lai CKW, Aït-Khaled N, Odhiambo J, and the ISAAC Phase One Study Group. *Which population level environmental factors are associated with asthma, rhinoconjunctivitis and eczema? A review of the ecological analyses of ISAAC Phase One.* Respiratory Research. 2010; 11(8):

Beasley R, Clayton T, Crane J, von Mutius E, Lai CKW, Montefort S, Stewart A, for the ISAAC Phase Three Study Group. *Association between paracetamol use in infancy and childhood, and risk of asthma, rhinoconjunctivitis, and eczema in children aged 6-7 years analysis from Phase Three of the ISAAC programme.* Lancet 2008; 372(9643): 1039-48.

Beasley RW, Clayton TO, Crane J, Lai CKW, Montefort SR, von Mutius E, Stewart AW, and the ISAAC Phase Three Study Group. *Acetaminophen Use and Risk of Asthma, Rhinoconjunctivitis and Eczema in Adolescents ISAAC Phase Three* Am J Resp Crit Care Med. 2011; 183(2): 171-178.

Björkstén B, Clayton T, Ellwood P, Stewart A, Strachan D, and the ISAAC Phase Three Study Group. *Worldwide time trends for symptoms of rhinitis and conjunctivitis Phase III of the International Study of Asthma and Allergies in Childhood.* Pediatr Allergy Immunol 2008; 19(2): 110-24.

Brunekreef B, Stewart AW, Anderson HR, Lai CKW, Pearce NE, and the Phase Three Study Group. *Self Reported Truck Traffic on the Street of Residence and Symptoms of Asthma and Allergic Disease A Global Relationship in ISAAC Phase Three.* Environ Health Perspect 2009; 117(11): 1791-98. Epub July 2009.

Burr ML, Emberlin JC, Treu R, Cheng S, Pearce NE, and the ISAAC Phase One Study Group. *Pollen counts in relation to the prevalence of allergic rhinoconjunctivitis, asthma and atopic eczema in the International Study of Asthma and Allergies in Childhood (ISAAC).* Clin Exp Allergy 2003; 33(12): 1675-80.

Büchele G, Genuneit J, Weinmayr G, Björkstén B, Gehring U, von Mutius E, Priftanji A, Stein RT, Addo-Yobo EO, Priftis KN, Shah JR, Forastiere F, Svabe V, Crane J, Nystad W, García-Marcos L, Saraçlar Y, El-Sharif N, Strachan DP and the ISAAC Phase Two Study Group *International Variations in Bronchial Responsiveness in Children Findings From ISAAC Phase Two* Pediatr Pulmonol 2010; 45(8): 796–806

Ellwood P, Asher MI, Björkstén B, Burr M, Pearce N, Robertson CF, and the ISAAC Phase One Study Group. *Diet and asthma, allergic rhinoconjunctivitis and atopic eczema symptom prevalence An ecological analysis of the International Study of Asthma and Allergies in Childhood (ISAAC) data.* Eur Respir J 2001; 17(3): 436-443.

Ellwood P, Asher MI, Stewart AW and the ISAAC Phase III Study Group *The impact of the method of consent on response rates in the ISAAC time trends study.* Int J Tuberc Lung Dis. 2010 Aug;14(8):1059-65.

Ellwood P, Williams H, Aït-Khaled N, Björkstén B, Robertson C, and the ISAAC Phase III Study Group. *Translation of questions The International Study of Asthma and Allergies in Childhood (ISAAC) experience.* Int J Tuberc Lung Dis.September 2009; 13(9): 1174-1182.

Flohr C, Weiland SK, Weinmayr G, Björkstén B, Bråbäck L, Brunekreef B, Büchele G, Clausen M, Cookson WOC, von Mutius E, Strachan DP, Williams HC, and the ISAAC Phase Two Study Group. *The role of atopic sensitization in flexural eczema Findings from the International Study of Asthma and Allergies in Childhood Phase Two.* J Allergy Clin Immunol 2008; 121(1): 141-7.

