

CHAPTER 8. REFERENCES

- Abdelouahab N, Mergler D, Takser L, et al. 2008. Gender differences in the effects of organochlorines, mercury, and lead on thyroid hormone levels in lakeside communities of Quebec (Canada). *Environ Res* 107(3):380-392. <http://doi.org/10.1016/j.envres.2008.01.006>.
- Abou-Arab AA. 1999. Behavior of pesticides in tomatoes during commercial and home preparation. *Food Chem* 65:509-514.
- Adamson RH, Sieber SM. 1979. The use of nonhuman primates for chemical carcinogenesis studies. In: *Regulatory aspects of carcinogenesis and food additives: The Delaney Clause*. San Francisco: Academy Press, 257-296.
- Adamson RH, Sieber SM. 1983. Chemical carcinogenesis studies in nonhuman primates. *Basic Life Sci* 24:129-156. http://doi.org/10.1007/978-1-4684-4400-1_7.
- Adamsson A, Salonen V, Paranko J, et al. 2009. Effects of maternal exposure to di-isobutylphthalate (DINP) and 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (p,p'-DDE) on steroidogenesis in the fetal rat testis and adrenal gland. *Reprod Toxicol* 28(1):66-74. <http://doi.org/10.1016/j.reprotox.2009.03.002>.
- Addison RF, Stobo WT. 2001. Trends in organochlorine residue concentrations and burdens in grey seals (*Halichoerus grypus*) from Sable Is., NS, Canada, between 1974-1994. *Environ Pollut* 112(3):505-513.
- Adeshina F, Todd EL. 1990. Organochlorine compounds in human adipose tissue from north Texas. *J Toxicol Environ Health* 29(2):147-156. <http://doi.org/10.1080/15287399009531379>.
- Agarwal N, Sanyal S, Khuller GK, et al. 1978. Effect of acute administration of dichlorodiphenyl trichloroethane on certain enzymes of Rhesus monkey. *Indian J Med Res* 68:1001-1006.
- Agay-Shay K, Martinez D, Valvi D, et al. 2015. Exposure to endocrine-disrupting chemicals during pregnancy and weight at 7 years of age: A multi-pollutant approach. *Environ Health Perspect* 123(10):1030-1037. <http://doi.org/10.1289/ehp.1409049>.
- Agthe C, Garcia H, Shubik P, et al. 1970. Study of the potential carcinogenicity of DDT in the Syrian golden hamster. *Proc Soc Exp Biol Med* 134(1):113-116. <http://doi.org/10.3181/00379727-134-34740>.
- Aigner EJ, Leone AD, Falconer RL. 1998. Concentrations and enantiomeric ratios of organochlorine pesticides in soils from the U.S. Corn Belt. *Environ Sci Technol* 32(9):1162-1168. <http://doi.org/10.1021/es970750h>.
- AIHW. 2009. *A picture of Australia's children 2009*. Canberra, Australia: Australian Institute of Health and Welfare.
- Airaksinen R, Rantakokko P, Eriksson JG, et al. 2011. Association between type 2 diabetes and exposure to persistent organic pollutants. *Diabetes Care* 34(9):1972-1979. <http://doi.org/10.2337/dc10-2303>.
- Aislabie JM, Richards NK, Boul HL. 1997. Microbial degradation of DDT and its residues- a review. *N Z J Agric Res* 40:269-282.
- Alegria-Torres JA, Diaz-Barriga F, Gandolfi AJ, et al. 2009. Mechanisms of p,p'-DDE-induced apoptosis in human peripheral blood mononuclear cells. *Toxicol in Vitro* 23(6):1000-1006. <http://doi.org/10.1016/j.tiv.2009.06.021>.
- Alexander M. 1995. How toxic are toxic chemicals in soil? *Environ Sci Technol* 29(11):2713-2717. <http://doi.org/10.1021/es00011a003>.
- Alexander M. 1997. Environmentally acceptable endpoints in soil: Risk-based approach to contaminated site management based on availability of chemicals in soil. American Academy of Environmental Engineers. 48-56, 103-104, 110-111, 115-116, 127-136.
- Allen-Gil SM, Gubala CP, Wilson R, et al. 1997. Organochlorine pesticides and polychlorinated biphenyls (PCBs) in sediments and biota from four US Arctic lakes. *Arch Environ Contam Toxicol* 33(4):378-387. <http://doi.org/10.1007/s002449900267>.

8. REFERENCES

- Al-Othman AA, Abd-Alrahman SH, Al-Daghri NM. 2015. DDT and its metabolites are linked to increased risk of type 2 diabetes among Saudi adults: a cross-sectional study. *Environ Sci Pollut Res Int* 22(1):379-386. <http://doi.org/10.1007/s11356-014-3371-0>.
- Al-Saleh I, Coskun S, El-Doush I, et al. 2009. Outcome of in-vitro fertilization treatment and DDT levels in serum and follicular fluid. *Med Sci Monit* 15(11):BR320-333.
- Al-Saleh I, Al-Doush I, Alsabbaheen A, et al. 2012. Levels of DDT and its metabolites in placenta, maternal and cord blood and their potential influence on neonatal anthropometric measures. *Sci Total Environ* 416:62-74. <http://doi.org/10.1016/j.scitotenv.2011.11.020>.
- Alvarado-Hernandez DL, Montero-Montoya R, Serrano-Garcia L, et al. 2013. Assessment of exposure to organochlorine pesticides and levels of DNA damage in mother-infant pairs of an agrarian community. *Environ Mol Mutagen* 54(2):99-111. <http://doi.org/10.1002/em.21753>.
- Alvarez-Pedrerol M, Ribas-Fito N, Torrent M, et al. 2008. Effects of PCBs, p,p'-DDT, p,p'-DDE, HCB and beta-HCH on thyroid function in preschool children. *Occup Environ Med* 65(7):452-457. <http://doi.org/10.1136/oem.2007.032763>.
- Alvarez-Pedrerol M, Guxens M, Ibarluzea J, et al. 2009. Organochlorine compounds, iodine intake, and thyroid hormone levels during pregnancy. *Environ Sci Technol* 43(20):7909-7915. <http://doi.org/10.1021/es9007273>.
- Amacher DE, Zelljadt I. 1984. Mutagenic activity of some clastogenic chemicals at the hypoxanthine guanine phosphoribosyl transferase locus of Chinese hamster ovary cells. *Mutat Res* 136:137-145.
- Aminov Z, Haase R, Rej R, et al. 2016. Diabetes prevalence in relation to serum concentrations of polychlorinated biphenyl (PCB) congener groups and three chlorinated pesticides in a Native American population. *Environ Health Perspect* 124(9):1376-1383. <http://doi.org/10.1289/ehp.1509902>.
- Anand M, Agarwal P, Singh L, et al. 2015. Persistent organochlorine pesticides and oxidant/antioxidant status in the placental tissue of the women with full-term and pre-term deliveries. *Toxicology Research* 4(2):326-332. <http://doi.org/10.1039/c4tx00094c>.
- Anderson HA. 1985. Utilization of adipose tissue biopsy in characterizing human halogenated hydrocarbon exposure. *Environ Health Perspect* 60:127-131. <http://doi.org/10.1289/ehp.8560127>.
- Anderson HA, Falk C, Hanrahan L, et al. 1998. Profiles of Great Lakes critical pollutants: a sentinel analysis of human blood and urine. The Great Lakes Consortium. *Environ Health Perspect* 106(5):279-289. <http://doi.org/10.1289/ehp.98106279>.
- Anderson KA, Johnson E. 2001. Bioavailable organochlorine pesticides in a semi-arid region of eastern Oregon, USA, as determined by gas chromatography with electron-capture detection. *J AOAC Int* 84(5):1371-1382.
- Andrea MM, Tomita RY, Luchini LC, et al. 1994. Laboratory studies on volatilization and mineralization of c14-p,p'-ddt in soil, release of bound residues and dissipation from solid surfaces. *J Environ Sci Health B* 29:133-139.
- Aneck-Hahn NH, Schulenburg GW, Bornman MS, et al. 2007. Impaired semen quality associated with environmental DDT exposure in young men living in a malaria area in the Limpopo Province, South Africa. *J Androl* 28(3):423-434. <http://doi.org/10.2164/jandrol.106.001701>.
- Anthony RG, Miles K, Estes JA, et al. 1999. Productivity, diets, and environmental contaminants in nesting bald eagles from the Aleutian Archipelago. *Environ Toxicol Chem* 18(9):2054-2062.
- Appenzeller BMR, Hardy EM, Grova N, et al. 2017. Hair analysis for the biomonitoring of pesticide exposure: comparison with blood and urine in a rat model. *Arch Toxicol* 91(8):2813-2825. <http://doi.org/10.1007/s00204-016-1910-9>.
- Araki A, Miyashita C, Mitsui T, et al. 2018. Prenatal organochlorine pesticide exposure and the disruption of steroids and reproductive hormones in cord blood: The Hokkaido study. *Environ Int* 110:1-13. <http://doi.org/10.1016/j.envint.2017.10.006>.
- Archibeque-Engle SL, Tessari JD, Winn DT, et al. 1997. Comparison of organochlorine pesticide and polychlorinated biphenyl residues in human breast adipose tissue and serum. *J Toxicol Environ Health* 52(4):285-293. <http://doi.org/10.1080/00984109708984065>.

8. REFERENCES

- Arisoy M. 1998. Biodegradation of chlorinated organic compounds by white-rot fungi. *Bull Environ Contam Toxicol* 60(6):872-876. <http://doi.org/10.1007/s001289900708>.
- Aronson KJ, Wilson JW, Hamel M, et al. 2010. Plasma organochlorine levels and prostate cancer risk. *J Expo Sci Environ Epidemiol* 20(5):434-445. <http://doi.org/10.1038/jes.2009.33>.
- Arrebola JP, Pumarega J, Gasull M, et al. 2013. Adipose tissue concentrations of persistent organic pollutants and prevalence of type 2 diabetes in adults from Southern Spain. *Environ Res* 122:31-37. <http://doi.org/10.1016/j.envres.2012.12.001>.
- Arrebola JP, Ocana-Riola R, Arrebola-Moreno AL, et al. 2014. Associations of accumulated exposure to persistent organic pollutants with serum lipids and obesity in an adult cohort from Southern Spain. *Environ Pollut* 195:9-15. <http://doi.org/10.1016/j.envpol.2014.08.003>.
- Arrebola JP, Belhassen H, Artacho-Cordon F, et al. 2015a. Risk of female breast cancer and serum concentrations of organochlorine pesticides and polychlorinated biphenyls: a case-control study in Tunisia. *Sci Total Environ* 520:106-113. <http://doi.org/10.1016/j.scitotenv.2015.03.045>.
- Arrebola JP, Fernandez MF, Martin-Olmedo P, et al. 2015b. Historical exposure to persistent organic pollutants and risk of incident hypertension. *Environ Res* 138:217-223. <http://doi.org/10.1016/j.envres.2015.02.018>.
- Arrebola JP, Gonzalez-Jimenez A, Fornieles-Gonzalez C, et al. 2015c. Relationship between serum concentrations of persistent organic pollutants and markers of insulin resistance in a cohort of women with a history of gestational diabetes mellitus. *Environ Res* 136:435-440. <http://doi.org/10.1016/j.envres.2014.11.007>.
- Arrebola JP, Fernandez-Rodriguez M, Artacho-Cordon F, et al. 2016. Associations of persistent organic pollutants in serum and adipose tissue with breast cancer prognostic markers. *Sci Total Environ* 566-567:41-49. <http://doi.org/10.1016/j.scitotenv.2016.04.188>.
- Arthur RD, Cain JD, Barrentine BF. 1977. DDT residues in air in the Mississippi delta, 1975. *Pestic Monit J* 10(4):168.
- Ashley-Martin J, Levy AR, Arbuckle TE, et al. 2015. Maternal exposure to metals and persistent pollutants and cord blood immune system biomarkers. *Environ Health* 14:52. <http://doi.org/10.1186/s12940-015-0046-3>.
- Asplund L, Svensson BG, Nilsson A, et al. 1994. Polychlorinated biphenyls, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (p,p'-DDT) and 1,1-dichloro-2,2-bis(p-chlorophenyl)-ethylene (p,p'-DDE) in human plasma related to fish consumption. *Arch Environ Health* 49(6):477-486. <http://doi.org/10.1080/00039896.1994.9955004>.
- Atlas E, Foster R, Giam CS. 1982. Air-sea exchange of high-molecular weight organic pollutants: laboratory studies. *Environ Sci Technol* 16(5):283-286. <http://doi.org/10.1021/es00099a010>.
- ATSDR. 1989. Decision guide for identifying substance-specific data needs related to toxicological profiles; Notice. Agency for Toxic Substances and Disease Registry. *Fed Regist* 54(174):37618-37634.
- ATSDR. 2019. DDT. Full SPL data. Substance priority list (SPL) resource page. Agency for Toxic Substances and Disease Registry.
- Attaran A, Roberts DR, Curtis CF, et al. 2000. Balancing risks on the backs of the poor. *Nat Med* 6(7):729-731. <http://doi.org/10.1038/77438>.
- Austin H, Keil JE, Cole P. 1989. A prospective follow-up study of cancer mortality in relation to serum DDT. *Am J Public Health* 79(1):43-46. <http://doi.org/10.2105/ajph.79.1.43>.
- Axmon A, Rignell-Hydbom A. 2006. Estimations of past male and female serum concentrations of biomarkers of persistent organochlorine pollutants and their impact on fecundability estimates. *Environ Res* 101(3):387-394. <http://doi.org/10.1016/j.envres.2005.10.005>.
- Axmon A, Thulstrup AM, Rignell-Hydbom A, et al. 2006. Time to pregnancy as a function of male and female serum concentrations of 2,2'4,4'5,5'-hexachlorobiphenyl (CB-153) and 1,1-dichloro-2,2-bis(p-chlorophenyl)-ethylene (p,p'-DDE). *Hum Reprod* 21(3):657-665. <http://doi.org/10.1093/humrep/dei397>.

8. REFERENCES

- Bachelet D, Verner MA, Neri M, et al. 2019. Breast cancer and exposure to organochlorines in the CECILE Study: Associations with plasma levels measured at the time of diagnosis and estimated during adolescence. *Int J Environ Res Public Health* 16(2) <http://doi.org/10.3390/ijerph16020271>.
- Bagga D, Anders KH, Wang HJ, et al. 2000. Organochlorine pesticide content of breast adipose tissue from women with breast cancer and control subjects. *J Natl Cancer Inst* 92(9):750-753. <http://doi.org/10.1093/jnci/92.9.750>.
- Bahena-Medina LA, Torres-Sanchez L, Schnaas L, et al. 2011. Neonatal neurodevelopment and prenatal exposure to dichlorodiphenyl dichloroethylene (DDE): a cohort study in Mexico. *J Expo Sci Environ Epidemiol* 21(6):609-614. <http://doi.org/10.1038/jes.2011.25>.
- Baker RD, Applegate HG. 1970. Effect of temperature and ultraviolet radiation on the persistence of methyl parathion and DDT in soils. *Agron J* 62:509-512.
- Bakke JE, Bergman AL, Larsen GL. 1982. Metabolism of 2,4',5-trichlorobiphenyl by the mercapturic acid pathway. *Science* 217(4560):645-647. <http://doi.org/10.1126/science.6806905>.
- Balaguer P, Francois F, Comunale F, et al. 1999. Reporter cell lines to study the estrogenic effects of xenoestrogens. *Sci Total Environ* 233(1-3):47-56. [http://doi.org/10.1016/s0048-9697\(99\)00178-3](http://doi.org/10.1016/s0048-9697(99)00178-3).
- Balte PP, Kuhr J, Kruse H, et al. 2017. Body burden of dichlorodiphenyl dichloroethene (DDE) and childhood pulmonary function. *Int J Environ Res Public Health* 14(11) <http://doi.org/10.3390/ijerph14111376>.
- Banerjee BD. 1987a. Sub-chronic effect of DDT on humoral immune response to a thymus-independent antigen (bacterial lipopolysaccharide) in mice. *Bull Environ Contam Toxicol* 39:822-826.
- Banerjee BD. 1987b. Effects of sub-chronic DDT exposure on humoral and cell-mediated immune responses in albino rats. *Bull Environ Contam Toxicol* 39:827-834.
- Banerjee BD, Ramachandran M, Hussain QZ. 1986. Sub-chronic effect of DDT on humoral immune response in mice. *Bull Environ Contam Toxicol* 37(3):433-440. <http://doi.org/10.1007/BF01607785>.
- Banerjee BD, Saha S, Mohapatra TK, et al. 1995. Influence of dietary protein on DDT-induced immune responsiveness in rats. *Indian J Exp Biol* 33(10):739-744.
- Banerjee BD, Ray A, Pasha ST. 1996. A comparative evaluation of immunotoxicity of DDT and its metabolites in rats. *Indian J Exp Biol* 34(6):517-522.
- Banerjee BD, Koner BC, Pasha ST. 1997a. Influence of DDT exposure on susceptibility to human leprosy bacilli in mice. *Int J Lepr Other Mycobact Dis* 65(1):97-99.
- Banerjee BD, Koner BC, Ray A. 1997b. Influence of stress on DDT-induced humoral immune responsiveness in mice. *Environ Res* 74:43-47.
- Bard SM. 1999. Global transport of anthropogenic contaminants and the consequences for the arctic marine ecosystem. *Mar Pollut Bull* 38(5):356-379.
- Barmpas M, Vakonaki E, Tzatzarakis M, et al. 2020. Organochlorine pollutants' levels in hair, amniotic fluid and serum samples of pregnant women in Greece. A cohort study. *Environ Toxicol Pharmacol* 73:103279. <http://doi.org/10.1016/j.etap.2019.103279>.
- Barnes DG, Dourson M. 1988. Reference dose (RfD): Description and use in health risk assessments. *Regul Toxicol Pharmacol* 8(4):471-486.
- Bassig BA, Engel LS, Langseth H, et al. 2019. Pre-diagnostic serum concentrations of organochlorines and risk of acute myeloid leukemia: A nested case-control study in the Norwegian Janus Serum Bank Cohort. *Environ Int* 125:229-235. <http://doi.org/10.1016/j.envint.2019.01.066>.
- Bassig BA, Shu XO, Sjodin A, et al. 2020. Prediagnostic blood levels of organochlorines and risk of non-Hodgkin lymphoma in three prospective cohorts in China and Singapore. *Int J Cancer* 146(3):839-849. <http://doi.org/10.1002/ijc.32350>.
- Bayarri S, Conchello P, Arino A, et al. 1994. DDT, DDT metabolites, and other organochlorines as affected by thermal processing in three commercial cuts of lamb. *Bull Environ Contam Toxicol* 52:554-559.

8. REFERENCES

- Beard J, Marshall S, Jong K, et al. 2000. 1,1,1-Trichloro-2,2-bis (p-chlorophenyl)-ethane (DDT) and reduced bone mineral density. *Arch Environ Health* 55(3):177-180.
<http://doi.org/10.1080/00039890009603403>.
- Beard J, Sladden T, Morgan G, et al. 2003. Health impacts of pesticide exposure in a cohort of outdoor workers. *Environ Health Perspect* 111(5):724-730. <http://doi.org/10.1289/ehp.5885>.
- Becker PR, Mackey EA, Demirralp R, et al. 1997. Concentrations of chlorinated hydrocarbons and trace elements in marine mammal tissues archives in the U.S. National Biomonitoring Specimen Bank. *Chemosphere* 34(9/10):2067-2098.
- Ben Maamar M, Sadler-Riggleman I, Beck D, et al. 2018. Epigenetic transgenerational inheritance of altered sperm histone retention sites. *Sci Rep* 8(1):5308. <http://doi.org/10.1038/s41598-018-23612-y>.
- Ben Maamar M, Nilsson E, Sadler-Riggleman I, et al. 2019. Developmental origins of transgenerational sperm DNA methylation epimutations following ancestral DDT exposure. *Dev Biol* 445(2):280-293. <http://doi.org/10.1016/j.ydbio.2018.11.016>.
- Ben Maamar M, King SE, Nilsson E, et al. 2020. Epigenetic transgenerational inheritance of parent-of-origin allelic transmission of outcross pathology and sperm epimutations. *Dev Biol* 458(1):106-119. <http://doi.org/10.1016/j.ydbio.2019.10.030>.
- Ben-Dyke R, Sanderson DM, Noakes DN. 1970. Acute toxicity data for pesticides (1970). *World Rev Pest Control* 9:119-127.
- Bennison BE, Mostofi FK. 1950. Observations on inbred mice exposed to DDT. *J Natl Cancer Inst* 10(4):989-992.
- Berg V, Nost TH, Sandanger TM, et al. 2018. Predicting human plasma concentrations of persistent organic pollutants from dietary intake and socio-demographic information in the Norwegian Women and Cancer study. *Environ Int* 121(Pt 2):1311-1318. <http://doi.org/10.1016/j.envint.2018.10.057>.
- Berghuis SA, Van Braeckel K, Sauer PJJ, et al. 2018. Prenatal exposure to persistent organic pollutants and cognition and motor performance in adolescence. *Environ Int* 121(Pt 1):13-22. <http://doi.org/10.1016/j.envint.2018.08.030>.
- Bergman A, Norstrom RJ, Haraguchi K, et al. 1994. PCB and DDE methyl sulfones in mammals from Canada and Sweden. *Environ Toxicol Chem* 13:121-128.
- Bergonzi R, Specchia C, Dinolfo M, et al. 2009. Distribution of persistent organochlorine pollutants in maternal and foetal tissues: data from an Italian polluted urban area. *Chemosphere* 76(6):747-754. <http://doi.org/10.1016/j.chemosphere.2009.05.026>.
- Bergonzi R, De Palma G, Specchia C, et al. 2011. Persistent organochlorine compounds in fetal and maternal tissues: evaluation of their potential influence on several indicators of fetal growth and health. *Sci Total Environ* 409(15):2888-2893. <http://doi.org/10.1016/j.scitotenv.2011.04.031>.
- Bernard RF, Gaertner RA. 1964. Some effects of DDT on reproduction in mice. *J Mammal* 45(2):272-276.
- Bernard L, Martinat N, Lecureuil C, et al. 2007. Dichlorodiphenyltrichloroethane impairs follicle-stimulating hormone receptor-mediated signaling in rat Sertoli cells. *Reprod Toxicol* 23(2):158-164. <http://doi.org/10.1016/j.reprotox.2006.11.002>.
- Bertrand KA, Spiegelman D, Aster JC, et al. 2010. Plasma organochlorine levels and risk of non-Hodgkin lymphoma in a cohort of men. *Epidemiology* 21(2):172-180. <http://doi.org/10.1097/EDE.0b013e3181cb610b>.
- Bevenue A, Hylin JW, Kawano Y, et al. 1972. Pesticides in water: Organochlorine pesticide residues in water, sediment, algae, and fish, Hawaii, 1970-71. *Pestic Monit J* 6:56-64.
- Bhatia R, Shiau R, Petreas M, et al. 2005. Organochlorine pesticides and male genital anomalies in the child health and development studies. *Environ Health Perspect* 113(2):220-224. <http://doi.org/10.1289/ehp.7382>.
- Bidleman TF. 1988. Atmospheric processes. Wet and dry deposition of organic compounds are controlled by their vapor-particle partitioning. *Environ Sci Technol* 22:361-367.

8. REFERENCES

- Bidleman TF, Matthews J, Olney C, et al. 1978. Pesticide residues: Separation of polychlorinated biphenyls, chlordane, and p,p'-DDD from toxaphene by silicic acid column chromatography. *Journal - Association of Official Analytical Chemists* 61:820-828.
- Bidleman TF, Christensen EJ, Billings WN, et al. 1981. Atmospheric transport of organochlorines in the North Atlantic gyre. *J Mar Res* 39:443-464.
- Bidleman TF, Cotham WE, Addison RF, et al. 1992. Organic contaminants in the northwest Atlantic atmosphere at Sable Island, Nova Scotia, 1988-1989. *Chemosphere* 24(9):1389-1412.
- Bidleman TF, Walla MD, Roura R, et al. 1993. Organochlorine pesticides in the atmosphere of the Southern Ocean and Antarctica, January-March, 1990. *Mar Pollut Bull* 26(5):258-262.
- Biggs ML, Davis MD, Eaton DL, et al. 2008. Serum organochlorine pesticide residues and risk of testicular germ cell carcinoma: a population-based case-control study. *Cancer Epidemiol Biomarkers Prev* 17(8):2012-2018. <http://doi.org/10.1158/1055-9965.EPI-08-0032>.
- Bilrha H, Roy R, Moreau B, et al. 2003. In vitro activation of cord blood mononuclear cells and cytokine production in a remote coastal population exposed to organochlorines and methyl mercury. *Environ Health Perspect* 111(16):1952-1957. <http://doi.org/10.1289/ehp.6433>.
- Bitman J, Cecil HC. 1970. Estrogenic activity of DDT analogs and polychlorinated biphenyls. *J Agric Food Chem* 18(6):1108-1112. <http://doi.org/10.1021/jf60172a019>.
- Bjerregaard P, Hansen JC. 2000. Organochlorines and heavy metals in pregnant women from the Disko Bay area in Greenland. *Sci Total Environ* 245(1-3):195-202. [http://doi.org/10.1016/s0048-9697\(99\)00444-1](http://doi.org/10.1016/s0048-9697(99)00444-1).
- Blanco-Munoz J, Lacasana M, Aguilar-Garduno C, et al. 2012. Effect of exposure to p,p'-DDE on male hormone profile in Mexican flower growers. *Occup Environ Med* 69(1):5-11. <http://doi.org/10.1136/oem.2010.059667>.
- Blanco-Munoz J, Lacasana M, Lopez-Flores I, et al. 2016. Association between organochlorine pesticide exposure and thyroid hormones in floriculture workers. *Environ Res* 150:357-363. <http://doi.org/10.1016/j.envres.2016.05.054>.
- Bloom MS, Jansing RL, Kannan K, et al. 2014. Thyroid hormones are associated with exposure to persistent organic pollutants in aging residents of upper Hudson River communities. *Int J Hyg Environ Health* 217(4-5):473-482. <http://doi.org/10.1016/j.ijheh.2013.09.003>.
- Bloom MS, Fujimoto VY, Storm R, et al. 2017. Persistent organic pollutants (POPs) in human follicular fluid and in vitro fertilization outcomes, a pilot study. *Reprod Toxicol* 67:165-173. <http://doi.org/10.1016/j.reprotox.2017.01.004>.
- Blus LJ, Henny CJ, Stafford CJ, et al. 1987. Persistence of DDT and metabolites in wildlife from Washington State orchards. *Arch Environ Contam Toxicol* 16(4):467-476. <http://doi.org/10.1007/BF01055269>.
- Boada LD, Zumbado M, Henriquez-Hernandez LA, et al. 2012. Complex organochlorine pesticide mixtures as determinant factor for breast cancer risk: a population-based case-control study in the Canary Islands (Spain). *Environ Health* 11:28. <http://doi.org/10.1186/1476-069X-11-28>.
- Boada LD, Henriquez-Hernandez LA, Zumbado M, et al. 2016. Organochlorine pesticides exposure and bladder cancer: Evaluation from a gene-environment perspective in a hospital-based case-control study in the Canary Islands (Spain). *J Agromedicine* 21(1):34-42. <http://doi.org/10.1080/1059924x.2015.1106374>.
- Bohannon AD, Cooper GS, Wolff MS, et al. 2000. Exposure to 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDT) in relation to bone mineral density and rate of bone loss in menopausal women. *Arch Environ Health* 55(6):386-391. <http://doi.org/10.1080/00039890009604035>.
- Bonde JP, Flachs EM, Rimborg S, et al. 2016. The epidemiologic evidence linking prenatal and postnatal exposure to endocrine disrupting chemicals with male reproductive disorders: a systematic review and meta-analysis. *Hum Reprod Update* 23(1):104-125. <http://doi.org/10.1093/humupd/dmw036>.

8. REFERENCES

- Bornman M, Delport R, Farias P, et al. 2018. Alterations in male reproductive hormones in relation to environmental DDT exposure. *Environ Int* 113:281-289.
<http://doi.org/10.1016/j.envint.2017.12.039>.
- Boul H. 1996. Effect of soil moisture on the fate of radiolabelled DDT and DDE in vitro. *Chemosphere* 32(5):855-866.
- Boul HL, Garnham ML, Hucker D, et al. 1994. Influence of agricultural practices on the levels of DDT and its residues in soil. *Environ Sci Technol* 28(8):1397-1402. <http://doi.org/10.1021/es00057a004>.
- Bouwman H, Reinecke AJ, Cooppan RM, et al. 1990. Factors affecting levels of DDT and metabolites in human breast milk from Kwazulu. *J Toxicol Environ Health* 31(2):93-115.
<http://doi.org/10.1080/15287399009531440>.
- Bradt PT, Herrenkohl RC. 1976. DDT in human milk. What determines the levels? *Sci Total Environ* 6(2):161-163. [http://doi.org/10.1016/0048-9697\(76\)90011-5](http://doi.org/10.1016/0048-9697(76)90011-5).
- Brauner EV, Sorensen M, Gaudreau E, et al. 2012. A prospective study of organochlorines in adipose tissue and risk of non-Hodgkin lymphoma. *Environ Health Perspect* 120(1):105-111.
- Bravo N, Hansen S, Okland I, et al. 2017. Influence of maternal and sociodemographic characteristics on the accumulation of organohalogen compounds in Argentinian women. The EMASAR study. *Environ Res* 158:759-767. <http://doi.org/10.1016/j.envres.2017.07.033>.
- Brevik EM, Grande M, Knutzen J, et al. 1996. DDT contamination of fish and sediments from Lake Orsjoen, Southern Norway: Comparison of data from 1975 and 1994. *Chemosphere* 33(11):2189-2200.
- Brock JW, Melnyk LJ, Caudill SP, et al. 1998. Serum levels of several organochlorine pesticides in farmers correspond with dietary exposure and local use history. *Toxicol Ind Health* 14(1/2):275-289.
- Brown DP. 1992. Mortality of workers employed at organochlorine pesticide manufacturing plants -- an update. *Scand J Work Environ Health* 18:155-161.
- Brucker-Davis F, Wagner-Mahler K, Delattre I, et al. 2008. Cryptorchidism at birth in Nice area (France) is associated with higher prenatal exposure to PCBs and DDE, as assessed by colostrum concentrations. *Hum Reprod* 23(8):1708-1718. <http://doi.org/10.1093/humrep/den186>.
- Buck NA, Estesen BJ, Ware GW. 1983. DDT moratorium in Arizona: residues in soil and alfalfa after 12 years. *Bull Environ Contam Toxicol* 31(1):66-72. <http://doi.org/10.1007/BF01608768>.
- Buck Louis GM. 2014. Persistent environmental pollutants and couple fecundity: an overview. *Reproduction* 147(4):R97-R104. <http://doi.org/10.1530/REP-13-0472>.
- Buck Louis GM, Sundaram R, Schisterman EF, et al. 2013. Persistent environmental pollutants and couple fecundity: the LIFE study. *Environ Health Perspect* 121(2):231-236.
<http://doi.org/10.1289/ehp.1205301>.
- Burns JS, Williams PL, Sergeyev O, et al. 2012. Serum concentrations of organochlorine pesticides and growth among Russian boys. *Environ Health Perspect* 120(2):303-308.
<http://doi.org/10.1289/ehp.1103743>.
- Burns JS, Williams PL, Korrick SA, et al. 2014. Association between chlorinated pesticides in the serum of prepubertal Russian boys and longitudinal biomarkers of metabolic function. *Am J Epidemiol* 180(9):909-919. <http://doi.org/10.1093/aje/kwu212>.
- Buselmaier W, Rohrborn G, Propping P. 1973. Comparative investigations on the mutagenicity of pesticides in mammalian test systems. *Mutat Res* 21:25-26.
- Büyüksönmez F, Rynk R, Hess TF. 2000. Occurrence, degradation and fate of pesticides during composting. Part II. Occurrence and fate of pesticides in compost and composting systems. *Compost Sci Util* 8:61-81.
- Cabral JRP, Hall RK, Rossi L, et al. 1982a. Lack of carcinogenicity of DDT in hamsters. *Tumori* 68:5-10.
- Cabral JRP, Hall RK, Rossi L, et al. 1982b. Effects of long-term intake of DDT on rats. *Tumori* 68:11-17.

8. REFERENCES

- Cabrera-Rodriguez R, Luzardo OP, Almeida-Gonzalez M, et al. 2019. Association between prenatal exposure to multiple persistent organic pollutants (POPs) and growth indicators in newborns. *Environ Res* 171:285-292. <http://doi.org/10.1016/j.envres.2018.12.064>.
- Cahill TM, Cousins I, Mackay D. 2003. Development and application of a generalized physiologically based pharmacokinetic model for multiple environmental contaminants. *Environ Toxicol Chem* 22(1):26-34.
- Cameron GR, Burgess F. 1945. The toxicity of 2,2-bis (p-chlorophenyl) 1,1,1-trichloroethane (DDT). *Br Med J* 1(June 23):865-871.
- Canales-Aguirre A, Padilla-Camberos E, Gomez-Pinedo U, et al. 2011. Genotoxic effect of chronic exposure to DDT on lymphocytes, oral mucosa and breast cells of female rats. *Int J Environ Res Public Health* 8(2):540-553. <http://doi.org/10.3390/ijerph8020540>.
- Cano-Sancho G, Salmon AG, La Merrill MA. 2017. Association between exposure to p,p'-DDT and its metabolite p,p'-DDE with obesity: Integrated systematic review and meta-analysis. *Environ Health Perspect* 125(9):096002. <http://doi.org/10.1289/EHP527>.
- Canter LW, Sabatini DA. 1994. Contamination of public ground water supplies by Superfund sites. *Int J Environ Stud* 46(1):35-57. <http://doi.org/10.1080/00207239408710909>.
- Carey AE, Kutz FW. 1985. Trends in ambient concentrations of agrochemicals in humans and the environment of the United States. *Environ Monit Assess* 5(2):155-163. <http://doi.org/10.1007/BF00395844>.
- Carey AE, Douglas P, Tai H, et al. 1979a. Pesticide residue concentrations in soils of five United States cities, 1971--urban soils monitoring program. *Pestic Monit J* 13(1):17-22.
- Carey AE, Gowen J, Tai H, et al. 1979b. Pesticide residue levels in soils and crops from 37 states, 1972—National Soils Monitoring Program (IV). *Pestic Monit J* 12:209-229.
- Carmichael SL, Herring AH, Sjodin A, et al. 2010. Hypospadias and halogenated organic pollutant levels in maternal mid-pregnancy serum samples. *Chemosphere* 80(6):641-646. <http://doi.org/10.1016/j.chemosphere.2010.04.055>.
- Carr RS, Montagna PA, Biedenbach JM, et al. 2000. Impact of storm-water outfalls on sediment quality in Corpus Christi Bay, Texas, USA. *Environ Toxicol Chem* 19(3):561-574.
- Cartier C, Muckle G, Jacobson SW, et al. 2014. Prenatal and 5-year p,p'-DDE exposures are associated with altered sensory processing in school-aged children in Nunavik: a visual evoked potential study. *Neurotoxicology* 44:8-16. <http://doi.org/10.1016/j.neuro.2014.04.009>.
- Casas M, Nieuwenhuijsen M, Martinez D, et al. 2015. Prenatal exposure to PCB-153, p,p'-DDE and birth outcomes in 9000 mother-child pairs: exposure-response relationship and effect modifiers. *Environ Int* 74:23-31. <http://doi.org/10.1016/j.envint.2014.09.013>.
- Castellanos CG, Sorvik IB, Tanum MB, et al. 2013. Differential effects of the persistent DDT metabolite methylsulfonyl-DDE in nonstimulated and LH-stimulated neonatal porcine Leydig cells. *Toxicol Appl Pharmacol* 267(3):247-255. <http://doi.org/10.1016/j.taap.2012.12.022>.
- CDC. 2018. Fourth national report on human exposure to environmental chemicals. Updated tables, March 2018. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. <http://www.cdc.gov/exposurereport/>. April 17, 2018.
- Cetkovic-Cvrlje M, Olson M, Schindler B, et al. 2016. Exposure to DDT metabolite p,p'-DDE increases autoimmune type 1 diabetes incidence in NOD mouse model. *J Immunotoxicol* 13(1):108-118. <http://doi.org/10.3109/1547691X.2015.1017060>.
- Charles GD, Gennings C, Tornesi B, et al. 2007. Analysis of the interaction of phytoestrogens and synthetic chemicals: an in vitro/in vivo comparison. *Toxicol Appl Pharmacol* 218(3):280-288. <http://doi.org/10.1016/j.taap.2006.11.029>.
- Charlier CJ, Foidart JM. 2005. Comparative study of dichlorodiphenyldichloroethylene in blood and semen of two young male populations: lack of relationship to infertility, but evidence of high exposure of the mothers. *Reprod Toxicol* 20(2):215-220. <http://doi.org/10.1016/j.reprotox.2005.03.007>.

