

Coughs, Colds and Wheezes

in Leicestershire

The largest and oldest study of breathing problems in young people in Europe!

Study Participants' Newsletter 2003

March 2003

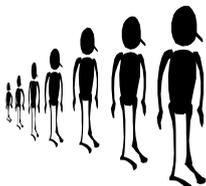


What is it all about?



Coughs, colds, wheezes and asthma are very common in children and young people, causing many visits to the doctor, hospital admissions and reducing quality of life. In spite of this, doctors don't know enough about these breathing problems. We are only just learning which children are likely to grow out of wheeze and cough and which will have asthma later in life. We also don't know how to prevent breathing problems in children and young adults. The study on Coughs, Colds and Wheezes in Leicestershire is the largest study in Europe looking at breathing problems in children. **In this newsletter we'd like to update you on the progress of the study.**

How many children and young people are taking part?



- In 1990, questionnaires were sent to the parents of **1650 infants and toddlers aged between 0 and 5 years. You were one of these children!**
- In 1998, we sent **8700 questionnaires to another set of children aged 1 to 5 years.**

These are very large numbers and the study therefore give us lots of vital information on all the common breathing troubles in children in the 1990's. In addition, most families filled in follow-up questionnaires at regular intervals telling us how the children were getting on. Some children even came to the hospital for breathing tests 10 years ago!



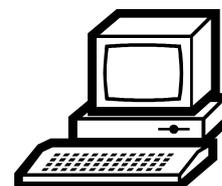
How were the study participants chosen?

The addresses of the families were **chosen at random from all families living in Leicestershire.** We did not know in advance which children had breathing problems. In fact, most participants in this survey were very healthy.

Confidentiality: What happens with the questionnaires?



The questionnaires are treated in the strictest confidence. Only the answers to the questions (but no names or addresses) will be entered into a computer and then analysed anonymously. No individual results will be given to other people (not even to your doctor or to the hospital).



What have we found out?

1. **Answers to questionnaires by parents are very reliable:** Some families have filled in several questionnaires for their child. By comparing these, we have found that the information given by parents is very reliable and their memory of earlier illnesses is good. This encourages us to continue the research.



(Kuehni CE, Brooke AM, Silverman M. Prevalence of wheeze during childhood: Retrospective and prospective assessment. *European Respiratory Journal* 2000;16:81-5)

2. **Wheezing illness in toddlers has become twice as common between 1990 and 1998:** In 1990, 12% of all parents reported that their children aged 1 to 5 years were suffering from wheeze. This number increased to 26% in 1998. Up until now, we have not found out the reasons for this increase. These very important results have been **published in The Lancet, one of the best known weekly journals for doctors in Europe!**

(Kuehni CE, Davis A, Brooke AM, Silverman M. Are all pre-school wheezing disorders increasing in prevalence? *Lancet* 2001; 357: 1821-25).



3. **Childhood immunisations do not increase the frequency of asthma and allergy in children.** When we compared children who got all childhood immunisations with those who didn't, we showed that there was no increase in asthma and wheezing illness in immunised children.



This is in line with other international studies and reinforces the safety of immunisation. (Kuehni CE, Brooke AM, Davis A, Silverman M. Vaccinations as risk factors for wheezing disorders. *Lancet* 2001;358: 1186).

4. **Wheezing illness in pre-school children costs the NHS £53m per year!** We estimated these costs by combining data on frequency of wheeze from our questionnaires and data on the cost of going to the doctor or hospital. This study shows that we need to intensify research to find ways to prevent the development of wheezing in children.

(Stevens CA, Turner D, Kuehni CE, Couriel JM, Silverman M. The economic impact of pre-school asthma and wheeze. *European Respiratory Journal* 2003, in press)



5. **Are wheezing and asthma caused by outdoor air pollution?** We are currently working together with the Leicester City Council, using a new program that estimates exposure to traffic pollution using information from the postcode of the study participant's homes. It allows us to compare respiratory symptoms in our study participants with their exposure to air pollution and road traffic .



That's all for today. We look forward to receiving the next round of questionnaires. These will help us to answer other important questions, such as how many children have grown out of wheeze and how many have newly developed it since the last questionnaire.



**Thank you very much again for your ongoing help in this important research!
The next newsletter will tell you all about the results of the current questionnaire round!**