

## A Second European Study Shows Birth Defects In DES Grandsons

### American Researchers Do Not Get The Same Results

“Prevalence of hypospadias in grandsons of women exposed to diethylstilbestrol during pregnancy: a multigenerational national cohort study,” *Fertility and Sterility*, Nicolas Kalfa, et al., available online April 2, 2011.

#### Reviewed by Kari Christianson

This study by researchers in France focuses on the incidence of hypospadias in DES Grandsons. Similar to a study from The Netherlands published in 2002, the French team found a “significant” incidence of hypospadias (a birth deformity in which the urethra, that carries urine, ends before reaching the tip of the penis) among the grandsons of women who were given DES during pregnancy.

In this French study of 1,000 pregnancies in which DES was given and 180 pregnancies without DES, 8 out every 100 DES Grandsons were born with hypospadias.

The National Cancer Institute (NCI) DES Follow-up Study in their 2005 review did not find a greatly increased risk of hypospadias in DES Grandsons, based on the overall incidence in the United States. According to the Centers for Disease Control and Prevention (CDC), in the U.S. about

4 out of every 1000 boys are born with hypospadias.

In addition to the different findings, there is not complete understanding of the developmental mechanisms that cause hypospadias.

In reporting on this study Reuters Health News sought the perspective of NCI DES Follow-up Study principal investigator and professor at Dartmouth Medical School Linda Titus-Ernstoff, Ph.D. While not involved with the French research, she was able to comment on it and said, “If (defects) are being transmitted to the third generation – and it’s not 100 percent certain that they are — we don’t know how that’s happening.”

Among the possibilities listed by Reuters Health was egg damage during the fetal development of a DES Daughter, which then cause the hypospadias defect in her son, or that DES could alter genes and this change could be passed down to subsequent generations. Or, as Titus-Ernstoff is quoted, “It could be nothing.”

Even without different findings about the incidence of hypospadias in DES Grandsons, more research is needed to understand *how* DES, and other endocrine disrupting substances, harms our health and the environment.