8. REFERENCES

- Charlier C, Foidart JM, Pitance F, et al. 2004. Environmental dichlorodiphenyltrichlorethane or hexachlorobenzene exposure and breast cancer: is there a risk? *Clin Chem Lab Med* 42(2):222-227. <http://doi.org/10.1515/CCLM.2004.040>.
- Chedrese PJ, Feyles F. 2001. The diverse mechanism of action of dichlorodiphenylchloroethylene (DDE) and methoxychlor in ovarian cells in vitro. *Reprod Toxicol* 15(6):693-698. [http://doi.org/10.1016/s0890-6238\(01\)00172-1](http://doi.org/10.1016/s0890-6238(01)00172-1).
- Chen A, Zhang J, Zhou L, et al. 2005. DDT serum concentration and menstruation among young Chinese women. *Environ Res* 99(3):397-402. <http://doi.org/10.1016/j.envres.2004.12.015>.
- Chen MW, Santos HM, Que DE, et al. 2018. Association between organochlorine pesticide levels in breast milk and their effects on female reproduction in a Taiwanese population. *Int J Environ Res Public Health* 15(5):931. <http://doi.org/10.3390/ijerph15050931>.
- Chevrier J, Eskenazi B, Holland N, et al. 2008. Effects of exposure to polychlorinated biphenyls and organochlorine pesticides on thyroid function during pregnancy. *Am J Epidemiol* 168(3):298-310. <http://doi.org/10.1093/aje/kwn136>.
- Chevrier C, Warembourg C, Gaudreau E, et al. 2013. Organochlorine pesticides, polychlorinated biphenyls, seafood consumption, and time-to-pregnancy. *Epidemiology* 24(2):251-260. <http://doi.org/10.1097/EDE.0b013e31827f53ec>.
- Chowdhury AR, Gautam AK, Venkatakrishna-Bhatt H. 1990. DDT (2,2,bis(p-chlorophenyl) 1,1,1-trichloroethane) induced structural changes in adrenal glands of rats. *Bull Environ Contam Toxicol* 45(2):193-196. <http://doi.org/10.1007/BF01700183>.
- Clark JM. 1974. Mutagenicity of DDT in mice, *Drosophila melanogaster* and *Neurospora crassa*. *Aust J Biol Sci* 27(4):427-440. <http://doi.org/10.1071/bi9740427>.
- Clement JG, Okey AB. 1972. Estrogenic and anti-estrogenic effects of DDT administered in the diet to immature female rats. *Can J Physiol Pharmacol* 50(10):971-975. <http://doi.org/10.1139/y72-141>.
- Clement JG, Okey AB. 1974. Reproduction in female rats born to DDT-treated parents. *Bull Environ Contam Toxicol* 12(3):373-377. <http://doi.org/10.1007/BF01709135>.
- Clewel HJ, 3rd, Andersen ME. 1985. Risk assessment extrapolations and physiological modeling. *Toxicol Ind Health* 1(4):111-131. <http://doi.org/10.1177/074823378500100408>.
- Cocco P, Kazerouni N, Zahm SH. 2000. Cancer mortality and environmental exposure to DDE in the United States. *Environ Health Perspect* 108(1):1-4. <http://doi.org/10.1289/ehp.001081>.
- Cocco P, Fadda D, Billai B, et al. 2005. Cancer mortality among men occupationally exposed to dichlorodiphenyltrichloroethane. *Cancer Res* 65(20):9588-9594. <http://doi.org/10.1158/0008-5472.CAN-05-1487>.
- Cocco P, Brennan P, Ibba A, et al. 2008. Plasma polychlorobiphenyl and organochlorine pesticide level and risk of major lymphoma subtypes. *Occup Environ Med* 65(2):132-140. <http://doi.org/10.1136/oem.2007.033548>.
- Codru N, Schymura MJ, Negoita S, et al. 2007. Diabetes in relation to serum levels of polychlorinated biphenyls and chlorinated pesticides in adult Native Americans. *Environ Health Perspect* 115(10):1442-1447. <http://doi.org/10.1289/ehp.10315>.
- Cohn BA. 2011. Developmental and environmental origins of breast cancer: DDT as a case study. *Reprod Toxicol* 31(3):302-311. <http://doi.org/10.1016/j.reprotox.2010.10.004>.
- Cohn BA, Cirillo PM, Wolff MS, et al. 2003. DDT and DDE exposure in mothers and time to pregnancy in daughters. *Lancet* 361(9376):2205-2206. [http://doi.org/10.1016/S0140-6736\(03\)13776-2](http://doi.org/10.1016/S0140-6736(03)13776-2).
- Cohn BA, Wolff MS, Cirillo PM, et al. 2007. DDT and breast cancer in young women: new data on the significance of age at exposure. *Environ Health Perspect* 115(10):1406-1414. <http://doi.org/10.1289/ehp.10260>.
- Cohn BA, La Merrill M, Krigbaum NY, et al. 2015. DDT Exposure in Utero and Breast Cancer. *J Clin Endocrinol Metab* 100(8):2865-2872. <http://doi.org/10.1210/jc.2015-1841>.
- Coker E, Chevrier J, Rauch S, et al. 2018. Association between prenatal exposure to multiple insecticides and child body weight and body composition in the VHEMBE South African birth cohort. *Environ Int* 113:122-132. <http://doi.org/10.1016/j.envint.2018.01.016>.

8. REFERENCES

- Consales C, Toft G, Leter G, et al. 2016. Exposure to persistent organic pollutants and sperm DNA methylation changes in Arctic and European populations. *Environ Mol Mutagen* 57(3):200-209. <http://doi.org/10.1002/em.21994>.
- Cooney MA, Buck Louis GM, Hediger ML, et al. 2010. Organochlorine pesticides and endometriosis. *Reprod Toxicol* 30(3):365-369. <http://doi.org/10.1016/j.reprotox.2010.05.011>.
- Cooper GS, Savitz DA, Millikan R, et al. 2002. Organochlorine exposure and age at natural menopause. *Epidemiology* 13(6):729-733. <http://doi.org/10.1097/00001648-200211000-00021>.
- Cooper GS, Martin SA, Longnecker MP, et al. 2004. Associations between plasma DDE levels and immunologic measures in African-American farmers in North Carolina. *Environ Health Perspect* 112(10):1080-1084. <http://doi.org/10.1289/ehp.6892>.
- Cooper GS, Klebanoff MA, Promislow J, et al. 2005. Polychlorinated biphenyls and menstrual cycle characteristics. *Epidemiology* 16(2):191-200. <http://doi.org/10.1097/01.ede.0000152913.12393.86>.
- Coulston F. 1985. Reconsideration of the dilemma of DDT for the establishment of an acceptable daily intake. *Regul Toxicol Pharmacol* 5(4):332-383. [http://doi.org/10.1016/0273-2300\(85\)90002-9](http://doi.org/10.1016/0273-2300(85)90002-9).
- Coupe RH, Manning MA, Foreman WT, et al. 2000. Occurrence of pesticides in rain and air in urban and agricultural areas of Mississippi, April-September 1995. *Sci Total Environ* 248(2-3):227-240. [http://doi.org/10.1016/s0048-9697\(99\)00545-8](http://doi.org/10.1016/s0048-9697(99)00545-8).
- Cox S, Niskar AS, Narayan KM, et al. 2007. Prevalence of self-reported diabetes and exposure to organochlorine pesticides among Mexican Americans: Hispanic health and nutrition examination survey, 1982-1984. *Environ Health Perspect* 115(12):1747-1752. <http://doi.org/10.1289/ehp.10258>.
- Craig GR, Ogilvie DM. 1974. Alteration of T-maze performance in mice exposed to DDT during pregnancy and lactation. *Environ Physiol Biochem* 4:189-199.
- Cranmer MF, Carroll JJ, Copeland MF. 1972. Determinations of DDT and metabolites including DDA in human urine by gas chromatography. In: Davies JE, Edmundson WF, eds. *Epidemiology of DDT*, appendix A. State of Florida, Bureau of Research, Division of Health, 147-152.
- Crockett AB, Wiersma GB, Tai H, et al. 1974. Pesticides in soils: Pesticide residue levels in soils and crops, FY-70-National Soils Monitoring Program. *Pestic Monit J* 8:69-97.
- Croes K, Den Hond E, Bruckers L, et al. 2015. Endocrine actions of pesticides measured in the Flemish environment and health studies (FLEHS I and II). *Environ Sci Pollut Res Int* 22(19):14589-14599. <http://doi.org/10.1007/s11356-014-3437-z>.
- Cueto C. 1970. Cardiovascular effects of o,p'-DDD. *IMS Ind Med Surg* 39(1):55-56.
- Cupul-Uicab LA, Hernandez-Avila M, Terrazas-Medina EA, et al. 2010. Prenatal exposure to the major DDT metabolite 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE) and growth in boys from Mexico. *Environ Res* 110(6):595-603. <http://doi.org/10.1016/j.envres.2010.06.001>.
- Cupul-Uicab LA, Klebanoff MA, Brock JW, et al. 2013. Prenatal exposure to persistent organochlorines and childhood obesity in the U.S. collaborative perinatal project. *Environ Health Perspect* 121(9):1103-1109. <http://doi.org/10.1289/ehp.1205901>.
- Cupul-Uicab LA, Terrazas-Medina EA, Hernandez-Avila M, et al. 2014. Prenatal exposure to p,p'-DDE and p,p'-DDT in relation to lower respiratory tract infections in boys from a highly exposed area of Mexico. *Environ Res* 132:19-23. <http://doi.org/10.1016/j.envres.2014.03.017>.
- Cupul-Uicab LA, Terrazas-Medina EA, Hernandez-Avila M, et al. 2017. In utero exposure to DDT and incidence of diarrhea among boys from tropical Mexico. *Environ Res* 159:331-337. <http://doi.org/10.1016/j.envres.2017.08.027>.
- Custer TW, Hines RK, Stewart PM, et al. 1998. Organochlorines, mercury, and selenium in great blue heron eggs from Indiana Dunes National Lakeshore, Indiana. *J Great Lakes Res* 24(1):3-11.
- Dallaire F, Dewailly E, Muckle G, et al. 2004. Acute infections and environmental exposure to organochlorines in Inuit infants from Nunavik. *Environ Health Perspect* 112(14):1359-1365. <http://doi.org/10.1289/ehp.7255>.
- Dallaire R, Dewailly E, Pereg D, et al. 2009. Thyroid function and plasma concentrations of polyhalogenated compounds in Inuit adults. *Environ Health Perspect* 117(9):1380-1386. <http://doi.org/10.1289/ehp.0900633>.

8. REFERENCES

- Dallinga JW, Moonen EJ, Dumoulin JC, et al. 2002. Decreased human semen quality and organochlorine compounds in blood. *Hum Reprod* 17(8):1973-1979. <http://doi.org/10.1093/humrep/17.8.1973>.
- Damgaard IN, Skakkebaek NE, Toppari J, et al. 2006. Persistent pesticides in human breast milk and cryptorchidism. *Environ Health Perspect* 114(7):1133-1138. <http://doi.org/10.1289/ehp.8741>.
- Daniels SI, Chambers JC, Sanchez SS, et al. 2018. Elevated levels of organochlorine pesticides in South Asian immigrants are associated with an increased risk of diabetes. *J Endocr Soc* 2(8):832-841. <http://doi.org/10.1210/jes.2017-00480>.
- Danzo BJ. 1997. Environmental xenobiotics may disrupt normal endocrine function by interfering with the binding of physiological ligands to steroid receptors and binding proteins. *Environ Health Perspect* 105(3):294-301.
- Darnerud PO, Lignell S, Glynn A, et al. 2010. POP levels in breast milk and maternal serum and thyroid hormone levels in mother-child pairs from Uppsala, Sweden. *Environ Int* 36(2):180-187. <http://doi.org/10.1016/j.envint.2009.11.001>.
- Davies RP, Dobbs AJ. 1984. The prediction of bioconcentration in fish. *Water Res* 18:1253-1262.
- de Cock M, de Boer MR, Lamoree M, et al. 2014. Prenatal exposure to endocrine disrupting chemicals in relation to thyroid hormone levels in infants - a Dutch prospective cohort study. *Environ Health* 13:106. <http://doi.org/10.1186/1476-069X-13-106>.
- de Cock M, De Boer MR, Lamoree M, et al. 2016. Prenatal exposure to endocrine disrupting chemicals and birth weight-A prospective cohort study. *J Environ Sci Health A Tox Hazard Subst Environ Eng* 51(2):178-185. <http://doi.org/10.1080/10934529.2015.1087753>.
- de Cock M, de Boer MR, Govarts E, et al. 2017. Thyroid-stimulating hormone levels in newborns and early life exposure to endocrine-disrupting chemicals: analysis of three European mother-child cohorts. *Pediatr Res* 82(3):429-437. <http://doi.org/10.1038/pr.2017.50>.
- de Jager C, Farias P, Barraza-Villarreal A, et al. 2006. Reduced seminal parameters associated with environmental DDT exposure and p,p'-DDE concentrations in men in Chiapas, Mexico: A cross-sectional study. *J Androl* 27(1):16-27. <http://doi.org/10.2164/jandrol.05121>.
- de Jager C, Aneck-Hahn NH, Bornman MS, et al. 2009. Sperm chromatin integrity in DDT-exposed young men living in a malaria area in the Limpopo Province, South Africa. *Hum Reprod* 24(10):2429-2438. <http://doi.org/10.1093/humrep/dep249>.
- De Roos AJ, Hartge P, Lubin JH, et al. 2005. Persistent organochlorine chemicals in plasma and risk of non-Hodgkin's lymphoma. *Cancer Res* 65(23):11214-11226. <http://doi.org/10.1158/0008-5472.CAN-05-1755>.
- De Roos AJ, Ulrich CM, Sjodin A, et al. 2012. Adiposity, body composition, and weight change in relation to organochlorine pollutant plasma concentrations. *J Expo Sci Environ Epidemiol* 22(6):617-624. <http://doi.org/10.1038/jes.2012.43>.
- de Waziers I, Azais V. 1987. Drug-metabolizing enzyme activities in the liver and intestine of rats exposed to DDT: effects of vitamin A status. *Arch Environ Contam Toxicol* 16(3):343-348. <http://doi.org/10.1007/BF01054952>.
- Debost-Legrand A, Warembourg C, Massart C, et al. 2016a. Prenatal exposure to persistent organic pollutants and organophosphate pesticides, and markers of glucose metabolism at birth. *Environ Res* 146:207-217. <http://doi.org/10.1016/j.envres.2016.01.005>.
- Debost-Legrand A, Warembourg C, Massart C, et al. 2016b. Supplemental file to "Prenatal exposure to persistent organic pollutants and organophosphate pesticides, and markers of glucose metabolism at birth". *Environ Res* <http://doi.org/10.1016/j.envres.2016.01.005>.
- Deichmann WB, Keplinger M, Sala F, et al. 1967. Synergism among oral carcinogens. IV. The simultaneous feeding of four tumorigens to rats. *Toxicol Appl Pharmacol* 11:88-103.
- Del Pup JA, Pasternack BS, Harley NH, et al. 1978. Effects of DDT on stable laboratory mouse populations. *J Toxicol Environ Health* 4(4):671-687. <http://doi.org/10.1080/15287397809529689>.

8. REFERENCES

- Delvaux I, Van Cauwenberghe J, Den Hond E, et al. 2014. Prenatal exposure to environmental contaminants and body composition at age 7-9 years. *Environ Res* 132:24-32. <http://doi.org/10.1016/j.envres.2014.03.019>.
- Demers A, Ayotte P, Brisson J, et al. 2000. Risk and aggressiveness of breast cancer in relation to plasma organochlorine concentrations. *Cancer Epidemiol Biomarkers Prev* 9(2):161-166.
- Den Hond E, Dhooge W, Bruckers L, et al. 2011. Internal exposure to pollutants and sexual maturation in Flemish adolescents. *J Expo Sci Environ Epidemiol* 21(3):224-233. <http://doi.org/10.1038/jes.2010.2>.
- Denham M, Schell LM, Deane G, et al. 2005. Relationship of lead, mercury, mirex, dichlorodiphenylchloroethylene, hexachlorobenzene, and polychlorinated biphenyls to timing of menarche among Akwesasne Mohawk girls. *Pediatrics* 115(2):e127-134. <http://doi.org/10.1542/peds.2004-1161>.
- Dewailly E, Ayotte P, Laliberte C, et al. 1996. Polychlorinated biphenyl (PCB) and dichlorodiphenyl dichloroethylene (DDE) concentrations in the breast milk of women in Quebec. *Am J Public Health* 86(9):1241-1246. <http://doi.org/10.2105/ajph.86.9.1241>.
- Dewailly E, Ayotte P, Bruneau S, et al. 2000. Susceptibility to infections and immune status in Inuit infants exposed to organochlorines. *Environ Health Perspect* 108(3):205-211. <http://doi.org/10.1289/ehp.00108205>.
- Dhooge W, Den Hond E, Koppen G, et al. 2010. Internal exposure to pollutants and body size in Flemish adolescents and adults: associations and dose-response relationships. *Environ Int* 36(4):330-337. <http://doi.org/10.1016/j.envint.2010.01.005>.
- Dhooge W, den Hond E, Koppen G, et al. 2011. Internal exposure to pollutants and sex hormone levels in Flemish male adolescents in a cross-sectional study: associations and dose-response relationships. *J Expo Sci Environ Epidemiol* 21(1):106-113. <http://doi.org/10.1038/jes.2009.63>.
- Diel P, Schulz T, Smolnikar K, et al. 2000. Ability of xeno- and phytoestrogens to modulate expression of estrogen-sensitive genes in rat uterus: estrogenicity profiles and uterotrophic activity. *J Steroid Biochem Mol Biol* 73(1-2):1-10. [http://doi.org/10.1016/s0960-0760\(00\)00051-0](http://doi.org/10.1016/s0960-0760(00)00051-0).
- Dimond JB, Owen RB. 1996. Long-term residue of DDT compounds in forest soils in Maine. *Environ Pollut* 92(2):227-230. [http://doi.org/10.1016/0269-7491\(95\)00059-3](http://doi.org/10.1016/0269-7491(95)00059-3).
- Ding J, Wu S. 1997. Transport of organochlorine pesticides in soil columns enhanced by dissolved organic carbon. *Water Sci Technol* 35:139-145.
- Dirinck EL, Dirtu AC, Govindan M, et al. 2014. Exposure to persistent organic pollutants: relationship with abnormal glucose metabolism and visceral adiposity. *Diabetes Care* 37(7):1951-1958. <http://doi.org/10.2337/dc13-2329>.
- Diwan BA, Ward JM, Kurata Y, et al. 1994. Dissimilar frequency of hepatoblastomas and hepatic cystadenomas and adenocarcinomas arising in hepatocellular neoplasms of D2B6F1 mice initiated with N-nitrosodiethylamine and subsequently given Aroclor-1254, dichlorodiphenyltrichloroethane, or phenobarbital. *Toxicol Pathol* 22(4):430-439. <http://doi.org/10.1177/019262339402200409>.
- Djordjevic MV, Fan J, Hoffmann D. 1995. Assessment of chlorinated pesticide residues in cigarette tobacco based on supercritical fluid extraction and GC-ECD. *Carcinogenesis* 16(11):2627-2632. <http://doi.org/10.1093/carcin/16.11.2627>.
- DOE. 2018a. Protective action criteria (PAC) with AEGLs, ERPGs, & TEELs: Rev. 29A, June 2018. U.S. Department of Energy. <https://edms.energy.gov/pac/>. April 12, 2020.
- DOE. 2018b. Table 3: Protective action criteria (PAC) rev. 29a based on applicable 60-minute AEGLs, ERPGs, or TEELs. The chemicals are listed by CASRN. June 2018. U.S. Department of Energy. https://edms.energy.gov/pac/docs/Revision_29A_Table3.pdf. April 12, 2020.
- Donaldson GM, Shutt JL, Hunter P. 1999. Organochlorine contamination in bald eagle eggs and nestlings from the Canadian Great Lakes. *Arch Environ Contam Toxicol* 36(1):70-80. <http://doi.org/10.1007/s002449900444>.

8. REFERENCES

- Donat-Vargas C, Akesson A, Tornevi A, et al. 2018. Persistent organochlorine pollutants in plasma, blood pressure, and hypertension in a longitudinal study. *Hypertension* 71(6):1258-1268. <http://doi.org/10.1161/hypertensionaha.117.10691>.
- Dorea JG, Cruz-Granja AC, Lacayo-Romero ML, et al. 2001. Perinatal metabolism of dichlorodiphenyl dichloroethylene in Nicaraguan mothers. *Environ Res* 86(3):229-237. <http://doi.org/10.1006/enrs.2001.4277>.
- Dorgan JF, Brock JW, Rothman N, et al. 1999. Serum organochloride pesticides and PCBs and breast cancer risk: results from a prospective analysis (USA). *Cancer Causes Control* 10:1-11.
- Dua VK, Kumari R, Sharma VP, et al. 2001. Organochlorine residues in human blood from Nainital (U.P.), India. *Bull Environ Contam Toxicol* 67(1):42-45. <http://doi.org/10.1007/s001280088>.
- Duby RT, Travis HF, Terrill CE. 1971. Uterotropic activity of DDT in rats and mink and its influence on reproduction in the rat. *Toxicol Appl Pharmacol* 18(2):348-355. [http://doi.org/10.1016/0041-008x\(71\)90127-x](http://doi.org/10.1016/0041-008x(71)90127-x).
- Duggan RE, Corneliusen PE, Duggan MB, et al. 1983. Pesticide residue levels in foods in the United States from July 1, 1969, to June 30, 1976: Summary. *J Assoc Off Anal Chem* 66(6):1534-1535.
- Dunstan RH, Roberts TK, Donohoe M, et al. 1996. Bioaccumulated chlorinated hydrocarbons and red/white blood cell parameters. *Biochem Mol Med* 58(1):77-84. <http://doi.org/10.1006/bmme.1996.0035>.
- Durham WF, Ortega P, Hayes WJ. 1963. The effect of various dietary levels of DDT on liver function, cell morphology, and DDT storage in the Rhesus monkey. *Arch Int Pharmacodyn Ther* 141:111-129.
- Dutta R, Mondal AM, Arora V, et al. 2008. Immunomodulatory effect of DDT (bis[4-chlorophenyl]-1,1,1-trichloroethane) on complement system and macrophages. *Toxicology* 252(1-3):78-85. <http://doi.org/10.1016/j.tox.2008.07.063>.
- Eden PR, Meek EC, Wills RW, et al. 2016. Association of type 2 diabetes mellitus with plasma organochlorine compound concentrations. *J Expo Sci Environ Epidemiol* 26(2):207-213. <http://doi.org/10.1038/jes.2014.69>.
- Elobeid MA, Padilla MA, Brock DW, et al. 2010. Endocrine disruptors and obesity: an examination of selected persistent organic pollutants in the NHANES 1999-2002 data. *Int J Environ Res Public Health* 7(7):2988-3005. <http://doi.org/10.3390/ijerph7072988>.
- Elvia LF, Sioban HD, Bernardo HP, et al. 2000. Organochlorine pesticide exposure in rural and urban areas in Mexico. *J Expo Anal Environ Epidemiol* 10(4):394-399. <http://doi.org/10.1038/sj.jea.7500103>.
- Emeille E, Giton F, Giusti A, et al. 2013. Persistent organochlorine pollutants with endocrine activity and blood steroid hormone levels in middle-aged men. *PLoS ONE* 8(6):e66460. <http://doi.org/10.1371/journal.pone.0066460>.
- Emeille E, Giusti A, Coumoul X, et al. 2015. Associations of plasma concentrations of dichlorodiphenyl dichloroethylene and polychlorinated biphenyls with prostate cancer: a case-control study in Guadeloupe (French West Indies). *Environ Health Perspect* 123(4):317-323. <http://doi.org/10.1289/ehp.1408407>.
- Engel LS, Laden F, Andersen A, et al. 2007. Polychlorinated biphenyl levels in peripheral blood and non-Hodgkin's lymphoma: a report from three cohorts. *Cancer Res* 67(11):5545-5552. <http://doi.org/10.1158/0008-5472.CAN-06-3906>.
- Engel LS, Zabor EC, Satagopan J, et al. 2019. Prediagnostic serum organochlorine insecticide concentrations and primary liver cancer: A case-control study nested within two prospective cohorts. *Int J Cancer* 145(9):2360-2371. <http://doi.org/10.1002/ijc.32175>.
- Ennaceur S, Ridha D, Marcos R. 2008. Genotoxicity of the organochlorine pesticides 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE) and hexachlorobenzene (HCB) in cultured human lymphocytes. *Chemosphere* 71(7):1335-1339. <http://doi.org/10.1016/j.chemosphere.2007.11.040>.
- EPA. 1979. Water-related environmental fate of 129 priority pollutants: Volume II: Halogenated aliphatic hydrocarbons, halogenated ethers, monocyclic aromatics, phthalate esters, polycyclic

8. REFERENCES

- aromatic hydrocarbons, nitrosamines, and miscellaneous compounds. Washington, DC: U.S. Environmental Protection Agency. EPA440479026b.
<https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000K6JL.txt>. August 10, 2021.
- EPA. 1980. Ambient water quality criteria for DDT. U.S. Environmental Protection Agency. EPA440580038. PB81117491.
- EPA. 1986a. Superfund public health evaluation manual. Washington, DC: U.S. Environmental Protection Agency. EPA540186060.
- EPA. 1992. U.S. pesticide use trends: 1966-1989. Washington, DC: U.S. Environmental Protection Agency.
- EPA. 1998. Method 8081B. Organochlorine pesticides by gas chromatography. U.S. Environmental Protection Agency.
- EPA. 1999. National recommended water quality criteria-correction. U.S. Environmental Protection Agency. EPA822Z99001.
- EPA. 2005. Toxic Chemical Release Inventory reporting forms and instructions: Revised 2004 version. Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986). U.S. Environmental Protection Agency. EPA260B05001.
- EPA. 2008. The analysis of occurrence data from the first unregulated contaminant monitoring regulation (UCMR 1) in support of regulatory determinations for the second drinking water contaminant candidate list (CCL 2). U.S. Environmental Protection Agency. EPA815R08013.
- EPA. 2009. National primary drinking water regulations. U.S. Environmental Protection Agency. EPA816F090004. https://www.epa.gov/sites/production/files/2016-06/documents/npwdr_complete_table.pdf. September 7, 2017.
- EPA. 2011. Exposure factors handbook: 2011 edition. Washington, DC: U.S. Environmental Protection Agency. EPA600R09052F.
<https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252>. July 19, 2021.
- EPA. 2014. United Heckathorn Superfund site, Richmond, California. DDT fate and transport study. U.S. Environmental Protection Agency.
[http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/3dc283e6c5d6056f88257426007417a2/d9263fb3f9c7358e88257d18005d365d/\\$FILE/Final_Heckathorn_DDT_FateAndTransport.pdf](http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/3dc283e6c5d6056f88257426007417a2/d9263fb3f9c7358e88257d18005d365d/$FILE/Final_Heckathorn_DDT_FateAndTransport.pdf) January 18, 2018.
- EPA. 2017a. Guidelines establishing test procedures for the analysis of pollutants. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 136.
<https://www.gpo.gov/fdsys/pkg/CFR-2017-title40-vol25/pdf/CFR-2017-title40-vol25-part136.pdf>. January 9, 2017.
- EPA. 2017b. Provisional peer-reviewed toxicity values for p,p'-dichlorodiphenyl dichloroethane (p,p'-DDD). Cincinnati, OH: U.S. Environmental Protection Agency. EPA690R17006.
https://cfpub.epa.gov/ncea/pprtv/chemicalLanding.cfm?pprtv_sub_id=1663. July 26, 2021.
- EPA. 2017c. Provisional peer-reviewed toxicity values for p,p'-dichlorodiphenyl dichloroethylene (p,p'-DDE). Cincinnati, OH: U.S. Environmental Protection Agency. EPA690R17007.
https://cfpub.epa.gov/ncea/pprtv/chemicalLanding.cfm?pprtv_sub_id=1664. July 25, 2021.
- EPA. 2018a. Acute Exposure Guideline Levels (AEGLs) values. U.S. Environmental Protection Agency. https://www.epa.gov/sites/production/files/2018-08/documents/compiled_aegls_update_27jul2018.pdf. April 12, 2020.
- EPA. 2018b. 2018 Edition of the drinking water standards and health advisories. Washington, DC: U.S. Environmental Protection Agency. EPA822S12001.
<https://www.epa.gov/sites/production/files/2018-03/documents/dwtable2018.pdf>. July 25, 2018.
- Eriksson P, Nordberg A. 1986. The effects of DDT, DDOH-palmitic acid, and a chlorinated paraffin on muscarinic receptors and the sodium-dependent choline uptake in the central nervous system of immature mice. *Toxicol Appl Pharmacol* 85(2):121-127. [http://doi.org/10.1016/0041-008x\(86\)90105-5](http://doi.org/10.1016/0041-008x(86)90105-5).

8. REFERENCES

- Eriksson P, Archer T, Fredriksson A. 1990a. Altered behaviour in adult mice exposed to a single low dose of DDT and its fatty acid conjugate as neonates. *Brain Res* 514:141-142.
- Eriksson P, Nilsson-Hakansson L, Nordberg A, et al. 1990b. Neonatal exposure to DDT and its fatty acid conjugate: effects on cholinergic and behavioural variables in the adult mouse. *Neurotoxicology* 11(2):345-354.
- Eriksson P, Ahlbom J, Fredriksson A. 1992. Exposure to DDT during a defined period in neonatal life induces permanent changes in brain muscarinic receptors and behaviour in adult mice. *Brain Res* 582(2):277-281. [http://doi.org/10.1016/0006-8993\(92\)90144-x](http://doi.org/10.1016/0006-8993(92)90144-x).
- Eriksson P, Johansson U, Ahlbom J, et al. 1993. Neonatal exposure to DDT induces increased susceptibility to pyrethroid (bioallethrin) exposure at adult age. Changes in cholinergic muscarinic receptor and behavioural variables. *Toxicology* 77:21-30.
- Eskenazi B, Marks AR, Bradman A, et al. 2006. In utero exposure to dichlorodiphenyltrichloroethane (DDT) and dichlorodiphenyldichloroethylene (DDE) and neurodevelopment among young Mexican American children. *Pediatrics* 118(1):233-241. <http://doi.org/10.1542/peds.2005-3117>.
- Eskenazi B, Rauch SA, Tenerelli R, et al. 2017. In utero and childhood DDT, DDE, PBDE and PCBs exposure and sex hormones in adolescent boys: The CHAMACOS study. *Int J Hyg Environ Health* 220(2 Pt B):364-372. <http://doi.org/10.1016/j.ijheh.2016.11.001>.
- Eskenazi B, An S, Rauch SA, et al. 2018. Prenatal exposure to DDT and pyrethroids for malaria control and child neurodevelopment: The VHEMBE cohort, South Africa. *Environ Health Perspect* 126(4):047004. <http://doi.org/10.1289/ehp2129>.
- Evangelou E, Ntritsos G, Chondrogiorgi M, et al. 2016. Exposure to pesticides and diabetes: A systematic review and meta-analysis. *Environ Int* 91:60-68. <http://doi.org/10.1016/j.envint.2016.02.013>.
- Evans MS, Noguchi GE, Rice CP. 1991. The biomagnification of polychlorinated biphenyls, toxaphene, and DDT compounds in a Lake Michigan offshore food web. *Arch Environ Contam Toxicol* 20(1):87-93. <http://doi.org/10.1007/BF01065333>.
- Everett CJ, Frithsen IL, Diaz VA, et al. 2007. Association of a polychlorinated dibenzo-p-dioxin, a polychlorinated biphenyl, and DDT with diabetes in the 1999-2002 National Health and Nutrition Examination Survey. *Environ Res* 103(3):413-418. <http://doi.org/10.1016/j.envres.2006.11.002>.
- Everett CJ, Matheson EM. 2010. Biomarkers of pesticide exposure and diabetes in the 1999-2004 national health and nutrition examination survey. *Environ Int* 36(4):398-401. <http://doi.org/10.1016/j.envint.2010.02.010>.
- Everett CJ, Thompson OM. 2015. Association of DDT and heptachlor epoxide in human blood with diabetic nephropathy. *Rev Environ Health* 30(2):93-97. <http://doi.org/10.1515/reveh-2015-0003>.
- Everett CJ, Thompson OM, Dismuke CE. 2017a. Exposure to DDT and diabetic nephropathy among Mexican Americans in the 1999-2004 National Health and Nutrition Examination Survey. *Environ Pollut* 222:132-137.
- Everett CJ, Thompson OM, Dismuke CE. 2017b. DDT and DDE concentrations in blood of Mexican Americans exposed to DDT in Mexico: The 1999-2004 National Health and Nutrition Examination Study. *Int J Agric Environ Res* 3(4):370-376.
- Fabro S, McLachlan JA, Dames NM. 1984. Chemical exposure of embryos during the preimplantation stages of pregnancy: mortality rate and intrauterine development. *Am J Obstet Gynecol* 148(7):929-938. [http://doi.org/10.1016/0002-9378\(84\)90535-0](http://doi.org/10.1016/0002-9378(84)90535-0).
- Fahrig R. 1974. Comparative mutagenicity studies with pesticides. *IARC Sci Publ* 10:161-181.
- Fakhri Y, Sheikhmohammadi A, Bay A, et al. 2017. Association between dichlorodiphenyldichloroethylene in the serum and adipose tissue with Type 2 Diabetes: A systematic review and meta-analysis. *Glob J Health Sci* 9(2):43.
- Falck F, Ricci A, Wolff MS, et al. 1992. Pesticides and polychlorinated biphenyl residues in human breast lipids and their relation to breast cancer. *Arch Environ Health* 47(2):143-146.

