

## **EFFECTS OF ENVIRONMENTAL FACTORS ON REPRODUCTIVE HEALTH**

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**Abstract** Reproductive fitness refers to physical, emotional, social and well-being disorders associated with the reproductive system. Genetics and organic elements have a significant impact on reproduction outcomes, but environmental factors have grown to become increasingly important determinants of reproductive fitness. Over the past decades, environmental awareness of contamination, chemicals and toxins has been linked to many adverse effects on reproductive fitness, including infertility, miscarriage, premature babies, and developmental disorders. These environmental pollution affect all male and reproductive systems for the effects of men and loud voice, and in some cases can have cross-generational consequences.

**Keywords:** Environmental factors, reproductive health, endocrine-disrupting chemicals, infertility, air pollution, heavy metals, climate change, endocrine disruption, oxidative stress, inflammation, climate change and reproductive health.

Environmental elements including endocrine compounds (EDCs), air pollution, heavy metals and weather trade are essential participants in reproductive fitness station issues. EDCs are synthetic or herbal compounds that penetrate the body's endocrine machines that regulate twice as much hormones. These compounds are found in a variety of customer products, along with plastics, pesticides, cosmetics and food packaging. Important EDCs, bisphenol A (BPA), phthalates, and insecticides have been shown to contain regular functions of the reproductive system due to many health issues. For example, BPA was often determined by diet and water bottles, and exposure was associated with altered hormonal regions, reduced sperm permission, and altered ovarian function. In

women, BPA exposure was associated with polycystic ovarian syndrome (PCOS) and the risk of spreading early menopause. Plastic acid esters can be used as plasticizers and were found in gadgets for personal hygiene, air cleaners, and diet, and were associated with poor fertility effects in men, consisting of reduced anti-sperm. In women, phthalates were associated with irregular menstrual cycles and lower birth rates. Pesticides in which many EDCs work were involved in reduced sperm counts in offspring, miscarriage, and developmental issues.

Air pollutants are other environmental factors that have been proven to achieve adverse reproductive fitness outcomes. Pollutants such as comfortable particles (PM<sub>2.5</sub>), volatile organic compounds (VOCs), and nitrogen dioxide (NO<sub>2</sub>) are common in urban environments and have low reproductive results. In adult men, air pollutants public relations can reduce sperm count, motility and morphology. Long-term advertising of these contaminants can lead to oxidative stress, which damages sperm DNA, causing infertility and initiation errors. In women, air pollutants were associated with hormonal imbalances, irregular menstrual cycles, and diseases such as endometriosis and PCOS. Furthermore, prenatal exposure to air pollutants increases the threat of premature babies, low birth weight and fetal developmental disorders.

Heavy metals such as lead, mercury, arsenic and cadmium are environmental pollutants that can be collected in the body and destroy the breeding function. Lead ads were associated with lower birth rates for both women and men. In men, motility and sperm count can be reduced if it impairs ovulation in women and leads to miscarriage. Mercury exposure to contaminated seafood was particularly associated with decreased sperm first class in males and increased developmental errors and fetal mortality in females. Cadmium, usually found in tobacco smoke and industrial pollutants, has shown that it impairs ovarian properties in women and reduces sperm motility in men.

Increased temperatures have been shown to have a negative effect on the reproductive characteristics of all humans and animals. In men, excessive ambient temperatures can affect sperm production. In women, fever stress can interfere with the

menstrual cycle and affect ovarian function. Extreme weather activities such as hurricanes, floods and droughts can interfere with health care and gain entry and simple water substances. Additionally, these activities can exacerbate existing environmental hazards, such as air pollution, which can damage reproductive health. Changes in weather patterns can affect infectious disease prevalence and sexually transmitted diseases (STIs) and reproductive health. The growth of diseases such as the Zika virus has raised concerns about the consequences in pregnancy and fetal development.

A large number of techniques are desired when reducing the impact of environmental factors on reproductive fitness. Governments and regulatory companies need to tighten regulations to limit the use of harmful chemicals and contamination. This is to prohibit or limit the use of endocrine compounds in consumer products and implement stricter air quality standards. Campaigns for public knowledge can clarify people about the dangers of environmental pollutants and manage public relations. It consists of using non-toxic household products and promoting advocates for safer food packaging. Furthermore, the development and implementation of inexperienced technologies, including electric engines and renewable energy sources, can help reduce environmental pollutants and their consequences on reproductive health. Healthcare airlines operate in individuals and business environments with high public relations and play a role in using persecution of individuals who provide early interventions to prevent destructive reproductive outcomes.

The surrounding elements serve a considerable role in designing reproductive fitness effects. A developing research framework that emphasizes the desire that the harmful effects of endocrine-inhibition chemicals, air pollution, heavy metals and weather changes require a complete strategy to reduce these risks. By impose stronger rules and promoting public awareness and inspiration for sustainable practices, we can reduce the weight of pollution on reproductive fitness and improve the general aesthetics of a fateful generation.

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