Flohr C, Weinmayr G, Weiland SK (deceased), Addo-Yobo E, Annesi-Maesano I, Björkstén B, Bråbäck L, Büchele G, Chico M, Cooper P, Clausen M, El-Sharif N, Martínez Gimeno A, Mathur RS, von Mutius E, Morales Suárez-Varela MM, Pearce N, Svabe V, Wong GWK, Yu M, Zhong NS, Williams HC and the ISAAC Phase Two Study Group. *How well do questionnaires perform compared with physical examination in detecting flexural eczema? Findings from the International Study of Asthma and Allergies in Childhood (ISAAC) Phase Two.* Br J Dermatol 2009; 161(4): 846-853. Epub 27 May.

Foliaki S, Kildegaard Nielsen S, Björkstén B, von Mutius E, Cheng S, Pearce N, and the ISAAC Phase One Study Group. *Antibiotic sales and the prevalence of symptoms of asthma, rhinitis, and eczema The International Study of Asthma and Allergies in Childhood (ISAAC).* Int J Epidemiol 2004; 33(3): 558-63.

Foliaki S, Pearce N, Björkstén B, Mallol J, Montefort S, von Mutius E and the ISAAC Phase Three Study Group. *Antibiotic use in infancy and risk of symptoms of asthma, rhinoconjunctivitis and eczema in 6 to 7 year old children ISAAC Phase Three.* J Allergy Clin Immunol 2009;124(5):982-9.

Gehring U, Strikwold M, Schram-Bijkerk D, Weinmayr G, Genuneit J, Nagel G, Wickens K, Siebers R, Crane J, Doekes G, Di Domenicantonio R, Nilsson L, Priftanji A, Sandin A, El-Sharif N, Strachan D, van Hage M, von Mutius E, Brunekreef B, and the ISAAC Phase Two Study Group. *Asthma and allergic symptoms in relation to house dust endotoxin Phase Two of the International Study on Asthma and Allergies in Childhood (ISAAC II).* Clin Exp Allergy 2008; 38: 1911–1920.

Genuneit J, Cantelmo JL, Weinmayr G, Wong GWK, Cooper PJ, Riikjärv MA, Gotua M, Kabesch M, von Mutius E, Forastiere F, Crane J, Nystad W, El Sharif N, Batllés-Garrido J, García-Marcos L, García-Hernández G, Morales Suárez-Varela MM, Nilsson L, Bråbäck L, Saraçlar Y, Weiland SK, Cookson WOC, Strachan DP, Moffatt MF, ISAAC Phase Two Study Group. *A multi-centre study of candidate genes for wheeze and allergy. The International Study of Asthma and Allergies in Childhood Phase Two.* Clin Exp Allergy 2009 Dec; 39(12): 1875-1888

Lai CKW, Beasley R, Crane J, Foliaki S, Shah J, Weiland S, and the ISAAC Phase Three Study Group. *Global variation in the prevalence and severity of asthma symptoms Phase Three of the International Study of Asthma and Allergies in Childhood (ISAAC).* Thorax 2009; 64: 476–483.Epub Feb 2009.

Mitchell EA, Stewart AW, on behalf of the ISAAC Phase One Study Group. *The ecological relationship of tobacco smoking to the prevalence of symptoms of asthma and other atopic diseases in children The International Study of Asthma and Allergies in Childhood (ISAAC).* Eur J Epidemiol 2001; 17(7): 667-73.

Moffatt MF, Gut IG, Demenais F, Strachan DP, Bouzigon E, Heath S, von Mutius E, Farrall M, Lathrop M, Cookson WO for the GABRIEL Consortium. *A large-scale, consortium-based genomewide association study of asthma* N Engl J Med 2010; 363(13): 1211-21

Nagel G, Büchele G, Weinmayr G, Björkstén B, Chen Y-Z, Wang H, Nystad W, Saraçlar Y, Bråbäck L, Batllés-Garrido J, García-Hernández G, Weiland SK, and the ISAAC Phase Two Study Group. *Effect of Breastfeeding on Asthma, Lung function, and Bronchial Hyperreactivity in ISAAC-Phase-Two.* Eur Respir J.2009; 33: 993–1002; Epub 2009 Jan22.

