

Occurrence of Endocrine Disruptors in the Environment and their Impact on the Human and Wildlife Health †

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Abstract: Within the recent decades, the concept of endocrine-disrupting chemicals (EDCs) has been increased because of different types of industrially manufactured chemicals that have become widespread contaminants and cause harmful effects to both humans and wildlife. According to US Environmental Protection Agency (EPA), EDCs are the exogenous substances that may interfere with the synthesis, secretion, transport, metabolism, receptor binding activity, or alteration of endocrine and homeostatic systems. A very large number of chemicals [Industrial: Dioxins, polychlorinated biphenyls (PCBs), agricultural products (pesticides, insecticide, herbicides, phytoestrogens), residential products (phthalates, polybrominated biphenyls, bisphenol A), Pharmaceutical and a few heavy metals such as cadmium, lead, mercury, and arsenic.] have been identified as the endocrine disruptors. Humans and wild animals may be exposed to these chemicals as part of their daily routine like dietary and from their environment, as EDCs have persisted in the environment due to the rapid industrialization and realize of industrial by-products that have resulted in deleterious outcomes. This review explores the compiled study of the current knowledge on the sources, bioaccumulation, and the extent of the toxicity of EDCs. It also discusses the detection techniques and their management strategies.

Keywords: endocrine disruptors; bioaccumulation; mitigation; human health; wildlife.

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Conflicts of Interest

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