8. REFERENCES

- Fang SC, Fallin E, Freed VH. 1977. Maternal transfer of ¹⁴C-p,p'-DDT via placenta and milk and its metabolism in infant rats. *Arch Environ Contam Toxicol* 5(4):427-436.
<http://doi.org/10.1007/BF02220922>.
- Farhang L, Weintraub JM, Petreas M, et al. 2005. Association of DDT and DDE with birth weight and length of gestation in the Child Health and Development Studies, 1959-1967. *Am J Epidemiol* 162(8):717-725. <http://doi.org/10.1093/aje/kwi276>.
- Fawcett SC, King LJ, Bunyan PJ, et al. 1987. The metabolism of ¹⁴C-DDT, ¹⁴C-DDD, ¹⁴C-DDE, and ¹⁴C-DDMU in rats and Japanese quail. *Xenobiotica* 17(5):525-538.
- FDA. 1995. Pesticide program residue monitoring. Washington, DC: U.S. Food and Drug Administration.
- FDA. 1999. Food and Drug Administration Pesticide Program: Residue monitoring 1999. U.S. Food and Drug Administration. <http://www.cfsan.fda.gov/~dms/pesrpts.html>. March 27, 2017.
- FDA. 2001. Drug products containing certain active ingredients offered over-the-counter. U.S. Food and Drug Administration. Code of Federal Regulations. 21 CFR 310.545.
- FDA. 2006. U.S. Food and Drug Administration- total diet study market baskets 2004-1 through 2005-4. College Park, MD: U.S. Food and Drug Administration.
- FDA. 2021. Substances added to food. U.S. Food and Drug Administration.
<https://www.cfsanappexternal.fda.gov/scripts/fdcc/?set=FoodSubstances>. February 3, 2021.
- Fenster L, Eskenazi B, Anderson M, et al. 2006. Association of in utero organochlorine pesticide exposure and fetal growth and length of gestation in an agricultural population. *Environ Health Perspect* 114(4):597-602. <http://doi.org/10.1289/ehp.8423>.
- Fenster L, Eskenazi B, Anderson M, et al. 2007. In utero exposure to DDT and performance on the Brazelton neonatal behavioral assessment scale. *Neurotoxicology* 28(3):471-477.
<http://doi.org/10.1016/j.neuro.2006.12.009>.
- Ferguson KK, Hauser R, Altshul L, et al. 2012. Serum concentrations of p, p'-DDE, HCB, PCBs and reproductive hormones among men of reproductive age. *Reprod Toxicol* 34(3):429-435.
<http://doi.org/10.1016/j.reprotox.2012.04.006>.
- Fernandez MF, Olmos B, Granada A, et al. 2007. Human exposure to endocrine-disrupting chemicals and prenatal risk factors for cryptorchidism and hypospadias: a nested case-control study. *Environ Health Perspect* 115 Suppl 1:8-14. <http://doi.org/10.1289/ehp.9351>.
- Fiorini C, Tilloy-Ellul A, Chevalier S, et al. 2004. Sertoli cell junctional proteins as early targets for different classes of reproductive toxicants. *Reprod Toxicol* 18(3):413-421.
<http://doi.org/10.1016/j.reprotox.2004.01.002>.
- Fishbein L. 1973. Mutagens and potential mutagens in the biosphere. I. DDT and its metabolites, polychlorinated biphenyls, chlorodioxins, polycyclic aromatic hydrocarbons, haloethers. *Sci Total Environ* 4:305-340.
- Fitzhugh OG, Nelson AA. 1947. The chronic oral toxicity of DDT (2,2-bis(p-chlorophenyl-1,1,1-trichloroethane). *J Pharmacol Exp Ther* 89(1):18-30.
- Fluck ER, Poirier LA, Ruelius HW. 1976. Evaluation of a DNA polymerase-deficient mutant of *E. coli* for the rapid detection of carcinogens. *Chem Biol Interact* 15(3):219-231.
[http://doi.org/10.1016/0009-2797\(76\)90148-4](http://doi.org/10.1016/0009-2797(76)90148-4).
- Ford WM, Hill EP. 1990. Organochlorine contaminants in eggs and tissue of wood ducks from Mississippi. *Bull Environ Contam Toxicol* 45(6):870-875. <http://doi.org/10.1007/BF01701086>.
- Ford WM, Hill EP. 1991. Organochlorine pesticides in soil sediments and aquatic animals in the upper Steele bayou watershed of Mississippi. *Arch Environ Contam Toxicol* 20:161-167.
- Forns J, Torrent M, Garcia-Esteban R, et al. 2012a. Longitudinal association between early life socio-environmental factors and attention function at the age 11 years. *Environ Res* 117:54-59.
<http://doi.org/10.1016/j.envres.2012.04.007>.
- Forns J, Lertxundi N, Aranbarri A, et al. 2012b. Prenatal exposure to organochlorine compounds and neuropsychological development up to two years of life. *Environ Int* 45:72-77.
<http://doi.org/10.1016/j.envint.2012.04.009>.

8. REFERENCES

- Forns J, Mandal S, Iszatt N, et al. 2016. Novel application of statistical methods for analysis of multiple toxicants identifies DDT as a risk factor for early child behavioral problems. *Environ Res* 151:91-100. <http://doi.org/10.1016/j.envres.2016.07.014>.
- Forns J, Stigum H, Hoyer BB, et al. 2018. Prenatal and postnatal exposure to persistent organic pollutants and attention-deficit and hyperactivity disorder: a pooled analysis of seven European birth cohort studies. *Int J Epidemiol* 47(4):1082-1097. <http://doi.org/10.1093/ije/dyy052>.
- Francone MP, Mariani FH, DeMare C. 1952. [Clinical signs of poisoning by DDT]. *Rev Asoc Med Argent* 66:56-59. (Spanish)
- Frank R, Braun HE. 1989. PCB and DDE residues in milk supplies of Ontario, Canada 1985-1986. *Bull Environ Contam Toxicol* 42(5):666-669. <http://doi.org/10.1007/BF01700385>.
- Franken C, Koppen G, Lambrechts N, et al. 2017. Environmental exposure to human carcinogens in teenagers and the association with DNA damage. *Environ Res* 152:165-174. <http://doi.org/10.1016/j.envres.2016.10.012>.
- Freire C, Lopez-Espinosa MJ, Fernandez M, et al. 2011. Prenatal exposure to organochlorine pesticides and TSH status in newborns from Southern Spain. *Sci Total Environ* 409(18):3281-3287. <http://doi.org/10.1016/j.scitotenv.2011.05.037>.
- Freire C, Koifman RJ, Sarcinelli P, et al. 2012. Long term exposure to organochlorine pesticides and thyroid function in children from Cidade dos Meninos, Rio de Janeiro, Brazil. *Environ Res* 117:68-74. <http://doi.org/10.1016/j.envres.2012.06.009>.
- Freire C, Koifman RJ, Sarcinelli PN, et al. 2013. Long-term exposure to organochlorine pesticides and thyroid status in adults in a heavily contaminated area in Brazil. *Environ Res* 127:7-15. <http://doi.org/10.1016/j.envres.2013.09.001>.
- Freire C, Koifman RJ, Sarcinelli PN, et al. 2014. Association between serum levels of organochlorine pesticides and sex hormones in adults living in a heavily contaminated area in Brazil. *Int J Hyg Environ Health* 217(2-3):370-378. <http://doi.org/10.1016/j.ijheh.2013.07.012>.
- Freire C, Koifman RJ, Koifman S. 2015a. Hematological and hepatic alterations in Brazilian population heavily exposed to organochlorine pesticides. *J Toxicol Environ Health A* 78(8):534-548. <http://doi.org/10.1080/15287394.2014.999396>.
- Freire C, Koifman RJ, Koifman S. 2015b. Supplemental data to "Hematological and hepatic alterations in Brazilian population heavily exposed to organochlorine pesticides". *J Toxicol Environ Health A* <http://doi.org/10.1080/15287394.2014.999396>.
- Fry K, Power MC. 2017. Persistent organic pollutants and mortality in the United States, NHANES 1999-2011. *Environ Health* 16(1):105. <http://doi.org/10.1186/s12940-017-0313-6>.
- Fuhremann TW, Lichtenstein EP. 1980. A comparative study of the persistence, movement, and metabolism of six carbon-14 insecticides in soils and plants. *J Agric Food Chem* 28(2):446-452. <http://doi.org/10.1021/jf60228a016>.
- Gabliks J, Al-zubaidy T, Askari E. 1975. DDT and immunological responses. 3. Reduced anaphylaxis and mast cell populations in rats fed DDT. *Arch Environ Health* 30:81-84.
- Gaido KW, Leonard LS, Lovell S, et al. 1997. Evaluation of chemicals with endocrine modulating activity in a yeast-based steroid hormone receptor gene transcription assay. *Toxicol Appl Pharmacol* 143(1):205-212. <http://doi.org/10.1006/taap.1996.8069>.
- Gaines TB. 1969. Acute toxicity of pesticides. *Toxicol Appl Pharmacol* 14(3):515-534. [http://doi.org/10.1016/0041-008x\(69\)90013-1](http://doi.org/10.1016/0041-008x(69)90013-1).
- Gallo MV, Ravenscroft J, Carpenter DO, et al. 2016. Endocrine disrupting chemicals and ovulation: Is there a relationship? *Environ Res* 151:410-418. <http://doi.org/10.1016/j.envres.2016.08.007>.
- Gammon MD, Wolff MS, Neugut AI, et al. 1997. Temporal variation in chlorinated hydrocarbons in healthy women. *Cancer Epidemiol Biomarkers Prev* 6(5):327-332.
- Garabrant DH, Held J, Langholz B, et al. 1992. DDT and related compounds and risk of pancreatic cancer. *J Natl Cancer Inst* 84(10):764-771. <http://doi.org/10.1093/jnci/84.10.764>.

8. REFERENCES

- Garcia S, Torres-Sanchez L, Cebrian ME, et al. 2012. Prenatal dichlorodiphenyldichloroethylene (DDE) exposure and child growth during the first year of life. *Environ Res* 113:58-62. <http://doi.org/10.1016/j.envres.2011.12.002>.
- Garcia M, Mourelle M. 1984. Gamma-glutamyl transpeptidase: a sensitive marker in DDT and toxaphene exposure. *J Appl Toxicol* 4(5):246-248. <http://doi.org/10.1002/jat.2550040506>.
- Garcia-Villarino M, Riano-Galan I, Rodriguez-Dehli AC, et al. 2018. Prenatal Exposure to Persistent Organic Pollutants and Anogenital Distance in Children at 18 Months. *Horm Res Paediatr* 90(2):116-122. <http://doi.org/10.1159/000492236>.
- Garrett RM. 1947. Toxicity of DDT for man. *J Med Assoc State Ala* 17(2):74-76.
- Gartrell MJ, Craun JC, Podrebarac DS, et al. 1985. Pesticides, selected elements, and other chemicals in adult total diet samples, October 1979-September 1980. *J Assoc Off Anal Chem* 68(6):1184-1197.
- Gartrell MJ, Craun JC, Podrebarac DS, et al. 1986a. Pesticides, selected elements, and other chemicals in adult total diet samples, October 1980-March 1982. *J Assoc Off Anal Chem* 69(1):146-159.
- Gartrell MJ, Craun JC, Podrebarac DS, et al. 1986b. Pesticides, selected elements, and other chemicals in infant and toddler total diet samples, October 1980-March 1982. *J Assoc Off Anal Chem* 69(1):123-145.
- Gascon M, Vrijheid M, Martinez D, et al. 2012. Pre-natal exposure to dichlorodiphenyldichloroethylene and infant lower respiratory tract infections and wheeze. *Eur Respir J* 39(5):1188-1196. <http://doi.org/10.1183/09031936.00011711>.
- Gascon M, Verner MA, Guxens M, et al. 2013. Evaluating the neurotoxic effects of lactational exposure to persistent organic pollutants (POPs) in Spanish children. *Neurotoxicology* 34:9-15. <http://doi.org/10.1016/j.neuro.2012.10.006>.
- Gascon M, Sunyer J, Casas M, et al. 2014. Prenatal exposure to DDE and PCB 153 and respiratory health in early childhood: a meta-analysis. *Epidemiology* 25(4):544-553. <http://doi.org/10.1097/EDE.0000000000000097>.
- Gaspar FW, Harley KG, Kogut K, et al. 2015a. Prenatal DDT and DDE exposure and child IQ in the CHAMACOS cohort. *Environ Int* 85:206-212. <http://doi.org/10.1016/j.envint.2015.09.004>.
- Gaspar FW, Harley KG, Kogut K, et al. 2015b. Supplemental material: Prenatal DDT and DDE exposure and child IQ in the CHAMACOS cohort. *Environ Int* <http://doi.org/10.1016/j.envint.2015.09.004>.
- Gaspar-Ramirez O, Perez-Vazquez FJ, Salgado-Bustamante M, et al. 2015. DDE and PCB 153 independently induce aryl hydrocarbon receptor (AhR) expression in peripheral blood mononuclear cells. *J Immunotoxicol* 12(3):266-272. <http://doi.org/10.3109/1547691X.2014.960108>.
- Gasull M, Porta M, Pumarega J, et al. 2010. The relative influence of diet and serum concentrations of organochlorine compounds on K-ras mutations in exocrine pancreatic cancer. *Chemosphere* 79(7):686-697. <http://doi.org/10.1016/j.chemosphere.2010.03.011>.
- Gasull M, Pumarega J, Tellez-Plaza M, et al. 2012. Blood concentrations of persistent organic pollutants and prediabetes and diabetes in the general population of Catalonia. *Environ Sci Technol* 46(14):7799-7810. <http://doi.org/10.1021/es300712g>.
- Gauthier JM, Pelletier E, Brochu C, et al. 1998. Environmental contaminants in tissues of neonate St Lawrence Beluga whale (*Delphinapterus leucas*). *Mar Pollut Bull* 36(1):102-108.
- Gellert RJ, Heinrichs WL. 1975. Effects of DDT homologs administered to female rats during the perinatal period. *Biol Neonate* 26(3-4):283-290. <http://doi.org/10.1159/000240740>.
- Gellert RJ, Heinrichs WL, Swerdloff RS. 1972. DDT homologues: estrogen-like effects on the vagina, uterus and pituitary of the rat. *Endocrinology* 91(4):1095-1100. <http://doi.org/10.1210/endo-91-4-1095>.
- Gellert RJ, Heinrichs WL, Swerdloff R. 1974. Effects of neonatally-administered DDT homologs on reproductive function in male and female rats. *Neuroendocrinology* 16(2):84-94. <http://doi.org/10.1159/000122555>.
- Genuis SJ, Lane K, Birkholz D. 2016. Human elimination of organochlorine pesticides: Blood, urine, and sweat study. *Biomed Res Int* 2016:1624643. <http://doi.org/10.1155/2016/1624643>.

8. REFERENCES

- Geric M, Ceraj-Ceric N, Gajski G, et al. 2012. Cytogenetic status of human lymphocytes after exposure to low concentrations of p,p'-DDT, and its metabolites (p,p'-DDE, and p,p'-DDD) in vitro. *Chemosphere* 87(11):1288-1294. <http://doi.org/10.1016/j.chemosphere.2012.01.037>.
- Geyer H, Sheehan P, Kotzias D, et al. 1982. Prediction of ecotoxicological behaviour of chemicals: Relationship between physico-chemical properties and bioaccumulation of organic chemicals in the mussel *Mytilus edulis*. *Chemosphere* 11:1121-1134.
- Gianessi LP, Puffer CA. 1992. Insecticide use in U.S. crop production: Resources for the future. Washington, DC: U.S. Food and Drug Administration and U.S. Environmental Protection Agency. U.S. EPA Cooperative Agreement CR 813719.
- Giannandrea F, Gandini L, Paoli D, et al. 2011. Pesticide exposure and serum organochlorine residuals among testicular cancer patients and healthy controls. *J Environ Sci Health B* 46(8):780-787. <http://doi.org/10.1080/03601234.2012.597704>.
- Giesy JP, Verbrugge DA, Othout RA, et al. 1994. Contaminants in fishes from Great Lakes-influenced sections and above dams of three Michigan rivers. I: Concentrations of organo chlorine insecticides, polychlorinated biphenyls, dioxin equivalents, and mercury. *Arch Environ Contam Toxicol* 27(2):202-212. <http://doi.org/10.1007/BF00214264>.
- Gilliom RJ. 1984. Pesticides in rivers of the United States. National water summary 1984: Hydrologic events, selected water-quality trends, and ground-water resources. Water Supply Paper 2275. U.S. Geological Survey. 85-92. <http://doi.org/10.3133/wsp2275>.
- Gillis CA, Bonnevie NL, Su SH, et al. 1995. DDT, DDD, and DDE contamination of sediment in the Newark Bay Estuary, New Jersey. *Arch Environ Contam Toxicol* 28:85-92.
- Gingell R. 1975. Enterohepatic circulation of bis(p-chlorophenyl)acetic acid in the rat. *Drug Metab Dispos* 3(1):42-46.
- Giordano F, Abballe A, De Felip E, et al. 2010. Maternal exposures to endocrine disrupting chemicals and hypospadias in offspring. *Birth Defects Res A Clin Mol Teratol* 88(4):241-250. <http://doi.org/10.1002/bdra.20657>.
- Giwercman AH, Rignell-Hydbom A, Toft G, et al. 2006. Reproductive hormone levels in men exposed to persistent organohalogen pollutants: a study of Inuit and three European cohorts. *Environ Health Perspect* 114(9):1348-1353. <http://doi.org/10.1289/ehp.8935>.
- Gladen BC, Rogan WJ. 1995. DDE and shortened duration of lactation in a northern Mexican town. *Am J Public Health* 85(4):504-508. <http://doi.org/10.2105/ajph.85.4.504>.
- Gladen BC, Rogan WJ, Hardy P, et al. 1988. Development after exposure to polychlorinated biphenyls and dichlorodiphenyl dichloroethene transplacentally and through human milk. *J Pediatr* 113(6):991-995. [http://doi.org/10.1016/s0022-3476\(88\)80569-9](http://doi.org/10.1016/s0022-3476(88)80569-9). 2017/04/05.
- Gladen BC, Ragan NB, Rogan WJ. 2000. Pubertal growth and development and prenatal and lactational exposure to polychlorinated biphenyls and dichlorodiphenyl dichloroethene. *J Pediatr* 136(4):490-496. [http://doi.org/10.1016/s0022-3476\(00\)90012-x](http://doi.org/10.1016/s0022-3476(00)90012-x).
- Gladen BC, Shkiryak-Nyzhnyk ZA, Chyslovska N, et al. 2003. Persistent organochlorine compounds and birth weight. *Ann Epidemiol* 13(3):151-157. [http://doi.org/10.1016/s1047-2797\(02\)00268-5](http://doi.org/10.1016/s1047-2797(02)00268-5).
- Gladen BC, Klebanoff MA, Hediger ML, et al. 2004. Prenatal DDT exposure in relation to anthropometric and pubertal measures in adolescent males. *Environ Health Perspect* 112(17):1761-1767. <http://doi.org/10.1289/ehp.7287>.
- Glynn AW, Michaelsson K, Lind PM, et al. 2000. Organochlorines and bone mineral density in Swedish men from the general population. *Osteoporos Int* 11(12):1036-1042. <http://doi.org/10.1007/s001980070025>.
- Glynn A, Thuvander A, Aune M, et al. 2008. Immune cell counts and risks of respiratory infections among infants exposed pre- and postnatally to organochlorine compounds: a prospective study. *Environ Health* 7:62. <http://doi.org/10.1186/1476-069X-7-62>.
- Gold B, Brunk G. 1982. Metabolism of 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-ethane and 1,1-dichloro-2,2-bis(p-chlorophenyl)ethane in the mouse. *Chem Biol Interact* 41(3):327-339. [http://doi.org/10.1016/0009-2797\(82\)90109-0](http://doi.org/10.1016/0009-2797(82)90109-0).

8. REFERENCES

- Gold B, Brunk G. 1983. Metabolism of 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (DDT), 1,1-dichloro-2,2-bis(p-chlorophenyl)ethane, and 1-chloro-2,2-bis(p-chlorophenyl)ethene in the hamster. *Cancer Res* 43(6):2644-2647.
- Gold B, Brunk G. 1984. A mechanistic study of the metabolism of 1,1-dichloro-2,2-bis(p-chlorophenyl)ethane (DDD) to 2,2-bis(p-chlorophenyl)acetic acid (DDA). *Biochem Pharmacol* 33(7):979-982. [http://doi.org/10.1016/0006-2952\(84\)90503-3](http://doi.org/10.1016/0006-2952(84)90503-3).
- Goldberg ED. 1975. Synthetic organohalides in the sea. *Proc R Soc Lond B Biol Sci* 189(1096):277-289. <http://doi.org/10.1098/rspb.1975.0057>.
- Goldman M. 1981. The effect of a single dose of DDT on thyroid function in male rats. *Arch Int Pharmacodyn Ther* 252(2):327-334.
- Goncharov A, Rej R, Negoita S, et al. 2009. Lower serum testosterone associated with elevated polychlorinated biphenyl concentrations in Native American men. *Environ Health Perspect* 117(9):1454-1460. <http://doi.org/10.1289/ehp.0800134>.
- Goncharov A, Pavuk M, Foushee HR, et al. 2011. Blood pressure in relation to concentrations of PCB congeners and chlorinated pesticides. *Environ Health Perspect* 119(3):319-325. <http://doi.org/10.1289/ehp.1002830>.
- Govarts E, Nieuwenhuijsen M, Schoeters G, et al. 2012. Birth weight and prenatal exposure to polychlorinated biphenyls (PCBs) and dichlorodiphenyldichloroethylene (DDE): a meta-analysis within 12 European Birth Cohorts. *Environ Health Perspect* 120(2):162-170. <http://doi.org/10.1289/ehp.1103767>.
- Govarts E, Iszatt N, Trnovec T, et al. 2018. Prenatal exposure to endocrine disrupting chemicals and risk of being born small for gestational age: Pooled analysis of seven European birth cohorts. *Environ Int* 115:267-278. <http://doi.org/10.1016/j.envint.2018.03.017>.
- Graillot C, Gak JC, Truhart CLR. 1975. Recherches sur les modalites et les mecanismes d'action toxique des insecticides organochlores. II. Etude chez le hamster des effets de toxicite a long terme du DDT. *Eur J Toxicol* 8(6):353-359. (French)
- Grandjean P, Henriksen JE, Choi AL, et al. 2011. Marine food pollutants as a risk factor for hypoinsulinemia and type 2 diabetes. *Epidemiology* 22(3):410-417.
- Gray LE, Wolf C, Lambright C, et al. 1999. Administration of potentially antiandrogenic pesticides (procymidone, linuron, iprodione, chlozolinate, p,p'-DDE, and ketoconazole) and toxic substances (dibutyl- and diethylhexyl phthalate, PCB 169, and ethane dimethane sulphonate) during sexual differentiation produces diverse profiles of reproductive malformations in the male rat. *Toxicol Ind Health* 15(1-2):94-118.
- Green VA. 1969. Effects of pesticides on rat and chick embryo. *Trace Subst Environ Health* 3:183-209.
- Griffin DE, Hill WE. 1978. In vitro breakage of plasmid DNA by mutagenesis and pesticides. *Mutat Res* 52:161-169.
- Grindler NM, Allsworth JE, Macones GA, et al. 2015. Persistent organic pollutants and early menopause in U.S. women. *PLoS ONE* 10(1):e0116057. <http://doi.org/10.1371/journal.pone.0116057>.
- Gunderson EL. 1995a. FDA Total Diet Study, July 1986-April 1991, dietary intakes of pesticides, selected elements, and other chemicals. *J AOAC Int* 78(6):1353-1363.
- Gunderson EL. 1995b. Dietary intakes of pesticides, selected elements, and other chemicals: FDA Total Diet Study, June 1984-April 1986. *J AOAC Int* 78(4):910-921.
- Guo H, Jin Y, Cheng Y, et al. 2014. Prenatal exposure to organochlorine pesticides and infant birth weight in China. *Chemosphere* 110:1-7. <http://doi.org/10.1016/j.chemosphere.2014.02.017>.
- Gupta PH, Mehta S, Mehta SK. 1989. Effect of DDT on hepatic mixed-function oxidase activity in normal and vitamin A-deficient rats. *Biochem Int* 19(2):247-256.
- Guzzardi MA, Iozzo P, Salonen MK, et al. 2016. Exposure to persistent organic pollutants predicts telomere length in older age: Results from the Helsinki Birth Cohort Study. *Aging Dis* 7(5):540-552. <http://doi.org/10.14336/ad.2016.0209>.
- Ha MH, Lee DH, Jacobs DR. 2007. Association between serum concentrations of persistent organic pollutants and self-reported cardiovascular disease prevalence: results from the National Health and

8. REFERENCES

- Nutrition Examination Survey, 1999-2002. Environ Health Perspect 115(8):1204-1209.
<http://doi.org/10.1289/ehp.10184>.
- Hagmar L, Bjork J, Sjodin A, et al. 2001. Plasma levels of persistent organohalogens and hormone levels in adult male humans. Arch Environ Health 56(2):138-143.
<http://doi.org/10.1080/00039890109604065>.
- Hamid J, Sayeed A, McFarlane H. 1974. The effect of 1-(o-chlorophenyl)-1-(p-chlorophenyl)-2,2-dichloroethane(o,p'-DDD) on the immune response in malnutrition. Br J Exp Pathol 55(1):94-100.
- Hammer T, Lophaven SN, Nielsen KR, et al. 2019. Dietary risk factors for inflammatory bowel diseases in a high-risk population: Results from the Faroese IBD study. United European Gastroenterol J 7(7):924-932. <http://doi.org/10.1177/2050640619852244>.
- Han L, Hsu WW, Todem D, et al. 2016. In utero exposure to polychlorinated biphenyls is associated with decreased fecundability in daughters of Michigan female fisheaters: a cohort study. Environ Health 15(1):92. <http://doi.org/10.1186/s12940-016-0175-3>.
- Han X, Zhang F, Meng L, et al. 2020. Exposure to organochlorine pesticides and the risk of type 2 diabetes in the population of East China. Ecotoxicol Environ Saf 190:110125.
<http://doi.org/10.1016/j.ecoenv.2019.110125>.
- Hanrahan LP, Falk C, Anderson HA, et al. 1999. Serum PCB and DDE levels of frequent Great Lakes sport fish consumers-a first look. The Great Lakes Consortium. Environ Res 80(2 Pt 2):S26-S37.
<http://doi.org/10.1006/enrs.1998.3914>.
- Hansen S, Strom M, Olsen SF, et al. 2014. Maternal concentrations of persistent organochlorine pollutants and the risk of asthma in offspring: results from a prospective cohort with 20 years of follow-up. Environ Health Perspect 122(1):93-99. <http://doi.org/10.1289/ehp.1206397>.
- Hansen S, Strom M, Olsen SF, et al. 2016. Prenatal exposure to persistent organic pollutants and offspring allergic sensitization and lung function at 20 years of age. Clin Exp Allergy 46(2):329-336. <http://doi.org/10.1111/cea.12631>.
- Harada T, Yamaguchi S, Ohtsuka R, et al. 2003. Mechanisms of promotion and progression of preneoplastic lesions in hepatocarcinogenesis by DDT in F344 rats. Toxicol Pathol 31(1):87-98.
<http://doi.org/10.1080/01926230390173941>.
- Harada T, Ohtsuka R, Takeda M, et al. 2006. Hepatocarcinogenesis by DDT in Rats. J Toxicol Pathol 19(4):155-167. <http://doi.org/10.1293/tox.19.155>.
- Harada T, Takeda M, Kojima S, et al. 2016. Toxicity and carcinogenicity of dichlorodiphenyltrichloroethane (DDT). Toxicol Res 32(1):21-33.
<http://doi.org/10.5487/TR.2016.32.1.021>.
- Haraguchi K, Kuroki H, Masuda Y. 1989. Occurrence and distribution of chlorinated aromatic methylsulfones and sulfoxides in biological samples. Chemosphere 19(1-6):487-492.
- Hardell E, Eriksson M, Lindstrom G, et al. 2001. Case-control study on concentrations of organohalogen compounds and titers of antibodies to Epstein-Barr virus antigens in the etiology of non-Hodgkin lymphoma. Leuk Lymphoma 42(4):619-629. <http://doi.org/10.3109/10428190109099322>.
- Hardell L, van Bavel B, Lindstrom G, et al. 2004. Adipose tissue concentrations of p,p'-DDE and the risk for endometrial cancer. Gynecol Oncol 95(3):706-711.
<http://doi.org/10.1016/j.ygyno.2004.08.022>.
- Hardell L, Andersson S, Carlberg M, et al. 2006a. Adipose tissue concentrations of persistent organic pollutants and the risk of prostate cancer. J Occup Environ Med 48(7):700-707. <http://doi.org/10.1097/01.jom.0000205989.46603.43>.
- Hardell L, van Bavel B, Lindstroem G, et al. 2006b. In utero exposure to persistent organic pollutants in relation to testicular cancer risk. Int J Androl 29(1):228-234.
- Hardell L, Carlberg M, Hardell K, et al. 2007. Decreased survival in pancreatic cancer patients with high concentrations of organochlorines in adipose tissue. Biomed Pharmacother 61(10):659-664.
<http://doi.org/10.1016/j.bioph.2007.04.006>.

8. REFERENCES

- Hardell K, Carlberg M, Hardell L, et al. 2009. Concentrations of organohalogen compounds and titres of antibodies to Epstein-Barr virus antigens and the risk for non-Hodgkin lymphoma. *Oncol Rep* 21(6):1567-1576. http://doi.org/10.3892/or_00000389.
- Hargrave BT, Harding GC, Vass WP, et al. 1992. Organochlorine pesticides and polychlorinated biphenyls in the Arctic Ocean food web. *Arch Environ Contam Toxicol* 22(1):41-54. <http://doi.org/10.1007/BF00213301>.
- Harley KG, Marks AR, Bradman A, et al. 2008. DDT exposure, work in agriculture, and time to pregnancy among farmworkers in California. *J Occup Environ Med* 50(12):1335-1342. <http://doi.org/10.1097/JOM.0b013e31818f684d>.
- Harner T. 1997. Organochlorine contamination of the Canadian Arctic, and speculation on future trends. *Int J Environ Pollut* 8:5-72. <http://doi.org/10.1504/IJEP.1997.028158>.
- Harris ML, Wilson LK, Elliott JE, et al. 2000. Transfer of DDT and metabolites from fruit orchard soils to American robins (*Turdus migratorius*) twenty years after agricultural use of DDT in Canada. *Arch Environ Contam Toxicol* 39:205-220.
- Hart MM, Adamson RH, Fabro S. 1971. Prematurity and intrauterine growth retardation induced by DDT in the rabbit. *Arch Int Pharmacodyn Ther* 192(2):286-290.
- Hart MM, Whang-Peng J, Sieber SM, et al. 1972. Distribution and effects of DDT in the pregnant rabbit. *Xenobiotica* 2(6):567-574. <http://doi.org/10.3109/00498257209111084>.
- Hatcher JM, Delea KC, Richardson JR, et al. 2008. Disruption of dopamine transport by DDT and its metabolites. *Neurotoxicology* 29(4):682-690. <http://doi.org/10.1016/j.neuro.2008.04.010>.
- Haugen TB, Tefre T, Malm G, et al. 2011. Differences in serum levels of CB-153 and p,p'-DDE, and reproductive parameters between men living south and north in Norway. *Reprod Toxicol* 32(3):261-267. <http://doi.org/10.1016/j.reprotox.2011.06.072>.
- Hauser R, Chen Z, Pothier L, et al. 2003. The relationship between human semen parameters and environmental exposure to polychlorinated biphenyls and p,p'-DDE. *Environ Health Perspect* 111(12):1505-1511. <http://doi.org/10.1289/ehp.6175>.
- Hayes WJ. 1982. Chlorinated hydrocarbon insecticides. In: *Pesticides studied in man*. Baltimore, MD: Williams and Wilkins, 180-205.
- Hayes WJ, Durham WF, Cueto C. 1956. The effect of known repeated oral doses of chlorophenothenane (DDT) in man. *J Am Med Assoc* 162(9):890-897.
- Hayes WJ, Dale WE, Pirkle CI. 1971. Evidence of safety of long-term, high, oral doses of DDT for man. *Arch Environ Health* 22(1):119-135. <http://doi.org/10.1080/00039896.1971.10665822>.
- Heberer T, Dünnbier U. 1999. DDT metabolite bis(chlorophenyl)acetic acid: The neglected environmental contaminant. *Environ Sci Technol* 33(4):2346-2351.
- Heggeseth B, Harley K, Warner M, et al. 2015. Detecting associations between early-life DDT exposures and childhood growth patterns: A novel statistical approach. *PLoS ONE* 10(6):e0131443. <http://doi.org/10.1371/journal.pone.0131443>.
- Heindel JJ, Blumberg B, Cave M, et al. 2017. Metabolism disrupting chemicals and metabolic disorders. *Reprod Toxicol* 68:3-33. <http://doi.org/10.1016/j.reprotox.2016.10.001>.
- Helzlsouer KJ, Alberg AJ, Huang HY, et al. 1999. Serum concentrations of organochlorine compounds and the subsequent development of breast cancer. *Cancer Epidemiol Biomarkers Prev* 8(6):525-532.
- Henderson GL, Woolley DE. 1969. Studies on the relative insensitivity of the immature rat to the neurotoxic effects of 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (DDT). *J Pharmacol Exp Ther* 170(1):173-180.
- Henderson GL, Woolley DE. 1970. Mechanisms of neurotoxic action of 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (DDT) in immature and adult rats. *J Pharmacol Exp Ther* 175(1):60-68.
- Henriquez-Hernandez LA, Luzardo OP, Zumbado M, et al. 2014. Blood pressure in relation to contamination by polychlorobiphenyls and organochlorine pesticides: Results from a population-based study in the Canary Islands (Spain). *Environ Res* 135:48-54. <http://doi.org/10.1016/j.envres.2014.05.036>.

8. REFERENCES

- Herr DW, Tilson HA. 1987. Modulation of p,p'-DDT-induced tremor by catecholaminergic agents. *Toxicol Appl Pharmacol* 91(2):149-158. [http://doi.org/10.1016/0041-008x\(87\)90096-2](http://doi.org/10.1016/0041-008x(87)90096-2).
- Herr DW, Hong JS, Tilson HA. 1985. DDT-induced tremor in rats: effects of pharmacological agents. *Psychopharmacology (Berl)* 86(4):426-431. <http://doi.org/10.1007/BF00427903>.
- Hietanen E, Vainio H. 1976. Effect of administration route of DDT on acute toxicity and on drug biotransformation in various rodents. *Arch Environ Contam Toxicol* 4:201-216.
- Hill KR, Robinson G. 1945. A fatal case of DDT poisoning in a child, with an account of two accidental deaths in dogs. *Br Med J* 2(Dec 15):845-847.
- Hitch RK, Day HR. 1992. Unusual persistence of DDT in some western USA soils. *Bull Environ Contam Toxicol* 48:259-264.
- Hoff RM, Strachan MJ, Sweet CW, et al. 1996. Atmospheric deposition of toxic chemicals to the Great Lakes: A review of the data through 1994. *Atmos Environ* 30(20):3505-3527.
- Hojo H, Aoyama H, Takahashi KL, et al. 2006. Two-generation reproduction toxicity study in rats with 1,1,1-trichloro-2,2-bis(4-chlorophenyl)ethane (p,p'-DDT). *Congenit Anom (Kyoto)* 46(2):105-114. <http://doi.org/10.1111/j.1741-4520.2006.00110.x>.
- Holloway AC, Petrik JJ, Younglai EV. 2007. Influence of dichlorodiphenylchloroethylene on vascular endothelial growth factor and insulin-like growth factor in human and rat ovarian cells. *Reprod Toxicol* 24(3-4):359-364. <http://doi.org/10.1016/j.reprotox.2007.05.003>.
- Hong JS, Herr DW, Hudson PM, et al. 1986. Neurochemical effects of DDT in rat brain in vivo. *Arch Toxicol Suppl* 9:14-26. http://doi.org/10.1007/978-3-642-71248-7_2.
- Hoppin JA, Tolbert PE, Holly EA, et al. 2000. Pancreatic cancer and serum organochlorine levels. *Cancer Epidemiol Biomarkers Prev* 9(2):199-205.
- Hou L, Andreotti G, Baccarelli AA, et al. 2013. Lifetime pesticide use and telomere shortening among male pesticide applicators in the Agricultural Health Study. *Environ Health Perspect* 121(8):919-924. <http://doi.org/10.1289/ehp.1206432>.
- Hovinga ME, Sowers M, Humphrey HE. 1992. Historical changes in serum PCB and DDT levels in an environmentally-exposed cohort. *Arch Environ Contam Toxicol* 22(4):362-366. <http://doi.org/10.1007/BF00212554>.
- Hovinga ME, Sowers M, Humphrey HE. 1993. Environmental exposure and lifestyle predictors of lead, cadmium, PCB, and DDT levels in Great Lakes fish eaters. *Arch Environ Health* 48(2):98-104. <http://doi.org/10.1080/00039896.1993.9938402>.
- Howard PH, Neal MW. 1992. Dictionary of chemical names and synonyms. Boca Raton, FL: Lewis Publishers. I558, I769, I524-525.
- Howard PH, Meylan WM, eds. 1997. In: *Handbook of physical properties of organic chemicals*. Boca Raton: CRC Lewis Publishers, 3, 12, 49, 518, 723.
- Howell G, Mangum L. 2011. Exposure to bioaccumulative organochlorine compounds alters adipogenesis, fatty acid uptake, and adipokine production in NIH3T3-L1 cells. *Toxicol in Vitro* 25(1):394-402. <http://doi.org/10.1016/j.tiv.2010.10.015>.
- Howell GE, Meek E, Kilic J, et al. 2014. Exposure to p,p'-dichlorodiphenyldichloroethylene (DDE) induces fasting hyperglycemia without insulin resistance in male C57BL/6H mice. *Toxicology* 320:6-14. <http://doi.org/10.1016/j.tox.2014.02.004>.
- Howell GE, Mulligan C, Meek E, et al. 2015. Effect of chronic p,p'-dichlorodiphenyldichloroethylene (DDE) exposure on high fat diet-induced alterations in glucose and lipid metabolism in male C57BL/6H mice. *Toxicology* 328:112-122. <http://doi.org/10.1016/j.tox.2014.12.017>.
- Howsam M, Grimalt JO, Guino E, et al. 2004. Organochlorine exposure and colorectal cancer risk. *Environ Health Perspect* 112(15):1460-1466. <http://doi.org/10.1289/ehp.7143>.
- Hoyer BB, Ramlau-Hansen CH, Henriksen TB, et al. 2014. Body mass index in young school-age children in relation to organochlorine compounds in early life: a prospective study. *Int J Obes (Lond)* 38(7):919-925. <http://doi.org/10.1038/ijo.2014.58>.

