

Adolescence

Puberty

Ovarian estrogen production may trigger additional epigenetic changes

Fetal period

Epigenetic reprogramming of cellular signals in:

F1: Somatic cells

F1: Germ cells →
F2: Somatic cells &
F2: Germ cells etc.

Maternal exposure to DES during pregnancy

Daughters

2-fold increase in BREAST CANCER

Granddaughters

Great granddaughters

Exposure to cancer initiating factors (carcinogens, radiation, etc)

Adulthood

Epigenetic silencing of genes protecting against cancer and activation of genes promoting cancer

Increase in number of TEBS/TDLUs where breast cancer is initiated

