

# Newsletter - November 1995

## **I** NTERNATIONAL **S** TUDY OF **A** STHMA AND **A** LLERGIES IN **C** HILDHOOD

### **The Newsletter**

Thank you for your positive responses to the April Newsletter. I would welcome items from anyone for inclusion in the next newsletter.

- *Innes Asher*  
*Auckland*

PS Please let me know if you do NOT want to receive the ISAAC Newsletter.

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(for Innes Asher)

The ISAAC Steering Committee had a very positive and successful meeting in Barcelona on 15-16 September 1995.

## **ISAAC Phase One Deadline**

The Steering Committee confirmed that there is a deadline for receipt of a clean data set by ISAAC International Data Centre in Auckland for centres to be included in the initial ISAAC publications.

**The deadline is 1 December 1995.**

The Steering Committee adopted the following criteria for a clean data set:

1. Readable by the ISAAC International Data Centre (IIDC);
2. Responses for the Wheezing, Rhinitis, Eczema and Video questionnaires have not been subject to manipulation except where explicitly indicated in the demographic information;
3. There is a satisfactory response to queries generated by the IIDC; and
4. A completed data registration form is received by the IIDC

Please note: If you think you are going to have trouble meeting this deadline, it is important to contact Innes Asher at the International Data Centre as soon as possible to discuss your situation.

The World Health Organisation (WHO) has offered to publish ISAAC data. The Steering Committee has decided that a WHO publication would be a good way in which to publish Phase One data from centres that are unable to meet the the initial deadline.

A deadline of 1 December 1996 has been established for centres to have submitted a clean data set to the IIDC to be included in the WHO publication.

ISAAC collaborators are encouraged to complete their Phase One studies even if they may have difficulty meeting the second deadline. Any data collected can be directly compared to data presented in the ISAAC publications when writing up the results of their research.

## **Guidelines for Analysis of Phase One Data**

The Steering Committee discussed principles for the international analysis of Phase One data. The following recommendations were formulated:

1. All basic analyses must use only data as recorded on the core questionnaire. No recoding of missing or inconsistent variables should occur;
2. For basic analyses, prevalence values for all variables should be calculated as the number or positive responses divided by the total number of participants; and

3. Combination of variables for case definitions should use only those observations where there is data for all variables in the case definition.

The Steering Committee urges centres who are publishing their own data to follow these guidelines.

## IUATLD Annual Meeting

The International Union Against Tuberculosis and Lung Disease (IUATLD) is keen to encourage ISAAC collaborators to present papers at the 1996 Annual Meeting. In particular, the IUATLD would like to promote research in developing countries. If enough abstracts are received, the IUATLD would be prepared to designate a session for ISAAC research. Interested collaborators should contact Erika von Mutius who will liaise with the IUATLD at the following address:

Dr med Erika von Mutius  
Kinderklinik der Universität im  
Dr von Hauner'schen Kinderspital  
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D-80337  
GERMANY

## ISAAC Phase Two

The Steering Committee is continuing to make progress on the design of the Phase Two International study. The aim of the ISAAC Phase Two study is to explore variations in prevalence. This will involve objective measures, assessment of environment and lifestyle and examination of clinical management. The study will require standardised measurements on representative samples of informative populations.

While centres are free to use the modules in local or regional studies if they have the resources, there may be a global approach which will be directed by the Steering Committee and will focus on informative centres.

The ISAAC Modules document should be available by the end of this year and it will include

details of the modules which can be used in Phase Two studies.

Collaborators preparing to carry out studies using any of the Phase Two tools are strongly encouraged to include the Phase One core questionnaires in the design of the study.

## ISAAC Abstracts Presented at the European Respiratory Society Annual Congress, September 1995.

P0332

THE EFFECT OF SEASON ON RESPONSES TO ISAAC QUESTIONS ABOUT ASTHMA, RHINITIS AND ECZEMA IN CHILDREN.

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<sup>1</sup> Department of Community Health, School of Medicine, University of Auckland, Auckland; <sup>2</sup> Department of Paediatrics, School of Medicine, University of Auckland, Auckland; <sup>3</sup> Department of Medicine, Wellington School of Medicine, University of Otago, Wellington; <sup>4</sup> Department of Paediatrics, Christchurch School of Medicine, University of Otago, Christchurch, New Zealand

**Purpose:** To examine whether responses to questions about asthma and allergies are affected by the season in which the questions are asked.

**Methods:** The International Study of Asthma and Allergies in Children (ISAAC) Phase One was undertaken in three New Zealand centres. Approximately 3000 children in each of two age groups per centre (6-7 years; 13-14 years) were studied over three school terms (October-December 1992; February-May 1993; May-August 1993), one third in each term respectively. Standardised questionnaires were used concerning asthma, rhinitis and eczema symptoms. The effect of season was studied with a logistic regression model in European children.

**Results:** For asthma symptoms no seasonal effect was present for 6-7 year olds. For 13-14 year olds there was one question of significance; sleep disturbance due to wheeze in the last 12 months ( $p=0.002$ ). For rhinitis symptoms there was a statistically significant seasonal effect in both age groups across most questions. For eczema symptoms there was no seasonal effect (both age groups).

**Conclusions:** There is no effect of season on responses to questions on eczema symptoms, and most questions on asthma symptoms. There is a seasonal effect on responses to questions on rhinitis symptoms suggesting a recall bias relating to recency of symptoms at times of expected high prevalence.

(Euro Resp J 1995; 8 (Supplement 19: p53s)

P0786

PREVALENCE OF CHILDHOOD ASTHMA (ISAAC) IN FINLAND

J. Pekkanen\*, T. Husman\*, M. Lindberg\*, M. Kajosaari\*\*, A. Koivikko\*\*\*, L. Solminen\*\*\*\*. \*Dept. of Environmental Epidemiology, National Public Health Institute, Kuopio, \*\*Helsinki University Hospital, \*\*\*Turku University Hospital, \*\*\*\*Provincial Government of Lapland, Finland

The prevalence of childhood asthma was studied as part of the International Study on Asthma and Allergies in Childhood (ISAAC). The study will be carried out in the winter of 1994-95 in four areas of Finland among more than 12,000 school children. This report describes the first preliminary results in one of the areas, the study of Kuopio in Eastern Finland. All 17 randomly selected schools participated and 2698 pupils aged 13 to 14 years filled out the ISAAC written and video questionnaires. Children were also asked about smoking and a questionnaire was sent out to the patients. The self-reported prevalence of wheezing during the last 12 months was more common among girls (16%,  $n=1348$ ) than boys (11%,  $n=1350$ ) and increased consistently with smoking (11% among 2006 non-smokers and 20% among 680 occasional and other smokers). A positive reply to any of the three video questions on wheezing during the last year was common among girls (10%) and boys (9%), but more common among smokers (14%) than non-smokers (8%). The self-reported prevalence of asthma was not clearly associated with smoking, but tended to be higher among boys (5.5%) than girls (4.0%). In conclusion, asthma symptoms in the present study were strongly associated with smoking and less prevalent than has earlier been reported in ISAAC.

(Euro Resp J 1995; 8 (Supplement 19: p144s)

## 2455

**PREVALENCE OF ASTHMA IN AUSTRALIAN SCHOOLCHILDREN USING A STANDARDISED INTERNATIONAL PROTOCOL (ISAAC)**

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The International Study of Asthma and Allergy in Childhood was formed to maximise the value of epidemiological research into asthma and allergic disease by establishing a standardised methodology. The use of a standardised methodology to describe the prevalence and severity of asthma, rhinitis and eczema in children living in different centres, will allow comparison within and between countries.

In Australia, three centres, Melbourne, Sydney and Adelaide, participated recruiting a total of 17,041 children. Samples of 6-7 year old and 13-14 year old children were drawn from schools in the metropolitan areas. The 6-7 year old children were issued with a questionnaire for completion by parents and the 13-14 year old children completed the questionnaire in the classroom. The response rates were 91% and 97% respectively.

	N	Current wheeze	Wheeze ever	Asthma ever	Hay fever	Eczema
<b>6-7 year olds</b>						
Melbourne	2881	26.4%	39.7%	27.9%	14.5%	22.1%
Sydney	2638	22.5%	35.2%	24.8%	12.5%	19.0%
Adelaide	3066	26.2%	41.2%	27.4%	23.4%	24.8%
<b>13-14 year olds</b>						
Melbourne	2702	27.4%	38.6%	26.8%	40.7%	16.0%
Sydney	2741	24.8%	35.7%	25.0%	24.8%	9.7%
Adelaide	3013	33.5%	46.1%	30.5%	54.3%	19.9%

Children born in Australia were more likely to report current wheeze [OR 1.86 (1.55, 2.24) for 6-7 year olds and 2.24 (1.94, 2.59) for 13-14 year olds]. Of the 6-7 year olds, 21% had received  $\beta$ -agonists in the last 12 months, 2% cromoglycate and 9% inhaled corticosteroids and for the 13-14 year olds, 16% had received  $\beta$ -agonists in the last 12 months, 1% cromoglycate and 7% inhaled corticosteroids. These results are comparable with other prevalence surveys in Australia and form the basis for international comparison.

