Reproductive patterns and exposure to reproductive hormones play a role in the development of some cancers in women. Economic, political and social shifts in the last century have been marked by profound changes in sexual maturation and reproductive patterns. These changes have led to increased lifetime number of monthly menstrual cycles, which is associated with higher risk of breast, endometrial and ovarian cancers. Although not fully understood, one mechanism that could underlie these relationships is increased exposure to endogenous estrogen and progesterone levels. Other aspects of menopause may play a role in the development of some types of ovarian cancers. Longer term breastfeeding is associated with a lower risk of most types of breast cancer likely through cessation of the menstrual cycle, changes to the hormonal milieu, and profound cellular changes to the breast tissue.

While shifting patterns of reproductive factors, such as decreasing age at menarche, increasing age at first birth, and fewer births per woman, continue in many developing countries—and may have contributed to increases in incidence rates for hormone-related cancers—these trends have plateaued in many developed countries. Although use of fertility drugs is a relatively new exposure, early studies indicate that use of these powerful hormones does not increase cancer risk. Menopausal hormone therapy increases risk of breast and endometrial cancer dependent on formulation, timing of use, and body size, but may be associated with a decreased risk of colorectal cancer.

Increasing breastfeeding duration from present levels to 12 months per child in high-income countries and 2 years per child in low- and middle-income countries could avert 22,000 breast cancer deaths per year.

The number of births per woman has decreased to 2 or fewer in most high-HDI countries.