

CHAPTER 8. REFERENCES

- Abad E, Abalos M, Fiedler H. 2022. Air monitoring with passive samplers for dioxin-like persistent organic pollutants in developing countries (2017-2019). *Chemosphere* 287(Pt 1):131931. <https://doi.org/10.1016/j.chemosphere.2021.131931>.
- Abballe A, Ballard TJ, Dellatte E, et al. 2008. Persistent environmental contaminants in human milk: concentrations and time trends in Italy. *Chemosphere* 73(1 Suppl):S220-S227. <https://doi.org/10.1016/j.chemosphere.2007.12.036>.
- Abbott BD, Birnbaum LS. 1989a. Cellular alterations and enhanced induction of cleft palate after coadministration of retinoic acid and TCDD. *Toxicol Appl Pharmacol* 99:287-301. [https://doi.org/10.1016/0041-008X\(89\)90011-2](https://doi.org/10.1016/0041-008X(89)90011-2).
- Abbott BD, Birnbaum LS. 1989b. TCDD alters medial epithelial cell differentiation during palatogenesis. *Toxicol Appl Pharmacol* 99:276-286. [https://doi.org/10.1016/0041-008X\(89\)90010-0](https://doi.org/10.1016/0041-008X(89)90010-0).
- Abbott BD, Birnbaum LS, Pratt RM. 1987a. TCDD-induced hyperplasia of the ureteral epithelium produces hydronephrosis in murine fetuses. *Teratology* 35:329-334. <https://doi.org/10.1002/TERA.1420350307>.
- Abbott BD, Morgan KS, Birnbaum LS, et al. 1987b. TCDD alters the extracellular matrix and basal lamina of the fetal mouse kidney. *Teratology* 35:335-344. <https://doi.org/10.1002/TERA.1420350308>.
- Abbott BD, Birnbaum LS. 1990. TCDD-induced altered expression of growth factors may have a role in producing cleft palate and enhancing the incidence of clefts after coadministration of retinoic acid and TCDD. *Toxicol Appl Pharmacol* 106:418-432. [https://doi.org/10.1016/0041-008X\(90\)90337-T](https://doi.org/10.1016/0041-008X(90)90337-T).
- Abbott BD, Harris MW, Birnbaum LS. 1992. Comparisons of the effects of TCDD and hydrocortisone on growth factor expression provide insight into their interaction in the embryonic mouse palate. *Teratology* 45:35-53. <https://doi.org/10.1002/TERA.1420450104>.
- Abbott BD, Birnbaum LS, Dilberto JJ. 1996. Rapid distribution of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) to embryonic tissues in C57BL/6N mice and correlation with palatal uptake in vitro. *Toxicol Appl Pharmacol* 141:256-263. [https://doi.org/10.1016/S0041-008X\(96\)80031-7](https://doi.org/10.1016/S0041-008X(96)80031-7).
- Abbott BD, Lin TM, Rasmussen NT, et al. 2003. Lack of expression of EGF and TGF-alpha in the fetal mouse alters formation of prostatic epithelial buds and influences the response to TCDD. *Toxicol Sci* 76(2):427-436. <https://doi.org/10.1093/TOXSCI/KFG238>.
- Abraham K, Krowke R, Neubert D. 1988. Pharmacokinetics and biological activity of 2,3,7,8-tetrachlorodibenzo-p-dioxin: 1 Dose-dependent tissue distribution and induction of hepatic ethoxyresorufin O-deethylase in rats following a single injection. *Arch Toxicol* 62:359-368. <https://doi.org/10.1007/BF00293624>.
- Abraham K, Weberrub U, Wiesmuller T, et al. 1989. Comparative studies on absorption and distribution in the liver and adipose tissue of PCDDs and PCDFs in rats and marmoset monkeys. *Chemosphere* 19:887-892. [https://doi.org/10.1016/0045-6535\(89\)90427-X](https://doi.org/10.1016/0045-6535(89)90427-X).
- Abraham K, Hille A, Ende M, et al. 1994. Intake and fecal excretion of PCDDs, PCDFs, HCB and PCBs (138,153,180) in a breast-fed and a formula-fed infant. *Chemosphere* 29:2279-2286. [https://doi.org/10.1016/0045-6535\(94\)90395-6](https://doi.org/10.1016/0045-6535(94)90395-6).
- Abraham K, Knoll A, Ende M, et al. 1996. Intake, fecal excretion, and body burden of polychlorinated dibenzo-p-dioxins and dibenzofurans in breast-fed and formula-fed infants. *Pediatr Res* 40:671-679. <https://doi.org/10.1203/00006450-199611000-00005>.
- Adams WJ, Degraeve GM, Sabourin TD, et al. 1986. Toxicity and bioconcentration of 2,3,7,8,-TCDD to fathead minnows (*Pimephales promelas*). *Chemosphere* 15:1503-1511. [https://doi.org/10.1016/0045-6535\(86\)90431-5](https://doi.org/10.1016/0045-6535(86)90431-5).
- Adamsson A, Simanainen U, Viluksela M, et al. 2008. The effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on foetal male rat steroidogenesis. *Int J Androl* 32(5):575-585. <https://doi.org/10.1111/j.1365-2605.2008.00900.x>.