Nagel G, Weinmayr G, Kleiner A, García-Marcos, Strachan DP, the ISAAC Phase Two Study Group. *Effect of diet on asthma and allergic sensitisation in the International Study on Allergies and Asthma in Childhood (ISAAC) Phase Two.* Thorax 2010; 65(6): 516-522 doi:10.1136/thx.2009.128256

Odhiambo J, Williams H, Clayton T, Robertson C, Asher MI, and the ISAAC Phase Three Study group. *Global variations in prevalence of eczema symptoms in children from ISAAC Phase Three* J Allergy Clin Immunol. Dec 2009;124(6):1251-8.

Pearce N, Aït-Khaled N, Beasley R, Mallol J, Keil U, Mitchell E, Robertson C, and the ISAAC Phase Three Study Group. *Worldwide trends in the prevalence of asthma symptoms Phase III of the International Study of Asthma and Allergies in Childhood (ISAAC).* Thorax 2007; 62(9): 758-66.

Pearce N, Sunyer J, Cheng S, Chinn S, Björkstén B, Burr M, Keil U, Anderson HR, Burney P, on behalf of the ISAAC Steering Committee and the European Community Respiratory Health Survey. *Comparison of asthma prevalence in the ISAAC and the ECRHS.* Eur Respir J 2000; 16(3): 420-6.

Pearce N, Weiland S, Keil U, Langridge P, Anderson HR, Strachan D, Bauman A, Young L, Gluyas P, Ruffin D, Crane J, Beasley R. *Self-reported prevalence of asthma symptoms in children in Australia, England, Germany and New Zealand an international comparison using the ISAAC protocol.* Eur Respir J 1993; 6: 1455-61.

Shirtcliffe P, Weatherall M, Beasley R, on behalf of the ISAAC Phase One Study Group. *An inverse correlation between estimated tuberculosis notification rates and asthma symptoms.* Respirology 2002; 7(2): 153-5.

Stewart AW, Asher MI, Clayton TO, Crane J, D'Souza W, Ellwood PE, Ford RPK, Mitchell EA, Pattemore PK, Pearce N. *The effect of season-of-response to ISAAC questions about asthma, rhinitis and eczema in children.* Int J Epidemiol 1997; 26: 126-36.

Stewart AW, Mitchell EA, Pearce N, Strachan DP, Weiland SK, on behalf of the ISAAC Steering Committee. *The relationship of per capita gross national product to the prevalence of symptoms of asthma and other atopic diseases in children (ISAAC).* Int J Epidemiol 2001; 30: 173-9.

Strachan D, Sibbald B, Weiland S, Aït-Khaled N, Anabwani G, Anderson HR, Asher MI, Beasley R, Björkstén B, Burr M, Clayton T, Crane J, Ellwood P, Keil U, Lai C, Mallol J, Martinez F, Mitchell E, Montefort S, Pearce N, Robertson C, Shah J, Stewart A, von Mutius E, Williams H. *Worldwide Variations in prevalence of symptoms of allergic rhinoconjunctivitis in children the International Study of Asthma and Allergies in Childhood (ISAAC).* Pediatr Allergy Immunol 1997; 8(4): 161-76.

The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee. *Worldwide variation in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and atopic eczema ISAAC.* Lancet 1998; 351(9111): 1225-32.

The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee. *Worldwide variations in the prevalence of asthma symptoms the International Study of Asthma and Allergies in Childhood (ISAAC).* Eur Respir J 1998; 12(2): 315-335.

von Mutius E, Pearce N, Beasley R, Cheng S, von Ehrenstein O, Björkstén B, Weiland S, on behalf of the ISAAC Steering Committee. *International patterns of tuberculosis and the prevalence of symptoms of asthma, rhinitis and eczema.* Thorax 2000; 55(6): 449-453.

Weiland SK, Hüsing A, Strachan D, Rzehak P, Pearce N, and the ISAAC Phase One Study Group. *Climate and the prevalence of symptoms of asthma, allergic rhinitis and atopic eczema in children.* Occup Environ Med 2004; 61(7): 609-15.

Weiland SK, von Mutius E, Hüsing A, Asher MI, on behalf of the ISAAC Steering Committee. *Intake of trans fatty acids and prevalence of childhood asthma and allergies in Europe.* Lancet 1999; 353(9169): 2040-1.

