



# Leicestershire Cohort Studies

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

## Newsletter 2010

### Introduction

**Coughs, colds, wheezes and asthma are common** in young people, causing visits to the doctor, loss of school and working time and affecting quality of life. **In spite of this, doctors don't know enough about these breathing problems.**

We are only just learning which children grow out of wheeze and which will have asthma as adults. We also don't know how to prevent breathing problems in young people.

You are participating in one of the largest studies worldwide looking at these things. **In this newsletter we would like to update you on the progress of the study.**

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### Aims of the studies

The research carried out in the Leicestershire studies will contribute to improved respiratory health in children and adults, both now and in future. We want to know how to treat children better. More importantly, we need to prevent illness developing in the first place and to prevent problems continuing into adulthood.

**Therefore, we continue to collect data from the same children and young people over many years. Many have now reached adult life and stopped growing.** Although the research is carried out in Leicester, UK, the results will apply to people all over the world.

### Confidentiality

#### What happens with the questionnaires?

The questionnaires are treated in the strictest confidence. Only the answers to the questions are 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).

# Participants

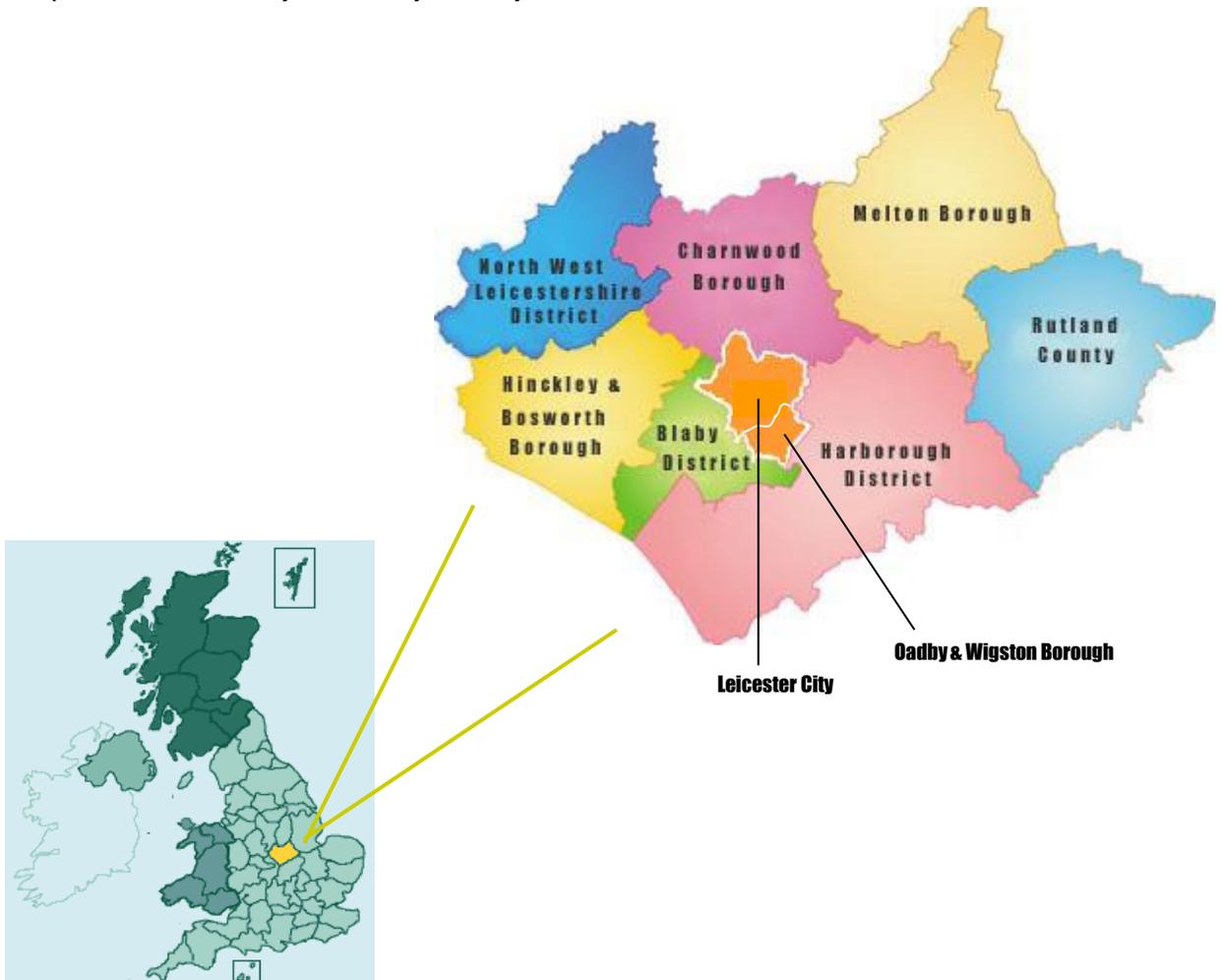
## How many children and young people are taking part?

