

# The Influence of Maternal Work on the Development of Allergic Diseases

## A PhD project within the Danish National Birth Cohort

Berit Hvass Christensen<sup>1,2</sup>, LR Skadhauge<sup>2</sup>, AM Thulstrup<sup>3</sup>, KS Hougaard<sup>4</sup>, KS Hansen<sup>5</sup>, V Schlünssen<sup>1</sup>

<sup>1</sup>Dept. Of Environmental and Occupational Medicine, Institute of Public Health, AU; <sup>2</sup> Dept. Of Occupational and Environmental Medicine, Hospital of Southern Jutland; <sup>3</sup> Dept. Of Occupational Medicine, Aarhus University Hospital; <sup>4</sup> The National Research Center for The Working Environment, Copenhagen; <sup>5</sup> Paediatric Clinic Gentofte, Juliane Marie Center, RH, Gentofte Hospital

### Background:

The prevalence of allergic diseases has increased in the last 40 years. In spite of thorough research the reason for this increase is not fully understood. Animal studies show that prenatal exposure can induce allergic diseases in the offspring.

### Cohort:

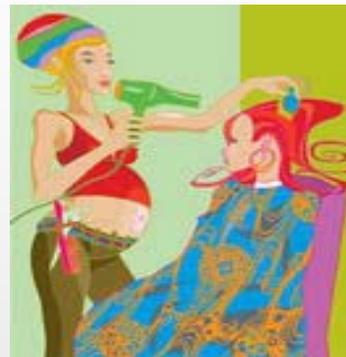
Population and data material derives from The National Danish Birth Cohort ("Better Health for Mother and Child", DNBC) The cohort includes data from more than 100.000 pregnancies in Denmark and was established in the years 1996- 2002 to contribute to the knowlegde on how pregnancy affects health of the child.

### Aim:

The purpose of this study is to explore whether occupational exposures (for example allergens and other asthmatogens) during pregnancy is associated with the development of allergic disease in the offspring.

### Perspective:

It is our hope that this study will contribute to further knowledge about the impact of occupational exposure during pregnancy on the development of allergic diseases. This knowledge might be important in the future working environment counselling of pregnant women.



### Methods:

In this study around 60.000 children from women who have answered the 7 year electronic questionnaire, will be included. The cohort contains information about prenatal occupation and the children's prevalence of Wheeze, asthma, rhinitis and atopic dermatitis at 1½ and 7 years. Additional information about occupational exposure during pregnancy will be provided via Asthma specific Job Exposure Matrixes and the Danish Ministry of Employment's DREAM Database. Additional information about health outcomes will be provided in The Danish National Birth Registry, and The Danish National Patient Registry.