(Euro Resp J 1995; 8 (Supplement 19: p495s)

## 2456

**THE PREVALENCE ASTHMA, RHINITIS AND ECZEMA IN ESTONIAN SCHOOLCHILDREN (ISAAC STUDY)**

M.-A. Riikj rvi\*, T. Annus\*\*, K. Joost\*, R. Taba\*, B. Bj rkst n\*\*\*. \*Tallinn Children's Hospital. \*\*Kivim e Hospital, Tallinn, Estonia. \*\*\*Department of Pediatrics, Link ping University, Sweden.

The prevalence of asthma and allergic diseases was studied according to ISAAC written and video questionnaires (WQ and VQ) among 13-14 year old schoolchildren (n=2721) from all estonian-language schools in Tallinn (Estonia) during Nov 1993 - May 1994. The participation rate was 87%. The prevalence of wheezing was reported by 7.6% of the children by WQ and 3.5% by VQ. Doctor's diagnosed asthma was present in 2.8% of the children. Wheezing while exercising in was reported by 8.2% of the children by WQ and by 7.2% of the children by VQ. Allergic rhinitis during last year was reported by 20.8% of the children, allergic rhinoconjunctivitis was prevalent in 4.8%. 9.6% of the children gave positive answers about the itchy rash and 13.7% of the children had had eczema. The prevalence of self-established symptoms of allergic disorders among Estonian schoolchildren was low. The results of this study are in accordance with the results of previous study among 10-12 year old Estonian schoolchildren about low prevalence of allergic diseases in East-European country. The exposure to risk factors, the criteria for asthma definition, attitude to the questionnaires, awareness of allergy problems in the society can influence the low prevalence rates of self-reported questionnaire studies.

(Euro Resp J 1995; 8 (Supplement 19: p495s)

**ISAAC Phase One Data Submitted by 10 November 1995****Anglophone Africa**

Kenya (KEN)  
Nigeria (NGA)

Eldoret, Nairobi  
Ibadan

**Asia-Pacific**China (CHN)

Beijing, Chongqing,  
Guangzhou, Shanghai,  
Wulumugi

Hong Kong (HKG)

Hong Kong

Japan (JPN)

Fukuoka

Malaysia (MYS)

Kota Bharu

Phillipines (PHL)

Metro Manilla

Singapore (SGP)

Singapore

Taiwan (TWN)

Tainan, Taipei

**Eastern Europe/Baltics**Estonia (EST)

Narva, Tallinn

Finland (FIN)

Kuopio county, Lapland  
area, Turku and Pori county

Latvia (LVA)

Riga

Poland (POL)

Krakow, Poznan

Republic of Georgia (GEO)

Tbilisi

Romania (ROM)

Cluj

Russia (RUS)

Moscow

Sweden (SWE)

Link ping

Uzbekistan (UZB)

Tashkent

**North America**USA (USA)

Chicago (2 centres)

**Oceania**Australia (AUS)

Adelaide, Melbourne,  
Sydney, Perth

New Zealand (NZL)

Auckland, Bay of Plenty,  
Christchurch, Hawke's Bay,  
Nelson, Wellington

**Western Europe**France (FRA)

Marseilles, Montpellier,  
Pessac, West Marne  
Funchal, Lisboa, Porto,  
Portimao

Portugal (PRT)

Barcelona, Cartagena,  
Castell n, Pamplona,  
Valencia

Spain (ESP)

Greifswald, M nster

Germany (DEU)

Dublin

Republic of Ireland (IRL)United Kingdom (GBR)

Anglia and Oxford, London,  
Northeast and Yorkshire,  
North Thames, Northwest,  
Scotland, South Thames,  
South and West, Trent,  
Wales, West Midlands

# ISAAC Phase One Data Received by November 1995

