



# Environmental Pollutants and Reproductive Health: A Comprehensive Overview

## Introduction

Environmental pollutants pose a significant threat to reproductive health, impacting fertility, pregnancy outcomes, and the overall well-being of future generations.

Endocrine-Disrupting Chemicals (EDCs), Bisphenol A (BPA) is a chemical produced in large quantities for use primarily in the production of polycarbonate plastics. And phthalates, a group of chemicals used to make plastics more durable are known to disrupt hormonal balance, by mimicking or blocking female hormones, suppressing the hormones involved in male sexual development. Contributing to infertility, Polycystic Ovarian Syndrome (PCOS) and related reproductive abnormalities. [1]

Fine particulate matter (PM2.5) in air has been shown to accumulate in the reproductive organs through blood-testis barrier, placental barrier, epithelial barrier etc and disrupt hormone levels and so does polycyclic aromatic hydrocarbons (PAHs) a pollutant found in air, specifically in rich in active and passive tobacco smoking, specific cooking methods, and pesticides, correlate with increased risks of miscarriage and preterm birth. [2]

Glyphosate is a broad-spectrum systemic herbicide and crop desiccant. It is an organophosphorus

compound, has been linked with low sperm quality and other hormonal disruptions.

Environmental pollutants have been suspected to contribute to infertility, reduced sperm quality, miscarriage, preterm birth, hormonal imbalances, birth defects, developmental disorders, endometriosis, and reproductive cancers. [3]


## Conclusion

Understanding the intricate pathways through which environmental pollutants impact reproductive health is crucial for public health initiatives. Continued research, stringent regulations, and individual awareness are essential to mitigate these adverse effects and foster a healthier environment for current and future generations.

## References

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**Dr. Sudharsan Vasudevan** 

Consultant,  
Indian Council of Medical Research Headquarters,  
New Delhi,  
India.

**Email ID:** [dr.sudharsan.pcos@gmail.com](mailto:dr.sudharsan.pcos@gmail.com)