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## Scientific evidence about adverse effects of working conditions must be used in counseling before conception and during early pregnancy

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**Introduction & Aim:** To find and use scientific evidence about the influence of working conditions on reproductive outcomes for practical use in a guideline for occupational and a website for pregnant women, parents to be, health care professionals and policy makers.

**Methods:** We searched the literature for evidence concerning the effects of working conditions before, and during pregnancy on pregnancy outcome and development during early childhood. The working conditions with effects on pregnancy outcome were summarized in six groups: physically or mentally heavy work, shift work, chemical substances, physical factors (like noise) and infections. We looked at the following pregnancy outcomes spontaneous abortions, preterm birth, low birth weight, hypertension and congenital malformations and developmental problems at early school age.

**Use of Evidence:** A practical guideline was made for occupational physicians in Netherlands and was recently updated. It can be used by physicians in advising pregnant women and women breastfeeding their child. In another report preconception care: a good beginning, the chapter about working conditions underlines the effect of exposure before conception on the embryo and fetus. In the third place the evidence was used on websites, for parents to be or pregnant women and can be used for preventive measures regarding working conditions preconceptionally or during pregnancy.

**Conclusion:** There is growing evidence that working conditions before and during pregnancy can increase the number and severity of pregnancy complications. There is also evidence that early intervention can prevent this increase of pregnancy complications. The available evidence has been used for a guideline for occupational physicians and on a website for parents to be in order to take preventive measures. A summary of the evidence will be presented together with examples to use the evidence in counseling before conception and during early pregnancy.

### Biography

Teus Brand is an occupational Physician working in The Netherlands. He developed expertise in finding and evaluating literature on the adverse effects of working conditions on pregnancy outcomes and making the information available for health professionals in every day practice. Therefore, a Dutch guideline on this topic has been written in 2007 as well as a part of a publication of the Health Council of The Netherlands on preconception care. Recently, the guideline has been updated. And in the new preconception indication list, the information on the effects of preconceptional exposure of hazardous working conditions will soon become available to health professionals involved in obstetric care such as general practitioners, midwives, gynecologists and occupational physicians.

### Notes: