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**ENVIRONMENTAL INFLUENCE ON REPRODUCTIVE HEALTH**

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The health status of an individual is determined by the interplay of two factors — the internal environment of the body and the surrounding external environment. Clean air, potable water and a toxin-free diet goes a long way in ensuring good health. Biohazardous compounds, some of which act as endocrine disrupters, are being increasingly implicated in infertility, menstrual irregularities, spontaneous abortions, birth defects, endometriosis and breast cancer. In some cases, women are at a greater risk than men, especially with the rise in environmental estrogens. Previously, obstetricians were not very aware of the impact of the environment on reproductive health.

The modern obstetrician is now aware of the role of environmental factors on the reproductive process, directly or indirectly. Water pollution can cause dysentery, typhoid, viral hepatitis, etc., which, in turn, can result in preterm birth and low birth weight babies. Occupational pulmonary diseases such as asbestosis or silicosis can also adversely affect reproductive health. Environmental issues are assuming new importance as more and more pregnant women and children are being exposed to increasingly polluted environments. The wave of industrialization, consumer oriented life styles, abuse of pesticides, disinfectants and insecticides are responsible for disturbance in the ecological balance. Although not an environmental estrogen, dioxin, one of the most toxic chemicals in the environment, is capable of blocking estrogen action, lowering levels of androgens (male hormones), and affecting the amount of thyroid hormones produced. It can also affect insulin levels and the amount of glucocorticoid secreted by the adrenals. It has also been implicated as a cause for endometriosis. Exposure of pregnant animals to very low levels of dioxin can damage the reproductive system of the offspring, resulting in a decreased sperm count and altered mating behavior. Many pollutants mimic estrogen and may be responsible for breast and uterine tumors.

Many exposures may play an active or potential role in many conditions. On the other hand, it is also likely in many cases that occupational and environmental factors may be red herrings. Many supposed household exposures may fall into one of these categories. Many suspected links between women’s health problems and environmental exposures exist. Some, like the VDT and spontaneous abortion issues, will not hold up under good scientific research — others may. These would include tobacco smoke, second-hand smoke, household exposures (i.e. radon, solvents and other chemicals), alcohol, and heavy metals. From the occupational and environmental medicine perspective, there are many priority research needs in the area of women’s health and environment. There needs to be a greater awareness and greater vigilance to this growing problem that will only grow in magnitude as we move into the 21st century.