Weinmayr G, Forastiere F, Weiland SK, Rzehak P, Abramidze T, Annesi-Maesano I, Björkstén B, Brunekreef B, Büchele G, Cookson WO, von Mutius E, Pistelli R, Strachan DP, and the ISAAC Phase Two Study Group. *International variation in prevalence of rhinitis and its relation with sensitization to perennial and seasonal allergens.* Eur Respir J 2008; 32: 1250–1261.

Weinmayr G, Genuneit J, Nagel G, Björkstén B, van Hage M, Priftanji A, Cooper P, Rijkjärv M-A, von Mutius E, Tsanakas J, Forastiere F, Doekes G, Garrido JB, Morales Suárez-Varela MM, Bråbäck L, Strachan DP, the ISAAC Phase Two Study Group. *International variations in associations of allergic markers and diseases in children ISAAC Phase Two.* Allergy 2010; 65(6): 766–775. epub 21 Dec 2009. DOI:10.1111/j.1398-9995.2009.02283.x

Weinmayr G, Weiland SK, Björkstén B, Brunekreef B, Büchele G, Cookson WO, García-Marcos L, Gotua M, Gratziou C, van Hage M, von Mutius E, Riikjärv MA, Rzehak P, Stein RT, Strachan DP, Tsanakas J, Wickens K, Wong GW, and the ISAAC Phase Two Study Group. *Atopic sensitization and the international variation of asthma symptom prevalence in children.* Am J Respir Crit Care Med 2007; 176(6): 565-74.

Williams H, Robertson C, Stewart A, Aït-Khaled N, Anabwani G, Anderson HR, Asher MI, Beasley R, Björkstén B, Burr M, Clayton T, Crane J, Ellwood P, Keil U, Lai C, Mallol J, Martinez F, Mitchell E, Montefort S, Pearce N, Shah J, Sibbald B, Strachan D, von Mutius E, Weiland S. *Worldwide variations in the prevalence of symptoms of atopic eczema in the international study of asthma and allergies in childhood.* J Allergy Clin Immunol 1999; 103(1 Pt 1): 125-38.

Williams H, Stewart A, von Mutius E, Cookson B, Anderson HR, and the ISAAC Phase One and Three Study groups. *Is eczema really on the increase worldwide?* J Allergy Clin Immunol 2008; 121(4): 947-54.

