

# Risk of negative birth outcome, when exposed to adverse psychosocial work environment during pregnancy

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## Background

Studies in animals and humans show that prenatal stress is affecting development and behaviour of the offspring by increasing the risk of congenital malformations, preterm birth, low birth weight and behavioural problems.

Numerous studies have examined the effects of prenatal exposure to stress on birth outcomes but very few studies have focused on the impact from the psychosocial work environment.

## Methods

Population and data material is the **Danish National Birth Cohort (DNBC)**.

The cohort includes interview data from more than 100,000 pregnant women during pregnancy and after birth.

Exposure data on psychosocial workplace factors is self-reported data from week 16 of pregnancy, which allow assessment in relation to the dimensions of the Karasek Job Strain Model.

*Do you feel overworked in your job?*

		Seldomly	From time to time	Often
Do you have any influence on your working conditions?	Seldomly	Passive		High Strain
	Often	Low Strain		Active

Data related to endpoints (gestational age, birth weight, congenital malformations, allergy, obesity and ADHD) are obtained by from the interviews, the Medical Birth Register and the National Hospital Discharge Register

## Aim

This project aims to investigate the association between pregnant women's exposure to adverse psychosocial work environment and risk of adverse pregnancy outcome or impact of the child's later development

## Results

The Ph.D. project will result in four papers testing the association between job stress and four groups of endpoints:

- 1) SGA, preterm birth and congenital malformations
- 2) Asthma and allergies
- 3) Obesity
- 4) ADHD

Before data-processing a study protocol will be worked out in details in accordance with guidelines for Good Epidemiological Practice.

## Discussion

It is of major public health importance to investigate if exposure to adverse psychosocial workplace factors during pregnancy has impact on the health of the offspring. Results from this project can contribute to securing an optimal work environment for pregnant women.