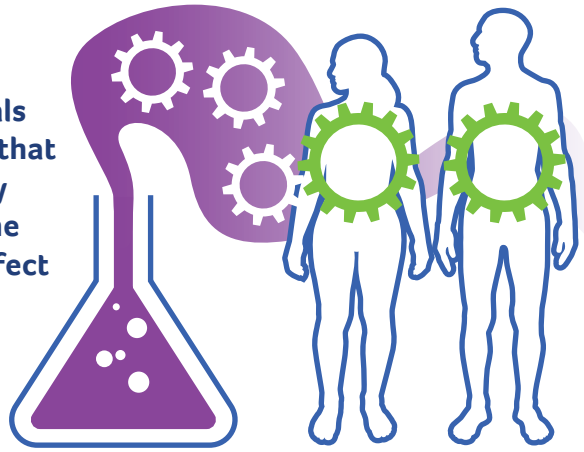
Endocrine Disrupting Chemicals (EDCs): A Hidden Threat to Fertility

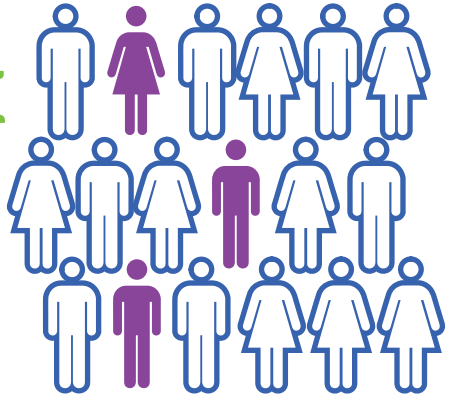
EDCs

EDCs are chemicals or their mixtures that interfere with any aspect of hormone action and can affect regular growth, metabolism, and reproduction



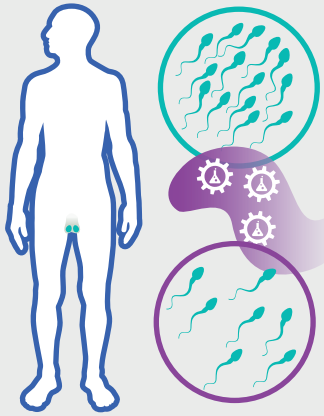
Nearly **100%** **of the global population** **has detectable levels of EDCs in their bodies**[1]

About **1 in 6** **PEOPLE** **around the world are currently affected by infertility during their lifetime**[2]



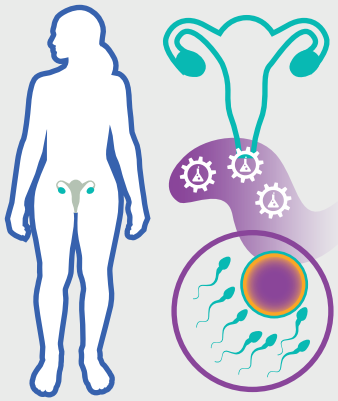
EDC exposure reduces fertility

EDC exposure lowers the chances of a live birth in IVF treatments[3]



Male

- Exposure to EDCs impairs sperm quality, lowers sperm number and reduces motility[4]
- Sperm counts have more than halved over the past five decades worldwide, and the pace of decline continues to increase[5]



Female

- Exposure to EDCs can harm the ovaries, leading to lower fertility[6]
- EDCs reduce egg quality, leading to lower fertility and higher miscarriage rates[7]

Sources of exposure

EDC exposure comes from chemicals in plastics, pesticides, industrial compounds, flame retardants, personal care products, contaminated food and water, as well as through air, household dust, skin contact, and in-utero exposure.

EU policymakers should strengthen regulations to protect people from EDC exposure

1. **Faniband M, et al. (2014)** Human biological monitoring of suspected endocrine-disrupting compounds.
2. **Cheng X, et al. (2025)** Global, regional, and national burden and trend of infertility and its subtypes from 1990 to 2021, with projections to 2035.
3. **Yuan M, et al. (2025)** Association of bisphenol A exposure with in vitro fertilization outcomes: A meta-analysis and systematic review.
4. **Lahimer M, et al. (2023)** Endocrine disrupting chemicals and male fertility: from physiological to molecular effects.
5. **Levine H, et al. (2022)** Temporal trends in sperm count: a systematic review and meta-regression analysis of samples collected globally in the 20th and 21st centuries.
6. **Panagopoulos P, et al. (2023)** Effects of endocrine disrupting compounds on female fertility.
7. **Li J, et al. (2024)** The effect of endocrine-disrupting chemicals in follicular fluid: The insights from oocyte to fertilization.

For further reading also see the ESHRE factsheets on this topic: https://www.eshre.eu/Press-Room/Resources/Fact-sheets

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