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**Appendix A5**

**Health Effects from POPs**

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## APPENDIX A5 HEALTH IMPLICATIONS of POPs

The actual implications of chronic and acute exposure to POPs is not fully understood. However, laboratory investigations and epidemiological studies have indicated that exposure to POPs can be associated with the following health effects in humans (Ritter *et al.*, 1995; Solomon and Schetter 2000):

- Immune dysfunctions;
- Endocrine disruption;
- Reproductive anomalies and deficits;
- A shortened period of lactation in nursing mothers;
- Neurological deficit and behavioral impairment (e.g., learning disorders, attention deficits);
- Diabetes (Rylander *et al.* 2005); and
- Cancer.

### Box 1: Carcinogenic risk of POPs.

The International Agency for Research on Cancer identifies most of the 12 POPs targeted by the Stockholm Convention as presenting a potential carcinogenic risk to humans, as described in the table below.

IARC Classification	POPs
<b>Group 1:</b> The agent (mixture) is carcinogenic to humans	2,3,7,8-Tetrachlorodibenzo- <i>para</i> -dioxin (TCDD)
<b>Group 2A:</b> The agent (mixture) is probably carcinogenic to humans	Mixtures of polychlorinated biphenyls (PCB)
<b>Group 2B:</b> The agent (mixture) is possibly carcinogenic to humans	Chlordane DDT Heptachlor Hexachlorobenzene Mirex Toxaphene (mixtures of Polychlorinated camphenes)
<b>Group 3:</b> The agent (mixture or exposure circumstance) is unclassifiable as to carcinogenicity in humans	Aldrin Dieldrin Endrin Polychlorinated dibenzo- <i>para</i> -dioxins (other than TCDD) Polychlorinated dibenzofuran

Source: [http://www.chem.unep.ch/gpa\\_trial/02health.htm](http://www.chem.unep.ch/gpa_trial/02health.htm)