8. REFERENCES

- Adriaens P, Grbic-Galic D. 1994. Reductive dechlorination of PCDD/F by anaerobic cultures and sediments. *Chemosphere* 29(9-11):2253-2253. [https://doi.org/10.1016/0045-6535\(94\)90392-1](https://doi.org/10.1016/0045-6535(94)90392-1).
- Ahmed RG. 2011. Perinatal TCDD exposure alters developmental neuroendocrine system. *Food Chem Toxicol* 49(6):1276-1284. <https://doi.org/10.1016/j.fct.2011.03.008>.
- Alaluusua S, Lukinmaa PL, Vartiainen T, et al. 1996. Polychlorinated dibenzo-p-dioxins and dibenzofurans via mother's milk may cause developmental defects in the child's teeth. *Environ Toxicol Pharmacol* 1(3):193-197. [https://doi.org/10.1016/1382-6689\(96\)00007-5](https://doi.org/10.1016/1382-6689(96)00007-5).
- Alaluusua S, Calderara P, Gerthoux PM, et al. 2004. Developmental dental aberrations after the dioxin accident in Seveso. *Environ Health Perspect* 112(13):1313-1318. <https://doi.org/10.1289/ehp.6920>.
- Allen JR, Barsotti DA, Van MJP, et al. 1977. Morphological changes in monkeys consuming a diet containing low levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Food Cosmet Toxicol* 15(5):401-410. [https://doi.org/10.1016/s0015-6264\(77\)80004-7](https://doi.org/10.1016/s0015-6264(77)80004-7).
- Allgeier SH, Vezina CM, Lin TM, et al. 2009. Estrogen signaling is not required for prostatic bud patterning or for its disruption by 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 239(1):80-86. <https://doi.org/10.1016/j.taap.2009.06.001>.
- Amendola G, Barna D, Blosser R, et al. 1989. The occurrence and fate of PCDDs and PCDFs in five bleached kraft pulp and paper mills. *Chemosphere* 18:1181-1188. [https://doi.org/10.1016/0045-6535\(89\)90253-1](https://doi.org/10.1016/0045-6535(89)90253-1).
- Ames J, Warner M, Brambilla P, et al. 2018. Neurocognitive and physical functioning in the Seveso women's health study. *Environ Res* 162:55-62. <https://doi.org/10.1016/j.envres.2017.12.005>.
- Ames J, Warner M, Siracusa C, et al. 2019. Prenatal dioxin exposure and neuropsychological functioning in the Seveso second generation health study. *Int J Hyg Environ Health* 222(3):425-433. <https://doi.org/10.1016/j.ijheh.2018.12.009>.
- Andersen ME, Krishnan K. 1994. Relating in vitro to in vivo exposures with physiologically based tissue dosimetry and tissue response models. In: Salem H, ed. *Animal test alternatives: Refinement, reduction, replacement*. New York, NY: Marcel Dekker, Inc., 9-25.
- Andersen ME, Mills JJ, Gargas ML, et al. 1993. Modeling receptor-mediated processes with dioxin: implications for pharmacokinetics and risk assessment. *Risk Anal* 13(1):25-36. <https://doi.org/10.1111/j.1539-6924.1993.tb00726.x>.
- Andersen ME, Eklund CR, Mills JJ, et al. 1997a. A multicompartment geometric model of the liver in relation to regional induction of cytochrome P450s. *Toxicol Appl Pharmacol* 144(1):135-144. <https://doi.org/10.1006/taap.1996.8066>.
- Andersen ME, Birnbaum LS, Barton HA, et al. 1997b. Regional hepatic CYP1A1 and CYP1A2 induction with 2,3,7,8-tetrachlorodibenzo-p-dioxin evaluated with a multicompartment geometric model of hepatic zonation. *Toxicol Appl Pharmacol* 144:145-155. <https://doi.org/10.1006/TAAP.1996.8067>.
- Anderson YB, Jackson JA, Birnbaum LS. 1993. Maturational changes in dermal absorption of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in Fischer 344 rats. *Toxicol Appl Pharmacol* 119(2):214-220. <https://doi.org/10.1006/taap.1993.1062>.
- Anderson HA, Falk C, Hanrahan L, et al. 1998. Profiles of Great Lakes critical pollutants: A sentinel analysis of human blood and urine. *Environ Health Perspect* 106(5):279-289. <https://doi.org/10.1289/ehp.98106279>.
- Andrews JS, Garret WA, Patterson DG, et al. 1989. 2,3,7,8-Tetrachlorodibenzo-p-dioxin levels in adipose tissue of persons with no known exposure and in exposed persons. *Chemosphere* 18:499-506. [https://doi.org/10.1016/0045-6535\(89\)90160-4](https://doi.org/10.1016/0045-6535(89)90160-4).
- Anh LT, Kido T, Honma S, et al. 2017. A relationship in adrenal androgen levels between mothers and their children from a dioxin-exposed region in Vietnam. *Sci Total Environ* 607-608:32-41. <https://doi.org/10.1016/j.scitotenv.2017.06.264>.
- Ankley GT, Niemi GJ, Lodge KB, et al. 1993. Uptake of planar polychlorinated biphenyls and 2,3,7,8-substituted polychlorinated dibenzofurans and dibenzo-p-dioxins by birds nesting in the Lower Fox

8. REFERENCES

- River and Green Bay, Wisconsin, USA. *Arch Environ Contam Toxicol* 24(3):332-344. <https://doi.org/10.1007/BF01128731>.
- Ao K, Suzuki T, Murai H, et al. 2009. Comparison of immunotoxicity among tetrachloro-, pentachloro-, tetrabromo- and pentabromo-dibenz-p-dioxins in mice. *Toxicology* 256(1-2):25-31. <https://doi.org/10.1016/j.tox.2008.10.024>.
- Aozasa O, Nakao T, Ohta S, et al. 1996. Time-dependent alterations of 1,3,6,8-TCDD metabolites formed by mouse liver microsome. *Organohalogen Compounds* 29:290-293.
- Aragon AC, Kopf PG, Campen MJ, et al. 2008a. In utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure: effects on fetal and adult cardiac gene expression and adult cardiac and renal morphology. *Toxicol Sci* 101(2):321-330. <https://doi.org/10.1093/toxsci/kfm272>.
- Aragon AC, Goens MB, Carbett E, et al. 2008b. Perinatal 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure sensitizes offspring to angiotensin II-induced hypertension. *Cardiovasc Toxicol* 8(3):145-154. <https://doi.org/10.1007/s12012-008-9023-1>.
- Arthur MR, Frea JL. 1989. 2,3,7,8-Tetrachlorodibenzo-p-dioxin: Aspects of its important properties and its potential biodegradation in soils. *J Environ Qual* 18:1-11. <https://doi.org/10.2134/JEQ1989.00472425001800010001X>.
- Aschengrau A, Monson RR. 1989. Paternal military service in Vietnam and risk of spontaneous abortion. *J Occup Med* 31:618-623. <https://doi.org/10.1097/00043764-198907000-00014>.
- Aschengrau A, Monson RR. 1990. Paternal military service in Vietnam and the risk of late adverse pregnancy outcomes. *Am J Publ Health* 80:1218-1223. <https://doi.org/10.2105/AJPH.80.10.1218>.
- Assennato G, Cervino D, Emmett EA, et al. 1989. Follow-up of subjects who developed chloracne following TCDD exposure at Seveso. *Am J Ind Med* 16:119-125. <https://doi.org/10.1002/ajim.4700160203>
- Atkinson R. 1991. Atmospheric lifetimes of dibenzo-p-dioxins and dibenzofurans. *Sci Total Environ* 104(1-2):17-33. [https://doi.org/10.1016/0048-9697\(91\)90005-Y](https://doi.org/10.1016/0048-9697(91)90005-Y).
- 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. <https://www.govinfo.gov/content/pkg/FR-1989-09-11/pdf/FR-1989-09-11.pdf>. October 4, 2023.
- ATSDR. 2000. Toxicological profile for polychlorinated biphenyls (PCBs). Atlanta, GA: Agency for Toxic Substances and Disease Registry. <https://www.atsdr.cdc.gov/toxprofiles/tp17.pdf>. October 27, 2023.
- ATSDR. 2005. Public health assessment guidance manual (PHAGM). Atlanta, GA: Agency for Toxic Substances and Disease Registry. <https://stacks.cdc.gov/view/cdc/124967>. October 27, 2023.
- ATSDR. 2022. [CDDs compounds]. Full SPL data. Substance priority list (SPL) resource page. Agency for Toxic Substances and Disease Registry. <https://www.atsdr.cdc.gov/SPL/resources/index.html>. July 30, 2023.
- ATSDR. 2023. Toxicological profile for chlorodibenzofurans (CDFs). Atlanta, GA: Agency for Toxic Substances and Disease Registry. <https://www.atsdr.cdc.gov/ToxProfiles/tp32.pdf>. October 27, 2023.
- Axegård P. 2019. The effect of the transition from elemental chlorine bleaching to chlorine dioxide bleaching in the pulp industry on the formation of PCDD/Fs. *Chemosphere* 236:124386. <https://doi.org/10.1016/j.chemosphere.2019.124386>.
- Aylward LL, Hays SM, LaKind JS, et al. 2003. Rapid communication: partitioning of persistent lipophilic compounds, including dioxins, between human milk lipid and blood lipid: an initial assessment. *J Toxicol Environ Health A* 66(1):1-5. <https://doi.org/10.1080/15287390306460>.
- Aylward LL, Brunet RC, Carrier G, et al. 2005. Concentration-dependent TCDD elimination kinetics in humans: Toxicokinetic modeling for moderately to highly exposed adults from Seveso, Italy, and Vienna, Austria, and impact on dose estimates for the NIOSH cohort. *J Expo Anal Environ Epidemiol* 15(1):51-65. <https://doi.org/10.1038/sj.jea.7500370>.

8. REFERENCES

- Aylward LL, Collins JJ, Bodner KM, et al. 2013. Elimination rates of dioxin congeners in former chlorophenol workers from Midland, Michigan. *Environ Health Perspect* 121(1):39-45. <https://doi.org/10.1289/ehp.1205544>.
- Ayotte P, Dewailly E, Ryan JJ, et al. 1997. PCBs and dioxin-like compounds in plasma of adult Inuit living in Nunavik (Arctic Quebec). *Chemosphere* 34(5-7):1459-1468. [https://doi.org/10.1016/S0045-6535\(97\)00442-6](https://doi.org/10.1016/S0045-6535(97)00442-6).
- Baccarelli A, Pesatori AC, Masten SA, et al. 2004. Aryl-hydrocarbon receptor-dependent pathway and toxic effects of TCDD in humans: a population-based study in Seveso, Italy. *Toxicol Lett* 149(1-3):287-293. <https://doi.org/10.1016/J.TOXLET.2003.12.062>.
- Baccarelli A, Hirt C, Pesatori AC, et al. 2006. t(14;18) translocations in lymphocytes of healthy dioxin-exposed individuals from Seveso, Italy. *Carcinogenesis* 27(10):2001-2007. <https://doi.org/10.1093/CARCIN/BGL011>.
- Baccarelli A, Giacomini SM, Corbetta C, et al. 2008. Neonatal thyroid function in Seveso 25 years after maternal exposure to dioxin. *PLoS* 5(7):e161. <https://doi.org/10.1371/journal.pmed.0050161>.
- Bake MA, Linnika Z, Sudmalis P, et al. 2007. Assessment of the exposure of breast milk to persistent organic pollutants in Latvia. *Int J Hyg Environ Health* 210(3-4):483-489. <https://doi.org/10.1016/j.ijheh.2007.01.016>.
- Balk JL, Piper WN. 1984. Altered blood levels of corticosteroids in the rat after exposure of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Biochem Pharmacol* 33:2531-2534. [https://doi.org/10.1016/0006-2952\(84\)90732-9](https://doi.org/10.1016/0006-2952(84)90732-9).
- Ball LM, Chhabra RS. 1981. Intestinal absorption of nutrients in rats treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *J Toxicol Environ Health* 8(4):629-638. <https://doi.org/10.1080/15287398109530097>.
- Banks YB, Birnbaum LS. 1991. Absorption of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) after low dose dermal exposure. *Toxicol Appl Pharmacol* 107:302-310. [https://doi.org/10.1016/0041-008X\(91\)90210-6](https://doi.org/10.1016/0041-008X(91)90210-6).
- Banks YB, Brewster DW, Birnbaum LS. 1990. Age-related changes in dermal absorption of 2,3,7,8-tetrachlorodibenzo-p-dioxin and 2,3,4,7,8-pentachlorodibenzofuran. *Fundam Appl Toxicol* 15:163-173. [https://doi.org/10.1016/0272-0590\(90\)90173-H](https://doi.org/10.1016/0272-0590(90)90173-H).
- Bannister R, Davis D, Zacharewski Z, et al. 1987. Aroclor 1254 as a 2,3,7,8-tetrachlorodibenzo-p-dioxin antagonist: Effects on enzyme induction and immunotoxicity. *Toxicology* 40:29-42. [https://doi.org/10.1016/0300-483X\(87\)90135-1](https://doi.org/10.1016/0300-483X(87)90135-1).
- Barbieri S, Pirovano C, Scarlato G, et al. 1988. Long-term effects on 2,3,7,8-tetrachlorodibenzo-p-dioxin on the peripheral nervous system: Clinical and neurophysiological controlled study on subjects with chloracne from the Seveso area. *Neuroepidemiology* 7:29-37. <https://doi.org/10.1159/000110133>.
- Barnes DG, Dourson M. 1988. Reference dose (RfD): Description and use in health risk assessments. *Regul Toxicol Pharmacol* 8:471-486. [https://doi.org/10.1016/0273-2300\(88\)90047-5](https://doi.org/10.1016/0273-2300(88)90047-5).
- Bastomsky CH. 1977. Enhanced thyroxine metabolism and high uptake goiters in rats after a single dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Endocrinology* 101:292-296. <https://doi.org/10.1210/ENDO-101-1-292>.
- Baughman R, Meselson M. 1973. An analytical method for detecting TCDD (dioxin): levels of TCDD in samples from Vietnam. *Environ Health Perspect* 5:27-35. <https://doi.org/10.1289/ehp.730527>.
- Beamer CA, Kreitinger JM, Cole SL, et al. 2019. Targeted deletion of the aryl hydrocarbon receptor in dendritic cells prevents thymic atrophy in response to dioxin. *Arch Toxicol* 93(2):355-368. <https://doi.org/10.1007/s00204-018-2366-x>.
- Beard JD, Engel LS, Richardson DB, et al. 2016. Military service, deployments, and exposures in relation to amyotrophic lateral sclerosis etiology. *Environ Int* 91:104-115. <https://doi.org/10.1016/j.envint.2016.02.014>.
- Beard JD, Engel LS, Richardson DB, et al. 2017. Military service, deployments, and exposures in relation to amyotrophic lateral sclerosis survival. *PLoS ONE* 12(10):e0185751. <https://doi.org/10.1371/journal.pone.0185751>.