8. REFERENCES

- Hoyer BB, Ramlau-Hansen CH, Pedersen HS, et al. 2015. Motor development following in utero exposure to organochlorines: a follow-up study of children aged 5-9 years in Greenland, Ukraine and Poland. *BMC Public Health* 15:146. <http://doi.org/10.1186/s12889-015-1465-3>.
- Hrdina PD, Singhal RL. 1972. Neurotoxic effects of DDT: protection by cycloheximide. *J Pharm Pharmacol* 24(2):167-169. <http://doi.org/10.1111/j.2042-7158.1972.tb08956.x>.
- Hrdina PD, Singhal RL, Peters DAV, et al. 1973. Some neurochemical alterations during acute DDT poisoning. *Toxicol Appl Pharmacol* 25:276-288.
- Hsieh HC. 1954. DDT intoxication in a family in southern Taiwan. *AMA Arch Ind Hyg Occup Med* 10:344-346.
- Huang X, Hites RA, Foran JA, et al. 2006. Consumption advisories for salmon based on risk of cancer and noncancer health effects. *Environ Res* 101(2):263-274. <http://doi.org/10.1016/j.envres.2005.08.011>.
- Huang J, Eskenazi B, Bornman R, et al. 2018. Maternal peripartum serum DDT/E and urinary pyrethroid metabolite concentrations and child infections at 2 years in the VHEMBE Birth Cohort. *Environ Health Perspect* 126(6):067006. <http://doi.org/10.1289/EHP2657>.
- Hudson PM, Chen PH, Tilson HA, et al. 1985. Effects of p,p'-DDT on the rat brain concentrations of biogenic amine and amino acid neurotransmitters and their associations with p,p'-DDT-induced tremor and hyperthermia. *J Neurochem* 45(5):1349-1355.
- Hurd-Brown T, Udoji F, Martin T, et al. 2013. Effects of DDT and triclosan on tumor-cell binding capacity and cell-surface protein expression of human natural killer cells. *J Appl Toxicol* 33(6):495-502. <http://doi.org/10.1002/jat.2767>.
- Hwang EC, Van Woert MH. 1978. p,p'-DDT-induced neurotoxic syndrome: experimental myoclonus. *Neurology* 28(10):1020-1025. <http://doi.org/10.1212/wnl.28.10.1020>.
- Hyland JL, Snoots TR, Balthis WL. 1998. Sediment quality of estuaries in the southeastern U.S. *Environ Monit Assess* 51:331-343.
- IARC. 2017. DDT. IARC monographs on the evaluation of carcinogenic risks to humans. Volume 113. DDT, lindane, and 2,4-D. Lyon, France: International Agency for Research on Cancer. <http://monographs.iarc.fr/ENG/Monographs/vol113/mono113-01.pdf>. January 10, 2018.
- IARC. 2018. DDT, lindane, and 2,4-D. IARC monographs on the evaluation of carcinogenic risks to humans. Lyon, France: International Agency for Research on Cancer.
- Ingber SZ, Buser MC, Pohl HR, et al. 2013. DDT/DDE and breast cancer: a meta-analysis. *Regul Toxicol Pharmacol* 67(3):421-433. <http://doi.org/10.1016/j.yrtph.2013.08.021>.
- Innes JR, Ulland BM, Valerio MG, et al. 1969. Bioassay of pesticides and industrial chemicals for tumorigenicity in mice: a preliminary note. *J Natl Cancer Inst* 42(6):1101-1114.
- IRIS. 2002a. p,p'-Dichlorodiphenyltrichloroethane (DDT); CASRN 50-29-3. Integrated Risk Information System. Chemical assessment summary. Washington, DC: U.S. Environmental Protection Agency. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0147_summary.pdf. April 26, 2017.
- IRIS. 2002b. p,p'-Dichlorodiphenyl dichloroethane (DDD); CASRN 72-54-8. Integrated Risk Information System. Chemical assessment summary. Washington, DC: U.S. Environmental Protection Agency. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0347_summary.pdf. April 26, 2017.
- IRIS. 2003. p,p'-Dichlorodiphenyldichloroethylene (DDE); CASRN 72-55-9. Integrated Risk Information System. Chemical assessment summary. Washington, DC: U.S. Environmental Protection Agency. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0328_summary.pdf. April 26, 2017.
- Ishikawa T, Graham JL, Stanhope KL, et al. 2015. Effect of DDT exposure on lipids and energy balance in obese Sprague-Dawley rats before and after weight loss. *Toxicology Reports* 2:990-995. <http://doi.org/10.1016/h.tixreo.2915.07.005>.

8. REFERENCES

- Iszatt N, Stigum H, Verner MA, et al. 2015. Prenatal and postnatal exposure to persistent organic pollutants and infant growth: A pooled analysis of seven European birth cohorts. *Environ Health Perspect* 123(7):730-736. <http://doi.org/10.1289/ehp.1308005>.
- Itoh H, Iwasaki M, Kasuga Y, et al. 2014. Association between serum organochlorines and global methylation level of leukocyte DNA among Japanese women: a cross-sectional study. *Sci Total Environ* 490:603-609. <http://doi.org/10.1016/j.scitotenv.2014.05.035>.
- Iwata H, Tanabe S, Sakai N, et al. 1993. Distribution of persistent organochlorines in the oceanic air and surface seawater and the role of ocean on their global transport and fate. *Environ Sci Technol* 27:1080-1098.
- Jaga K, Dharmani C. 2003. Global surveillance of DDT and DDE levels in human tissues. *Int J Occup Med Environ Health* 16(1):7-20.
- Jandacek RJ, Rider T, Yang Q, et al. 2009. Lymphatic and portal vein absorption of organochlorine compounds in rats. *Am J Physiol Gastrointest Liver Physiol* 296(2):G226-234. <http://doi.org/10.1152/ajpgi.90517.2008>.
- Janicki RH, Kinter WB. 1971. DDT inhibits Na⁺, K⁺, Mg²⁺-ATPase in the intestinal mucosae and gills of marine teleosts. *Nature New Biology* 233:148-149.
- Jasso-Pineda Y, Diaz-Barriga F, Yanez-Estrada L, et al. 2015. DNA damage in Mexican children living in high-risk contaminated scenarios. *Sci Total Environ* 518-519:38-48. <http://doi.org/10.1016/j.scitotenv.2015.02.073>.
- Jayasinghe S, Lind L, Salihovic S, et al. 2018. High serum levels of p,p'-DDE are associated with an accelerated decline in GFR during 10years follow-up. *Sci Total Environ* 644:371-374. <http://doi.org/10.1016/j.scitotenv.2018.07.020>.
- Jeddy Z, Kordas K, Allen K, et al. 2018. Prenatal exposure to organochlorine pesticides and early childhood communication development in British girls. *Neurotoxicology* 69:121-129. <http://doi.org/10.1016/j.neuro.2018.10.003>.
- Jellali R, Zeller P, Gilard F, et al. 2018. Effects of DDT and permethrin on rat hepatocytes cultivated in microfluidic biochips: Metabolomics and gene expression study. *Environ Toxicol Pharmacol* 59:1-12. <http://doi.org/10.1016/j.etap.2018.02.004>.
- Jensen S, Jansson B. 1976. Methyl sulfone metabolites of PCB and DDE. *Ambio* 5(5-6):257-260.
- Jensen JA, Cueto C, Dale WE, et al. 1957. DDT metabolites in feces and bile of rats. *Agric Food Chem* 5(12):919-924.
- Johansson U, Fredriksson A, Eriksson P. 1995. Bioallethrin causes permanent changes in behavioural and muscarinic acetylcholine receptor variables in adult mice exposed neonatally to DDT. *Eur J Pharmacol* 293(2):159-166. [http://doi.org/10.1016/0926-6917\(95\)00012-7](http://doi.org/10.1016/0926-6917(95)00012-7).
- Johansson U, Fredriksson A, Eriksson P. 1996. Low-dose effects of paraoxon in adult mice exposed neonatally to DDT: changes in behavioural and cholinergic receptor variables. *Environ Toxicol Pharmacol* 2(4):307-314. [http://doi.org/10.1016/s1382-6689\(96\)00062-2](http://doi.org/10.1016/s1382-6689(96)00062-2).
- Johnsen RE. 1976. DDT metabolism in microbial systems. *Residue Rev* 61:1-28. http://doi.org/10.1007/978-1-4613-9401-3_1.
- Johnson A, Norton D, Yake B. 1988. Persistence of DDT in the Yakima River drainage, Washington. *Arch Environ Contam Toxicol* 17(3):289-297. <http://doi.org/10.1007/BF01055165>.
- Johnson DC, Sen M, Dey SK. 1992. Differential effects of dichlorodiphenyltrichloroethane analogs, chlordcone, and 1,3,7,8-tetrachlorodibenzo-p-dioxin on establishment of pregnancy in the hypophysectomized rat. *Proc Soc Exp Biol Med* 199:42-48.
- Jones JL, Roberts LM. 1999. The relative merits of monitoring and domestic wells for ground water quality investigations. *Ground Water Monit Remed* 19(3):138-144.
- Jonsson HT, Keil JE, Gaddy RG, et al. 1976. Prolonged ingestion of commercial DDT and PCB; effects on progesterone levels and reproduction in the mature female rat. *Arch Environ Contam Toxicol* 3:479-490.

8. REFERENCES

- Jonsson HT, Walker EM, Greene WB, et al. 1981. Effects of prolonged exposure to dietary DDT and PCB on rat liver morphology. *Arch Environ Contam Toxicol* 10(2):171-183.
<http://doi.org/10.1007/BF01055619>.
- Jusko TA, Koepsell TD, Baker RJ, et al. 2006. Maternal DDT exposures in relation to fetal and 5-year growth. *Epidemiology* 17(6):692-700. <http://doi.org/10.1097/ede.0000232226.06807.90>.
- Jusko TA, Klebanoff MA, Brock JW, et al. 2012. In-utero exposure to dichlorodiphenyltrichloroethane and cognitive development among infants and school-aged children. *Epidemiology* 23(5):689-698. <http://doi.org/10.1097/EDE.0b013e31825fb61d>.
- Jusko TA, De Roos AJ, Lee SY, et al. 2016a. A birth cohort study of maternal and infant serum PCB-153 and DDE concentrations and responses to infant tuberculosis vaccination. *Environ Health Perspect* 124(6):813-821. <http://doi.org/10.1289/ehp.1510101>.
- Jusko TA, De Roos AJ, Lee SY, et al. 2016b. Supplemental material: A birth cohort study of maternal and infant serum PCB-153 and DDE concentrations and responses to infant tuberculosis vaccination. *Environ Health Perspect* <http://doi.org/10.1289/ehp.1510101>.
- Kajta M, Wnuk A, Rzemieniec J, et al. 2017. Depressive-like effect of prenatal exposure to DDT involves global DNA hypomethylation and impairment of GPER1/ESR1 protein levels but not ESR2 and AHR/ARNT signaling. *J Steroid Biochem Mol Biol* 171:94-109.
<http://doi.org/10.1016/j.jsbmb.2017.03.001>.
- Kalayou S, Granum C, Berntsen HF, et al. 2016. Label-free based quantitative proteomics analysis of primary neonatal porcine Leydig cells exposed to the persistent contaminant 3-methylsulfonyl-DDE. *J Proteomics* 137:68-82. <http://doi.org/10.1016/j.jprot.2015.12.007>.
- Kale SP, Murthy NB, Raghu K, et al. 1999. Studies on degradation of 14C-DDT in the marine environment. *Chemosphere* 39(6):959-968. [http://doi.org/10.1016/s0045-6535\(99\)00027-2](http://doi.org/10.1016/s0045-6535(99)00027-2).
- Kallenborn R, Oehme M, Wynn-Williams DD, et al. 1998. Ambient air levels and atmospheric long-range transport of persistent organochlorines to Signy Island, Antarctica. *Sci Total Environ* 220:167-180.
- KAN-DO Office and Pesticide Team. 1995. Accumulated pesticide and industrial chemical findings from a ten-year study of ready-to-eat foods. *J AOAC Int* 78(3):614-631.
- Kang IH, Kim HS, Shin JH, et al. 2004. Comparison of anti-androgenic activity of flutamide, vinclozolin, procymidone, linuron, and p, p'-DDE in rodent 10-day Hershberger assay. *Toxicology* 199(2-3):145-159. <http://doi.org/10.1016/j.tox.2004.02.019>.
- Kar PP, Dikshith TS. 1970. Dermal toxicity of DDT. *Experientia* 26(6):634-635.
<http://doi.org/10.1007/BF01898732>.
- Karami-Mohajeri S, Abdollahi M. 2011. Toxic influence of organophosphate, carbamate, and organochlorine pesticides on cellular metabolism of lipids, proteins, and carbohydrates: a systematic review. *Hum Exp Toxicol* 30(9):1119-1140. <http://doi.org/10.1177/0960327110388959>.
- Karlsen M, Grandjean P, Weihe P, et al. 2017. Early-life exposures to persistent organic pollutants in relation to overweight in preschool children. *Reprod Toxicol* 68:145-153.
<http://doi.org/10.1016/j.reprotox.2016.08.002>.
- Karmaus W, Zhu X. 2004. Maternal concentration of polychlorinated biphenyls and dichlorodiphenyl dichlorethylene and birth weight in Michigan fish eaters: a cohort study. *Environ Health* 3(1):1.
<http://doi.org/10.1186/1476-069X-3-1>.
- Karmaus W, Kuehr J, Kruse H. 2001. Infections and atopic disorders in childhood and organochlorine exposure. *Arch Environ Health* 56(6):485-492. <http://doi.org/10.1080/00039890109602896>.
- Karmaus W, Asakevich S, Indurkhy A, et al. 2002. Childhood growth and exposure to dichlorodiphenyl dichloroethene and polychlorinated biphenyls. *J Pediatr* 140(1):33-39.
<http://doi.org/10.1067/mpd.2002.120764>.
- Karmaus W, Davis S, Chen Q, et al. 2003. Atopic manifestations, breast-feeding protection and the adverse effect of DDE. *Paediatr Perinat Epidemiol* 17(2):212-220. <http://doi.org/10.1046/j.1365-3016.2003.00488.x>.

8. REFERENCES

- Karmaus W, Brooks KR, Nebe T, et al. 2005a. Immune function biomarkers in children exposed to lead and organochlorine compounds: a cross-sectional study. *Environ Health* 4(1):5. <http://doi.org/10.1186/1476-069x-4-5>.
- Karmaus W, Brooks KR, Nebe T, et al. 2005b. Supplementary material: Immune function biomarkers in children exposed to lead and organochlorine compounds: a cross-sectional study. *Environ Health* <http://doi.org/10.1186/1476-069x-4-5>. <https://ehjournal.biomedcentral.com/articles/10.1186/1476-069X-4-5>. March 29, 2017.
- Karmaus W, Osuch JR, Eneli I, et al. 2009. Maternal levels of dichlorodiphenyl-dichloroethylene (DDE) may increase weight and body mass index in adult female offspring. *Occup Environ Med* 66(3):143-149. <http://doi.org/10.1136/oem.2008.041921>.
- Kashyap SK, Nigam SK, Karnik AB, et al. 1977. Carcinogenicity of DDT (dichlorodiphenyl trichloroethane) in pure inbred Swiss mice. *Int J Cancer* 19(5):725-729. <http://doi.org/10.1002/ijc.2910190519>.
- Kaur N, Starling AP, Calafat AM, et al. 2020. Longitudinal association of biomarkers of pesticide exposure with cardiovascular disease risk factors in youth with diabetes. *Environ Res* 181:108916. <http://doi.org/10.1016/j.envres.2019.108916>.
- Kazantseva YA, Yarushkin AA, Pustylnyak VO. 2013. Dichlorodiphenyltrichloroethane technical mixture regulates cell cycle and apoptosis genes through the activation of CAR and ERalpha in mouse livers. *Toxicol Appl Pharmacol* 271(2):137-143. <http://doi.org/10.1016/j.taap.2013.05.008>.
- Keith LH, Garrison AW, Allen FR, et al. 1979. Identification of organic compounds in drinking water from thirteen U.S. cities. In: Identification and analysis of organic pollutants in water. Ann Arbor, MI: Ann Arbor Science, 329-358.
- Kelce W, Stone C, Laws S, et al. 1995. Persistent DDT metabolite p,p-DDE is a potent androgen receptor antagonist. *Nature* 375:581-585.
- Kelce WR, Lambright CR, Gray LE, et al. 1997. Vinclozolin and p,p'-DDE alter androgen-dependent gene expression: in vivo confirmation of an androgen receptor-mediated mechanism. *Toxicol Appl Pharmacol* 142(1):192-200. <http://doi.org/10.1006/taap.1996.7966>.
- Keller WC, Yeary RA. 1980. A comparison of the effects of mineral oil, vegetable oil, and sodium sulfate on the intestinal absorption of DDT in rodents. *Clin Toxicol* 16(2):223-231. <http://doi.org/10.3109/15563658008989941>.
- Kelly-Garvert F, Legator MS. 1973. Cytogenic and mutagenic effects of DDT and DDE in a Chinese hamster cell line. *Mutat Res* 17:223-229.
- Keplinger ML, Deichmann WB, Sala F. 1970. Effects of combinations of pesticides on reproduction in mice. In: Deichmann WB, Radomski JL, Penalver RA, eds. Collection of papers, Inter-American Conference on Toxicology and Occupational Medicine, 6th and 7th Pesticide Symposia. Miami, FL: Halos and Associates, 125-138.
- Kezios KL, Liu X, Cirillo PM, et al. 2013. Dichlorodiphenyltrichloroethane (DDT), DDT metabolites and pregnancy outcomes. *Reprod Toxicol* 35:156-164. <http://doi.org/10.1016/j.reprotox.2012.10.013>.
- Khairy M. 1959. Changes in behaviour associated with a nervous system poison (D.D.T.). *Q J Exp Psychol* 11:84-91.
- Khanjani N, Sim MR. 2006. Maternal contamination with dichlorodiphenyltrichloroethane and reproductive outcomes in an Australian population. *Environ Res* 101(3):373-379. <http://doi.org/10.1016/j.envres.2005.10.003>.
- Khanna N, Santerre CR, Xu D, et al. 1997. Changes in dieldrin and p,p'-DDE residues following cooking of channel catfish. *J Food Prot* 60(3):300-304.
- Kidd KA, Bootsma HA, Hesslein RH, et al. 2001. Biomagnification of DDT through the benthic and pelagic food webs of Lake Malawi, East Africa: importance of trophic level and carbon source. *Environ Sci Technol* 35(1):14-20. <http://doi.org/10.1021/es001119a>.

8. REFERENCES

- Kim JY, Choi CY, Lee KJ, et al. 2004. Induction of inducible nitric oxide synthase and proinflammatory cytokines expression by o,p'-DDT in macrophages. *Toxicol Lett* 147(3):261-269. <http://doi.org/10.1016/j.toxlet.2003.12.001>.
- Kim KY, Kim DS, Lee SK, et al. 2010. Association of low-dose exposure to persistent organic pollutants with global DNA hypomethylation in healthy Koreans. *Environ Health Perspect* 118(3):370-374. <http://doi.org/10.1289/ehp.0901131>.
- Kim S, Park J, Kim HJ, et al. 2013. Association between several persistent organic pollutants and thyroid hormone levels in serum among the pregnant women of Korea. *Environ Int* 59:442-448. <http://doi.org/10.1016/j.envint.2013.07.009>.
- Kim KS, Lee YM, Kim SG, et al. 2014. Associations of organochlorine pesticides and polychlorinated biphenyls in visceral vs. subcutaneous adipose tissue with type 2 diabetes and insulin resistance. *Chemosphere* 94:151-157. <http://doi.org/10.1016/j.chemosphere.2013.09.066>.
- Kim KS, Lee YM, Lee HW, et al. 2015a. Associations between organochlorine pesticides and cognition in U.S. elders: National Health and Nutrition Examination Survey 1999-2002. *Environ Int* 75:87-92. <http://doi.org/10.1016/j.envint.2014.11.003>.
- Kim SA, Lee YM, Lee HW, et al. 2015b. Greater cognitive decline with aging among elders with high serum concentrations of organochlorine pesticides. *PLoS ONE* 10(6):e0130623. <http://doi.org/10.1371/journal.pone.0130623>.
- Kim SA, Lee YM, Lee HW, et al. 2015c. Can inconsistent association between hypertension and cognition in elders be explained by levels of organochlorine pesticides? *PLoS ONE* 10(12):e0144205. <http://doi.org/10.1371/journal.pone.0144205>.
- Kim S, Park J, Kim HJ, et al. 2015d. Association between several persistent organic pollutants and thyroid hormone levels in cord blood serum and bloodspot of the newborn infants of Korea. *PLoS ONE* 10(5):e0125213. <http://doi.org/10.1371/journal.pone.0125213>.
- Kim HM, Youn CH, Ko HJ, et al. 2016. The relationship between the blood level of persistent organic pollutants and common gastrointestinal symptoms. *Korean J Fam Med* 37(5):267-272. <http://doi.org/10.4082/kjfm.2016.37.5.267>.
- Kim S, Cho YH, Lee I, et al. 2018. Prenatal exposure to persistent organic pollutants and methylation of LINE-1 and imprinted genes in placenta: A CHECK cohort study. *Environ Int* 119:398-406. <http://doi.org/10.1016/j.envint.2018.06.039>.
- Kim S, Cho YH, Won S, et al. 2019. Maternal exposures to persistent organic pollutants are associated with DNA methylation of thyroid hormone-related genes in placenta differently by infant sex. *Environ Int* 130:104956. <http://doi.org/10.1016/j.envint.2019.104956>.
- Kimbrough R, Gaines TB, Sherman JD. 1964. Nutritional factors, long-term DDT inhalation and chloroleukemia in rats. *J Natl Cancer Inst* 33:215-225.
- King SE, McBirney M, Beck D, et al. 2019a. Sperm epimutation biomarkers of obesity and pathologies following DDT induced epigenetic transgenerational inheritance of disease. *Environ Epigenet* 5(2):dvz008. <http://doi.org/10.1093/eep/dvz008>.
- King SE, Nilsson E, Beck D, et al. 2019b. Adipocyte epigenetic alterations and potential therapeutic targets in transgenerationally inherited lean and obese phenotypes following ancestral exposures. *Adipocyte* 8(1):362-378. <http://doi.org/10.1080/21623945.2019.1693747>.
- Kiriluk RM, Servos MR, Whittle DM, et al. 1995. Using ratios of stable nitrogen and carbon isotopes to characterize the biomagnification of DDE, mirex, and PCB in a Lake Ontario pelagic food web. *Can J Fish Aquat Sci* 52:2660-2674.
- Kirk GR, Jensen HE. 1975. Toxic effects of o,p'-DDD in the normal dog. *J Am Anim Hosp Assoc* 11:765-768.
- Kirk GR, Boyer S, Hutcheson DP. 1974. Effects of o,p'-DDD on plasma cortisol levels and histology of the adrenal gland in the normal dog. *J Am Anim Hosp Assoc* 10:179-182.
- Kitagawa T, Hino O, Nomura K, et al. 1984. Dose-response studies on promoting and anticarcinogenic effects of phenobarbital and DDT in the rat hepatocarcinogenesis. *Carcinogenesis* 5(12):1653-1656. <http://doi.org/10.1093/carcin/5.12.1653>.

8. REFERENCES

- Kitamura S, Shimizu Y, Shiraga Y, et al. 2002. Reductive metabolism of p,p'-DDT and o,p'-DDT by rat liver cytochrome P450. *Drug Metab Dispos* 30(2):113-118. <http://doi.org/10.1124/dmd.30.2.113>.
- Klaassen CD. 1990. Principles of toxicology. In: Gilman AG, Rall TW, Nies AS, et al., eds. *The pharmacological basis of therapeutics*. 8th ed. New York, NY: McGraw-Hill, 49-61.
- Klil-Drori AJ, Kleinster G, Seir RA, et al. 2018a. Serum organochlorines and non-Hodgkin lymphoma: A case-control study in Israeli Jews and Palestinians. *Chemosphere* 213:395-402. <http://doi.org/10.1016/j.chemosphere.2018.09.069>.
- Klil-Drori AJ, Kleinster G, Seir RA, et al. 2018b. Supplemental material: Serum organochlorines and non-Hodgkin lymphoma: A case-control study in Israeli Jews and Palestinians. *Chemosphere* 213 <http://doi.org/10.1016/j.chemosphere.2018.09.069>.
- Kolmodin B, Azarnoff DL, Sjöqvist F. 1969. Effect of environmental factors on drug metabolism: decreased plasma half-life of antipyrine in workers exposed to chlorinated hydrocarbon insecticides. *Clin Pharmacol Ther* 10(5):638-642. <http://doi.org/10.1002/cpt1969105638>.
- Koner BC, Banerjee BD, Ray A. 1998. Organochlorine pesticide-induced oxidative stress and immune suppression in rats. *Indian J Exp Biol* 36(4):395-398.
- Kornbrust D, Gillis B, Collins B, et al. 1986. Effects of 1,1-dichloro-2,2-bis[p-chlorophenyl]ethylene (DDE) on lactation in rats. *J Toxicol Environ Health* 17(1):23-36. <http://doi.org/10.1080/15287398609530799>.
- Korrick SA, Altshul LM, Tolbert PE, et al. 2000. Measurement of PCBs, DDE, and hexachlorobenzene in cord blood from infants born in towns adjacent to a PCB-contaminated waste site. *J Expo Anal Environ Epidemiol* 10(6 Pt 2):743-754. <http://doi.org/10.1038/sj.jea.7500120>.
- Korrick SA, Chen C, Damokosh AI, et al. 2001. Association of DDT with spontaneous abortion: a case-control study. *Ann Epidemiol* 11(7):491-496. [http://doi.org/10.1016/s1047-2797\(01\)00239-3](http://doi.org/10.1016/s1047-2797(01)00239-3).
- Kostka G, Palut D, Kopec-Szlezak J, et al. 2000. Early hepatic changes in rats induced by permethrin in comparison with DDT. *Toxicology* 142(2):135-143. [http://doi.org/10.1016/s0300-483x\(99\)00164-x](http://doi.org/10.1016/s0300-483x(99)00164-x).
- Kratzer CR. 1999. Transport of sediment-bound organochlorine pesticides to the San Joaquin River, California. *J Am Water Resour Assoc* 35(4):957-981.
- Krause W. 1977. Influence of DDT, DDVP and malathion on FSH, LH and testosterone serum levels and testosterone concentration in testis. *Bull Environ Contam Toxicol* 18(2):231-242. <http://doi.org/10.1007/BF01686072>.
- Krause W, Hamm K, Weissmuller J. 1975. The effect of DDT on spermatogenesis of the juvenile rat. *Bull Environ Contam Toxicol* 14(2):171-179. <http://doi.org/10.1007/BF01701310>.
- Krauthacker B, Reiner E, Votava-Raic A, et al. 1998. Organochlorine pesticides and PCBs in human milk from mothering nursing hospitalized children. *Chemosphere* 37(1):27-32.
- Kreiss K, Zack MM, Kimbrough RD, et al. 1981. Association of blood pressure and polychlorinated biphenyl levels. *JAMA* 245(24):2505-2509.
- Krieger N, Wolff M, Hiatt R, et al. 1994. Breast cancer and serum organochlorines: A prospective study among white, black, and Asian women. *J Natl Cancer Inst* 86(8):589-599.
- Krishnan K, Anderson ME, Clewell HJ, et al. 1994. Physiologically based pharmacokinetic modeling of chemical mixtures. In: Yang RSH, ed. *Toxicology of chemical mixtures. Case studies, mechanisms, and novel approaches*. San Diego, CA: Academic Press, 399-437.
- Kristensen SL, Ramlau-Hansen CH, Ernst E, et al. 2016. Prenatal exposure to persistent organochlorine pollutants and female reproductive function in young adulthood. *Environ Int* 92-93:366-372. <http://doi.org/10.1016/j.envint.2016.04.024>.
- Kubinski H, Gutzke GE, Kubinski ZO. 1981. DNA-cell-binding (DCB) assay for suspected carcinogens and mutagens. *Mutat Res* 89(2):95-136. [http://doi.org/10.1016/0165-1218\(81\)90118-x](http://doi.org/10.1016/0165-1218(81)90118-x).
- Kuhnlein HV, Receveur O, Muir DCG, et al. 1995. Arctic indigenous women consume greater than acceptable levels of organochlorines. *J Nutr* 125:2501-2510.

8. REFERENCES

- Kumar V, Yadav CS, Singh S, et al. 2010. CYP 1A1 polymorphism and organochlorine pesticides levels in the etiology of prostate cancer. *Chemosphere* 81(4):464-468.
<http://doi.org/10.1016/j.chemosphere.2010.07.067>.
- Kutz FW, Yobs AR, Strassman SC, et al. 1977. Pesticides in people: Effects of reducing DDT usage on total DDT storage in humans. *Pestic Monit J* 11(2):61-63.
- Kutz FW, Strassman SC, Sperling JF. 1979. Survey of selected organochlorine pesticides in the general population of the United States: fiscal years 1970-1975. *Ann N Y Acad Sci* 320:60-68.
<http://doi.org/10.1111/j.1749-6632.1979.tb56593.x>.
- Kutz FW, Wood PH, Bottimore DP. 1991. Organochlorine pesticides and polychlorinated biphenyls in human adipose tissue. *Rev Environ Contam Toxicol* 120:1-82. http://doi.org/10.1007/978-1-4612-3080-9_1.
- Kyriklaki A, Vafeiadi M, Kampouri M, et al. 2016. Prenatal exposure to persistent organic pollutants in association with offspring neuropsychological development at 4 years of age: The Rhea mother-child cohort, Crete, Greece. *Environ Int* 97:204-211. <http://doi.org/10.1016/j.envint.2016.09.012>.
- La Merrill M, Cirillo PM, Terry MB, et al. 2013. Prenatal exposure to the pesticide DDT and hypertension diagnosed in women before age 50: a longitudinal birth cohort study. *Environ Health Perspect* 121(5):594-599. <http://doi.org/10.1289/ehp.1205921>.
- La Merrill M, Karey E, Moshier E, et al. 2014a. Perinatal exposure of mice to the pesticide DDT impairs energy expenditure and metabolism in adult female offspring. *PLoS ONE* 9(7):e103337.
<http://doi.org/10.1371/journal.pone.0103337>.
- La Merrill M, Karey E, Moshier E, et al. 2014b. Correction: Perinatal exposure of mice to the pesticide DDT impairs energy expenditure and metabolism in adult female offspring (vol 9, e103337, 2014). *PLoS ONE* 9(9):Article No.: e107332. <http://doi.org/10.1371/journal.pone.0107332>.
- La Merrill MA, Sethi S, Benard L, et al. 2016. Perinatal DDT exposure induces hypertension and cardiac hypertrophy in adult mice. *Environ Health Perspect* 124(11):1722-1727.
<http://doi.org/10.1289/EHP164>.
- La Merrill MA, Lind PM, Salihovic S, et al. 2018. The association between p,p'-DDE levels and left ventricular mass is mainly mediated by obesity. *Environ Res* 160:541-546.
<http://doi.org/10.1016/j.envres.2017.10.031>.
- La Merrill MA, Johnson CL, Smith MT, et al. 2019. Exposure to persistent organic pollutants (POPs) and their relationship to hepatic fat and insulin insensitivity among Asian Indian immigrants in the United States. *Environ Sci Technol* 53(23):13906-13918. <http://doi.org/10.1021/acs.est.9b03373>.
- Laden F, Neas LM, Spiegelman D, et al. 1999. Predictors of plasma concentrations of DDE and PCBs in a group of U.S. women. *Environ Health Perspect* 107(1):75-81.
<http://doi.org/10.1289/ehp.9910775>.
- Laden F, Collman G, Iwamoto K, et al. 2001a. 1,1-Dichloro-2,2-bis(*p*-chlorophenyl)ethylene and polychlorinated biphenyls and breast cancer: Combined analysis of five U.S. studies. *J Natl Cancer Inst* 93(10):768-776. <http://doi.org/10.1093/jnci/93.10.768>.
- Laden F, Bertrand KA, Altshul L, et al. 2010. Plasma organochlorine levels and risk of non-Hodgkin lymphoma in the Nurses' Health Study. *Cancer Epidemiol Biomarkers Prev* 19(5):1381-1384.
<http://doi.org/10.1158/1055-9965.EPI-10-0125>.
- LaKind JS, Berlin CM, Park CN, et al. 2000. Methodology for characterizing distributions of incremental body burdens of 2,3,7,8-TCDD and DDE from breast milk in North American nursing infants. *J Toxicol Environ Health A* 59(8):605-639. <http://doi.org/10.1080/009841000156628>.
- Lam T, Williams PL, Lee MM, et al. 2014. Prepubertal organochlorine pesticide concentrations and age of pubertal onset among Russian boys. *Environ Int* 73:135-142.
<http://doi.org/10.1016/j.envint.2014.06.020>.
- Lam T, Williams PL, Lee MM, et al. 2015. Prepubertal serum concentrations of organochlorine pesticides and age at sexual maturity in Russian boys. *Environ Health Perspect* 123(11):1216-1221.
<http://doi.org/10.1289/ehp.1409022>.

8. REFERENCES

- Langer P, Utkopec J, Kocan A, et al. 2014. Obesogenic and diabetogenic impact of high organochlorine levels (HCB, p,p'-DDE, PCBs) on inhabitants in the highly polluted Eastern Slovakia. *Endocr Regul* 48(1):17-24. http://doi.org/10.4149/endo_2014_01_17.
- Larsen KD, Jalal SM. 1974. DDT induced chromosome mutations in mice: Further testing. *Can J Genet Cytol* 16:491-497.
- Lauenstein GG. 1995. Comparison of organic contaminants found in mussels and oysters from a current mussel watch project with those from archived mollusc samples of the 1970s. *Mar Pollut Bull* 30(12):826-833.
- Laug E, Nelson A, Fitzhugh O, et al. 1950. Liver cell alternation and DDT storage in the fat of the rat induced by dietary levels of 1 to 50 ppm DDT. *J Pharmacol Exp Ther Suppl* 98:268.
- Law DC, Klebanoff MA, Brock JW, et al. 2005. Maternal serum levels of polychlorinated biphenyls and 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE) and time to pregnancy. *Am J Epidemiol* 162(6):523-532. <http://doi.org/10.1093/aje/kwi240>.
- Laws ER, Curley A, Biros F. 1967. Men with intensive occupational exposure to DDT: A clinical and chemistry study. *Arch Environ Health* 15:766-775.
- Laws ER, Maddrey WC, Curley A, et al. 1973. Long-term occupational exposure to DDT: effect on the human liver. *Arch Environ Health* 27:318-321.
- Leavens TL, Sparrow BR, Devito MJ. 2002. Lack of antiandrogenic effects in adult male rats following acute exposure to 2,2-bis(4-chlorophenyl)-1,1-dichloroethylene (p,p'-DDE). *Toxicology* 174(2):69-78. [http://doi.org/10.1016/s0300-483x\(02\)00072-0](http://doi.org/10.1016/s0300-483x(02)00072-0).
- LeBlanc GA. 1995. Trophic-level differences in the bioconcentration of chemicals: implications in assessing environmental biomagnification. *Environ Sci Technol* 29(1):154-160. <http://doi.org/10.1021/es00001a020>.
- Ledoux TA, Lodge JR, Touchberry RW, et al. 1977. The effects of low dietary levels of DDT on breeding performance in hybrid mice. *Arch Environ Contam Toxicol* 6(4):435-446. <http://doi.org/10.1007/BF02097783>.
- Lee DH, Jacobs DR, Porta M. 2007a. Association of serum concentrations of persistent organic pollutants with the prevalence of learning disability and attention deficit disorder. *J Epidemiol Community Health* 61(7):591-596. <http://doi.org/10.1136/jech.2006.054700>.
- Lee DH, Lee IK, Song K, et al. 2006. A strong dose-response relation between serum concentrations of persistent organic pollutants and diabetes: results from the National Health and Examination Survey 1999-2002. *Diabetes Care* 29(7):1638-1644. <http://doi.org/10.2337/dc06-0543>.
- Lee DH, Lee IK, Porta M, et al. 2007b. Relationship between serum concentrations of persistent organic pollutants and the prevalence of metabolic syndrome among non-diabetic adults: Results from the National Health and Nutrition Examination Survey 1999-2002. *Diabetologia* 50(9):1841-1851. <http://doi.org/10.1007/s00125-007-0755-4>.
- Lee DH, Steffes MW, Sjodin A, et al. 2010. Low dose of some persistent organic pollutants predicts type 2 diabetes: a nested case-control study. *Environ Health Perspect* 118(9):1235-1242. <http://doi.org/10.1289/ehp.0901480>.
- Lee DH, Lind PM, Jacobs DR, et al. 2011a. Polychlorinated biphenyls and organochlorine pesticides in plasma predict development of Type 2 Diabetes in the elderly. The prospective investigation of the vasculature in Uppsala seniors (PIVUS) study. *Diabetes Care* 34(8):1778-1784.
- Lee DH, Steffes MW, Sjodin A, et al. 2011b. Low dose organochlorine pesticides and polychlorinated biphenyls predict obesity, dyslipidemia, and insulin resistance among people free of diabetes. *PLoS ONE* 6(1):e15977. <http://doi.org/10.1371/journal.pone.0015977>.
- Lee DH, Lind L, Jacobs DR, et al. 2012a. Associations of persistent organic pollutants with abdominal obesity in the elderly: The Prospective Investigation of the Vasculature in Uppsala Seniors (PIVUS) study. *Environ Int* 40:170-178. <http://doi.org/10.1016/j.envint.2011.07.010>.
- Lee DH, Lind PM, Jacobs DR, et al. 2012b. Background exposure to persistent organic pollutants predicts stroke in the elderly. *Environ Int* 47:115-120. <http://doi.org/10.1016/j.envint.2012.06.009>.

8. REFERENCES

- Lee DH, Porta M, Jacobs DR, et al. 2014. Chlorinated persistent organic pollutants, obesity, and type 2 diabetes. *Endocr Rev* 35(4):557-601. <http://doi.org/10.1210/er.2013-1084>.
- Lee DH, Lind PM, Jacobs DR, et al. 2016a. Association between background exposure to organochlorine pesticides and the risk of cognitive impairment: A prospective study that accounts for weight change. *Environ Int* 89-90:179-184. <http://doi.org/10.1016/j.envint.2016.02.001>.
- Lee DH, Lind PM, Jacobs DR, et al. 2016b. Supplemental material: Association between background exposure to organochlorine pesticides and the risk of cognitive impairment: A prospective study that accounts for weight change. *Environ Int* <http://doi.org/10.1016/j.envint.2016.02.001>.
- Lee H, Park S, Hong Y, et al. 2016c. The effect of exposure to persistent organic pollutants on metabolic health among KOREAN children during a 1-year follow-up. *Int J Environ Res Public Health* 13(3):270. <http://doi.org/10.3390/ijerph13030270>.
- Legator MS, Palmer KA, Adler ID. 1973. A collaborative study of in vivo cytogenetic analysis. I. Interpretation of slide preparations. *Toxicol Appl Pharmacol* 24(3):337-350. [http://doi.org/10.1016/0041-008x\(73\)90040-9](http://doi.org/10.1016/0041-008x(73)90040-9).
- Legler J, Fletcher T, Govarts E, et al. 2015. Obesity, diabetes, and associated costs of exposure to endocrine-disrupting chemicals in the European Union. *J Clin Endocrinol Metab* 100(4):1278-1288. <http://doi.org/10.1210/jc.2014-4326>.
- Lehman A. 1965. DDT (a mixture of 1,1,1-trichloro-2,2-bis(p-chlorophenyl) ethane and 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl) ethane). In: *Summaries of pesticide toxicity*. Topeka, KS: Association of Food and Drug Officials of the United States, 16-18.
- Lenters V, Portengen L, Rignell-Hydbom A, et al. 2016. Prenatal phthalate, perfluoroalkyl acid, and organochlorine exposures and term birth weight in three birth cohorts: Multi-pollutant models based on elastic net regression. *Environ Health Perspect* 124(3):365-372. <http://doi.org/10.1289/ehp.1408933>.
- Lenters V, Iszatt N, Forns J, et al. 2019a. Early-life exposure to persistent organic pollutants (OCPs, PBDEs, PCBs, PFASs) and attention-deficit/hyperactivity disorder: A multi-pollutant analysis of a Norwegian birth cohort. *Environ Int* 125:33-42. <http://doi.org/10.1016/j.envint.2019.01.020>.
- Lenters V, Iszatt N, Forns J, et al. 2019b. Supplemental material: Early-life exposure to persistent organic pollutants (OCPs, PBDEs, PCBs, PFASs) and attention-deficit/hyperactivity disorder: A multi-pollutant analysis of a Norwegian birth cohort. *Environ Int* 125 <http://doi.org/10.1016/j.envint.2019.01.020>.
- Lerro CC, Jones RR, Langseth H, et al. 2018. A nested case-control study of polychlorinated biphenyls, organochlorine pesticides, and thyroid cancer in the Janus Serum Bank cohort. *Environ Res* 165:125-132. <http://doi.org/10.1016/j.envres.2018.04.012>.
- Letcher RJ, Norstrom RJ, Bergman A. 1995. Geographical distribution and identification of methylsulphone PCB and DDE metabolites in pooled polar bear (*Ursus maritimus*) adipose tissue from western hemisphere Arctic and Subarctic regions. *Sci Total Environ* 160/161:409-420.
- Letcher RJ, Norstrom RJ, Muir DCG. 1998. Biotransformation versus bioaccumulation: Sources of methyl sulfone PCB and 4,4'-DDE metabolites in the polar bear food chain. *Environ Sci Technol* 32:1656-1661.
- Lewis RG, Fortmann RC, Camann DE. 1994. Evaluation of methods for monitoring the potential exposure of small children to pesticides in the residential environment. *Arch Environ Contam Toxicol* 26(1):37-46. <http://doi.org/10.1007/BF00212792>.
- Lewis-Mikhael AM, Olmedo-Requena R, Martinez-Ruiz V, et al. 2015. Organochlorine pesticides and prostate cancer, Is there an association? A meta-analysis of epidemiological evidence. *Cancer Causes Control* 26(10):1375-1392. <http://doi.org/10.1007/s10552-015-0643-z>.
- Li C, Cheng Y, Tang Q, et al. 2014. The association between prenatal exposure to organochlorine pesticides and thyroid hormone levels in newborns in Yancheng, China. *Environ Res* 129:47-51. <http://doi.org/10.1016/j.envres.2013.12.009>.

8. REFERENCES

- Li G, Kim C, Kim J, et al. 2015. Common pesticide, dichlorodiphenyltrichloroethane (DDT), increases amyloid- β levels by impairing the function of ABCA1 and IDE: Implication for Alzheimer's Disease. *J Alzheimers Dis* 46(1):109-122. <http://doi.org/10.3233/JAD-150024>.
- Liang Y, Liu D, Zhan J, et al. 2020. New insight into the mechanism of POP-induced obesity: Evidence from DDE-altered microbiota. *Chemosphere* 244:125123. <http://doi.org/10.1016/j.chemosphere.2019.125123>.
- Lichtenberg J, Eichelberger J, Dreeman R, et al. 1970. Pesticides in surface water of the United States: A 5-year summary, 1964-1968. *Pestic Monit J* 4(2):71-86.
- Lichtenstein E, Schulz K. 1959. Persistence of some chlorinated hydrocarbon insecticides as influenced by soil types, rate of application and temperature. *J Econ Entomol* 52(1):124-131.
- Lieberg-Clark P, Bacon C, Burns S, et al. 1995. DDT in California sea-lions: A follow-up study after twenty years. *Mar Pollut Bull* 30(11):744-745.
- Ligocki M, Leuenberger C, Pankow J. 1985. Trace organic compounds in rain. II. Gas scavenging of neutral organic compounds. *Atmos Environ* 19(10):1609-1617.
- Liljegren G, Hardell L, Lindstrom G, et al. 1998. Case-control study on breast cancer and adipose tissue concentrations of congener specific polychlorinated biphenyls, DDE and hexachlorobenzene. *Eur J Cancer Prev* 7(2):135-140.
- Lim JS, Son HK, Park SK, et al. 2011. Inverse associations between long-term weight change and serum concentrations of persistent organic pollutants. *Int J Obes (Lond)* 35(5):744-747. <http://doi.org/10.1038/ijo.2010.188>.
- Lim JE, Park SH, Jee SH, et al. 2015. Body concentrations of persistent organic pollutants and prostate cancer: a meta-analysis. *Environ Sci Pollut Res Int* 22(15):11275-11284. <http://doi.org/10.1007/s11356-015-4315-z>.
- Lind PM, Penell J, Salihovic S, et al. 2014. Circulating levels of p,p'-DDE are related to prevalent hypertension in the elderly. *Environ Res* 129:27-31. <http://doi.org/10.1016/j.envres.2013.12.003>.
- Lind PM, Salihovic S, Lind L. 2018. High plasma organochlorine pesticide levels are related to increased biological age as calculated by DNA methylation analysis. *Environ Int* 113:109-113. <http://doi.org/10.1016/j.envint.2018.01.019>.
- Lind PM, Salihovic S, Stubleski J, et al. 2019. Association of exposure to persistent organic pollutants with mortality risk: An analysis of data from the Prospective Investigation of Vasculature in Uppsala Seniors (PIVUS) Study. *JAMA Netw Open* 2(4):e193070. <http://doi.org/10.1001/jamanetworkopen.2019.3070>.
- Lindenau A, Fischer B, Seiler P, et al. 1994. Effects of persistent chlorinated hydrocarbons on reproductive tissues in female rabbits. *Hum Reprod* 9(5):772-780. <http://doi.org/10.1093/oxfordjournals.humrep.a138595>.
- Linder RE, Strader LF, Slott VL, et al. 1992. Endpoints of spermatotoxicity in the rat after short duration exposures to fourteen reproductive toxicants. *Reprod Toxicol* 6(6):491-505. [http://doi.org/10.1016/0890-6238\(92\)90034-q](http://doi.org/10.1016/0890-6238(92)90034-q).
- Lindstrom G, Hardell L, van Bavel B, et al. 2004. Adipose tissue concentrations of PCB, HCB, chlordane, PBDE, and p,p'-DDE and the risk for endometrial cancer. *Organohalogen Compounds* 66:3182-3187.
- Liu C, Ha M, Li L, et al. 2014. PCB153 and p,p'-DDE disorder thyroid hormones via thyroglobulin, deiodinase 2, transthyretin, hepatic enzymes and receptors. *Environ Sci Pollut Res Int* 21(19):11361-11369. <http://doi.org/10.1007/s11356-014-3093-3>.
- Liu Q, Wang Q, Xu C, et al. 2017a. Organochloride pesticides impaired mitochondrial function in hepatocytes and aggravated disorders of fatty acid metabolism. *Sci Rep* 7:46339. <http://doi.org/10.1038/srep46339>.
- Liu Q, Wang Q, Xu C, et al. 2017b. Supplemental materials for Organochloride pesticides impaired mitochondrial function in hepatocytes and aggravated disorders of fatty acid metabolism [Scientific Reports 7:46339. 10.1038/srep46339]. *Scientific Reports* September 19, 2017.

8. REFERENCES

- Loeffler IK, Peterson RE. 1999. Interactive effects of TCDD and p,p'-DDE on male reproductive tract development in in utero and lactationally exposed rats. *Toxicol Appl Pharmacol* 154(1):28-39. <http://doi.org/10.1006/taap.1998.8572>.
- Long ER, MacDonald DD, Smith SL, et al. 1995. Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuarine sediments. *Environ Manage* 19:81-97.
- Longnecker MP, Klebanoff MA, Zhou H, et al. 2001. Association between maternal serum concentration of the DDT metabolite DDE and preterm and small-for-gestational-age babies at birth. *Lancet* 358:110-114.
- Longnecker MP, Klebanoff MA, Brock JW, et al. 2002. Maternal serum level of 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene and risk of cryptorchidism, hypospadias, and polythelia among male offspring. *Am J Epidemiol* 155(4):313-322. <http://doi.org/10.1093/aje/155.4.313>.
- Longnecker MP, Klebanoff MA, Dunson DB, et al. 2005. Maternal serum level of the DDT metabolite DDE in relation to fetal loss in previous pregnancies. *Environ Res* 97(2):127-133. [http://doi.org/10.1016/s0013-9351\(03\)00108-7](http://doi.org/10.1016/s0013-9351(03)00108-7).
- Longnecker MP, Gladen BC, Cupul-Uicab LA, et al. 2007. In utero exposure to the antiandrogen 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE) in relation to anogenital distance in male newborns from Chiapas, Mexico. *Am J Epidemiol* 165(9):1015-1022. <http://doi.org/10.1093/aje/kwk109>.
- Looser R, Froescheis O, Cailliet GM, et al. 2000. The deep-sea as a final global sink of semivolatile persistent organic pollutants? Part II: Organochlorine pesticides in surface and deep-sea dwelling fish of the north and south Atlantic and the Monterey Bay Canyon (California). *Chemosphere* 40(6):661-670. [http://doi.org/10.1016/s0045-6535\(99\)00462-2](http://doi.org/10.1016/s0045-6535(99)00462-2).
- Lopez-Carrillo L, Blair A, Lopez-Cervantes M, et al. 1997. Dichlorodiphenyltrichloroethane serum levels and breast cancer risk: a case-control study from Mexico. *Cancer Res* 57(17):3728-3732.
- Lopez-Cervantes M, Torres-Sanchez L, Tobias A, et al. 2004. Dichlorodiphenyldichloroethane burden and breast cancer risk: a meta-analysis of the epidemiologic evidence. *Environ Health Perspect* 112(2):207-214. <http://doi.org/10.1289/ehp.112-1241830>.
- Lopez-Espinosa MJ, Granada A, Carreno J, et al. 2007. Organochlorine pesticides in placentas from Southern Spain and some related factors. *Placenta* 28(7):631-638. <http://doi.org/10.1016/j.placenta.2006.09.009>.
- Lopez-Espinosa MJ, Vizcaino E, Murcia M, et al. 2009. Association between thyroid hormone levels and 4,4'-DDE concentrations in pregnant women (Valencia, Spain). *Environ Res* 109(4):479-485. <http://doi.org/10.1016/j.envres.2009.02.003>.
- Lopez-Espinosa MJ, Vizcaino E, Murcia M, et al. 2010. Prenatal exposure to organochlorine compounds and neonatal thyroid stimulating hormone levels. *J Expo Sci Environ Epidemiol* 20(7):579-588. <http://doi.org/10.1038/jes.2009.47>.
- Lopez-Espinosa MJ, Murcia M, Iniguez C, et al. 2011. Prenatal exposure to organochlorine compounds and birth size. *Pediatrics* 128(1):e127-134. <http://doi.org/10.1542/peds.2010-1951>.
- Lorber M, Phillips L. 2002. Infant exposure to dioxin-like compounds in breast milk. *Environ Health Perspect* 110(6):A325-332. <http://doi.org/10.1289/ehp.021100325>.
- Lorber M, Toms LL. 2017. Use of a simple pharmacokinetic model to study the impact of breast-feeding on infant and toddler body burdens of PCB 153, BDE 47, and DDE. *Chemosphere* 185:1081-1089. <http://doi.org/10.1016/j.chemosphere.2017.07.118>.
- Lordo RA, Dinh KT, Schwemberger JG. 1996. Semivolatile organic compounds in adipose tissue: estimated averages for the US population and selected subpopulations. *Am J Public Health* 86(9):1253-1259. <http://doi.org/10.2105/ajph.86.9.1253>.
- Loreto-Gomez C, Farias P, Moreno-Macias H, et al. 2018. Prenatal exposure to persistent organic compounds and their association with anogenital distance in infants. *Reprod Biomed Online* 37(6):732-740. <http://doi.org/10.1016/j.rbmo.2018.09.008>.
- Lu FC, Jessup DC, Lavallee A. 1965. Toxicity of pesticides in young versus adult rats. *Food Cosmet Toxicol* 3(4):591-596. [http://doi.org/10.1016/s0015-6264\(65\)80206-1](http://doi.org/10.1016/s0015-6264(65)80206-1).

8. REFERENCES

- Lundberg C. 1973. Effects of long-term exposure to DDT on the oestrus cycle and the frequency of implanted ova in the mouse. *Environ Physiol Biochem* 3:127-131.
- Lundberg T. 1974. Effect of DDT on cytochrome p-450 and oestrogen-dependent functions in mice. *Environ Physiol Biochem* 4(5):200-204.
- Luo D, Zhou T, Tao Y, et al. 2016. Exposure to organochlorine pesticides and non-Hodgkin lymphoma: a meta-analysis of observational studies. *Sci Rep* 6:25768. <http://doi.org/10.1038/srep25768>.
- Lyall K, Croen LA, Sjodin A, et al. 2017. Polychlorinated biphenyl and organochlorine pesticide concentrations in maternal mid-pregnancy serum samples: Association with autism spectrum disorder and intellectual disability. *Environ Health Perspect* 125(3):474-480. <http://doi.org/10.1289/EHP277>.
- MacBean. 2011. DDD, DDE, DDT. The e-pesticide manual. Version 5.1. Surrey, UK: British Crop Protection Council. January 19, 2018.
- MacIntosh DL, Hammerstrom K, Ryan PB. 1999. Longitudinal exposure to selected pesticides in drinking water. *Hum Ecol Risk Assess* 5(3):575-588.
- Maervoet J, Vermeir G, Covaci A, et al. 2007. Association of thyroid hormone concentrations with levels of organochlorine compounds in cord blood of neonates. *Environ Health Perspect* 115(12):1780-1786. <http://doi.org/10.1289/ehp.10486>.
- Mahr U, Miltenburger HG. 1976. The effect of insecticides on Chinese hamster cell structure. *Mutat Res* 40:107-118.
- Makita Y. 2005. Effects of perinatal combined exposure to 1,4-dichlorobenzene and 1,1-dichloro-2,2-bis (p-chlorophenyl) ethylene on rat male offspring. *Basic Clin Pharmacol Toxicol* 96(5):361-365. http://doi.org/10.1111/j.1742-7843.2005.pto_04.x.
- Makita Y. 2008a. Effects of perinatal, combined exposure to 1,4-dichlorobenzene and 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene on rat female reproductive system. *Basic & clinical pharmacology & toxicology* 102(4):360-364. <http://doi.org/10.1111/j.1742-7843.2007.00179.x>.
- Makita Y. 2008b. Effects of perinatal combined exposure to 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (p,p'-DDE) and tributyltin (TBT) on rat female reproductive system. *Environ Toxicol Pharmacol* 25(3):380-385. <http://doi.org/10.1016/j.etap.2007.12.003>.
- Makita Y, Matsuura T, Ogata R, et al. 2003a. Systemic effects of orally administered p, p'-DDE on immature male Wistar rats during pubertal period. *J Occup Health* 45(4):223-227. <http://doi.org/10.1539/joh.45.223>.
- Makita Y, Tanaka A, Omura M, et al. 2003b. Effects of simultaneous administration of tributyltin (TBT) and p,p'(-DDE on female offspring of Wistar rats. *J Toxicol Environ Health A* 66(24):2337-2347. <http://doi.org/10.1080/716100642>.
- Maness SC, McDonnell DP, Gaido KW. 1998. Inhibition of androgen receptor-dependent transcriptional activity by DDT isomers and methoxychlor in HepG2 human hepatoma cells. *Toxicol Appl Pharmacol* 151(1):135-142. <http://doi.org/10.1006/taap.1998.8431>.
- Mangum LH, Howell GE, Chambers JE. 2015. Exposure to p,p'-DDE enhances differentiation of 3T3-L1 preadipocytes in a model of sub-optimal differentiation. *Toxicol Lett* 238(2):65-71. <http://doi.org/10.1016/j.toxlet.2015.07.009>.
- Mangum LH, Crow JA, Stokes JV, et al. 2016. Exposure to p,p'-DDE alters macrophage reactivity and increases macrophage numbers in adipose stromal vascular fraction. *Toxicol Sci* 150(1):169-177. <http://doi.org/10.1093/toxsci/kfv315>.
- Marien K, Laflamme DM. 1995. Determination of a tolerable daily intake of DDT for consumers of DDT contaminated fish from the lower Yakima River, Washington. *Risk Anal* 15(6):709-717. <http://doi.org/10.1111/j.1539-6924.1995.tb01343.x>.
- Marouani N, Hallegue D, Sakly M, et al. 2017. p,p'-DDT induces testicular oxidative stress-induced apoptosis in adult rats. *Reprod Biol Endocrinol* 15(1):40. <http://doi.org/10.1186/s12958-017-0259-0>.

8. REFERENCES

- Martin SA, Jr., Harlow SD, Sowers MF, et al. 2002. DDT metabolite and androgens in African-American farmers. *Epidemiology* 13(4):454-458. <http://doi.org/10.1097/00001648-200207000-00014>.
- Maslansky CJ, Williams GM. 1981. Evidence for an epigenetic mode of action in organochlorine pesticide hepatocarcinogenicity: a lack of genotoxicity in rat, mouse, and hamster hepatocytes. *J Toxicol Environ Health* 8(1-2):121-130. <http://doi.org/10.1080/15287398109530056>.
- Masters PM, Inman DL. 2000. Transport and fate of organochlorines discharged to the salt marsh at upper Newport Bay, California, USA. *Environ Toxicol Chem* 19:2076-2084.
- Matin MA, Jaffery FN, Siddiqui RA. 1981. A possible neurochemical basis of the central stimulatory effects of p,p'-DDT. *J Neurochem* 36(3):1000-1005.
- McAuliffe ME, Williams PL, Korrack SA, et al. 2012. Environmental exposure to polychlorinated biphenyls and p,p'-DDE and sperm sex-chromosome disomy. *Environ Health Perspect* 120(4):535-540. <http://doi.org/10.1289/ehp.1104017>.
- McCann J, Choi E, Yamasaki E, et al. 1975. Detection of carcinogens as mutagens in the *Salmonella*/microsome test: assay of 300 chemicals. *Proc Natl Acad Sci U S A* 72(12):5135-5139.
- McConnell L, Bidleman T, Cotham W, et al. 1998. Air concentrations of organochlorine insecticides and polychlorinated biphenyls over Green Bay, WI, and the four lower Great Lakes. *Environ Pollut* 101:391-399.
- McGlynn KA, Abnet CC, Zhang M, et al. 2006. Serum concentrations of 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (DDT) and 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE) and risk of primary liver cancer. *J Natl Cancer Inst* 98(14):1005-1010. <http://doi.org/10.1093/jnci/djj266>.
- McGlynn KA, Quraishi SM, Graubard BI, et al. 2008. Persistent organochlorine pesticides and risk of testicular germ cell tumors. *J Natl Cancer Inst* 100(9):663-671. <http://doi.org/10.1093/jnci/djn101>.
- Medehouenou TC, Ayotte P, Carmichael PH, et al. 2014. Plasma polychlorinated biphenyl and organochlorine pesticide concentrations in dementia: the Canadian Study of Health and Aging. *Environ Int* 69:141-147. <http://doi.org/10.1016/j.envint.2014.04.016>.
- Meek EC, Jones DD, Crow JA, et al. 2019. Association of serum levels of p,p'-Dichlorodiphenyldichloroethylene (DDE) with type 2 diabetes in African American and Caucasian adult men from agricultural (Delta) and non-agricultural (non-Delta) regions of Mississippi. *J Toxicol Environ Health A* 82(6):387-400. <http://doi.org/10.1080/15287394.2019.1610678>.
- Meeker JD, Altshul L, Hauser R. 2007. Serum PCBs, p,p'-DDE and HCB predict thyroid hormone levels in men. *Environ Res* 104(2):296-304. <http://doi.org/10.1016/j.envres.2006.11.007>.
- Meister R, Sine C. 1999. DDT. In: *Farm chemical handbook '99*. Willoughby, OH: Meister Publishing Company, C123-C124.
- Mendez MA, Garcia-Esteban R, Guxens M, et al. 2011. Prenatal organochlorine compound exposure, rapid weight gain, and overweight in infancy. *Environ Health Perspect* 119(2):272-278. <http://doi.org/10.1289/ehp.1002169>.
- Mendonca GA, Eluf-Neto J, Andrada-Serpa MJ, et al. 1999. Organochlorines and breast cancer: a case-control study in Brazil. *Int J Cancer* 83(5):596-600. [http://doi.org/10.1002/\(sici\)1097-0215\(19991126\)83:5<596::aid-ijc4>3.0.co;2-p](http://doi.org/10.1002/(sici)1097-0215(19991126)83:5<596::aid-ijc4>3.0.co;2-p).
- Meng G, Feng Y, Nie Z, et al. 2016. Internal exposure levels of typical POPs and their associations with childhood asthma in Shanghai, China. *Environ Res* 146:125-135. <http://doi.org/10.1016/j.envres.2015.12.026>.
- Menzie CM. 1980. Reaction types in the environment. In: Baughman GL, Burns LA, Cohen AS, et al., eds. *Reactions and processes*. Berlin, Germany: Springer-Verlag, 247-302.
- Menzie CA, Burmaster DE, Freshman JS, et al. 1992. Assessment of methods for estimating ecological risk in the terrestrial component: A case study at the Baird & McGuire Superfund site in Holbrook, Massachusetts. *Environ Toxicol Chem* 11:245-260.
- Mes J, Malcolm S. 1992. Comparison of chlorinated hydrocarbon residues in human populations from the Great Lakes and other regions of Canada. *Chemosphere* 25(3):417-424.

8. REFERENCES

- Mes J, Davies DJ, Turton D, et al. 1986. Levels and trends of chlorinated hydrocarbon contaminants in the breast milk of Canadian women. *Food Addit Contam* 3(4):313-322.
<http://doi.org/10.1080/02652038609373598>.
- Mes J, Marchand L, Davies DJ. 1990. Specific polychlorinated biphenyl congener distribution in adipose tissue of Canadians. *Environ Technol* 11:747-756.
- Messaros BM, Rossano MG, Liu G, et al. 2009. Negative effects of serum p,p'-DDE on sperm parameters and modification by genetic polymorphisms. *Environ Res* 109(4):457-464.
<http://doi.org/10.1016/j.envres.2009.02.009>.
- Metcalf PJ. 1989. Organolead compounds in the atmosphere. *Analytical Procedures* 26:134-136.
- Metcalf RL. 1995. Insect control technology. In: Kroschwitz J, Howe-Grant M, eds. *Kirk-Othmer encyclopedia of chemical technology*. New York, NY: John Wiley & Sons, Inc., 524-602.
- Metcalf RL, Booth GM, Schuth CK, et al. 1973. Uptake and fate of di-2-ethylhexyl phthalate in aquatic organisms and in a model ecosystem. *Environ Health Perspect* 4:27-34.
<http://doi.org/10.1289/ehp.730427>.
- Meylan WM, Howard PH. 1993. Computer estimation of the atmospheric gas-phase reaction rate of organic compounds with hydroxyl radicals and ozone. *Chemosphere* 26(2):2293-2299.
- Meylan W, Howard PH, Boethling RS. 1992. Molecular topology/fragment contribution method for predicting soil sorption coefficients. *Environ Sci Technol* 26(8):1560-1567.
- Miller M. 1994. Organochlorine concentration dynamics in Lake Michigan chinook salmon (*Oncorhynchus tshawytscha*). *Arch Environ Contam Toxicol* 27:367-374.
- Miller GC, Zepp RG. 1979. Photoreactivity of aquatic pollutants sorbed on suspended sediments. *Environ Sci Technol* 13(7):860-863. <http://doi.org/10.1021/es60155a019>.
- Millet M, Wortham H, Sanusi A, et al. 1997. Atmospheric contamination by pesticides: Determination in the liquid, gaseous and particulate phases. *Environ Sci Pollut Res Int* 4(3):172-180.
<http://doi.org/10.1007/BF02986327>.
- Mills KT, Blair A, Freeman LE, et al. 2009. Pesticides and myocardial infarction incidence and mortality among male pesticide applicators in the Agricultural Health Study. *Am J Epidemiol* 170(7):892-900. <http://doi.org/10.1093/aje/kwp214>.
- Min JY, Cho JS, Lee KJ, et al. 2011. Potential role for organochlorine pesticides in the prevalence of peripheral arterial diseases in obese persons: results from the National Health and Nutrition Examination Survey 1999-2004. *Atherosclerosis* 218(1):200-206.
<http://doi.org/10.1016/j.atherosclerosis.2011.04.044>.
- Minelli EV, Ribeiro ML. 1996. DDT and HCH residues in the blood serum of malaria control sprayers. *Bull Environ Contam Toxicol* 57(5):691-696. <http://doi.org/10.1007/s001289900245>.
- Minyard JP, Roberts WE. 1991. Chemical contaminants monitoring: State findings on pesticide residues in foods--1988 and 1989. *J Assoc Off Anal Chem* 74(3):438-452.
- Miyake Y, Tanaka K, Masuzaki Y, et al. 2011. Organochlorine concentrations in breast milk and prevalence of allergic disorders in Japanese women. *Chemosphere* 85(3):374-378.
<http://doi.org/10.1016/j.chemosphere.2011.07.001>.
- Monosmith CL, Hermanson MH. 1996. Spatial and temporal trends of atmospheric organochlorine vapors in the central and upper Great Lakes. *Environ Sci Technol* 30:3464-3472.
- Moody RP, Chu I. 1995. Dermal exposure to environmental contaminants in the Great Lakes. *Environ Health Perspect* 103(Suppl. 9):103-114.
- Moreno-Aliaga MJ, Matsumura F. 2002. Effects of 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-ethane (p,p'-DDT) on 3T3-L1 and 3T3-F442A adipocyte differentiation. *Biochem Pharmacol* 63(5):997-1007.
[http://doi.org/10.1016/s0006-2952\(01\)00933-9](http://doi.org/10.1016/s0006-2952(01)00933-9).
- Morgan DP, Roan CC. 1971. Absorption, storage, and metabolic conversion of ingested DDT and DDT metabolites in man. *Arch Environ Health* 22(3):301-308.
<http://doi.org/10.1080/00039896.1971.10665848>.
- Morgan D, Roan C. 1974. The metabolism of DDT in man. In: Hayes W, ed. *Essays in toxicology*. New York, NY: Academic Press, 39-97.

8. REFERENCES

- Morgan DP, Lin LI. 1978. Blood organochlorine pesticide concentrations, clinical hematology and biochemistry in workers occupationally exposed to pesticides. *Arch Environ Contam Toxicol* 7(4):423-447. <http://doi.org/10.1007/BF02332069>.
- Mota PC, Cordeiro M, Pereira SP, et al. 2011. Differential effects of p,p'-DDE on testis and liver mitochondria: implications for reproductive toxicology. *Reprod Toxicol* 31(1):80-85. <http://doi.org/10.1016/j.reprotox.2010.09.010>.
- Moysich KB, Ambrosone CB, Vena JE, et al. 1998. Environmental organochlorine exposure and postmenopausal breast cancer risk. *Cancer Epidemiol Biomarkers Prev* 7(3):181-188.
- Mrema EJ, Rubino FM, Brambilla G, et al. 2013. Persistent organochlorinated pesticides and mechanisms of their toxicity. *Toxicology* 307:74-88. <http://doi.org/10.1016/j.tox.2012.11.015>.
- Muhlebach S, Moor MJ, Wyss PA, et al. 1991. Kinetics of distribution and elimination of DDE in rats. *Xenobiotica* 21(1):111-120. <http://doi.org/10.3109/00498259109039455>.
- Muir DC, Norstrom RJ, Simon M. 1988. Organochlorine contaminants in arctic marine food chains: accumulation of specific polychlorinated biphenyls and chlordane-related compounds. *Environ Sci Technol* 22(9):1071-1079. <http://doi.org/10.1021/es00174a012>.
- Muir D, Grift N, Lockhart W, et al. 1995. Special trends and historical profiles of organochlorine pesticides in Arctic lake sediments. *Sci Total Environ* 160:447-457.
- Mulhens K. 1946. [The importance of bis(chlorophenyl)(trichloromethyl)-methane preparations as insecticides in combating infectious diseases]. *Dtsch Med Wochenschr* 71:164-169. (German)
- Muller MHB, Polder A, Brynildsrud OB, et al. 2017. Organochlorine pesticides (OCPs) and polychlorinated biphenyls (PCBs) in human breast milk and associated health risks to nursing infants in Northern Tanzania. *Environ Res* 154:425-434. <http://doi.org/10.1016/j.envres.2017.01.031>.
- Muller MHB, Polder A, Brynildsrud OB, et al. 2019. Prenatal exposure to persistent organic pollutants in Northern Tanzania and their distribution between breast milk, maternal blood, placenta and cord blood. *Environ Res* 170:433-442. <http://doi.org/10.1016/j.envres.2018.12.026>.
- Murphy R, Harvey C. 1985. Residues and metabolites of selected persistent halogenated hydrocarbons in blood specimens from a general population survey. *Environ Health Perspect* 60:115-120. <http://doi.org/10.1289/ehp.8560115>.
- Mussalo-Rauhamaa H. 1991. Partitioning and levels of neutral organochlorine compounds in human serum, blood cells, and adipose and liver tissue. *Sci Total Environ* 103(2-3):159-175. [http://doi.org/10.1016/0048-9697\(91\)90142-2](http://doi.org/10.1016/0048-9697(91)90142-2).
- Nagayama J, Nagayama M, Nakagawa R, et al. 2003. Frequency of SCEs in Japanese infants lactationally exposed to organochlorine pesticides. *Fukuoka Igaku Zasshi* 94(5):166-173.
- Nakagawa H, Hikiba Y, Hirata Y, et al. 2014. Loss of liver E-cadherin induces sclerosing cholangitis and promotes carcinogenesis. *Proc Natl Acad Sci U S A* 111(3):1090-1095. <http://doi.org/10.1073/pnas.1322731111>.
- Nanes JA, Xia Y, Dassanayake RM, et al. 2014. Selected persistent organic pollutants in human placental tissue from the United States. *Chemosphere* 106:20-27. <http://doi.org/10.1016/j.chemosphere.2013.12.080>.
- NAS/NRC. 1989. Report of the oversight committee. *Biologic markers in reproductive toxicology*. Washington, DC: National Academy of Sciences, National Research Council, National Academy Press. 15-35.
- Nash RG, Beall ML. 1970. Chlorinated hydrocarbon insecticides: Root uptake versus vapor contamination of soybean foliage. *Science* 168:1109-1111.
- NCI. 1978. Bioassays of DDT, TDE, and p,p'-DDE for possible Carcinogenicity. *Natl Cancer Inst Carcinog Tech Rep Ser* 131:1-251.
- Neal PA, von Oettingen WF, Smith WW, et al. 1944. Toxicity and potential dangers of aerosols, mists, and dusting powders containing DDT. *Public Health Rep (Suppl 177)*:1-32.
- Needham LL, Grandjean P, Heinzel B, et al. 2011. Partition of environmental chemicals between maternal and fetal blood and tissues. *Environ Sci Technol* 45(3):1121-1126. <http://doi.org/10.1021/es1019614>.

