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**American Journal of Epidemiology**

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Am. J. Epidemiol. (2001) 154 (4): 316-321. doi: 10.1093/aje/154.4.316

## Infertility among Women Exposed Prenatally to Diethylstilbestrol

Julie R. Palmer<sup>1</sup>, Elizabeth E. Hatch<sup>2</sup>, R. Sowmya Rao<sup>1</sup>, Raymond H. Kaufman<sup>3</sup>,  
Arthur L. Herbst<sup>4</sup>, Kenneth L. Noller<sup>5</sup>, Linda Titus-Ernstoff<sup>6</sup> and Robert N. Hoover<sup>2</sup>

+ Author Affiliations

Received June 15, 2000.  
Accepted January 17, 2001.

### Abstract

Although it is well established that women exposed to diethylstilbestrol in utero have an increased risk of spontaneous abortion, ectopic pregnancy, and preterm delivery, it is not known whether they also have an increased risk of infertility. The authors assessed this question in data from a collaborative follow-up study of the offspring of women who took diethylstilbestrol during pregnancy. In 1994, 1,753 diethylstilbestrol-exposed and 1,050 unexposed women from an ongoing cohort study (National Cooperative Diethylstilbestrol Adenosis Study and Dieckmann cohorts) provided data on difficulties in conceiving and reasons for the difficulty. Age-adjusted relative risks were computed for the association of diethylstilbestrol exposure with specific types of infertility. A greater proportion of exposed than unexposed women were nulligravid (relative risk (RR) = 1.3, 95% confidence interval (CI): 1.1, 1.5), and a greater proportion had tried to become pregnant for at least 12 months without success (RR = 1.8, 95% CI: 1.6, 2.1). Diethylstilbestrol exposure was significantly associated with infertility due to uterine and tubal problems, with relative risks of 7.7 (95% CI: 2.3, 25) and 2.4 (95% CI: 1.2, 4.6), respectively. The present findings indicate that diethylstilbestrol-exposed women have a higher risk of infertility than do unexposed women and that the increased risk of infertility is primarily due to uterine or tubal problems.

**Key words** diethylstilbestrol infertility

**Key words** CI, confidence interval

DESAD, National Cooperative Diethylstilbestrol Adenosis Study OR, odds ratio

RR, relative risk

Women who were exposed to diethylstilbestrol in utero commonly have malformations of the uterus, cervix, and fallopian tubes, all of which are associated with a higher prevalence of unfavorable pregnancy outcomes (1-9). Spontaneous abortion, ectopic pregnancy, and preterm delivery are more common among diethylstilbestrol-exposed women (9). Whether diethylstilbestrol-exposed women also have more difficulty achieving pregnancy is unresolved. The two most informative previous studies on this question provide conflicting results (2, 10). The present study is based on the continued follow-up of the two cohorts previously studied (2, 10) and provides information on whether diethylstilbestrol-exposed women are at higher risk of infertility and, if so, which factors contribute to the infertility.

### MATERIALS AND METHODS

#### Subjects

Two cohorts are included in the present study. The larger consists of women