8. REFERENCES

- Becher H, Flesch-Janys D, Kauppinen T, et al. 1996. Cancer mortality in German male workers exposed to phenoxy herbicides and dioxins. *Cancer Causes Control* 7(3):312-321.
<https://doi.org/10.1007/BF00052936>.
- Beck H, Eckart K, Kellert M, et al. 1987. Levels of PCDFs and PCDDs in samples of human origin and food in the Federal Republic of Germany. *Chemosphere* 16(8-9):1977-1982.
[https://doi.org/10.1016/0045-6535\(87\)90197-4](https://doi.org/10.1016/0045-6535(87)90197-4).
- Beck H, Eckart K, Mathar W, et al. 1988. Occurrence of PCDD and PCDF in different kinds of paper. *Chemosphere* 17:51-57. [https://doi.org/10.1016/0045-6535\(88\)90043-4](https://doi.org/10.1016/0045-6535(88)90043-4).
- Beck H, Eckart K, Mathar W, et al. 1989a. PCDD and PCDF body burden from food intake in the Federal Republic of Germany. *Chemosphere* 18:417-424. [https://doi.org/10.1016/0045-6535\(89\)90150-1](https://doi.org/10.1016/0045-6535(89)90150-1).
- Beck H, Eckart K, Mathar W, et al. 1989b. Levels of PCDDs and PCDFs in adipose tissue of occupationally exposed workers. *Chemosphere* 18:507-516. [https://doi.org/10.1016/0045-6535\(89\)90161-6](https://doi.org/10.1016/0045-6535(89)90161-6).
- Beck H, Dro A, Eckart K, et al. 1989c. PCDDs, PCDFs and related compounds in paper products. *Chemosphere* 19:655-660. [https://doi.org/10.1016/0045-6535\(89\)90386-X](https://doi.org/10.1016/0045-6535(89)90386-X).
- Bell DR, Clode S, Fan MQ, et al. 2007a. Toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the developing male Wistar(Han) rat. I: No decrease in epididymal sperm count after a single acute dose. *Toxicol Sci* 99(1):214-223. <https://doi.org/10.1093/toxsci/kfm140>.
- Bell DR, Clode S, Fan MQ, et al. 2007b. Toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the developing male Wistar(Han) rat. II: Chronic dosing causes developmental delay. *Toxicol Sci* 99(1):224-233. <https://doi.org/10.1093/toxsci/kfm141>.
- Berry DL, DiGiovanni J, Juchau MR, et al. 1978. Lack of tumor-promoting ability of certain environmental chemicals in a two-stage mouse skin tumorigenesis assay. *Res Commun Chem Pathol Pharmacol* 20(1):101-108.
- Berry DL, Slaga TJ, DiGiovanni J, et al. 1979. Studies with chlorinated dibenzo-p-dioxins, polybrominated biphenyls and polychlorinated biphenyls in a two-stage system of mouse skin tumorigenesis: Potent anticarcinogenic effects. *Ann N Y Acad Sci* 320:405-414.
<https://doi.org/10.1111/j.1749-6632.1979.tb56621.x>.
- Berry RM, Luthe CE, Voss RH. 1993. Ubiquitous nature of dioxins: A comparison of the dioxins content of common everyday materials with that of pulps and papers. *Environ Sci Technol* 27(6):1164-1168. <https://doi.org/10.1021/ES00043A016>.
- Bertazzi PA, Zocchetti C, Pesatori AC, et al. 1989a. Mortality in an area contaminated by TCDD following an industrial incident. *Med Lav* 80:316-329.
- Bertazzi PA, Zocchetti C, Pesatori AC, et al. 1989b. Ten-year mortality study of the population involved in the Seveso incident in 1976. *Am J Epidemiol* 129:1187-1200.
<https://doi.org/10.1093/oxfordjournals.aje.a115240>.
- Bertazzi PA, Pesatori AC, Consonni D, et al. 1993. Cancer incidence in a population accidentally exposed to 2,3,7,8-tetrachlorodibenzo-para-dioxin. *Epidemiol* 4:398-406.
<https://doi.org/10.1097/00001648-199309000-00004>.
- Bertazzi PA, Zocchetti C, Guercilena S, et al. 1997. Dioxin exposure and cancer risk: A 15-year mortality study after the "Seveso Accident". *Epidemiology* 8:646-652.
<https://doi.org/10.1097/00001648-199710000-00006>.
- Bertazzi PA, Consonni D, Bachetti S, et al. 2001. Health effects of dioxin exposure: A 20-year mortality study. *Am J Epidemiol* 153(11):1031-1044. <https://doi.org/10.1093/aje/153.11.1031>.
- Bestervelt LL, Cai Y, Piper DW, et al. 1993. TCDD alters pituitary-adrenal function. I: Adrenal responsiveness to exogenous ACTH. *Neurotoxicol Teratol* 15:365-370.
[https://doi.org/10.1016/0892-0362\(93\)90052-P](https://doi.org/10.1016/0892-0362(93)90052-P).
- Beurskens JEM, Toussaint M, De WJ, et al. 1995. Dehalogenation of chlorinated dioxins by an anaerobic microbial consortium from sediment. *Environ Toxicol Chem* 14(6):939-943.
<https://doi.org/10.1002/ETC.5620140603>.

8. REFERENCES

- Bi C, Chen Y, Zhao Z, et al. 2020. Characteristics, sources and health risks of toxic species (PCDD/Fs, PAHs and heavy metals) in PM(2.5) during fall and winter in an industrial area. *Chemosphere* 238:124620. <https://doi.org/10.1016/j.chemosphere.2019.124620>.
- Bingham AG, Edmunds CJ, Graham BWL, et al. 1989. Determination of PCDDs and PCDFs in car exhaust. *Chemosphere* 19:669-673. [https://doi.org/10.1016/0045-6535\(89\)90388-3](https://doi.org/10.1016/0045-6535(89)90388-3).
- Birmingham B. 1990. Analysis of PCDD and PCDF patterns in soil samples: Use in the estimation of the risk of exposure. *Chemosphere* 20(7-9):807-814. [https://doi.org/10.1016/0045-6535\(90\)90186-w](https://doi.org/10.1016/0045-6535(90)90186-w).
- Birnbaum LS, Couture LA. 1988. Disposition of octachlorodibenzo-p-dioxin (OCDD) in male rats. *Toxicol Appl Pharmacol* 93:22-30. [https://doi.org/10.1016/0041-008X\(88\)90022-1](https://doi.org/10.1016/0041-008X(88)90022-1).
- Birnbaum LS, Weber H, Harris MW, et al. 1985. Toxic interaction of specific polychlorinated biphenyls and 2,3,7,8-tetrachlorodibenzo-p-dioxin: Increased incidence of cleft palate in mice. *Toxicol Appl Pharmacol* 77:292-302. [https://doi.org/10.1016/0041-008X\(85\)90329-1](https://doi.org/10.1016/0041-008X(85)90329-1).
- Birnbaum LS, Harris MW, Miller CP, et al. 1986. Synergistic interaction of 2,3,7,8-tetrachlorodibenzo-p-dioxin and hydrocortisone in the induction of cleft palate in mice. *Teratology* 33:29-35. <https://doi.org/10.1002/TERA.1420330106>.
- Birnbaum LS, Couture LA, Elwell MR. 1989a. Subchronic effects of exposure to octachlorodibenzodioxin (OCDD). *Chemosphere* 18(1-6):389-390. [https://doi.org/10.1016/0045-6535\(89\)90145-8](https://doi.org/10.1016/0045-6535(89)90145-8).
- Birnbaum LS, Harris MW, Stocking LM, et al. 1989b. Retinoic acid and 2,3,7,8-tetrachlorodibenzo-p-dioxin selectively enhance teratogenesis in C57BL/6N mice. *Toxicol Appl Pharmacol* 98:487-500. [https://doi.org/10.1016/0041-008X\(89\)90177-4](https://doi.org/10.1016/0041-008X(89)90177-4).
- Bisanti L, Bonetti F, Caramaschi F, et al. 1980. Experiences from the accident of Seveso. *Acta Morphologica Acad Sci Hung* 28:139-157.
- Bjerke DL, Peterson RE. 1994. Reproductive toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in male rats: different effects of in utero versus lactational exposure. *Toxicol Appl Pharmacol* 127(2):241-249. <https://doi.org/10.1006/taap.1994.1158>.
- Bjerke DL, Sommer RJ, Moore RW, et al. 1994a. Effects of in utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on responsiveness of the male rat reproductive system to testosterone stimulation in adulthood. *Toxicol Appl Pharmacol* 127(2):250-257. <https://doi.org/10.1006/taap.1994.1159>.
- Bjerke DL, Brown TJ, MacLusky NJ, et al. 1994b. Partial demasculinization and feminization of sex behavior in male rats by in utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin is not associated with alterations in estrogen receptor binding or volumes of sexually differentiated brain nuclei. *Toxicol Appl Pharmacol* 127(2):258-267. <https://doi.org/10.1006/taap.1994.1160>.
- Blackwell L, Birnbaum L, De VM. 1998. The effects of TCDD in a murine model of type II diabetes. *Organohalogen Compounds* 37:281-284.
- Blank JA, Tucker AN, Sweatlock J, et al. 1987. Naphthoflavone antagonism of 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced murine lymphocyte ethoxresorufin-O-deethylase activity and immunosuppression. *Mol Pharmacol* 32:168-172.
- Blaylock BL, Holladay SD, Comment CE, et al. 1992. Exposure to tetrachlorodibenzo-p-dioxin (TCDD) alters fetal thymocyte maturation. *Toxicol Appl Pharmacol* 112(2):207-213. [https://doi.org/10.1016/0041-008x\(92\)90189-y](https://doi.org/10.1016/0041-008x(92)90189-y).
- Bloom M, Vena J, Olson J, et al. 2006. Chronic exposure to dioxin-like compounds and thyroid function among New York anglers. *Environ Toxicol Pharmacol* 21(3):260-267. <https://doi.org/10.1016/j.etap.2005.09.001>.
- Bobet E, Berard MF, Dann T. 1990. The measurement of PCDD and PCDF in ambient air in southwestern Ontario. *Chemosphere* 20(10-12):1439-1445. [https://doi.org/10.1016/0045-6535\(90\)90295-5](https://doi.org/10.1016/0045-6535(90)90295-5).

