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Endocrine disruptors and female reproductive health

Globally, women are experiencing more reproductive disorders, and exposure to chemicals that disrupt the endocrine system (EDCs) play a role in this. Continuous exposure to these substances at low doses is inevitable as they are present in our daily lives. **Better regulation could protect women's health.**

1 in 6

people globally affected by infertility

60,000

approximate number of industrial chemicals on the market globally

€163bn+

estimated annual costs related to effects of exposure to EDs in the EU

What role do EDCs play in female reproductive health

Female reproductive development begins in fetal life with the formation of the ovaries and the differentiation of oocytes (eggs). This is followed by the development of secondary sex characteristics and the establishment of the hypothalamic–pituitary–gonadal axis, which is essential for postnatal reproductive function.

These developmental processes are all sensitive to environmental EDCs, which can be transferred from the pregnant mother to the fetus. Disruption of these critical windows of development may predispose women to reproductive disorders later in life.

Reproductive disorders linked to EDCS

- Premature ovarian insufficiency
- Early or late onset of puberty
- Infertility
- Early menopause
- Irregular cycles
- Polycystic ovary syndrome (PCOS)
- Reproductive cancers

Sources: Parent, A et al. (May 2025), ENKORE policybrief (2025), WHO (2023)

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