

# TAB 1: WHAT WE KNOW ABOUT DES

## Overview

Diethylstilbestrol (DES) is a synthetic estrogen that was developed to supplement a woman's natural estrogen production. First prescribed by physicians in 1938 for women who experienced miscarriages or premature deliveries, DES was originally considered effective and safe for both the pregnant woman and the developing baby. In the United States, an estimated 5–10 million persons were exposed to DES during 1938–1971, including women who were prescribed DES while pregnant and the female and male children born of these pregnancies. In 1971, the Food and Drug Administration (FDA) issued a Drug Bulletin advising physicians to stop prescribing DES to pregnant women because it was linked to a rare vaginal cancer in female offspring.

More than 30 years of research have confirmed that health risks are associated with DES exposure. However, not all exposed persons will experience the following DES-related health problems.

- Women prescribed DES while pregnant are at a modestly increased risk for breast cancer.
- Women exposed to DES before birth (in the womb), known as DES Daughters, are at an increased risk for clear cell adenocarcinoma (CCA) of the vagina and cervix, reproductive tract structural differences, pregnancy complications, and infertility. Although DES Daughters appear to be at highest risk for clear cell cancer in their teens and early 20s, cases have been reported in DES Daughters in their 30s and 40s (Hatch, 1998).
- Men exposed to DES before birth (in the womb), known as DES Sons, are at an increased risk for non-cancerous epididymal cysts.

Researchers are still following the health of persons exposed to DES to determine whether other health problems occur as they grow older.

Whether you know for sure or suspect you were exposed to DES, you can use CDC's DES Update to learn more about what DES exposure means and what you can do about DES. This section of CDC's DES Update includes the following information.

- **DES: Yesterday, Today, Tomorrow** – A history of DES and what to look for about DES in the future.
- **CDC's DES Update** – An overview of CDC's DES health education program, including a timeline of the history of DES and a list of partner organizations.
- **CDC's DES Update in Brief** – A summary card to help start a discussion about DES. Take this card to your health care provider and share it with family and friends.
- **Known DES Health Effects** – In-depth information about the health effects found in women prescribed DES while pregnant, DES Daughters, and DES Sons.
- **Understanding DES Research** – Information on DES research, including how to decide whether a source of information is reliable, what can be learned about human health risks from laboratory animal studies, and the role of cohort studies in DES research.