The ISAAC Story

Steering Committee Photos

Nice, France 1994

Barcelona, Spain 1995

Stockholm, Sweden 1996

Berlin, Germany 1997

Geneva, Switzerland 1998

Madrid, Spain 1999

The ISAAC Story

Auckland, New Zealand 2000




















The ISAAC Story









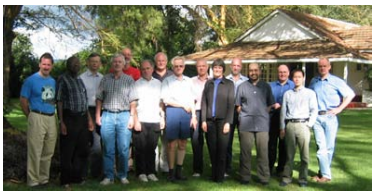




Malta, Malta 2001

Stockholm, Sweden 2002

Kenya, Kenya 2003



Tonga, Tonga 2004











The ISAAC Story























Hong Kong, SAR China 2005









The ISAAC Story















The ISAAC Story















Santiago, Chile 2006

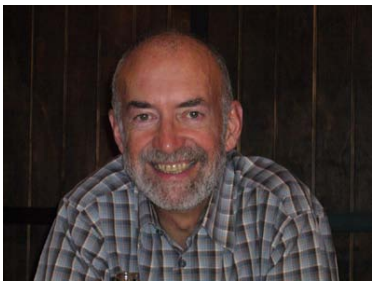


The ISAAC Story









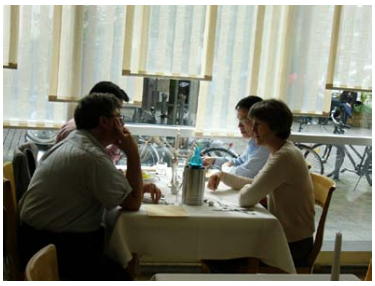

Munster, Germany 2007





The ISAAC Story










Casablanca, Morocco 2008






The ISAAC Story



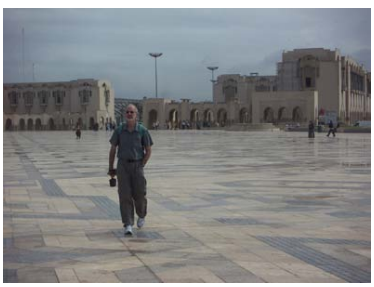



















Merida, Mexico 2009



Auckland, New Zealand 2011



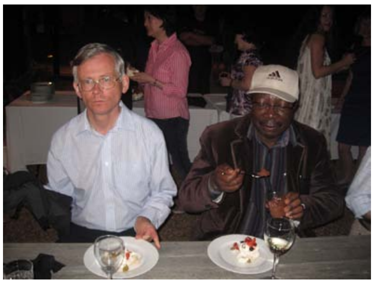












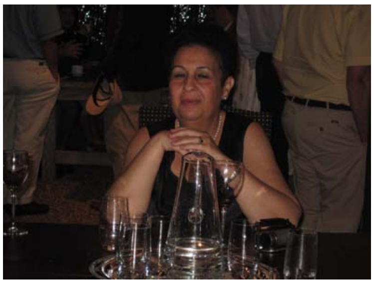










Appendices
ISAAC Maps
List of Centres
Summary of Publications
List of Publications
References
Steering Committee Photos

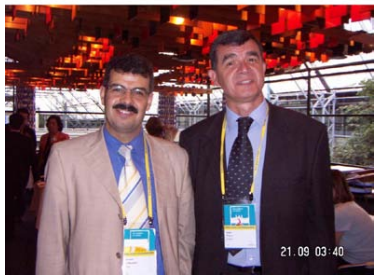




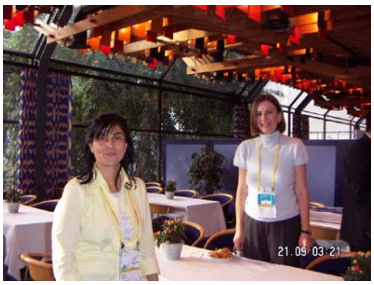


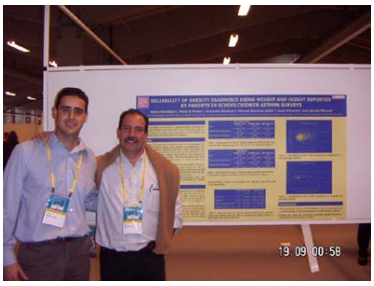

ISAAC Receptions

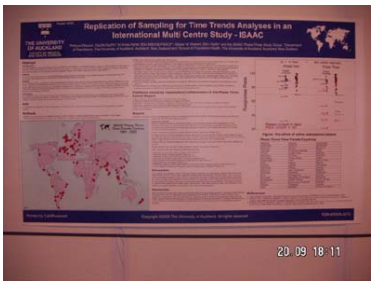
Copenhagen, Germany ERS2005

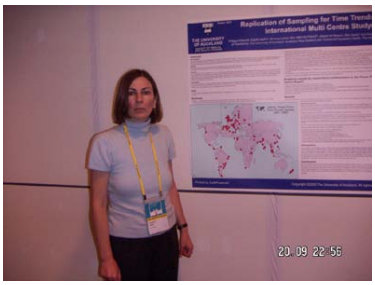
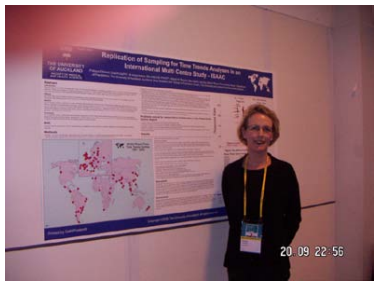


The ISAAC Story



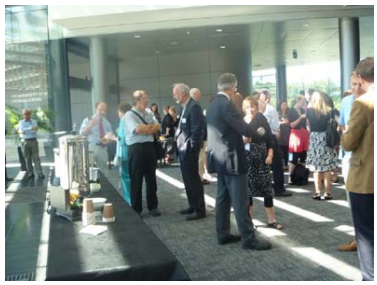




Auckland, New Zealand Symposium2011








The ISAAC Story



ISAAC Phase Two











ISAAC
The International Study of Asthma and Allergies in Childhood

ISBN: 978-0-473-20211-8
http://isaac.auckland.ac.nz