8. REFERENCES

- Boda H, Nghi TN, Nishijo M, et al. 2018. Prenatal dioxin exposure estimated from dioxins in breast milk and sex hormone levels in umbilical cord blood in Vietnamese newborn infants. *Sci Total Environ* 615:1312-1318. <https://doi.org/10.1016/j.scitotenv.2017.09.214>.
- Boers D, Portengen L, Bueno DMBH, et al. 2010. Cause-specific mortality of Dutch chlorophenoxy herbicide manufacturing workers. *Occup Environ Med* 67(1):24-31. <https://doi.org/10.1136/oem.2008.044222>.
- Boers D, Portengen L, Turner WE, et al. 2012. Plasma dioxin levels and cause-specific mortality in an occupational cohort of workers exposed to chlorophenoxy herbicides, chlorophenols and contaminants. *Occup Environ Med* 69(2):113-118. <https://doi.org/10.1136/oem.2010.060426>.
- Bonaccorsi A, di DA, Fanelli R, et al. 1984. The influence of soil particle adsorption on 2,3,7,8-tetrachlorodibenzo-p-dioxin biological uptake in the rabbit. *Arch Toxicol Suppl* 7:431-434. https://doi.org/10.1007/978-3-642-69132-4_82.
- Bond GG, Ott MG, Brenner FE, et al. 1983. Medical and morbidity surveillance findings among employees potentially exposed to TCDD. *Br J Ind Med* 40:318-324. <https://doi.org/10.1136/oem.40.3.318>.
- Bond GG, McLaren EA, Lipps TE, et al. 1989. Update of mortality among chemical workers with potential exposure to the higher chlorinated dioxins. *J Occup Med* 31:121-123.
- Bookstaff RC, Moore RW, Peterson RE. 1990. 2,3,7,8-Tetrachlorodibenzo-p-dioxin increases the potency of androgens and estrogens as feedback inhibitors of luteinizing hormone secretion in male rats. *Toxicol Appl Pharmacol* 104(2):212-224. [https://doi.org/10.1016/0041-008x\(90\)90296-7](https://doi.org/10.1016/0041-008x(90)90296-7).
- Bopp RF, Gross ML, Tong H, et al. 1991. A major incident of dioxin contamination: Sediments of New Jersey Estuaries. *Environ Sci Technol* 25:951-956. <https://doi.org/10.1021/ES00017A019>.
- Bouwman CA, Van DE, Fase KM, et al. 1999. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin or 2,2',4,4',5,5'-hexachloro-biphenyl on vitamin K-dependent Blood coagulation in male and female WAG-rats. *Chemosphere* 38(3):489-505. [https://doi.org/10.1016/S0045-6535\(98\)00208-2](https://doi.org/10.1016/S0045-6535(98)00208-2).
- Boverhof DR, Burgoon LD, Tashiro C, et al. 2005. Temporal and dose-dependent hepatic gene expression patterns in mice provide new insights into TCDD-mediated hepatotoxicity. *Toxicol Sci* 85(2):1048-1063. <https://doi.org/10.1093/toxsci/kfi162>.
- Boverhof DR, Burgoon LD, Tashiro C, et al. 2006. Comparative toxicogenomic analysis of the hepatotoxic effects of TCDD in Sprague Dawley rats and C57BL/6 mice. *Toxicol Sci* 94(2):398-416. <https://doi.org/10.1093/toxsci/kfl100>.
- Bovey RW. 1980. Uses of phenoxy herbicides and their methods of application. In: Bovey RW, Young AL, eds. *The science of 2,4,5-T and associated phenoxy herbicides*. New York, NY: John Wiley and Sons, Inc., 49-69.
- Bowman RE, Schantz SL, Gross ML, et al. 1989a. Behavioral effects in monkeys exposed to 2,3,7,8-TCDD transmitted maternally during gestation and for four months of nursing. *Chemosphere* 18:235-242. [https://doi.org/10.1016/0045-6535\(89\)90126-4](https://doi.org/10.1016/0045-6535(89)90126-4).
- Bowman RE, Schantz SL, Weerasinghe NCA, et al. 1989b. Chronic dietary intake of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) at 5 or 25 parts per trillion in the monkey: TCDD kinetics and dose-effect estimate of reproductive toxicity. *Chemosphere* 18:243-252. [https://doi.org/10.1016/0045-6535\(89\)90127-6](https://doi.org/10.1016/0045-6535(89)90127-6).
- Bowman RE, Tong HY, Gross ML, et al. 1990. Controlled exposure of female Rhesus monkeys to 2,3,7,8,-TCDD: concentrations of TCDD in fat of offspring, and its decline over time. *Chemosphere* 20:1199-1202. [https://doi.org/10.1016/0045-6535\(90\)90245-O](https://doi.org/10.1016/0045-6535(90)90245-O).
- Branson D, Takahashi T, Parker W, et al. 1985. Bioconcentration kinetics of 2,3,7,8-tetrachlorodibenzo-p-dioxin in rainbow trout. *Environ Toxicol Chem* 4:779-788. <https://doi.org/10.1002/ETC.5620040609>.
- Bronzetti G, Bauer C, Corsi C, et al. 1983. Mutagenicity study of TCDD and ashes from urban incinerator in vitro and in vivo using yeast D7 strain. *Chemosphere* 12:549-553. [https://doi.org/10.1016/0045-6535\(83\)90208-4](https://doi.org/10.1016/0045-6535(83)90208-4).