8. REFERENCES

- Neidert E, Saschenbrecker PW. 1996. Occurrence of pesticide residues in selected agricultural food commodities available in Canada. *J AOAC Int* 79(2):549-566.
- Nims RW, Lubet RA, Fox SD, et al. 1998. Comparative pharmacodynamics of CYP2B induction by DDT, DDE, and DDD in male rat liver and cultured rat hepatocytes. *J Toxicol Environ Health A* 53(6):455-477. <http://doi.org/10.1080/009841098159187>.
- NIOSH. 2014. DDT. Immediately Dangerous to Life or Health Concentrations (IDLH). Atlanta, GA: National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. <https://www.cdc.gov/niosh/idlh/50293.html>. April 26, 2017.
- NIOSH. 2016. DDT. NIOSH pocket guide to chemical hazards. Atlanta, GA: National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. <https://www.cdc.gov/niosh/npg/npgd0174.html>. April 26, 2017.
- Nishizumi M. 1979. Effect of phenobarbital, dichlorodiphenyltrichloroethane, and polychlorinated biphenyls on diethylnitrosamine-induced hepatocarcinogenesis. *Gann* 70(6):835-837.
- NOAA. 1988. PCB and chlorinated pesticide contamination in U.S. fish and shellfish: A historical assessment report. Rockville, MD: National Oceanic and Atmospheric Administration. PB91172742.
- Noguchi T, Charman WNA, Stella VJ. 1985. Lymphatic appearance of DDT in thoracic or mesenteric lymph duct cannulated rats. *Int J Pharm* 24:185-192.
- Norén K. 1988. Changes in the levels of organochlorine pesticides, polychlorinated biphenyls, dibenz-p-dioxins and dibenzofurans in human milk from Stockholm, 1972-1985. *Chemosphere* 17(1):39-49.
- Norén K. 1993. Contemporary and retrospective investigations of human milk in the trend studies of organochlorine contaminants in Sweden. *Sci Total Environ* 139-140:347-355. [http://doi.org/10.1016/0048-9697\(93\)90032-2](http://doi.org/10.1016/0048-9697(93)90032-2).
- Norén K, Meironyte D. 2000. Certain organochlorine and organobromine contaminants in Swedish human milk in perspective of past 20-30 years. *Chemosphere* 40(9-11):1111-1123. [http://doi.org/10.1016/s0045-6535\(99\)00360-4](http://doi.org/10.1016/s0045-6535(99)00360-4).
- Norén K, Lunden A, Pettersson E, et al. 1996. Methylsulfonyl metabolites of PCBs and DDE in human milk in Sweden, 1972-1992. *Environ Health Perspect* 104(7):766-772. <http://doi.org/10.1289/ehp.104-1469405>.
- Norén K, Weistrand C, Karpe F. 1999. Distribution of PCB congeners, DDE, hexachlorobenzene, and methylsulfonyl metabolites of PCB and DDE among various fractions of human blood plasma. *Arch Environ Contam Toxicol* 37:408-414.
- Norstrom RJ, Belikov SE, Born EW, et al. 1998. Chlorinated hydrocarbon contaminants in polar bears from eastern Russia, North America, Greenland, and Svalbard: biomonitoring of Arctic pollution. *Arch Environ Contam Toxicol* 35(2):354-367. <http://doi.org/10.1007/s002449900387>.
- NTP. 2016. Dichlorodiphenyltrichloroethane. In: Report on carcinogens. 14th ed. National Toxicology Program, <https://ntp.niehs.nih.gov/ntp/roc/content/profiles/dichlorodiphenyltrichloroethane.pdf>. April 26, 2017.
- Numoto S, Tanaka T, Williams GM. 1985. Morphologic and cytochemical properties of mouse liver neoplasm induced by diethylnitrosamine and promoted by 4,4'-dichlorodiphenyltrichloroethane, chlordane, or heptachlor. *Toxicol Pathol* 13:325-334.
- Odsjo T, Bignert A, Olsson M, et al. 1997. The Swedish Environmental Specimen Bank- application in trend monitoring of mercury and some organohalogenated compounds. *Chemosphere* 34(9/10):2059-2066.
- Okey AB, Page DJ. 1974. Acute toxicity of o,p'-DDT to mice. *Bull Environ Contam Toxicol* 11(4):359-363. <http://doi.org/10.1007/BF01684943>.
- Oliver BG, Niimi AJ. 1985. Bioconcentration factors of some halogenated organics for rainbow trout: Limitations in their use for prediction of environmental residues. *Environ Sci Technol* 19(9):842-849.

8. REFERENCES

- Orberg J, Lundberg C. 1974. Some effect of DDT and PCB on the hormonal system in the male mouse. *Environ Physiol Biochem* 4:116-120.
- Orenstein ST, Thurston SW, Bellinger DC, et al. 2014. Prenatal organochlorine and methylmercury exposure and memory and learning in school-age children in communities near the New Bedford Harbor Superfund site, Massachusetts. *Environ Health Perspect* 122(11):1253-1259. <http://doi.org/10.1289/ehp.1307804>.
- Ortega P. 1956. DDT in the diet of the rat. *Public Health Monogr* 43:1-27.
- Ortelee MF. 1958. Study of men with prolonged intensive occupational exposure to DDT. *AMA Arch Ind Health* 18(5):433-440.
- OSHA. 2020a. Occupational safety and health standards. Subpart Z - Toxic and hazardous substances. Air contaminants. Table Z-1: Limits for air contaminants. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1910.1000. <https://www.osha.gov/laws-regulations/regulations/standardnumber/1910/1910.1000TABLEZ1>. September 28, 2020.
- OSHA. 2020b. Occupational safety and health standards for shipyard employment. Subpart Z - Toxic and hazardous substances. Air contaminants. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1915.1000. <https://www.osha.gov/laws-regulations/regulations/standardnumber/1915/1915.1000>. September 28, 2020.
- OSHA. 2020c. Safety and health regulations for construction. Subpart D - Occupational health and environment controls. Gases, vapors, fumes, dusts, and mists. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1926.55 Appendix A. <https://www.osha.gov/laws-regulations/regulations/standardnumber/1926/1926.55AppA>. September 28, 2020.
- Osorio-Valencia E, Torres-Sanchez L, Lopez-Carrillo L, et al. 2015. Prenatal p,p'-DDE exposure and establishment of lateralization and spatial orientation in Mexican preschooler. *Neurotoxicology* 47:1-7. <http://doi.org/10.1016/j.neuro.2014.12.011>.
- Ostrea EM, Bielawski DM, Posecion NC, et al. 2008. A comparison of infant hair, cord blood and meconium analysis to detect fetal exposure to environmental pesticides. *Environ Res* 106(2):277-283. <http://doi.org/10.1016/j.envres.2007.08.014>.
- Ottar B. 1981. The transfer of airborne pollutants to the Arctic region. *Atmos Environ* 15(8):1439-1445.
- Ottoboni A. 1969. Effect of DDT on reproduction in the rat. *Toxicol Appl Pharmacol* 14(1):74-81. [http://doi.org/10.1016/0041-008x\(69\)90166-5](http://doi.org/10.1016/0041-008x(69)90166-5).
- Ottoboni A. 1972. Effect of DDT on the reproductive life-span in the female rat. *Toxicol Appl Pharmacol* 22(3):497-502. [http://doi.org/10.1016/0041-008x\(72\)90257-8](http://doi.org/10.1016/0041-008x(72)90257-8).
- Ottoboni A, Bissell GD, Hexter AC. 1977. Effects of DDT on reproduction in multiple generations of beagle dogs. *Arch Environ Contam Toxicol* 6(1):83-101. <http://doi.org/10.1007/BF02097752>.
- Ouidir M, Buck Louis GM, Kanner J, et al. 2020a. Association of maternal exposure to persistent organic pollutants in early pregnancy with fetal growth. *JAMA Pediatr* 174(2):149-161. <http://doi.org/10.1001/jamapediatrics.2019.5104>.
- Ouidir M, Buck Louis GM, Kanner J, et al. 2020b. Supplemental content: Association of maternal exposure to persistent organic pollutants in early pregnancy with fetal growth. *JAMA Pediatr* 174(2). <http://doi.org/10.1001/jamapediatrics.2019.5104>.
- Ouyang F, Perry MJ, Venners SA, et al. 2005. Serum DDT, age at menarche, and abnormal menstrual cycle length. *Occup Environ Med* 62(12):878-884. <http://doi.org/10.1136/oem.2005.020248>.
- Ouyang F, Longnecker MP, Venners SA, et al. 2014. Preconception serum 1,1,1-trichloro-2,2,bis(p-chlorophenyl)ethane and B-vitamin status: independent and joint effects on women's reproductive outcomes. *Am J Clin Nutr* 100(6):1470-1478. <http://doi.org/10.3945/ajcn.114.088377>.
- Palanza P, Parmigiani S, vom Saal FS. 2001. Effects of prenatal exposure to low doses of diethylstilbestrol, o,p'DDT, and methoxychlor on postnatal growth and neurobehavioral development in male and female mice. *Horm Behav* 40(2):252-265. <http://doi.org/10.1006/hbeh.2001.1697>.

8. REFERENCES

- Palanza P, Parmigiani S, Liu H, et al. 1999. Prenatal exposure to low doses of the estrogenic chemicals diethylstilbestrol and o,p'-DDT alters aggressive behavior of male and female house mice. *Pharmacol Biochem Behav* 64(4):665-672. [http://doi.org/10.1016/s0091-3057\(99\)00151-3](http://doi.org/10.1016/s0091-3057(99)00151-3).
- Palin KJ, Wilson CG, Davis SS, et al. 1982. The effect of oils on the lymphatic absorption of DDT. *J Pharm Pharmacol* 34(11):707-710. <http://doi.org/10.1111/j.2042-7158.1982.tb06204.x>.
- Palmer KA, Green S, Legator MS. 1972. Cytogenetic effects of DDT and derivatives of DDT in a cultured mammalian cell line. *Toxicol Appl Pharmacol* 22(3):355-364. [http://doi.org/10.1016/0041-008x\(72\)90241-4](http://doi.org/10.1016/0041-008x(72)90241-4).
- Palmer KA, Green S, Legator MS. 1973. Dominant lethal study of p,p'-DDT in rats. *Food Cosmet Toxicol* 11(1):53-62. [http://doi.org/10.1016/0015-6264\(73\)90061-8](http://doi.org/10.1016/0015-6264(73)90061-8).
- Pan IJ, Daniels JL, Goldman BD, et al. 2009. Lactational exposure to polychlorinated biphenyls, dichlorodiphenyltrichloroethane, and dichlorodiphenyldichloroethylene and infant neurodevelopment: an analysis of the pregnancy, infection, and nutrition babies study. *Environ Health Perspect* 117(3):488-494. <http://doi.org/10.1289/ehp.0800063>.
- Pan IJ, Daniels JL, Herring AH, et al. 2010. Lactational exposure to polychlorinated biphenyls, dichlorodiphenyltrichloroethane, and dichlorodiphenyldichloroethylene and infant growth: an analysis of the Pregnancy, Infection, and Nutrition Babies Study. *Paediatr Perinat Epidemiol* 24(3):262-271. <http://doi.org/10.1111/j.1365-3016.2010.01114.x>.
- Pant N, Kumar R, Mathur N, et al. 2007. Chlorinated pesticide concentration in semen of fertile and infertile men and correlation with sperm quality. *Environ Toxicol Pharmacol* 23(2):135-139. <http://doi.org/10.1016/j.etap.2006.07.012>.
- Parada H, Jr., Wolff MS, Engel LS, et al. 2016. Organochlorine insecticides DDT and chlordane in relation to survival following breast cancer. *Int J Cancer* 138(3):565-575. <http://doi.org/10.1002/ijc.29806>.
- Parada H, Sun X, Tse CK, et al. 2019. Plasma levels of dichlorodiphenyldichloroethene (DDE) and dichlorodiphenyltrichloroethane (DDT) and survival following breast cancer in the Carolina Breast Cancer Study. *Environ Int* 125:161-171. <http://doi.org/10.1016/j.envint.2019.01.032>.
- Parajuli RP, Goodrich JM, Chan LHM, et al. 2018. Genetic polymorphisms are associated with exposure biomarkers for metals and persistent organic pollutants among Inuit from the Inuvialuit Settlement Region, Canada. *Sci Total Environ* 634:569-578. <http://doi.org/10.1016/j.scitotenv.2018.03.331>.
- Pardio VT, Waliszewski SM, Aguirre AA, et al. 1998. DDT and its metabolites in human milk collected in Veracruz City and suburban areas (Mexico). *Bull Environ Contam Toxicol* 60(6):852-857. <http://doi.org/10.1007/s001289900705>.
- Park JH, Cha ES, Ko Y, et al. 2014. Exposure to dichlorodiphenyltrichloroethane and the risk of breast cancer: A systematic review and meta-analysis. *Osong Public Health Res Perspect* 5(2):77-84. <http://doi.org/10.1016/j.phrp.2014.02.001>.
- Park SH, Lim JE, Park H, et al. 2016. Body burden of persistent organic pollutants on hypertension: a meta-analysis. *Environ Sci Pollut Res Int* 23(14):14284-14293. <http://doi.org/10.1007/s11356-016-6568-6>.
- Pasha ST. 1981. Changes in hepatic microsomal enzymes due to DDT, DDE and DDD feeding in CF-1 mice. *Indian Journal of Medical Research* 74:926-930.
- Patrick SM, Bornman MS, Joubert AM, et al. 2016. Effects of environmental endocrine disruptors, including insecticides used for malaria vector control on reproductive parameters of male rats. *Reprod Toxicol* 61:19-27. <http://doi.org/10.1016/j.reprotox.2016.02.015>.
- Patterson DG, Wong LY, Turner WE, et al. 2009. Levels in the U.S. population of those persistent organic pollutants (2003-2004) included in the Stockholm Convention or in other long range transboundary air pollution agreements. *Environ Sci Technol* 43(4):1211-1218. <http://doi.org/10.1021/es801966w>.
- PDR. 1999. Physicians desk reference. Montvale, NJ: Medical Economics Company. 631.

8. REFERENCES

- Pelletier C, Doucet E, Imbeault P, et al. 2002. Associations between weight loss-induced changes in plasma organochlorine concentrations, serum T(3) concentration, and resting metabolic rate. *Toxicol Sci* 67(1):46-51. <http://doi.org/10.1093/toxsci/67.1.46>.
- Peraino C, Fry RJ, Staffeldt E, et al. 1975. Comparative enhancing effects of phenobarbital, amobarbital, diphenylhydantoin, and dichlorodiphenyltrichloroethane on 2-acetylaminofluorene-induced hepatic tumorigenesis in the rat. *Cancer Res* 35(10):2884-2890.
- Pereira WE, Domagalski JL, Hostettler FD, et al. 1996. Occurrence and accumulation of pesticides and organic contaminants in river sediment, water and clam tissues from the San Joaquin River and tributaries, California. *Environ Toxicol Chem* 15(2):172-180.
- Perez-Maldonado IN, Diaz-Barriga F, de la Fuente H, et al. 2004. DDT induces apoptosis in human mononuclear cells in vitro and is associated with increased apoptosis in exposed children. *Environ Res* 94(1):38-46.
- Perez-Maldonado IN, Herrera C, Batres LE, et al. 2005. DDT-induced oxidative damage in human blood mononuclear cells. *Environ Res* 98(2):177-184. <http://doi.org/10.1016/j.envres.2004.11.001>.
- Perez-Maldonado IN, Athanasiadou M, Yanez L, et al. 2006. DDE-induced apoptosis in children exposed to the DDT metabolite. *Sci Total Environ* 370(2-3):343-351. <http://doi.org/10.1016/j.scitotenv.2006.06.026>.
- Perez-Maldonado IN, Perez-Vazquez FJ, Gaspar-Ramirez O, et al. 2011. Variability in DDT-induced apoptosis in Mexican indigenous populations. *Toxicol Mech Methods* 21(9):675-680. <http://doi.org/10.3109/15376516.2011.601354>.
- Perla ME, Rue T, Cheadle A, et al. 2015. Biomarkers of insecticide exposure and asthma in children: A National Health and Nutrition Examination Survey (NHANES) 1999-2008 analysis. *Arch Environ Occup Health* 70(6):309-322. <http://doi.org/10.1080/19338244.2014.910490>.
- Perry MJ, Ouyang F, Korrick S, et al. 2005. Body mass index and serum 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane in nulliparous Chinese women. *Cancer Epidemiol Biomarkers Prev* 14(10):2433-2438. <http://doi.org/10.1158/1055-9965.EPI-05-0174>.
- Perry MJ, Ouyang F, Korrick SA, et al. 2006. A prospective study of serum DDT and progesterone and estrogen levels across the menstrual cycle in nulliparous women of reproductive age. *Am J Epidemiol* 164(11):1056-1064. <http://doi.org/10.1093/aje/kwj329>.
- Perry MJ, Young HA, Grandjean P, et al. 2016. Sperm aneuploidy in Faroese men with lifetime exposure to dichlorodiphenylchloroethylene (p,p'-DDE) and polychlorinated biphenyl (PCB) pollutants. *Environ Health Perspect* 124(7):951-956. <http://doi.org/10.1289/ehp.1509779>.
- Persson EC, Graubard BI, Evans AA, et al. 2012. Dichlorodiphenyltrichloroethane and risk of hepatocellular carcinoma. *Int J Cancer* 131(9):2078-2084. <http://doi.org/10.1002/ijc.27459>.
- Peterson JR, Adams RS, Cutkomp LK. 1971. Soil properties influencing DDT bioactivity. *Soil Sci Soc Am Proc* 35:43-59.
- Philibert A, Schwartz H, Mergler D. 2009. An exploratory study of diabetes in a First Nation community with respect to serum concentrations of p,p'-DDE and PCBs and fish consumption. *Int J Environ Res Public Health* 6(12):3179-3189. <http://doi.org/10.3390/ijerph6123179>.
- Pi N, Chia SE, Ong CN, et al. 2016a. Associations of serum organohalogen levels and prostate cancer risk: Results from a case-control study in Singapore. *Chemosphere* 144:1505-1512. <http://doi.org/10.1016/j.chemosphere.2015.10.020>.
- Pi N, Chia SE, Ong CN, et al. 2016b. Supplemental material: Associations of serum organohalogen levels and prostate cancer risk: Results from a case-control study in Singapore. *Chemosphere* 144 <http://doi.org/10.1016/j.chemosphere.2015.10.020>.
- Pinto JD, Camien MN, Dunn MS. 1965. Metabolic fate of p,p'-DDT [1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane] in rats. *J Biol Chem* 240(5):2148-2154.
- Pocock DE, Vost A. 1974. DDT absorption and chylomicron transport in rat. *Lipids* 9(6):374-381. <http://doi.org/10.1007/BF02532054>.
- Poissant L, Koprivnjak JF, Matthieu R. 1997. Some persistent organic pollutants and heavy metals in the atmosphere over a St Lawrence River valley site (Villeroy) in 1992. *Chemosphere* 34(3):567-585.

8. REFERENCES

- Poland A, Smith D, Kuntzman R, et al. 1970. Effect of intensive occupational exposure to DDT on phenylbutazone and cortisol metabolism in human subjects. *Clin Pharmacol Ther* 11(5):724-732. <http://doi.org/10.1002/cpt1970115724>.
- Porpora MG, Medda E, Abballe A, et al. 2009. Endometriosis and organochlorinated environmental pollutants: a case-control study on Italian women of reproductive age. *Environ Health Perspect* 117(7):1070-1075. <http://doi.org/10.1289/ehp.0800273>.
- Powers JM, Hennigar GR, Grooms G, et al. 1974. Adrenal cortical degeneration and regeneration following administration of DDD. *Am J Pathol* 75(1):181-194.
- Pranzatelli MR, Tkach K. 1992. Regional glycine receptor binding in the p,p'-DDT myoclonic rat model. *Arch Toxicol* 66(1):73-76. <http://doi.org/10.1007/BF02307273>.
- Pratt JA, Rothwell J, Jenner P, et al. 1986. p,p'-DDT-induced myoclonus in the rat and its application as an animal model of 5-HT-sensitive action myoclonus. *Adv Neurol* 43:577-588.
- Preat V, de Gerlache J, Lans M, et al. 1986. Comparative analysis of the effect of phenobarbital, dichlorodiphenyltrichloroethane, butylated hydroxytoluene and nafenopin on rat hepatocarcinogenesis. *Carcinogenesis* 7(6):1025-1028. <http://doi.org/10.1093/carcin/7.6.1025>.
- Preston BD, Miller JA, Miller EC. 1984. Reactions of 2,2'5,5'-tetrachlorobiphenyl 3,4-oxide with methionine, cysteine and glutathione in relation to the formation of methylthio-metabolites of 2,2'5,5'-tetrachlorobiphenyl in the rat and mouse. *Chem Biol Interact* 50:289-312.
- Probst GS, Hill LE. 1980. Chemically-induced DNA repair synthesis in primary rat hepatocytes: a correlation with bacterial mutagenicity. *Ann N Y Acad Sci* 349:405-406. <http://doi.org/10.1111/j.1749-6632.1980.tb29551.x>.
- Probst GS, McMahon RE, Hill LE, et al. 1981. Chemically-induced unscheduled DNA synthesis in primary rat hepatocyte cultures: a comparison with bacteria mutagenicity using 218 compounds. *Environ Mutagen* 3:11-32.
- Procianoy RS, Schvartsman S. 1981. Blood pesticide concentration in mothers and their newborn infants: Relation to prematurity. *Acta Paediatr Scand* 70:925-928.
- Purdue MP, Engel LS, Langseth H, et al. 2009. Prediagnostic serum concentrations of organochlorine compounds and risk of testicular germ cell tumors. *Environ Health Perspect* 117(10):1514-1519. <http://doi.org/10.1289/ehp.0800359>.
- Quan C, Shi Y, Wang C, et al. 2016. p,p'-DDE damages spermatogenesis via phospholipid hydroperoxide glutathione peroxidase depletion and mitochondria apoptosis pathway. *Environ Toxicol* 31(5):593-600. <http://doi.org/10.1002/tox.22072>.
- Quaranta MG, Porpora MG, Mattioli B, et al. 2006. Impaired NK-cell-mediated cytotoxic activity and cytokine production in patients with endometriosis: a possible role for PCBs and DDE. *Life Sci* 79(5):491-498. <http://doi.org/10.1016/j.lfs.2006.01.026>.
- Quensen JF, Tiedje JM, Jain MK, et al. 2001. Factors controlling the rate of DDE dechlorination to DDMU in Palos Verdes margin sediments under anaerobic conditions. *Environ Sci Technol* 35(2):286-291. <http://doi.org/10.1021/es0012873>.
- Quintana PJ, Delfino RJ, Korrick S, et al. 2004. Adipose tissue levels of organochlorine pesticides and polychlorinated biphenyls and risk of non-Hodgkin's lymphoma. *Environ Health Perspect* 112(8):854-861. <http://doi.org/10.1289/ehp.6726>.
- Rabello MN, Dealmeida WF, Pigati P, et al. 1975. Cytogenetic study on individuals occupationally exposed to DDT. *Mutat Res* 28(3):449-454. [http://doi.org/10.1016/0027-5107\(75\)90238-9](http://doi.org/10.1016/0027-5107(75)90238-9).
- Racke K, Skidmore M, Hamilton D, et al. 1997. Pesticide fate in tropical soils. *Pure Appl Chem* 69(6):1349-1371.
- Rapaport R, Urban N, Capel P, et al. 1985. "New" DDT inputs to North America: Atmospheric deposition. *Chemosphere* 14(9):1167-1173.
- Reed A, Dzon L, Loganathan BG, et al. 2004. Immunomodulation of human natural killer cell cytotoxic function by organochlorine pesticides. *Hum Exp Toxicol* 23(10):463-471. <http://doi.org/10.1191/0960327104ht477oa>.

8. REFERENCES

- Rehana T, Rao PR. 1992. Effect of DDT on the immune system in Swiss albino mice during adult and perinatal exposure: humoral responses. *Bull Environ Contam Toxicol* 48(4):535-540.
<http://doi.org/10.1007/BF00199070>.
- Reich AR, Perkins JL, Cutter G. 1986. DDT contamination of a north Alabama aquatic ecosystem. *Environ Toxicol Chem* 5:725-736.
- Reif VD, Sinsheimer JE. 1975. Metabolism of 1-(o-chlorophenyl)-1-(p-chlorophenyl)-2,2-dichloroethane (o,p'-DDD) in rats. *Drug Metab Dispos* 3(1):15-25.
- Reingold IM, Lasky II. 1947. Acute fatal poisoning following ingestion of a solution of DDT. *Ann Intern Med* 26(6):945-947. <http://doi.org/10.7326/0003-4819-26-6-945>.
- Reish DJ, Kauwling TJ, Mearns AJ, et al. 1978. Marine and estuarine pollution. *J Water Pollut Control Fed* 50:1424-1469.
- Ren A, Qiu X, Jin L, et al. 2011. Association of selected persistent organic pollutants in the placenta with the risk of neural tube defects. *Proc Natl Acad Sci U S A* 108(31):12770-12775.
<http://doi.org/10.1073/pnas.1105209108>.
- RePORTER. 2021. DDT. National Institutes of Health, Research Portfolio Online Reporting Tools.
<http://projectreporter.nih.gov/reporter.cfm>. July 13, 2021.
- Ribas-Fito N, Sala M, Cardo E, et al. 2002. Association of hexachlorobenzene and other organochlorine compounds with anthropometric measures at birth. *Pediatr Res* 52(2):163-167.
<http://doi.org/10.1203/00006450-200208000-00006>.
- Ribas-Fito N, Cardo E, Sala M, et al. 2003a. Breastfeeding, exposure to organochlorine compounds, and neurodevelopment in infants. *Pediatrics* 111(5 Pt 1):e580-585.
- Ribas-Fito N, Sala M, Cardo E, et al. 2003b. Organochlorine compounds and concentrations of thyroid stimulating hormone in newborns. *Occup Environ Med* 60(4):301-303.
- Ribas-Fito N, Gladen BC, Brock JW, et al. 2006. Prenatal exposure to 1,1-dichloro-2,2-bis (p-chlorophenyl)ethylene (p,p'-DDE) in relation to child growth. *Int J Epidemiol* 35(4):853-858.
<http://doi.org/10.1093/ije/dyl067>.
- Richardson JR, Roy A, Shalat SL, et al. 2014. Elevated serum pesticide levels and risk for Alzheimer disease. *JAMA Neurol* 71(3):284-290. <http://doi.org/10.1001/jamaneurol.2013.6030>.
- Rignell-Hydbom A, Rylander L, Giwercman A, et al. 2004. Exposure to CB-153 and p,p'-DDE and male reproductive function. *Hum Reprod* 19(9):2066-2075. <http://doi.org/10.1093/humrep/deh362>.
- Rignell-Hydbom A, Rylander L, Elzanaty S, et al. 2005a. Exposure to persistent organochlorine pollutants and seminal levels of markers of epididymal and accessory sex gland functions in Swedish men. *Human reproduction (Oxford, England)* 20(7):1910-1914.
<http://doi.org/10.1093/humrep/deh856>.
- Rignell-Hydbom A, Rylander L, Giwercman A, et al. 2005b. Exposure to PCBs and p,p'-DDE and human sperm chromatin integrity. *Environ Health Perspect* 113(2):175-179.
- Rignell-Hydbom A, Rylander L, Hagmar L. 2007. Exposure to persistent organochlorine pollutants and type 2 diabetes mellitus. *Hum Exp Toxicol* 26(5):447-452.
<http://doi.org/10.1177/0960327107076886>.
- Rignell-Hydbom A, Skerfving S, Lundh T, et al. 2009a. Exposure to cadmium and persistent organochlorine pollutants and its association with bone mineral density and markers of bone metabolism on postmenopausal women. *Environ Res* 109(8):991-996.
<http://doi.org/10.1016/j.envres.2009.08.008>.
- Rignell-Hydbom A, Lidfeldt J, Kiviranta H, et al. 2009b. Exposure to p,p'-DDE: a risk factor for type 2 diabetes. *PLoS ONE* 4(10):e7503. <http://doi.org/10.1371/journal.pone.0007503>.
- Rignell-Hydbom A, Elfving M, Ivarsson SA, et al. 2010. A nested case-control study of intrauterine exposure to persistent organochlorine pollutants in relation to risk of type 1 diabetes. *PLoS ONE* 5(6):e11281. <http://doi.org/10.1371/journal.pone.0011281>.
- Risebrough R, Jarman W, Springer A, et al. 1986. A metabolic derivation of DDE from Kelthane. *Environ Toxicol Chem* 5:13-19.

8. REFERENCES

- Ritchie JM, Vial SL, Fuortes LJ, et al. 2003. Organochlorines and risk of prostate cancer. *J Occup Environ Med* 45(7):692-702. <http://doi.org/10.1097/01.jom.0000071510.96740.0b>.
- Riva E, Grandi F, Massetto N, et al. 2004. Polychlorinated biphenyls in colostral milk and visual function at 12 months of life. *Acta Paediatr* 93(8):1103-1107.
- Rivero-Rodriguez L, Borja-Aburto VH, Santos-Burgoa C, et al. 1997. Exposure assessment for worker applying DDT to control malaria in Veracruz, Mexico. *Environ Health Perspect* 105(1):98-101.
- Roan C, Morgan D, Paschal EH. 1971. Urinary excretion of DDA following ingestion of DDT and DDT metabolites in man. *Arch Environ Health* 22(3):309-315.
<http://doi.org/10.1080/00039896.1971.10665849>.
- Roberts JR, Karr CJ. 2012. Pesticide exposure in children. *Pediatrics* 130(6):e1765-1788.
<http://doi.org/10.1542/peds.2012-2758>.
- Roberts DR, Laughlin LL, Hsueh P, et al. 1997. DDT, global strategies, and a malaria control crisis in South America. *Emerg Infect Dis* 3(3):295-302. <http://doi.org/10.3201/eid0303.970305>.
- Robertson BK, Alexander M. 1998. Sequestration of DDT and dieldrin in soil: Disappearance of acute toxicity but not the compounds. *Environ Toxicol Chem* 17(6):1034-1038.
- Robledo CA, Yeung E, Mendola P, et al. 2015. Preconception maternal and paternal exposure to persistent organic pollutants and birth size: the LIFE study. *Environ Health Perspect* 123(1):88-94.
<http://doi.org/10.1289/ehp.1308016>.
- Rocha-Amador D, Navarro M, Trejo-Acevedo A, et al. 2009. Use of the Rey-Osterrieth Complex Figure Test for neurotoxicity evaluation of mixtures in children. *Neurotoxicology* 30(6):1149-1154.
<http://doi.org/10.1016/j.neuro.2009.09.003>.
- Rogan WJ, Gladen BC. 1991. PCBs, DDE, and child development at 18 and 24 months. *Ann Epidemiol* 1(5):407-413. [http://doi.org/10.1016/1047-2797\(91\)90010-a](http://doi.org/10.1016/1047-2797(91)90010-a).
- Rogan WJ, Gladen BC, McKinney JD, et al. 1986. Polychlorinated biphenyls (PCBs) and dichlorophenyl dichloroethene (DDE) in human milk: Effects of maternal factors and previous lactation. *Am J Public Health* 76:172-177.
- Rojanapo W, Tepsuwan A, Kupradinun P, et al. 1988. Modulation of hepatocarcinogenicity of aflatoxin B1 by the chlorinated insecticide DDT. In: Nigam SK, McBrien DCH, Slater TF, eds. *Eicosanoids, lipid peroxidation and cancer*. Berlin, Germany: Springer-Verlag, 327-338.
- Rojanapo W, Kupradinun P, Tepsuwan A, et al. 1993. Effect of varying the onset of exposure to DDT on its modulation of AFB1-induced hepatocarcinogenesis in the rat. *Carcinogenesis* 14(4):663-667.
<http://doi.org/10.1093/carcin/14.4.663>.
- Romieu I, Hernandez-Avila M, Lazcano-Ponce E, et al. 2000. Breast cancer, lactation history, and serum organochlorines. *Am J Epidemiol* 152(4):363-370. <http://doi.org/10.1093/aje/152.4.363>.
- Roos V, Ronn M, Salihovic S, et al. 2013. Circulating levels of persistent organic pollutants in relation to visceral and subcutaneous adipose tissue by abdominal MRI. *Obesity (Silver Spring)* 21(2):413-418. <http://doi.org/10.1002/oby.20267>.
- Rosenquist AH, Hoyer BB, Julvez J, et al. 2017. Prenatal and postnatal PCB-153 and p,p'-DDE exposures and behavior scores at 5-9 years of age among children in Greenland and Ukraine. *Environ Health Perspect* 125(10):107002. <http://doi.org/10.1289/ehp553>.
- Rossi L, Ravera M, Repetti G, et al. 1977. Long-term administration of DDT or phenobarbital-Na in Wistar rats. *Int J Cancer* 19(2):179-185. <http://doi.org/10.1002/ijc.2910190207>.
- Rossi L, Barbieri O, Sanguineti M, et al. 1983. Carcinogenicity study with technical-grade dichlorodiphenyltrichloroethane and 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene in hamsters. *Cancer Res* 43(2):776-781.
- Rossi M, Scarselli M, Fasciani I, et al. 2017. Dichlorodiphenyltrichloroethane (DDT) induced extracellular vesicle formation: a potential role in organochlorine increased risk of Parkinson's disease. *Acta Neurobiol Exp (Wars)* 77(2):113-117. <http://doi.org/10.21307/ane-2017-043>.
- Rothe CF, Mattson AM, Nueslein RM, et al. 1957. Metabolism of chlorophenoethane (DDT). *AMA Arch Ind Health* 16:82-86.

