

Environmental pollutants and health

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Environmental effects on health are in many cases preventable in contrast to genetic impact. Industrial chemicals have been produced only during the last 150 years and the production has multiplied during our time. Unfortunately many of the good products turned out to be bad pollutants affecting our health. Thanks to the Stockholm convention, the amount of persistent organic pollutants is declining, and now the main attention is on less persistent compounds that interfere with physiology, including endocrine and immune systems, central nervous system, and most importantly, their development. The incidence of non-communicable diseases is increasing and many environmental chemicals are associated with their pathophysiology. Endocrine disrupting chemicals can contribute to reproductive disorders and cognitive development by inhibiting hormone production and action at critical developmental phases. Anti-androgenic chemicals cause genital malformations and poor semen quality experimentally and most likely in humans, too. Anti-thyroid chemicals can cause severe adverse effects in central nervous system in fetuses and infants. Currently the greatest problem is the lack of knowledge about the health effects of the majority of chemicals in use.