8. REFERENCES

- Brown RP, Cooper KR, Cristini A. 1994. Polychlorinated dibenzo-p-dioxins and dibenzofurans in Mya Arenaria in the Newark/Raritan Bay Estuary. *Environ Toxicol Chem* 13(3):523-528. <https://doi.org/10.1002/ETC.5620130324>.
- Brown NM, Manzolillo PA, Zhang JX, et al. 1998. Prenatal TCDD and predisposition to mammary cancer in the rat. *Carcinogenesis* 19(9):1623-1629. <https://doi.org/10.1093/carcin/19.9.1623>.
- Bruggeman WA, Opperhuizen A, Wijbenga A, et al. 1984. Bioaccumulation of super-lipophilic chemicals in fish. *Toxicol Environ Chem* 7:173-189. <https://doi.org/10.1080/02772248409357024>.
- Brulport A, Le Corre L, Chagnon MC. 2017. Chronic exposure of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) induces an obesogenic effect in C57BL/6J mice fed a high fat diet. *Toxicology* 390:43-52. <https://doi.org/10.1016/j.tox.2017.07.017>.
- Bruner-Tran KL, Osteen KG. 2010. Dioxin-like PCBs and endometriosis. *Syst Biol Reprod Med* 56(2):132-146. <https://doi.org/10.3109/19396360903381023>.
- Bruner-Tran KL, Osteen KG. 2011. Developmental exposure to TCDD reduces fertility and negatively affects pregnancy outcomes across multiple generations. *Reprod Toxicol* 31(3):344-350. <https://doi.org/10.1016/j.reprotox.2010.10.003>.
- Bruner-Tran KL, Ding T, Yeoman KB, et al. 2014. Developmental exposure of mice to dioxin promotes transgenerational testicular inflammation and an increased risk of preterm birth in unexposed mating partners. *PLoS ONE* 9(8):e105084. <https://doi.org/10.1371/journal.pone.0105084>.
- Bryant PL, Schmid JE, Fenton SE, et al. 2001. Teratogenicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in mice lacking the expression of EGF and/or TGF- α . *Toxicol Sci* 62(1):103-114. <https://doi.org/10.1093/TOXSCI/62.1.103>.
- Budinsky RA, Rowlands JC, Casteel S, et al. 2008. A pilot study of oral bioavailability of dioxins and furans from contaminated soils: Impact of differential hepatic enzyme activity and species differences. *Chemosphere* 70(10):1774-1786. <https://doi.org/10.1016/J.CHEMOSPHERE.2007.08.035>.
- Buelke-Sam J, Holson JF, Nelson CJ. 1982a. Blood flow during pregnancy in the rat: II. Dynamics of and litter variability in uterine flow. *Teratology* 26(3):279-288. <https://doi.org/10.1002/tera.1420260310>.
- Buelke-Sam J, Nelson CJ, Byrd RA, et al. 1982b. Blood flow during pregnancy in the rat: I. Flow patterns to maternal organs. *Teratology* 26(3):269-277. <https://doi.org/10.1002/tera.1420260309>.
- Bueno de Mesquita HB, Doornbos G, van d, et al. 1993. Occupational exposure to phenoxy herbicides and chlorophenols and cancer mortality in The Netherlands. *Am J Ind Med* 23(2):289-300. <https://doi.org/10.1002/ajim.4700230206>.
- Bumpus JA, Tien M, Wright D, et al. 1985. Oxidation of persistent environmental pollutants by a white rot fungus. *Science* 228:1434-1436. <https://doi.org/10.1126/SCIENCE.3925550>.
- Burleson GR, Lebrec H, Yang YG, et al. 1996. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on influenza virus host resistance in mice. *Fundam Appl Toxicol* 29:40-47. <https://doi.org/10.1006/faat.1996.0004>.
- Burns JS, Williams PL, Sergeyev O, et al. 2011. Serum dioxins and polychlorinated biphenyls are associated with growth among Russian boys. *Pediatrics* 127(1):e59-68. <https://doi.org/10.1542/peds.2009-3556>.
- Burns JS, Lee MM, Williams PL, et al. 2016. Associations of peripubertal serum dioxin and polychlorinated biphenyl concentrations with pubertal timing among Russian boys. *Environ Health Perspect* 124(11):1801-1807. <https://doi.org/10.1289/ehp154>.
- Burns JS, Williams PL, Sergeyev O, et al. 2020. Associations of peri-pubertal serum dioxins and polychlorinated biphenyls with growth and body composition among Russian boys in a longitudinal cohort. *Int J Hyg Environ Health* 223(1):228-237. <https://doi.org/10.1016/j.ijheh.2019.08.008>.
- Burton JE, Michalek JE, Rahe AJ. 1998. Serum dioxin, chloracne, and acne in veterans of Operation Ranch Hand. *Arch Environ Health* 53:199-204. <https://doi.org/10.1080/00039899809605696>.

8. REFERENCES

- Buser HR. 1987. Brominated and brominated/chlorinated dibenzodioxins and dibenzofurans: Potential environmental contaminants. *Chemosphere* 16:713-732. [https://doi.org/10.1016/0045-6535\(87\)90007-5](https://doi.org/10.1016/0045-6535(87)90007-5).
- Buser HR, Rappe C, Bergqvist P. 1985. Analysis of polychlorinated dibenzofurans, dioxins, and related compounds in environmental samples. *Environ Health Perspect* 60:293-302. <https://doi.org/10.1289/EHP.8560293>.
- Cai Z, Giblin DE, Ramanujam VMS, et al. 1994. Mass profile monitoring in trace analysis: Identification of polychlorodibenzothiophenes in crab tissue collected from the Newark/Raritan Bay system. *Environ Sci Technol* 28(8):1535-1538. <https://doi.org/10.1021/es00057a024>.
- Cai LY, Izumi S, Suzuki T, et al. 2011. Dioxins in ascites and serum of women with endometriosis: a pilot study. *Hum Reprod* 26(1):117-126. <https://doi.org/10.1093/humrep/deq312>.
- Calvert GM, Sweeney MH, Morris JA, et al. 1991. Evaluation of chronic bronchitis, chronic obstructive pulmonary disease, and ventilatory function among workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Am Rev Resp Dis* 144:1302-1306. <https://doi.org/10.1164/ajrccm/144.6.1302>.
- Calvert GM, Hornung RW, Sweeney MH, et al. 1992. Hepatic and gastrointestinal effects in an occupational cohort exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *J Am Med Assoc* 267:2209-2214. <https://doi.org/10.1001/JAMA.1992.03480160067036>.
- Calvert GM, Wille KK, Sweeney MH, et al. 1996. Evaluation of serum lipid concentrations among U.S. workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Arch Environ Health* 51:100-107. <https://doi.org/10.1080/00039896.1996.9936001>.
- Calvert GM, Wall DK, Sweeney MH, et al. 1998. Evaluation of cardiovascular outcomes among U.S. workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Environ Health Perspect* 106(Suppl 2):635-643. <https://doi.org/10.1289/ehp.98106635>.
- Calvert GM, Sweeney MH, Deddens J, et al. 1999. Evaluation of diabetes mellitus, serum glucose, and thyroid function among United States workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Occup Environ Med* 56(4):270-276. <https://doi.org/10.1136/oem.56.4.270>.
- Camacho IA, Nagarkatti M, Nagarkatti PS. 2004. Evidence for induction of apoptosis in T cells from murine fetal thymus following perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Toxicol Sci* 78(1):96-106. <https://doi.org/10.1093/toxsci/kfh048>.
- Campo L, Bechtold P, Borsari L, et al. 2019. A systematic review on biomonitoring of individuals living near or working at solid waste incinerator plants. *Crit Rev Toxicol* 49(6):479-519. <https://doi.org/10.1080/10408444.2019.1630362>.
- Cao H, Suzuki N, Sakurai T, et al. 2008. Probabilistic estimation of dietary exposure of the general Japanese population to dioxins in fish, using region-specific fish monitoring data. *J Expo Sci Environ Epidemiol* 18(3):236-245. <https://doi.org/10.1038/sj.jes.7500608>.
- Caputo R, Monti M, Ermacora E, et al. 1988. Cutaneous manifestations of tetrachlorodibenzo-p-dioxin in children and adolescents: Follow-up 10 years after the Seveso, Italy, accident. *J Am Acad Dermatol* 19:812-819. [https://doi.org/10.1016/S0190-9622\(88\)70238-8](https://doi.org/10.1016/S0190-9622(88)70238-8).
- Caramaschi F, Del CG, Favaretti C, et al. 1981. Chloracne following environmental contamination by TCDD in Seveso, Italy. *Int J Epidemiol* 10:135-143. <https://doi.org/10.1093/IJE/10.2.135>.
- Carrier G, Brunet RC, Brodeur J. 1995a. Modeling of the toxicokinetics of polychlorinated dibenzo-p-dioxins and dibenzofurans in mammals, including humans. I. Nonlinear distribution of PCDD/PCDF body burden between liver and adipose tissues. *Toxicol Appl Pharmacol* 131:253-266. <https://doi.org/10.1006/TAAP.1995.1068>.
- Carrier G, Brunet RC, Brodeur J. 1995b. Modeling of the toxicokinetics of polychlorinated dibenzo-p-dioxins and dibenzofurans in mammals, including humans. II. Kinetics of absorption and disposition of PCDDs/PCDFs. *Toxicol Appl Pharmacol* 131:267-276. <https://doi.org/10.1006/TAAP.1995.1068>.
- Caspersen IH, Aase H, Biele G, et al. 2016a. The influence of maternal dietary exposure to dioxins and PCBs during pregnancy on ADHD symptoms and cognitive functions in Norwegian preschool children. *Environ Int* 94:649-660. <https://doi.org/10.1016/j.envint.2016.06.033>.