8. REFERENCES

- Rothman N, Cantor KP, Blair A, et al. 1997. A nested case-control study of non-Hodgkin lymphoma and serum organochlorine residues. *Lancet* 350(9073):240-244. [http://doi.org/10.1016/S0140-6736\(97\)02088-6](http://doi.org/10.1016/S0140-6736(97)02088-6).
- Rowlands SA, Hall AK, McCormick PG, et al. 1994. Destruction of toxic materials. *Nature* 367:223.
- Rubin JG, Payne GT, Soderlund DM. 1993. Structure-activity relationships for pyrethroids and DDT analogs as modifiers of [³H]batrachotoxinin A 20- α -benzoate binding to mouse brain sodium channels. *Pestic Biochem Physiol* 45(2):130-140.
- Ruel MVM, Bos AF, Soechitram SD, et al. 2019. Prenatal exposure to organohalogen compounds and children's mental and motor development at 18 and 30 months of age. *Neurotoxicology* 72:6-14. <http://doi.org/10.1016/j.neuro.2019.01.003>.
- Rusiecki JA, Baccarelli A, Bollati V, et al. 2008. Global DNA hypomethylation is associated with high serum-persistent organic pollutants in Greenlandic Inuit. *Environ Health Perspect* 116(11):1547-1552. <http://doi.org/10.1289/ehp.11338>.
- Russ K, Howard S. 2016. Developmental exposure to environmental chemicals and metabolic changes in children. *Curr Probl Pediatr Adolesc Health Care* 46(8):255-285. <http://doi.org/10.1016/j.cppeds.2016.06.001>.
- Russell RW, Hecnar SJ, Haffner D. 1995. Organochlorine pesticide residues in southern Ontario spring peepers. *Environ Toxicol Chem* 14(5):815-817.
- Rylander L, Rignell-Hydbom A, Hagmar L. 2005. A cross-sectional study of the association between persistent organochlorine pollutants and diabetes. *Environ Health* 4:28. <http://doi.org/10.1186/1476-069X-4-28>.
- Rylander L, Wallin E, Jonsson BA, et al. 2006. Associations between CB-153 and p,p'-DDE and hormone levels in serum in middle-aged and elderly men. *Chemosphere* 65(3):375-381. <http://doi.org/10.1016/j.chemosphere.2006.02.012>.
- Ryu DH, Yu HT, Kim SA, et al. 2018. Is chronic exposure to low-dose organochlorine pesticides a new risk factor of T-cell immunosenescence? *Cancer Epidemiol Biomarkers Prev* 27(10):1159-1167. <http://doi.org/10.1158/1055-9965.epi-17-0799>.
- Sa C, Pestana D, Calhau C, et al. 2018. Unravelling the effect of p,p'-Dichlorodiphenylchloroethylene (DDE) in hypertension of Wistar rats. *J Agric Food Chem* 66(48):12847-12854. <http://doi.org/10.1021/acs.jafc.8b05001>.
- Sabljic A. 1984. Predictions of the nature and strength of soil sorption of organic pollutants by molecular topology. *J Agric Food Chem* 32:243-246.
- Sadler-Riggleman I, Klukovich R, Nilsson E, et al. 2019. Epigenetic transgenerational inheritance of testis pathology and Sertoli cell epimutations: generational origins of male infertility. *Environ Epigenet* 5(3):dvz013. <http://doi.org/10.1093/eep/dvz013>.
- Sagiv SK, Tolbert PE, Altshul LM, et al. 2007. Organochlorine exposures during pregnancy and infant size at birth. *Epidemiology* 18(1):120-129. <http://doi.org/10.1097/ede.0000249769.15001.7c>.
- Sagiv SK, Nugent JK, Brazelton TB, et al. 2008. Prenatal organochlorine exposure and measures of behavior in infancy using the Neonatal Behavioral Assessment Scale (NBAS). *Environ Health Perspect* 116(5):666-673. <http://doi.org/10.1289/ehp.10553>.
- Sagiv SK, Thurston SW, Bellinger DC, et al. 2010. Prenatal organochlorine exposure and behaviors associated with attention deficit hyperactivity disorder in school-aged children. *Am J Epidemiol* 171(5):593-601. <http://doi.org/10.1093/aje/kwp427>.
- Sagiv SK, Thurston SW, Bellinger DC, et al. 2012. Neuropsychological measures of attention and impulse control among 8-year-old children exposed prenatally to organochlorines. *Environ Health Perspect* 120(6):904-909. <http://doi.org/10.1289/ehp.1104372>.
- Salihovic S, Ganna A, Fall T, et al. 2016. The metabolic fingerprint of p,p'-DDE and HCB exposure in humans. *Environ Int* 88:60-66. <http://doi.org/10.1016/j.envint.2015.12.015>.
- Samuel T, Pillai MK. 1989. The effect of temperature and solar radiations on volatilisation, mineralisation and degradation of [¹⁴C]-DDT in soil. *Environ Pollut* 57(1):63-77. [http://doi.org/10.1016/0269-7491\(89\)90130-9](http://doi.org/10.1016/0269-7491(89)90130-9).

8. REFERENCES

- Sanger DM, Holland AF, Scott GI. 1999. Tidal creek and salt marsh sediments in South Carolina coastal estuaries: II. Distribution of organic contaminants. *Arch Environ Contam Toxicol* 37(4):458-471. <http://doi.org/10.1007/s002449900540>.
- Sanyal S, Agarwal N, Subrahmanyam D. 1986. Effect of acute sublethal and chronic administration of DDT (chlorophenotane) on brain lipid metabolism of rhesus monkeys. *Toxicol Lett* 34(1):47-54. [http://doi.org/10.1016/0378-4274\(86\)90144-x](http://doi.org/10.1016/0378-4274(86)90144-x).
- Savitz DA, Klebanoff MA, Wellenius GA, et al. 2014a. Persistent organochlorines and hypertensive disorders of pregnancy. *Environ Res* 132:1-5. <http://doi.org/10.1016/j.envres.2014.03.020>.
- Savitz DA, Klebanoff MA, Wellenius GA, et al. 2014b. Supplemental material: Persistent organochlorines and hypertensive disorders of pregnancy. *Environ Res* 132. <http://doi.org/10.1016/j.envres.2014.03.020>.
- Sawada N, Iwasaki M, Inoue M, et al. 2010. Plasma organochlorines and subsequent risk of prostate cancer in Japanese men: a nested case-control study. *Environ Health Perspect* 118(5):659-665. <http://doi.org/10.1289/ehp.0901214>.
- Sax E. 1979. DDT. In: Dangerous properties of industrial materials. 5th ed. New York, NY: Van Nostrand Reinhold, 534-535.
- Saxena MC, Siddiqui MK, Bhargava AK, et al. 1980. Role of chlorinated hydrocarbon pesticides in abortions and premature labour. *Toxicology* 17(3):323-331. [http://doi.org/10.1016/0300-483x\(80\)90013-x](http://doi.org/10.1016/0300-483x(80)90013-x).
- Saxena MC, Siddiqui MK, Seth TD, et al. 1981. Organochlorine pesticides in specimens from women undergoing spontaneous abortion, premature of full-term delivery. *J Anal Toxicol* 5(1):6-9. <http://doi.org/10.1093/jat/5.1.6>.
- Saxena MC, Siddiqui MK, Agarwal V, et al. 1983. A comparison of organochlorine insecticide contents in specimens of maternal blood, placenta, and umbilical-cord blood from stillborn and live-born cases. *J Toxicol Environ Health* 11(1):71-79. <http://doi.org/10.1080/15287398309530321>.
- Saxena SP, Khare C, Farooq A, et al. 1987. DDT and its metabolites in leiomyomatous and normal human uterine tissue. *Arch Toxicol* 59(6):453-455. <http://doi.org/10.1007/BF00316214>.
- Schattenberg HJ, Hsu JP. 1992. Pesticide residue survey of produce from 1989-1991. *J AOAC Int* 75(5):925-933.
- Schechter A, Toniolo P, Dai LC, et al. 1997. Blood levels of DDT and breast cancer risk among women living in the north of Vietnam. *Arch Environ Contam Toxicol* 33:453-456.
- Schechter A, Cramer P, Boggess K, et al. 2001. Intake of dioxins and related compounds from food in the U.S. population. *J Toxicol Environ Health A* 63(1):1-18. <http://doi.org/10.1080/152873901750128326>.
- Schechter A, Haffner D, Colacino J, et al. 2010. Polybrominated diphenyl ethers (PBDEs) and hexabromocyclododecane (HBCD) in composite U.S. food samples. *Environ Health Perspect* 118(3):357-362. <http://doi.org/10.1289/ehp.0901345>.
- Scheele JS. 1998. A comparison of the concentrations of certain pesticides and polychlorinated hydrocarbons in bone marrow and fat tissue. *J Environ Pathol Toxicol Oncol* 17(1):65-68.
- Scheele J, Teufel M, Niessen KH. 1995. A comparison of the concentrations of certain chlorinated hydrocarbons and polychlorinated biphenyls in bone marrow and fat tissue of children and their concentrations in breast milk. *J Environ Pathol Toxicol Oncol* 14(1):11-14.
- Schell LM, Gallo MV, Ravenscroft J, et al. 2009. Persistent organic pollutants and anti-thyroid peroxidase levels in Akwesasne Mohawk young adults. *Environ Res* 109(1):86-92. <http://doi.org/10.1016/j.envres.2008.08.015>.
- Schell LM, Gallo MV, Deane GD, et al. 2014. Relationships of polychlorinated biphenyls and dichlorodiphenylchloroethylene (p,p'-DDE) with testosterone levels in adolescent males. *Environ Health Perspect* 122(3):304-309. <http://doi.org/10.1289/ehp.1205984>.
- Schildkraut JM, Demark-Wahnefried W, DeVoto E, et al. 1999. Environmental contaminants and body fat distribution. *Cancer Epidemiol Biomarkers Prev* 8(2):179-183.

8. REFERENCES

- Schmid K, Lederer P, Goen T, et al. 1997. Internal exposure to hazardous substances of persons from various continents: investigations on exposure to different organochlorine compounds. *Int Arch Occup Environ Health* 69:399-406.
- Schmitt CJ, Zajicek JL, Peterman PH. 1990. National contaminant biomonitoring program: Residues of organochlorine chemicals in U.S. Freshwater Fish, 1976-1984. *Arch Environ Contam Toxicol* 19(5):748-781. <http://doi.org/10.1007/BF01183992>.
- Schwack W. 1988. Photoinduced additions of pesticides to biomolecules. 2. Model reactions of DDT and methoxychlor with methyl oleate. *J Agric Food Chem* 36:645-648.
- Seiler JP. 1977. Inhibition of testicular DNA synthesis by chemical mutagens and carcinogens. Preliminary results in the validation of a novel short term test. *Mutat Res* 46(4):305-310. [http://doi.org/10.1016/0165-1161\(77\)90007-3](http://doi.org/10.1016/0165-1161(77)90007-3).
- Seiler P, Fischer B, Lindenau A, et al. 1994. Effects of persistent chlorinated hydrocarbons on fertility and embryonic development in the rabbit. *Hum Reprod* 9(10):1920-1926. <http://doi.org/10.1093/oxfordjournals.humrep.a138359>.
- Serdar B, LeBlanc WG, Norris JM, et al. 2014. Potential effects of polychlorinated biphenyls (PCBs) and selected organochlorine pesticides (OCPs) on immune cells and blood biochemistry measures: a cross-sectional assessment of the NHANES 2003-2004 data. *Environ Health* 13:114. <http://doi.org/10.1186/1476-069X-13-114>.
- Sexton K, Adgate JL, Fredrickson AL, et al. 2006. Using biologic markers in blood to assess exposure to multiple environmental chemicals for inner-city children 3-6 years of age. *Environ Health Perspect* 114(3):453-459. <http://doi.org/10.1289/ehp.8324>.
- Shabad LM, Kolesnichenko TA, Nikonova TV. 1973. Transplacental and combined long-term effect of DDT in five generations of A-strain mice. *Int J Cancer* 11(3):688-693. <http://doi.org/10.1002/ijc.2910110320>.
- Sharma E, Mustafa M, Pathak R, et al. 2012. A case control study of gene environmental interaction in fetal growth restriction with special reference to organochlorine pesticides. *Eur J Obstet Gynecol Reprod Biol* 161(2):163-169. <http://doi.org/10.1016/j.ejogrb.2012.01.008>.
- Shi Y, Song Y, Wang Y, et al. 2009. p,p'-DDE induces apoptosis of rat Sertoli cells via a FasL-dependent pathway. *J Biomed Biotechnol* 2009:181282. <http://doi.org/10.1155/2009/181282>.
- Shi YQ, Li HW, Wang YP, et al. 2013. p,p'-DDE induces apoptosis and mRNA expression of apoptosis-associated genes in testes of pubertal rats. *Environ Toxicol* 28(1):31-41. <http://doi.org/10.1002/tox.20694>.
- Shin JY, Choi YY, Jeon HS, et al. 2010. Low-dose persistent organic pollutants increased telomere length in peripheral leukocytes of healthy Koreans. *Mutagenesis* 25(5):511-516. <http://doi.org/10.1093/mutage/geq035>.
- Shiplov J, Gruber CD, Keil JE, et al. 1972. Effect of DDT on antibody response to typhoid vaccine in rabbits and man. *Immunol Commun* 1(4):385-394. <http://doi.org/10.3109/08820137209022951>.
- Shirasu Y, Moriya M, Kato K, et al. 1976. Mutagenicity screening of pesticides in the microbial system. *Mutat Res* 40(1):19-30. [http://doi.org/10.1016/0165-1218\(76\)90018-5](http://doi.org/10.1016/0165-1218(76)90018-5).
- Shutoh Y, Takeda M, Ohtsuka R, et al. 2009. Low dose effects of dichlorodiphenyltrichloroethane (DDT) on gene transcription and DNA methylation in the hypothalamus of young male rats: implication of hormesis-like effects. *J Toxicol Sci* 34(5):469-482. <http://doi.org/10.2131/jts.34.469>.
- Siddarth M, Datta SK, Mustafa M, et al. 2014. Increased level of organochlorine pesticides in chronic kidney disease patients of unknown etiology: role of GSTM1/GSTT1 polymorphism. *Chemosphere* 96:174-179. <http://doi.org/10.1016/j.chemosphere.2013.10.029>.
- Siddiqui MK, Srivastava S, Srivastava SP, et al. 2003. Persistent chlorinated pesticides and intra-uterine foetal growth retardation: a possible association. *Int Arch Occup Environ Health* 76(1):75-80. <http://doi.org/10.1007/s00420-002-0393-6>.
- Sieber SM. 1976. The lymphatic absorption of p,p'-DDT and some structurally-related compounds in the rat. *Pharmacology* 14:443-454.

8. REFERENCES

- Silinskas KC, Okey AB. 1975. Protection by 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (DDT) against mammary tumors and leukemia during prolonged feeding of 7,12-dimethylbenz(a)anthracene to female rats. *J Natl Cancer Inst* 55(3):653-657. <http://doi.org/10.1093/jnci/55.3.653>.
- Singh BK, Kuhad RC, Singh A, et al. 1999. Biochemical and molecular basis of pesticide degradation by microorganisms. *Crit Rev Biotechnol* 19(3):197-225. <http://doi.org/10.1080/0738-859991229242>.
- Singhal RL, Valadares JRE, Schwark WS. 1970. Metabolic control mechanisms in mammalian systems-IX: Estrogen-like stimulation of uterine enzymes by o,p'-1,1,1-trichloro-2-2-bis (p-chlorophenyl) ethane. *Biochem Pharmacol* 19:2145-2155.
- Sioen I, Den Hond E, Nelen V, et al. 2013. Prenatal exposure to environmental contaminants and behavioural problems at age 7-8years. *Environ Int* 59:225-231. <http://doi.org/10.1016/j.envint.2013.06.014>.
- Sjoeib F, Anwar E, Tungguldihardjo MS. 1994. Laboratory studies of dissipation of 14C-DDT from soil and plywood surfaces. *Journal of Environmental science and health* B29(1):153-159.
- Skinner MK, Ben Maamar M, Sadler-Riggleman I, et al. 2018. Alterations in sperm DNA methylation, non-coding RNA and histone retention associate with DDT-induced epigenetic transgenerational inheritance of disease. *Epigenetics Chromatin* 11(1):8. <http://doi.org/10.1186/s13072-018-0178-0>.
- Sleicher CA, Hopcraft J. 1984. Persistence of pesticides in surface soil and relation to sublimation. *Environ Sci Technol* 18(7):514-518.
- Smith D. 1999. Worldwide trends in DDT levels in human breast milk. *Int J Epidemiol* 28(2):179-188. <http://doi.org/10.1093/ije/28.2.179>.
- Sobotka TJ. 1971. Behavioral effects of low doses of DDT. *Proc Soc Exp Biol Med* 137(3):952-955. <http://doi.org/10.3181/00379727-137-35703>.
- Sohoni P, Sumpter J. 1998. Several environmental oestrogens are also anti-androgens. *J Endocrinol* 158:327-339.
- Son HK, Kim SA, Kang JH, et al. 2010. Strong associations between low-dose organochlorine pesticides and type 2 diabetes in Korea. *Environ Int* 36(5):410-414. <http://doi.org/10.1016/j.envint.2010.02.012>.
- Song Y, Yang L. 2017. Transgenerational pancreatic impairment with Igf2/H19 epigenetic alteration induced by p,p'-DDE exposure in early life. *Toxicol Lett* 280:222-231. <http://doi.org/10.1016/j.toxlet.2017.08.083>.
- Song Y, Yang L. 2018. Transgenerational impaired spermatogenesis with sperm H19 and Gtl2 hypomethylation induced by the endocrine disruptor p,p'-DDE. *Toxicol Lett* 297:34-41. <http://doi.org/10.1016/j.toxlet.2018.08.015>.
- Song Y, Liang X, Hu Y, et al. 2008. p,p'-DDE induces mitochondria-mediated apoptosis of cultured rat Sertoli cells. *Toxicology* 253(1-3):53-61. <http://doi.org/10.1016/j.tox.2008.08.013>.
- Song Y, Shi Y, Yu H, et al. 2011. p,p'-Dichlorodiphenyldichloroethylene induced apoptosis of Sertoli cells through oxidative stress-mediated p38 MAPK and mitochondrial pathway. *Toxicol Lett* 202(1):55-60. <http://doi.org/10.1016/j.toxlet.2011.01.020>.
- Song S, Ma X, Pan M, et al. 2018. Excretion kinetics of three dominant organochlorine compounds in human milk within the first 6 months postpartum. *Environ Monit Assess* 190(8):457. <http://doi.org/10.1007/s10661-018-6850-9>.
- Sonne C, Gustavson K, Riget FF, et al. 2014. Physiologically based pharmacokinetic modeling of POPs in Greenlanders. *Environ Int* 64:91-97. <http://doi.org/10.1016/j.envint.2013.12.006>.
- Soto AM, Fernandez MF, Luizzi MF, et al. 1997. Developing a marker of exposure to xenoestrogen mixtures in human serum. *Environ Health Perspect* 105(Suppl 3):647-654. <http://doi.org/10.1289/ehp.97105s3647>.
- Soto AM, Lin TM, Justicia H, et al. 1998. An "in culture" bioassay to assess the estrogenicity of xenobiotics (e-screen). *J Clean Technol Environ Toxicol Occup Med* 7(3):331-343.

8. REFERENCES

- Spano M, Toft G, Hagmar L, et al. 2005. Exposure to PCB and p, p'-DDE in European and Inuit populations: impact on human sperm chromatin integrity. *Hum Reprod* 20(12):3488-3499. <http://doi.org/10.1093/humrep/dei297>.
- Spencer WF, Singh G, Taylor CD, et al. 1996. DDT persistence and volatility as affected by management practices after 23 years. *J Environ Qual* 25:815-821.
- Spinelli JJ, Ng CH, Weber JP, et al. 2007. Organochlorines and risk of non-Hodgkin lymphoma. *Int J Cancer* 121(12):2767-2775. <http://doi.org/10.1002/ijc.23005>.
- Stanley MR, Barney JE, Helton MR, et al. 1971. Measurement of atmospheric levels of pesticides. *Environ Sci Technol* 5(5):430-435.
- Staples CA, Werner AF, Hoogheem TJ. 1985. Assessment of priority pollutant concentrations in the United States using STORET database. *Environ Toxicol Chem* 4:131-142.
- Steenland K, Mora AM, Barr DB, et al. 2014. Organochlorine chemicals and neurodegeneration among elderly subjects in Costa Rica. *Environ Res* 134:205-209. <http://doi.org/10.1016/j.envres.2014.07.024>.
- Stehr-Green PA. 1989. Demographic and seasonal influences on human serum pesticide residue levels. *J Toxicol Environ Health* 27(4):405-421. <http://doi.org/10.1080/15287398909531312>.
- Stellman SD, Djordjevic MV, Muscat JE, et al. 1998. Relative abundance of organochlorine pesticides and polychlorinaed biphenyls in adipose tissue and serum of women in Long Island, New York. *Cancer Epidemiol Biomarkers Prev* 7:489-496.
- Stewart DKR, Chisholm D. 1971. Long-term persistence of BHC, DDT and chlordane in a sandy loam soil. *Can J Soil Sci* 51:379-383.
- Stewart P, Reihman J, Lonky E, et al. 2000. Prenatal PCB exposure and neonatal behavioral assessment scale (NBAS) performance. *Neurotoxicol Teratol* 22(1):21-29. [http://doi.org/10.1016/s0892-0362\(99\)00056-2](http://doi.org/10.1016/s0892-0362(99)00056-2).
- Streck G, Herrmann R. 2000. Distribution of endocrine disrupting semivolatile organic compounds in several compartments of a terrestrial ecosystem. *Water Sci Technol* 42(7-8):39-44.
- Street JC, Chadwick RW. 1967. Stimulation of dieldrin metabolism by DDT. *Toxicol Appl Pharmacol* 11(1):68-71. [http://doi.org/10.1016/0041-008x\(67\)90027-0](http://doi.org/10.1016/0041-008x(67)90027-0).
- Street JC, Sharma RP. 1975. Alteration of induced cellular and humoral immune responses by pesticides and chemicals of environmental concern: quantitative studies of immunosuppression by DDT, aroclor 1254, carbaryl, carbofuran, and methylparathion. *Toxicol Appl Pharmacol* 32(3):587-602. [http://doi.org/10.1016/0041-008x\(75\)90123-4](http://doi.org/10.1016/0041-008x(75)90123-4).
- Strom PF. 2000. Pesticide in yard compost. *Compost Sci Util* 8(1):54-60.
- Strom M, Hansen S, Olsen SF, et al. 2014. Persistent organic pollutants measured in maternal serum and offspring neurodevelopmental outcomes--a prospective study with long-term follow-up. *Environ Int* 68:41-48. <http://doi.org/10.1016/j.envint.2014.03.002>.
- Strompl C, Thiele JH. 1997. Comparative fate of 1,1-diphenylethylene (DPE), 1,1-dichloro-2,2-bis(4-Chlorophenyl)-ethylene (DDE), and pentachlorophenol (PCP) under alternating aerobic and anaerobic conditions. *Arch Environ Contam Toxicol* 33(4):350-356. <http://doi.org/10.1007/s002449900264>.
- Stronati A, Manicardi GC, Cecati M, et al. 2006. Relationships between sperm DNA fragmentation, sperm apoptotic markers and serum levels of CB-153 and p,p'-DDE in European and Inuit populations. *Reproduction* 132(6):949-958. <http://doi.org/10.1530/rep.1.01034>.
- Sturgeon SR, Brock JW, Potischman N, et al. 1998. Serum concentrations of organochlorine compounds and endometrial cancer risk (United States). *Cancer Causes Control* 9(4):417-424. <http://doi.org/10.1023/a:1008823802393>.
- Sunyer J, Torrent M, Munoz-Ortiz L, et al. 2005. Prenatal dichlorodiphenyldichloroethylene (DDE) and asthma in children. *Environ Health Perspect* 113(12):1787-1790. <http://doi.org/10.1289/ehp.8127>.
- Sunyer J, Torrent M, Garcia-Estebe R, et al. 2006. Early exposure to dichlorodiphenyldichloroethylene, breastfeeding and asthma at age six. *Clin Exp Allergy* 36(10):1236-1241. <http://doi.org/10.1111/j.1365-2222.2006.02560.x>.

8. REFERENCES

- Sunyer J, Alvarez-Pedrerol M, To-Figueras J, et al. 2008. Urinary porphyrin excretion in children is associated with exposure to organochlorine compounds. *Environ Health Perspect* 116(10):1407-1410. <http://doi.org/10.1289/ehp.11354>.
- Sunyer J, Garcia-Estebar R, Alvarez M, et al. 2010. DDE in mothers' blood during pregnancy and lower respiratory tract infections in their infants. *Epidemiology* 21(5):729-735. <http://doi.org/10.1097/EDE.0b013e3181e5ea96>.
- Svensson BG, Hallberg T, Nilsson A, et al. 1994. Parameters of immunological competence in subjects with high consumption of fish contaminated with persistent organochlorine compounds. *Int Arch Occup Environ Health* 65(6):351-358. <http://doi.org/10.1007/BF00383243>.
- Swann RL, McCall PJ, Laskowski DA, et al. 1981. Estimation of soil sorption constants of organic chemicals by high-performance liquid chromatography. *ASTM Spec Tech Publ* 737:43-48.
- Takayama S, Sieber SM, Dalgard DW, et al. 1999. Effects of long-term oral administration of DDT on nonhuman primates. *J Cancer Res Clin Oncol* 125(3-4):219-225. <http://doi.org/10.1007/s004320050266>.
- Takei GH, Kauahikaua SM, Leong GH. 1983. Analysis of human milk samples collected in Hawaii for residues of organochlorine pesticides and polychlorobiphenyls. *Bull Environ Contam Toxicol* 30:606-613.
- Takser L, Mergler D, Baldwin M, et al. 2005. Thyroid hormones in pregnancy in relation to environmental exposure to organochlorine compounds and mercury. *Environ Health Perspect* 113(8):1039-1045. <http://doi.org/10.1289/ehp.7685>.
- Talts U, Talts JF, Eriksson P. 1998. Differential expression of muscarinic subtype mRNAs after exposure to neurotoxic pesticides. *Neurobiol Aging* 19(6):553-559.
- Tan J, Loganath A, Chong YS, et al. 2009. Exposure to persistent organic pollutants in utero and related maternal characteristics on birth outcomes: a multivariate data analysis approach. *Chemosphere* 74(3):428-433. <http://doi.org/10.1016/j.chemosphere.2008.09.045>.
- Tanaka T, Mori H, Williams GM. 1987. Enhancement of dimethylnitrosamine-initiated hepatocarcinogenesis in hamsters by subsequent administration of carbon tetrachloride but not phenobarbital or p,p'-dichlorodiphenyltrichloroethane. *Carcinogenesis* 8(9):1171-1178.
- Tang M, Chen K, Yang F, et al. 2014. Exposure to organochlorine pollutants and type 2 diabetes: a systematic review and meta-analysis. *PLoS ONE* 9(10):e85556. <http://doi.org/10.1371/journal.pone.0085556>.
- Tang-Peronard JL, Andersen HR, Jensen TK, et al. 2011. Endocrine-disrupting chemicals and obesity development in humans: a review. *Obes Rev* 12(8):622-636. <http://doi.org/10.1111/j.1467-789X.2011.00871.x>.
- Tang-Peronard JL, Heitmann BL, Andersen HR, et al. 2014. Association between prenatal polychlorinated biphenyl exposure and obesity development at ages 5 and 7 y: a prospective cohort study of 656 children from the Faroe Islands. *Am J Clin Nutr* 99(1):5-13. <http://doi.org/10.3945/ajcn.113.066720>.
- Tang-Peronard JL, Jensen TK, Andersen HR, et al. 2015a. Associations between exposure to persistent organic pollutants in childhood and overweight up to 12 years later in a low exposed Danish population. *Obesity facts* 8(4):282-292. <http://doi.org/10.1159/000438834>.
- Tang-Peronard JL, Heitmann BL, Jensen TK, et al. 2015b. Prenatal exposure to persistent organochlorine pollutants is associated with high insulin levels in 5-year-old girls. *Environ Res* 142:407-413. <http://doi.org/10.1016/j.envres.2015.07.009>.
- Tarjan R, Kemeny T. 1969. Multigeneration studies on DDT in mice. *Food Cosmet Toxicol* 7(3):215-222. [http://doi.org/10.1016/s0015-6264\(69\)80325-1](http://doi.org/10.1016/s0015-6264(69)80325-1).
- Tavares RS, Mansell S, Barratt CL, et al. 2013. p,p'-DDE activates CatSper and compromises human sperm function at environmentally relevant concentrations. *Hum Reprod* 28(12):3167-3177. <http://doi.org/10.1093/humrep/det372>.

8. REFERENCES

- Tavares RS, Amaral S, Paiva C, et al. 2015. In vitro exposure to the organochlorine p,p'-DDE affects functional human sperm parameters. *Chemosphere* 120:443-446.
<http://doi.org/10.1016/j.chemosphere.2014.08.075>.
- Taylor LG, Canfield SE, Du XL. 2009. Review of major adverse effects of androgen-deprivation therapy in men with prostate cancer. *Cancer* 115(11):2388-2399. <http://doi.org/10.1002/cncr.24283>.
- Taylor KW, Novak RF, Anderson HA, et al. 2013. Evaluation of the association between persistent organic pollutants (POPs) and diabetes in epidemiological studies: a national toxicology program workshop review. *Environ Health Perspect* 121(7):774-783. <http://doi.org/10.1289/ehp.1205502>.
- Teeyapant P, Ramchian S, Polputpisatkul D, et al. 2014. Serum concentrations of organochlorine pesticides p,p'-DDE in adult Thai residents with background levels of exposure. *J Toxicol Sci* 39(1):121-127. <http://doi.org/10.2131/jts.39.121>.
- Telang S, Tong C, Williams GM. 1981. Induction of mutagenesis by carcinogenic polycyclic aromatic hydrocarbons but not by organochlorine pesticides in the ARL/HGPRT mutagenesis assay. *Environ Mutagen* 3:359.
- Terracini B, Testa M, Cabral J, et al. 1973. The effects of long-term feeding of DDT to BALB/c mice. *Int J Cancer* 11:747-764.
- Thomas RG. 1990. Volatilization from soil. In: *Handbook of chemical property estimation methods: environmental behavior of organic compounds*. Washington, DC: American Chemical Society, 16-24 to 16-28.
- Thomas A, Toms LL, Harden FA, et al. 2017. Concentrations of organochlorine pesticides in pooled human serum by age and gender. *Environ Res* 154:10-18.
<http://doi.org/10.1016/j.envres.2016.12.009>.
- Thorpe E, Walker AIT. 1973. The toxicology of dieldrin (HEOD). II. Comparative long-term oral toxicity studies in mice with dieldrin, DDT, phenobarbitone, β -BHC and λ -BHC. *Food Cosmet Toxicol* 11:433-442.
- Tiido T, Rignell-Hydbom A, Jonsson B, et al. 2005. Exposure to persistent organochlorine pollutants associates with human sperm Y:X chromosome ratio. *Hum Reprod* 20(7):1903-1909.
<http://doi.org/10.1093/humrep/deh855>.
- Tiido T, Rignell-Hydbom A, Jonsson BA, et al. 2006. Impact of PCB and p,p'-DDE contaminants on human sperm Y:X chromosome ratio: studies in three European populations and the Inuit population in Greenland. *Environ Health Perspect* 114(5):718-724.
- Tilson HA, Hudson PM, Hong JS. 1986. 5,5-Diphenylhydantoin antagonizes neurochemical and behavioral effects of p,p'-DDT but not of chlordcone. *J Neurochem* 47(6):1870-1878.
- Tilson HA, Shaw S, McLamb RL. 1987. The effects of lindane, DDT, and chlordcone on avoidance responding and seizure activity. *Toxicol Appl Pharmacol* 88(1):57-65. [http://doi.org/10.1016/0041-008x\(87\)90269-9](http://doi.org/10.1016/0041-008x(87)90269-9).
- Tinwell H, Friry-Santini C, Rouquie D, et al. 2007. Evaluation of the antiandrogenic effects of flutamide, DDE, and linuron in the weanling rat assay using organ weight, histopathological, and proteomic approaches. *Toxicol Sci* 100(1):54-65. <http://doi.org/10.1093/toxsci/kfm208>.
- Toft G, Rignell-Hydbom A, Tyrkiel E, et al. 2006. Semen quality and exposure to persistent organochlorine pollutants. *Epidemiology* 17(4):450-458.
<http://doi.org/10.1097/01.ede.0000221769.41028.d2>.
- Toft G, Axmon A, Lindh CH, et al. 2008. Menstrual cycle characteristics in European and Inuit women exposed to persistent organochlorine pollutants. *Hum Reprod* 23(1):193-200.
<http://doi.org/10.1093/humrep/dem349>.
- Tomatis L, Turusov V, Day N, et al. 1972. The effect of long-term exposure to DDT on CF-1 mice. *Int J Cancer* 10(3):489-506. <http://doi.org/10.1002/ijc.2910100308>.
- Tomatis L, Turusov V, Charles R, et al. 1974a. Effect of long-term exposure to 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene, to 1,1-dichloro-2,2-bis(p-chlorophenyl)ethane, and to the two chemicals combined on CF-1 mice. *J Natl Cancer Inst* 52:883-891.

8. REFERENCES

- Tomatis L, Turusov V, Charles RT, et al. 1974b. Liver tumours in CF-1 mice exposed for limited periods to technical DDT. *Z Krebsforsch Klin Onkol Cancer Res Clin Oncol* 82:25-35.
- Tomita M, Yoshida T, Fukumori J, et al. 2013. p,p'-DDT induces microcytic anemia in rats. *J Toxicol Sci* 38(5):775-782. <http://doi.org/10.2131/jts.38.775>.
- Tomiyama N, Watanabe M, Takeda M, et al. 2003. A comparative study on the reliability of toxicokinetic parameters for predicting hepatotoxicity of DDT in rats receiving a single or repeated administration. *J Toxicol Sci* 28(5):403-413. <http://doi.org/10.2131/jts.28.403>.
- Tomiyama N, Takeda M, Watanabe M, et al. 2004. A further study on the reliability of toxicokinetic parameters for predicting hepatotoxicity in rats receiving a 28-day repeated administration of DDT. *J Toxicol Sci* 29(5):505-516. <http://doi.org/10.2131/jts.29.505>.
- Tong C, Fazio M, Williams GM. 1981. Rat hepatocyte-mediated mutagenesis of human cells by carcinogenic polycyclic aromatic hydrocarbons but not organochlorine pesticides. *Proc Soc Exp Biol Med* 167:572-575.
- Torres-Arreola L, Lopez-Carrillo L, Torres-Sanchez L, et al. 1999. Levels of dichloro-dyphenyl-trichloroethane (DDT) metabolites in maternal milk and their determinant factors. *Arch Environ Health* 54(2):124-129.
- Torres-Arreola L, Berkowitz G, Torres-Sanchez L, et al. 2003. Preterm birth in relation to maternal organochlorine serum levels. *Ann Epidemiol* 13(3):158-162. [http://doi.org/10.1016/s1047-2797\(02\)00424-6](http://doi.org/10.1016/s1047-2797(02)00424-6).
- Torres-Sanchez L, Rothenberg SJ, Schnaas L, et al. 2007. In utero p,p'-DDE exposure and infant neurodevelopment: A perinatal cohort in Mexico. *Environ Health Perspect* 115(3):435-439. <http://doi.org/10.1289/ehp.9566>.
- Torres-Sanchez L, Zepeda M, Cebrian ME, et al. 2008. Dichlorodiphenyldichloroethylene exposure during the first trimester of pregnancy alters the anal position in male infants. *Ann N Y Acad Sci* 1140:155-162. <http://doi.org/10.1196/annals.1454.004>.
- Torres-Sanchez L, Schnaas L, Cebrian ME, et al. 2009. Prenatal dichlorodiphenyldichloroethylene (DDE) exposure and neurodevelopment: a follow-up from 12 to 30 months of age. *Neurotoxicology* 30(6):1162-1165. <http://doi.org/10.1016/j.neuro.2009.08.010>.
- Torres-Sanchez L, Schnaas L, Rothenberg SJ, et al. 2013. Prenatal p,p'-DDE exposure and neurodevelopment among children 3.5-5 years of age. *Environ Health Perspect* 121(2):263-268. <http://doi.org/10.1289/ehp.1205034>.
- Trabert B, Chen Z, Kannan K, et al. 2015. Persistent organic pollutants (POPs) and fibroids: results from the ENDO study. *J Expo Sci Environ Epidemiol* 25(3):278-285. <http://doi.org/10.1038/jes.2014.31>.
- Traglia M, Croen LA, Lyall K, et al. 2017. Independent Maternal and Fetal Genetic Effects on Midgestational Circulating Levels of Environmental Pollutants. *G3 (Bethesda)* 7(4):1287-1299. <http://doi.org/10.1534/g3.117.039784>.
- Treon J, Boyd J, Berryman G, et al. 1954. Final report on the effects on the reproductive capacity of three generations of rats being fed on diets containing aldrin, dieldrin, or DDT. Cincinnati, OH: Kettering Laboratory, University of Cincinnati, College of Medicine.
- Tsushima G, Chang CC, Trosko JE, et al. 1983. Cytotoxic, mutagenic, and cell-cell communication inhibitory properties of DDT, lindane, and chlordane on Chinese hamster cells in vitro. *Arch Environ Contam Toxicol* 12(6):721-729. <http://doi.org/10.1007/BF01060757>.
- Tully DB, Cox VT, Mumtaz MM, et al. 2000. Six high-priority organochlorine pesticides, either singly or in combination, are nonestrogenic in transfected HeLa cells. *Reprod Toxicol* 14:95-102.
- Turner JC, Shanks V. 1980. Absorption of some organochlorine compounds by the rat small intestine-in vivo. *Bull Environ Contam Toxicol* 24:652-655.
- Turusov VS, Day NE, Tomatis L, et al. 1973. Tumors in CF-1 mice exposed for six consecutive generations to DDT. *J Natl Cancer Inst* 51(3):983-997. <http://doi.org/10.1093/jnci/51.3.983>.
- Turyk ME, Anderson HA, Persky VW. 2007. Relationships of thyroid hormones with polychlorinated biphenyls, dioxins, furans, and DDE in adults. *Environ Health Perspect* 115(8):1197-1203. <http://doi.org/10.1289/ehp.10179>.

