Environmental Impacts on Reproductive Health and Fertility
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Preface

The seemingly simple question “Why”? is motivating growing awareness and concern about ubiquitous chemicals in our environment and their effect on reproductive health. Why are there fewer frogs? Why can’t I get pregnant? Why do some of my patients always miscarry? Why does my child have a birth defect? Why did my young daughter get cancer? This book seeks to help us link the science of environmental health to this chorus of why. With observed increases in reproductive disorders and declines in reproductive function, a rapidly expanding body of scientific evidence indicates that a number of reproductive and developmental health problems may be caused by exposure to chemicals that are widely dispersed in our environment and with which we come into contact on a daily basis. These problems include male and female infertility, miscarriage, poor pregnancy outcomes, abnormal fetal development, early puberty, endometriosis, polycystic ovarian syndrome, uterine fibroids, and diseases and cancers of reproductive organs. The compelling nature of the collective science, with observations in humans, animal models, and wildlife, has resulted in recognition of a new field of environmental reproductive health. Environmental reproductive health focuses on exposures to environmental contaminants, particularly during critical periods in development (such as prior to conception and during pregnancy), and their potential effects on all aspects of the reproductive life course, including conception, fertility, pregnancy, child and adolescent development, and adult health. This book reviews science in key areas of the relationship between environmental contaminants and reproductive health outcomes, integrating insights from scientific disciplines in environmental health and clinical and public health fields. It also provides recommendations on efforts toward prevention in clinical care and public policy.

If elements of the environment we create are contributing to the decline in our reproductive health and capacity, then we have, in our hands, the ability to reverse this trend. This book is intended to lay the foundation for those who want to understand the science better, whether they are scientists, clinicians, nurses and other healthcare professionals, public and environmental health practitioners, and motivates further contributions in research, clinical care, and policy toward creating healthier environments for this and future generations.

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