- A total of 10350 families are part of this research.
- In addition, most families, including you and your parents, have filled in questionnaires at regular intervals.
- Some of you have been attending a special laboratory at the LRI for breathing tests and some have been tested at school.

**These are large numbers and the study therefore gives us a lot of vital information on common breathing troubles.**

## How were the study participants chosen?

The addresses of the families were **chosen at random from all families living in Leicester, Leicestershire and Rutland**. We didn't know in advance which children had breathing problems. In fact, most participants in this survey were very healthy and remain so.



**If you have any questions on the Leicestershire Cohort Studies, please contact**

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## What's new since the last questionnaire?

### 1- Vaccination might help to protect children from asthma

Early and prompt vaccinations in young children don't increase the risk of developing asthma. This is important information, reducing anxiety in parents and encouraging them to have their children vaccinated.

### 2- Snoring is surprisingly common in UK children

Almost 10% of young children snore every night and it is more common in boys! It is twice as common if both parents smoke. Living close to roads with high traffic was a risk factor for snoring.

### 3- Breastfeeding protects against asthma in young children

The effect of being breastfed for 6 months is associated with a reduced risk of asthma in young children even if there is a family history of asthma.

### 4- There is more than one kind of asthma!

We have long suspected that there may be several diseases under the name of "asthma". This is important because they may need different treatments. Using information from the Leicestershire cohorts we found 3 different forms of asthma and 2 different forms of coughing in children.

## Current projects

### Questionnaire survey 2010

Each questionnaire survey is designed to fill gaps in our understanding of asthma. Previously we have collected detailed information on over 10,000 people, beginning when they were babies or toddlers. With your continuing help we will collect information about (1) ongoing or new problems with wheezy breathing, cough or chest tightness and (2) your lifestyle and exposure to risk factors.

Analysis of all this new information, combined with the existing detailed records, will allow us to:

- Improve our definition and understanding of different types of asthma;
- Assess the importance of different risk factors acting in adolescence and early adulthood, such as air pollution, household pets, work exposures;
- Help doctors to know which children are likely to have asthma also as adults, and which might grow out of their breathing problems. Treatment can then be intensified in the first group.

### The Leicestershire School Study

This project aims to help our understanding of how many different types of asthma there are and the role that genes and environmental factors have in making children wheeze.

Large numbers of children who have been involved in our ongoing research agreed to participate in this part of the study. We already have a lot of information about them and are currently carrying out detailed measurements of their lung function and allergic tendencies.

We started visiting schools in June 2008 and have completed the Schools in Leicester City. We have completed the Schools in Leicestershire and Rutland by August 2010.

This is an important project that will help to improve diagnosis and also assist genetic research and case management.

**If you have any questions on Survey 2010 or the Leicestershire School Study, please contact**

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## Current projects

### Lung development & growth (Helium Study)

The purpose of this study is to learn how lungs grow in healthy and ill children and which genes are important in lung growth.

We hope to learn how the lungs grow during early life and whether simple and common problems such as asthma or premature birth can affect the way in which the lungs grow.

This will not provide any advantage to children who take part, but to future generations. In addition, the measurements in the hyper-modern magnetic resonance scanner in Nottingham are great fun!

#### **If you have any questions on Lung development & growth, please contact**

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## Further information

### Homepage of the Leicestershire Cohort Studies

[www.leicestercohorts.org](http://www.leicestercohorts.org)

You will find detailed information on the Leicestershire Cohort Studies, current research activities and results of the previous questionnaire surveys.

## Study team



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