8. REFERENCES

- Turyk M, Anderson HA, Hanrahan LP, et al. 2006. Relationship of serum levels of individual PCB, dioxin, and furan congeners and DDE with Great Lakes sport-caught fish consumption. *Environ Res* 100(2):173-183. <http://doi.org/10.1016/j.envres.2005.04.005>.
- Turyk M, Anderson HA, Knobeloch L, et al. 2009. Prevalence of diabetes and body burdens of polychlorinated biphenyls, polybrominated diphenyl ethers, and p,p'-diphenyldichloroethene in Great Lakes sport fish consumers. *Chemosphere* 75(5):674-679. <http://doi.org/10.1016/j.chemosphere.2008.12.035>.
- Udoji F, Martin T, Etherton R, et al. 2010. Immunosuppressive effects of triclosan, nonylphenol, and DDT on human natural killer cells in vitro. *J Immunotoxicol* 7(3):205-212. <http://doi.org/10.3109/15476911003667470>.
- Ukropec J, Radikova Z, Huckova M, et al. 2010. High prevalence of prediabetes and diabetes in a population exposed to high levels of an organochlorine cocktail. *Diabetologia* 53(5):899-906. <http://doi.org/10.1007/s00125-010-1683-2>.
- UNEP. 2015. Road map for the development of alternatives to DDT. Switzerland: UNEP Chemicals Branch. United Nations Environment Programme. <https://www.unep.org/resources/publication/road-map-development-alternatives-ddt>. August 10, 2021.
- Unger M, Kiaer H, Blichert-Toft M, et al. 1984. Organochlorine compounds in human breast fat from deceased with and without breast cancer and in a biopsy material from newly diagnosed patients undergoing breast surgery. *Environ Res* 34:24-28.
- Uppala PT, Roy SK, Tousson A, et al. 2005. Induction of cell proliferation, micronuclei and hyperdiploidy/polyploidy in the mammary cells of DDT- and DMBA-treated pubertal rats. *Environ Mol Mutagen* 46(1):43-52. <http://doi.org/10.1002/em.20131>.
- Upson K, De Roos AJ, Thompson ML, et al. 2013. Organochlorine pesticides and risk of endometriosis: findings from a population-based case-control study. *Environ Health Perspect* 121(11-12):1319-1324. <http://doi.org/10.1289/ehp.1306648>.
- USDA. 2016. Pesticide data program. Annual summary, calendar year 2014. Washington, DC: U.S. Department of Agriculture.
- USGS. 1999. The quality of our nation's waters: Nutrients and pesticide. U.S. Geological Survey. <http://water.usgs.gov/pubs/circ/circ1225/>. October 7, 2004.
- Vafeiadi M, Vrijheid M, Fthenou E, et al. 2014. Persistent organic pollutants exposure during pregnancy, maternal gestational weight gain, and birth outcomes in the mother-child cohort in Crete, Greece (RHEA study). *Environ Int* 64:116-123. <http://doi.org/10.1016/j.envint.2013.12.015>.
- Vafeiadi M, Georgiou V, Chalkiadaki G, et al. 2015. Association of prenatal exposure to persistent organic pollutants with obesity and cardiometabolic traits in early childhood: The Rhea Mother-Child Cohort (Crete, Greece). *Environ Health Perspect* 123(10):1015-1021. <http://doi.org/10.1289/ehp.1409062>.
- Vafeiadi M, Roumeliotaki T, Chalkiadaki G, et al. 2017. Persistent organic pollutants in early pregnancy and risk of gestational diabetes mellitus. *Environ Int* 98:89-95. <http://doi.org/10.1016/j.envint.2016.10.005>.
- Valera B, Ayotte P, Poirier P, et al. 2013a. Associations between plasma persistent organic pollutant levels and blood pressure in Inuit adults from Nunavik. *Environ Int* 59:282-289. <http://doi.org/10.1016/j.envint.2013.06.019>.
- Valera B, Jorgensen ME, Jeppesen C, et al. 2013b. Exposure to persistent organic pollutants and risk of hypertension among Inuit from Greenland. *Environ Res* 122:65-73. <http://doi.org/10.1016/j.envres.2012.12.006>.
- Valvi D, Mendez MA, Martinez D, et al. 2012. Prenatal concentrations of polychlorinated biphenyls, DDE, and DDT and overweight in children: A prospective birth cohort study. *Environ Health Perspect* 120(3):451-457. <http://doi.org/10.1289/ehp.1103862>.

8. REFERENCES

- Valvi D, Mendez MA, Garcia-Estebe R, et al. 2014. Prenatal exposure to persistent organic pollutants and rapid weight gain and overweight in infancy. *Obesity (Silver Spring)* 22(2):488-496. <http://doi.org/10.1002/oby.20603>.
- Valvi D, Oulhote Y, Weihe P, et al. 2017. Gestational diabetes and offspring birth size at elevated environmental pollutant exposures. *Environ Int* 107:205-215. <http://doi.org/10.1016/j.envint.2017.07.016>.
- van den Berg H. 2009. Global status of DDT and its alternatives for use in vector control to prevent disease. *Environ Health Perspect* 117(11):1656-1663. <http://doi.org/10.1289/ehp.0900785>.
- van den Berg M, Kypke K, Kotz A, et al. 2017. WHO/UNEP global surveys of PCDDs, PCDFs, PCBs and DDTs in human milk and benefit-risk evaluation of breastfeeding. *Arch Toxicol* 91(1):83-96. <http://doi.org/10.1007/s00204-016-1802-z>.
- Van Metre PC, Callender E. 1997. Water-quality trends in White Rock Creek Basin from 1912-1994 identified using sediment cores from White Rock Lake reservoir, Dallas, Texas. *Journal of Paleolimnology* 17:239-249.
- Van Metre PC, Callender E, Fuller C. 1997. Historical trends in organochlorine compounds in river basins identified using sediment cores from reservoirs. *Environ Sci Technol* 31:2339-2344.
- van 't Veer P, Lobbezoo IE, Martin-Moreno JM, et al. 1997. DDT (dicophane) and postmenopausal breast cancer in Europe: case-control study. *Br Med J* 315:81-85.
- Vasiliu O, Muttineni J, Karmaus W. 2004. In utero exposure to organochlorines and age at menarche. *Hum Reprod* 19(7):1506-1512. <http://doi.org/10.1093/humrep/deh292>.
- Veith GD, DeFoe VD, Bergstedt BV. 1979. Measuring and estimating the bioconcentration factor of chemicals in fish. *J Fish Res Board Can* 36:1040-1048.
- Velbinger H. 1947a. [On the question of DDT toxicity of man]. *Dtsch Gesundheitwes* 2:355-358 (German).
- Velbinger H. 1947b. [Contribution to the toxicology of "DDT"-agent, dichlorodiphenyl-trichloromethylmethane]. *Pharmazie* 2:268-274.
- Venkatesan MI, Greene GE, Ruth E, et al. 1996. DDTs and dumpsite in the Santa Monica Basin, California. *Sci Total Environ* 179:61-71.
- Venners SA, Korrick S, Xu X, et al. 2005. Preconception serum DDT and pregnancy loss: a prospective study using a biomarker of pregnancy. *Am J Epidemiol* 162(8):709-716. <http://doi.org/10.1093/aje/kwi275>.
- Verhulst SL, Nelen V, Hond ED, et al. 2009. Intrauterine exposure to environmental pollutants and body mass index during the first 3 years of life. *Environ Health Perspect* 117(1):122-126. <http://doi.org/10.1289/ehp.0800003>.
- Verma A, Pillai MKK. 1991a. Bioavailability of soil-bound residues of DDT and HCH to certain plants. *Soil Biol Biochem* 23(4):347-351. [http://doi.org/10.1016/0038-0717\(91\)90190-U](http://doi.org/10.1016/0038-0717(91)90190-U).
- Verma A, Pillai MKK. 1991b. Bioavailability of soil-bound residues of DDT and HCH to earthworms. *Curr Sci* 61(12):840-843.
- Verner MA, Charbonneau M, Lopez-Carrillo L, et al. 2008. Physiologically based pharmacokinetic modeling of persistent organic pollutants for lifetime exposure assessment: a new tool in breast cancer epidemiologic studies. *Environ Health Perspect* 116(7):886-892. <http://doi.org/10.1289/ehp.10917>.
- Verner MA, Ayotte P, Muckle G, et al. 2009. A physiologically based pharmacokinetic model for the assessment of infant exposure to persistent organic pollutants in epidemiologic studies. *Environ Health Perspect* 117(3):481-487. <http://doi.org/10.1289/ehp.0800047>.
- Verner MA, Sonneborn D, Lancz K, et al. 2013. Toxicokinetic modeling of persistent organic pollutant levels in blood from birth to 45 months of age in longitudinal birth cohort studies. *Environ Health Perspect* 121(1):131-137. <http://doi.org/10.1289/ehp.1205552>.
- Verner MA, Gaspar FW, Chevrier J, et al. 2015. Increasing sample size in prospective birth cohorts: back-extrapolating prenatal levels of persistent organic pollutants in newly enrolled children. *Environ Sci Technol* 49(6):3940-3948. <http://doi.org/10.1021/acs.est.5b00322>.

8. REFERENCES

- Verschueren K. 1983. DDT. In: *Handbook of environmental data on organic chemicals*. 2nd ed. New York, NY: Van Nostrand Reinhold Co. Inc, 433-445.
- Vested A, Ramlau-Hansen CH, Olsen SF, et al. 2014. In utero exposure to persistent organochlorine pollutants and reproductive health in the human male. *Reproduction* 148(6):635-646. <http://doi.org/10.1530/REP-13-0488>.
- Vetter W, Luckas B, Heidemann G, et al. 1996. Organochlorine residue in marine mammals from the Northern hemisphere-A consideration of the composition of organochlorine residues in the blubber of marine mammals. *Sci Total Environ* 186:29-39.
- Viel JF, Floret N, Deconinck E, et al. 2011. Increased risk of non-Hodgkin lymphoma and serum organochlorine concentrations among neighbors of a municipal solid waste incinerator. *Environ Int* 37(2):449-453. <http://doi.org/10.1016/j.envint.2010.11.009>.
- Vijverberg HP, van der Zalm JM, van der Bercken J. 1982. Similar mode of action of pyrethroids and DDT on sodium channel gating in myelinated nerves. *Nature* 295(5850):601-603. <http://doi.org/10.1038/295601a0>.
- Vine MF, Stein L, Weigle K, et al. 2000. Effects on the immune system associated with living near a pesticide dump site. *Environ Health Perspect* 108(12):1113-1124. <http://doi.org/10.1289/ehp.001081113>.
- Vine MF, Stein L, Weigle K, et al. 2001. Plasma 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE) levels and immune response. *Am J Epidemiol* 153(1):53-63. <http://doi.org/10.1093/aje/153.1.53>.
- Vollner L, Klotz D. 1994. Behaviour of DDT under laboratory and outdoor conditions in Germany. *J Environ Sci Health B29(1):161-167*.
- vom Saal FS, Nagel SC, Palanza P, et al. 1995. Estrogenic pesticides: binding relative to estradiol in MCF-7 cells and effects of exposure during fetal life on subsequent territorial behaviour in male mice. *Toxicol Lett* 77(1-3):343-350. [http://doi.org/10.1016/0378-4274\(95\)03316-5](http://doi.org/10.1016/0378-4274(95)03316-5).
- Waluszewski SM, Aguirre AA, Infanzon RM, et al. 2000. Partitioning coefficients of organochlorine pesticides between mother blood serum and umbilical blood serum. *Bull Environ Contam Toxicol* 65:293-299.
- Waluszewski SM, Aguirre AA, Infanzon RM, et al. 2001. Organochlorine pesticide levels in maternal adipose tissue, maternal blood serum, umbilical blood serum, and milk from inhabitants of Veracruz, Mexico. *Arch Environ Contam Toxicol* 40(3):432-438. <http://doi.org/10.1007/s002440010194>.
- Walker AIT, Thorpe E, Stevenson DE. 1972. The toxicology of dieldrin (HEOD). I. Long-term oral toxicity studies in mice. *Food Cosmet Toxicol* 11:415-432.
- Wallin E, Rylander L, Jonsson BA, et al. 2005. Exposure to CB-153 and p,p'-DDE and bone mineral density and bone metabolism markers in middle-aged and elderly men and women. *Osteoporos Int* 16(12):2085-2094. <http://doi.org/10.1007/s00198-005-2004-3>.
- Wang JS, Simpson KL. 1996. Accumulation and depuration of DDTs in the food chain from Artemia to brook trout (*Salvelinus fontinalis*). *Bull Environ Contam Toxicol* 56(6):888-895. <http://doi.org/10.1007/s001289900129>.
- Wania F, Mackay D. 1993. Global fractionation and cold condensation of low volatility organochlorine compounds in polar regions. *Ambio* 22(1):10-18.
- Ward AB, Dail MB, Chambers JE. 2016. In Vitro effect of DDE exposure on the regulation of lipid metabolism and secretion in McA-RH7777 hepatocytes: A potential role in dyslipidemia which may increase the risk of type 2 diabetes mellitus. *Toxicol in Vitro* 37:9-14. <http://doi.org/10.1016/j.tiv.2016.08.011>.
- Ward EM, Schulte P, Grajewski B, et al. 2000. Serum organochlorine levels and breast cancer: a nested case-control study of Norwegian women. *Cancer Epidemiol Biomarkers Prev* 9(12):1357-1367.
- Ware GW, Good EE. 1967. Effects of insecticides on reproduction in the laboratory mouse. II. Mirex, telodrin, and DDT. *Toxicol Appl Pharmacol* 10(1):54-61. [http://doi.org/10.1016/0041-008x\(67\)90127-5](http://doi.org/10.1016/0041-008x(67)90127-5).
- Ware GW, Crosby DG, Giles JW. 1980. Photodecomposition of DDA. *Arch Environ Contam Toxicol* 9(2):135-146. <http://doi.org/10.1007/BF01055369>.

8. REFERENCES

- Ware GW, Estesen BJ, Buck NA, et al. 1978. DDT moratorium in Arizona--agricultural residues after seven years. *Pestic Monit J* 12(1):1-3.
- Warner M, Aguilar Schall R, Harley KG, et al. 2013. In utero DDT and DDE exposure and obesity status of 7-year-old Mexican-American children in the CHAMACOS cohort. *Environ Health Perspect* 121(5):631-636. <http://doi.org/10.1289/ehp.1205656>.
- Warner M, Wesselink A, Harley KG, et al. 2014. Prenatal exposure to dichlorodiphenyltrichloroethane and obesity at 9 years of age in the CHAMACOS study cohort. *Am J Epidemiol* 179(11):1312-1322. <http://doi.org/10.1093/aje/kwu046>.
- Warner M, Ye M, Harley K, et al. 2017. Prenatal DDT exposure and child adiposity at age 12: The CHAMACOS study. *Environ Res* 159:606-612. <http://doi.org/10.1016/j.envres.2017.08.050>.
- Warner M, Rauch S, Coker ES, et al. 2018. Obesity in relation to serum persistent organic pollutant concentrations in CHAMACOS women. *Environ Epidemiol* 2(4) <http://doi.org/10.1097/EE9.0000000000000032>.
- Wattigney WA, Irvin-Barnwell E, Pavuk M, et al. 2015. Regional Variation in Human Exposure to Persistent Organic Pollutants in the United States, NHANES. *J Environ Public Health* 2015:571839. <http://doi.org/10.1155/2015/571839>.
- Webber EC, Bayne DR, Seesock WC. 1989. DDT contamination of benthic macroinvertebrates and sediments from tributaries of Wheeler Reservoir, Alabama. *Arch Environ Contam Toxicol* 18(5):728-733. <http://doi.org/10.1007/BF01225010>.
- Weihe P, Steuerwald U, Taheri S, et al. 2003. The human health programme in the Faroe Islands 1985-2001. In: AMAP Greenland and the Faroe Islands 1997–2001 Copenhagen: Danish Environmental Protection Agency, 135-212.
- Weisskopf MG, Anderson HA, Hanrahan LP, et al. 2005. Maternal exposure to Great Lakes sport-caught fish and dichlorodiphenyl dichloroethylene, but not polychlorinated biphenyls, is associated with reduced birth weight. *Environ Res* 97(2):149-162. <http://doi.org/10.1016/j.envres.2004.01.014>.
- Weisskopf MG, Knekt P, O'Reilly EJ, et al. 2010. Persistent organochlorine pesticides in serum and risk of Parkinson disease. *Neurology* 74(13):1055-1061. <http://doi.org/10.1212/WNL.0b013e3181d76a93>.
- Weistrand C, Norén K. 1997. Methylsulfonyl metabolites of PCBs and DDE in human tissues. *Environ Health Perspect* 105(6):644-649. <http://doi.org/10.1289/ehp.97105644>.
- Weistrand C, Norén K. 1998. Polychlorinated naphthalenes and other organochlorine contaminants in human adipose and liver tissue. *J Toxicol Environ Health A* 53(4):293-311. <http://doi.org/10.1080/009841098159295>.
- Welch RM, Levin W, Conney AH. 1969. Estrogenic action of DDT and its analogs. *Toxicol Appl Pharmacol* 14(2):358-367. [http://doi.org/10.1016/0041-008x\(69\)90117-3](http://doi.org/10.1016/0041-008x(69)90117-3).
- Welfinger-Smith G, Minholz JL, Byrne S, et al. 2011. Organochlorine and metal contaminants in traditional foods from St. Lawrence Island, Alaska. *J Toxicol Environ Health A* 74(18):1195-1214. <http://doi.org/10.1080/15287394.2011.590099>.
- Wessel JR, Yess NJ. 1991. Pesticide residues in food imported into the USA. *Rev Environ Contam Toxicol* 120:83-104.
- Wester RC, Maibach HI, Bucks DA, et al. 1990. Percutaneous absorption of [14C]DDT and [14C]benzo[a]pyrene from soil. *Fundam Appl Toxicol* 15(3):510-516.
- Whitehead TP, Crispo Smith S, Park JS, et al. 2015. Concentrations of persistent organic pollutants in California children's whole blood and residential dust. *Environ Sci Technol* 49(15):9331-9340. <http://doi.org/10.1021/acs.est.5b02078>.
- Whitmore RW, Immerman FW, Camann DE, et al. 1994. Non-occupational exposures to pesticides for residents of two U.S. cities. *Arch Environ Contam Toxicol* 26:47-59.
- WHO. 1979. DDT and its derivatives. Geneva, Switzerland: World Health Organization.
- WHO. Environmental Health Criteria 9. <https://wedocs.unep.org/20.500.11822/29274>. August 10, 2021.
- WHO. 2000. Pesticide residues in food. Report of the 2000 FAO/WHO joint meeting of experts. Geneva, Switzerland: World Health Organization.

8. REFERENCES

- WHO. 2004. DDT and its derivatives in drinking-water. Background document for development of WHO guidelines for drinking-water quality. Geneva, Switzerland: World Health Organization. WHO/SDE/WSH/03.04/89.
- WHO. 2010. Guidelines for indoor air quality: Selected pollutants. Geneva, Switzerland: World Health Organization. http://www.euro.who.int/__data/assets/pdf_file/0009/128169/e94535.pdf. January 08, 2014.
- WHO. 2017. Guidelines for drinking-water quality. Fourth edition incorporating the first addendum. Geneva, Switzerland: World Health Organization. <http://apps.who.int/iris/bitstream/10665/254637/1/9789241549950-eng.pdf?ua=1>. February 28, 2017.
- Wickstrom K, Pyysalo H, Siimes MA. 1983. Levels of chlordane, hexachlorobenzene, PCB and DDT compounds in Finnish human milk in 1982. *Bull Environ Contam Toxicol* 31(3):251-256. <http://doi.org/10.1007/BF01608694>.
- Williams G, Weisburger J. 1991. Chemical carcinogens. In: Amdur MO, Doull J, Klaasen CD, eds. Casarett and Doull's toxicology: The basic science of poisons. 4th ed. New York, NY: Pergamon Press, 127-200.
- Wilson ND, Shear NM, Paustenbach DJ, et al. 1998. The effect of cooking practices on the concentration of DDT and PCB compounds in the edible tissue of fish. *J Expo Anal Environ Epidemiol* 8(3):423-440.
- Windham GC, Lee D, Mitchell P, et al. 2005. Exposure to organochlorine compounds and effects on ovarian function. *Epidemiology* 16(2):182-190. <http://doi.org/10.1097/01.ede.0000152527.24339.17>.
- Wojtyniak BJ, Rabczenko D, Jonsson BA, et al. 2010. Association of maternal serum concentrations of 2,2', 4,4'5,5'-hexachlorobiphenyl (CB-153) and 1,1-dichloro-2,2-bis (p-chlorophenyl)-ethylene (p,p'-DDE) levels with birth weight, gestational age and preterm births in Inuit and European populations. *Environ Health* 9:56. <http://doi.org/10.1186/1476-069X-9-56>.
- Wolfe HR, Armstrong JF. 1971. Exposure of formulating plant workers to DDT. *Arch Environ Health* 23(3):169-176. <http://doi.org/10.1080/00039896.1971.10665981>.
- Wolfe MF, Seiber JN. 1993. Environmental activation of pesticides. *Occup Med* 8(3):561-573.
- Wolfe JL, Esher RJ, Robinson KM, et al. 1979. Lethal and reproductive effects of dietary mirex and DDT in old-field mice, *Peromyscus polionotus*. *Bull Environ Contam Toxicol* 21:397-402.
- Wolff MS, Toniolo PG, Lee EW, et al. 1993. Blood levels of organochlorine residues and risk of breast cancer. *J Natl Cancer Inst* 85(8):648-652. <http://doi.org/10.1093/jnci/85.8.648>.
- Wolff MS, Berkowitz GS, Brower S, et al. 2000a. Organochlorine exposures and breast cancer risk in New York City women. *Environ Res* 84(2):151-161.
- Wolff MS, Zeleniuch-Jacquotte A, Dubin N, et al. 2000b. Risk of breast cancer and organochlorine exposure. *Cancer Epidemiol Biomarkers Prev* 9:271-277.
- Wolff MS, Engel S, Berkowitz G, et al. 2007. Prenatal pesticide and PCB exposures and birth outcomes. *Pediatr Res* 61(2):243-250. <http://doi.org/10.1203/pdr.0b013e31802d77f0>.
- Wong O, Brocker W, Davis HV, et al. 1984. Mortality of workers potentially exposed to organic and inorganic brominated chemicals, DBCP, TRIS, PBB, and DDT. *Br J Ind Med* 41(1):15-24. <http://doi.org/10.1136/oem.41.1.15>.
- Wood SL, Jarrell JJ, Swaby C, et al. 2007. Endocrine disruptors and spontaneous premature labor: a case control study. *Environ Health* 6:35. <http://doi.org/10.1186/1476-069X-6-35>.
- Woodwell G, Craig P, Johnson H. 1971. DDT in the biosphere: Where does it go? *Science* 174:1101-1107.
- Woolley DE, Talens GM. 1971. Distribution of DDT, DDD, and DDE in tissues of neonatal rats and in milk and other tissues of mother rats chronically exposed to DDT. *Toxicol Appl Pharmacol* 18(4):907-916. [http://doi.org/10.1016/0041-008x\(71\)90238-9](http://doi.org/10.1016/0041-008x(71)90238-9).
- WQP. 2017. DDT, DDE, and DDD Water Quality Portal, Water quality data. Advisory Committee on Water Information (ACWI); Agricultural Research Service (ARS); Environmental Protection

8. REFERENCES

- Agency (EPA); National Water Quality Monitoring Council (NWQMC); United States Geological Survey (USGS). <https://www.waterqualitydata.us/portal/>. January 9, 2018.
- Wrenn TR, Weyant JR, Fries GF, et al. 1971. Effect of several dietary levels of o,p'-DDT on reproduction and lactation in the rat. *Bull Environ Contam Toxicol* 6(5):471-480.
- Wu Y, Foster WG, Younglai EV. 2006. Rapid effects of pesticides on human granulosa-lutein cells. *Reproduction* 131(2):299-310. <http://doi.org/10.1530/rep.1.00922>.
- Wu H, Bertrand KA, Choi AL, et al. 2013. Persistent organic pollutants and type 2 diabetes: a prospective analysis in the nurses' health study and meta-analysis. *Environ Health Perspect* 121(2):153-161. <http://doi.org/10.1289/ehp.1205248>.
- Wu HC, Cohn BA, Cirillo PM, et al. 2020. DDT exposure during pregnancy and DNA methylation alterations in female offspring in the Child Health and Development Study. *Reprod Toxicol* 92:138-147. <http://doi.org/10.1016/j.reprotox.2019.02.010>.
- Xiong X, Wang A, Liu G, et al. 2006. Effects of p,p'-dichlorodiphenyldichloroethylene on the expressions of transferrin and androgen-binding protein in rat Sertoli cells. *Environ Res* 101(3):334-339. <http://doi.org/10.1016/j.envres.2005.11.003>.
- Xu X, Dailey AB, Talbott EO, et al. 2010. Associations of serum concentrations of organochlorine pesticides with breast cancer and prostate cancer in U.S. adults. *Environ Health Perspect* 118(1):60-66. <http://doi.org/10.1289/ehp.0900919>.
- Yaglova NV, Yaglov VV. 2014. Changes in thyroid status of rats after prolonged exposure to low dose dichlorodiphenyltrichloroethane. *Bull Exp Biol Med* 156(6):760-762. <http://doi.org/10.1007/s10517-014-2443-y>.
- Yaglova NV, Yaglov VV. 2015a. Altered thyroid hormone production induced by long-term exposure to low doses of the endocrine disruptor dichlorodiphenyltrichloroethane. *Biochem Suppl Ser B: Biomed Chem* 9(4):339-342. <http://doi.org/10.1134/s1990750815040083>.
- Yaglova NV, Yaglov VV. 2015b. Mechanisms of disruptive action of dichlorodiphenyltrichloroethane (DDT) on the function of thyroid follicular epitheliocytes. *Bull Exp Biol Med* 160(2):231-233. <http://doi.org/10.1007/s10517-015-3136-x>.
- Yaglova NV, Yaglov VV. 2017. Cytophysiological changes in the follicular epithelium of the thyroid gland after long-term exposure to low doses of dichlorodiphenyltrichloroethane (DDT). *Bull Exp Biol Med* 162(5):699-702. <http://doi.org/10.1007/s10517-017-3691-4>.
- Yaglova NV, Timokhina EP, Yaglov VV. 2013. Effects of low-dose dichlorodiphenyltrichloroethane on the morphology and function of rat thymus. *Bull Exp Biol Med* 155(5):701-704. <http://doi.org/10.1007/s10517-013-2230-1>.
- Yaglova NV, Sledneva YP, Yaglov VV. 2016. Morphofunctional changes in the thyroid gland of pubertal and postpubertal rats exposed to low dose of DDT. *Bull Exp Biol Med* 162(2):260-263. <http://doi.org/10.1007/s10517-016-3590-0>.
- Yaglova NV, Tsomartova DA, Yaglov VV. 2017. Effect of prenatal and postnatal exposure to low doses of DDT on catecholamine secretion in rats in different period of ontogeny. *Bull Exp Biol Med* 163(4):422-424. <http://doi.org/10.1007/s10517-017-3819-6>.
- Yaglova NV, Tsomartova DA, Obernikhin SS, et al. 2018. Changes in secretory activity of adrenal zona fasciculata cells in pubertal rats exposed to low doses of DDT in different periods of ontogeny. *Bull Exp Biol Med* 166(2):283-286. <http://doi.org/10.1007/s10517-018-4333-1>.
- Yaglova NV, Tsomartova ES, Obernikhin SS, et al. 2020. Developmental exposure to low doses of dichlorodiphenyltrichloroethane impairs proliferative response of thymic lymphocytes to Concanavalin A in rats. *Heliyon* 6(3):e03608. <http://doi.org/10.1016/j.heliyon.2020.e03608>.
- Yamasaki K, Okuda H, Takeuchi T, et al. 2009. Effects of in utero through lactational exposure to dicyclohexyl phthalate and p,p'-DDE in Sprague-Dawley rats. *Toxicol Lett* 189(1):14-20. <http://doi.org/10.1016/j.toxlet.2009.04.023>.
- Yan M, Shi Y, Wang Y, et al. 2013. Effects of p,p'-DDE on the mRNA and protein expressions of vimentin, N-cadherin and FSHR in rats testes: an in vivo and in vitro study. *Environ Toxicol Pharmacol* 35(3):486-494. <http://doi.org/10.1016/j.etap.2013.02.008>.

8. REFERENCES

- Yanez L, Borja-Aburto VH, Rojas E, et al. 2004. DDT induces DNA damage in blood cells. Studies in vitro and in women chronically exposed to this insecticide. *Environ Res* 94(1):18-24. [http://doi.org/10.1016/s0013-9351\(03\)00047-1](http://doi.org/10.1016/s0013-9351(03)00047-1).
- Ye M, Beach J, Martin JW, et al. 2015. Association between lung function in adults and plasma DDT and DDE levels: results from the Canadian Health Measures Survey. *Environ Health Perspect* 123(5):422-427. <http://doi.org/10.1289/ehp.1408217>.
- Yess NJ, Gunderson EL, Roy RR. 1993. U.S. Food and Drug Administration monitoring of pesticide residues in infant foods and adult foods eaten by infants/children. *J AOAC Int* 76(3):492-507.
- You L, Brenneman KA, d'A. HH. 1999a. In utero exposure to antiandrogens alters the responsiveness of the prostate to p,p'-DDE in adult rats and may induce prostatic inflammation. *Toxicol Appl Pharmacol* 161:258-266.
- You L, Casanova M, Archibeque-Engle S, et al. 1998. Impaired male sexual development in perinatal Sprague-Dawley and Long-Evans hooded rats exposed in utero and lactationally to p,p'-DDE. *Toxicol Sci* 45(2):162-173. <http://doi.org/10.1093/toxsci/45.2.162>.
- You L, Gazi E, Archibeque-Engle S, et al. 1999b. Transplacental and lactational transfer of p,p'-DDE in Sprague-Dawley rats. *Toxicol Appl Pharmacol* 157:134-144.
- You L, Chan SK, Bruce JM, et al. 1999c. Modulation of testosterone-metabolizing hepatic cytochrome P-450 enzymes in developing Sprague-Dawley rats following in utero exposure to p,p'-DDE. *Toxicol Appl Pharmacol* 158:197-205.
- Younglai EV, Kwan TK, Kwan CY, et al. 2004a. Dichlorodiphenylchloroethylene elevates cytosolic calcium concentrations and oscillations in primary cultures of human granulosa-lutein cells. *Biol Reprod* 70(6):1693-1700. <http://doi.org/10.1095/biolreprod.103.026187>.
- Younglai EV, Holloway AC, Lim GE, et al. 2004b. Synergistic effects between FSH and 1,1-dichloro-2,2-bis(P-chlorophenyl)ethylene (P,P'-DDE) on human granulosa cell aromatase activity. *Hum Reprod* 19(5):1089-1093. <http://doi.org/10.1093/humrep/deh252>.
- Zeng E, Yu C, Tran K. 1999. In situ measurements of chlorinated hydrocarbons in the water column off the Palos Verdes Peninsula, California. *Environ Sci Technol* 33:392-398.
- Zepp RG, Wolfe NL, Azarraga LV, et al. 1977. Photochemical transformation of the DDT and methoxychlor degradation products, DDE and DMDE, by sunlight. *Arch Environ Contam Toxicol* 6(2-3):305-314. <http://doi.org/10.1007/BF02097771>.
- Zhang X, Wu X, Lei B, et al. 2018. Transplacental transfer characteristics of organochlorine pesticides in paired maternal and cord sera, and placentas and possible influencing factors. *Environ Pollut* 233:446-454. <http://doi.org/10.1016/j.envpol.2017.10.075>.
- Zhao B, Shen H, Liu F, et al. 2012. Exposure to organochlorine pesticides is an independent risk factor of hepatocellular carcinoma: a case-control study. *J Expo Sci Environ Epidemiol* 22(6):541-548. <http://doi.org/10.1038/jes.2011.29>.
- Zheng T, Holford TR, Mayne ST, et al. 1999. DDE and DDT in breast adipose tissue and risk of female breast cancer. *Am J Epidemiol* 150(5):453-458. <http://doi.org/10.1093/oxfordjournals.aje.a010033>.
- Zheng T, Holford TR, Mayne ST, et al. 2000. Risk of female breast cancer associated with serum polychlorinated biphenyls and 1,1-dichloro-2,2'-bis(p-chlorophenyl)ethylene. *Cancer Epidemiol Biomarkers Prev* 9(2):167-174.
- Zong G, Valvi D, Coull B, et al. 2018. Persistent organic pollutants and risk of type 2 diabetes: A prospective investigation among middle-aged women in Nurses' Health Study II. *Environ Int* 114:334-342. <http://doi.org/10.1016/j.envint.2017.12.010>.
- Zook C, Feng J. 1999. 1,1,1-trichloro-2,2-bis-(4'-chlorophenyl)ethane (DDT) pathway map. University of Minnesota. http://www.labmed.umn.edu/umbdd/ddt/ddt_map.html. June 23, 1999.
- Zuk AM, Tsuji LJS, Nieboer E, et al. 2019. Examining environmental contaminant mixtures among adults with type 2 diabetes in the Cree First Nation communities of Eeyou Istchee, Canada. *Sci Rep* 9(1):15909. <http://doi.org/10.1038/s41598-019-52200-x>.