8. REFERENCES

- Caspersen IH, Haugen M, Schjølberg S, et al. 2016b. Maternal dietary exposure to dioxins and polychlorinated biphenyls (PCBs) is associated with language delay in 3 year old Norwegian children. *Environ Int* 91:180-187. <https://doi.org/10.1016/j.envint.2016.02.031>.
- CDC. 1987. Comparison of serum levels of 2,3,7,8-TCDD with indirect estimates of Agent Orange exposure in Vietnam veterans. Atlanta, GA: Centers for Disease Control and Prevention.
- CDC. 1988. Serum 2,3,7,8-tetrachlorodibenzo-p-dioxin levels in US Army Vietnam-era veterans. Centers for Disease Control. *JAMA* 260:1249-1254. <https://doi.org/10.1001/jama.260.9.1249>.
- CDC. 2024a. Biomonitoring data tables for environmental chemicals: Polychlorinated dibenzo-p-dioxins. Centers for Disease Control and Prevention. <https://www.cdc.gov/exposurereport/report/pdf/Polychlorinated%20Dibenzo-p-dioxins%20NHANES-p.pdf>. April 16, 2024.
- CDC. 2024b. Biomonitoring data tables for environmental chemicals: Polychlorinated dibenzo-p-dioxins (pooled). Centers for Disease Control and Prevention. <https://www.cdc.gov/exposurereport/report/pdf/Polychlorinated%20Dibenzo-p-dioxins%20NHANES-p.pdf>. April 16, 2024.
- Cerlisi S, DiDomenico A, Ratti S. 1989. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) persistence in the Seveso (Milan, Italy) soil. *Ecotoxicol Environ Saf* 18(2):149-164. [https://doi.org/10.1016/0147-6513\(89\)90076-6](https://doi.org/10.1016/0147-6513(89)90076-6).
- Chaffin CL, Peterson RE, Hutz RJ. 1996. In utero and lactational exposure of female Holtzman rats to 2,3,7,8-tetrachlorodibenzo-p-dioxin: Modulation of the estrogen signal. *Biol Reprod* 55(1):62-67. <https://doi.org/10.1095/biolreprod55.1.62>.
- Chaffin CL, Trewin AL, Watanabe G, et al. 1997. Alterations to the pituitary-gonadal axis in the peripubertal female rat exposed in utero and through lactation to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Biol Reprod* 56:1498-1502. <https://doi.org/10.1095/BIOLREPROD56.6.1498>.
- Chang H, Wang YJ, Chang LW, et al. 2005. A histochemical and pathological study on the interrelationship between TCDD-induced AhR expression, AhR activation, and hepatotoxicity in mice. *J Toxicol Environ Health A* 68(17-18):1567-1579. <https://doi.org/10.1080/15287390590967513>.
- Chang JW, Chen HL, Su HJ, et al. 2010a. Dioxin exposure and insulin resistance in Taiwanese living near a highly contaminated area. *Epidemiology* 21(1):56-61. <https://doi.org/10.1097/EDE.0b013e3181c2fc6e>.
- Chang JW, Ou HY, Chen HL, et al. 2010b. Interrelationship between exposure to PCDD/Fs and hypertension in metabolic syndrome in Taiwanese living near a highly contaminated area. *Chemosphere* 81(8):1027-1032. <https://doi.org/10.1016/j.chemosphere.2010.08.050>.
- Chang JW, Chen HL, Chang CC, et al. 2011a. Predicting the risk of cardiovascular disease in people exposed to moderate to high levels of dioxin. *J Hazard Mater* 198:317-322. <https://doi.org/10.1016/j.jhazmat.2011.10.046>.
- Chang JW, Chen HL, Su HJ, et al. 2011b. Simultaneous exposure of non-diabetics to high levels of dioxins and mercury increases their risk of insulin resistance. *J Hazard Mater* 185(2-3):749-755. <https://doi.org/10.1016/j.jhazmat.2010.09.084>.
- Chang JW, Chen HL, Su HJ, et al. 2016. Abdominal obesity and insulin resistance in people exposed to moderate-to-high levels of dioxin. *PLoS ONE* 11(1):e0145818. <https://doi.org/10.1371/journal.pone.0145818>.
- Chen CY, Hamm JT, Hass JR, et al. 2000. Time-course transfer of PCDD/Fs and non-ortho PCBs to fetal and neonatal Long Evans rats. *Organohalogen Compounds* 48:334-337.
- Chen CY, Hamm JT, Hass JR, et al. 2001. Disposition of polychlorinated dibenzo-p-dioxins, dibenzofurans, and non-ortho polychlorinated biphenyls in pregnant Long Evans rats and the transfer to offspring. *Toxicol Appl Pharmacol* 173(2):65-88. <https://doi.org/10.1006/TAAP.2001.9143>.
- Chen X, Ma XM, Ma SW, et al. 2009. Proteomic analysis of the rat ovary following chronic low-dose exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *J Toxicol Environ Health A* 72(11-12):717-726. <https://doi.org/10.1080/15287390902841136>.

8. REFERENCES

- Chen HM, Lee YH, Chen RJ, et al. 2013. The immunotoxic effects of dual exposure to PCP and TCDD. *Chem Biol Interact* 206(2):166-174. <https://doi.org/10.1016/j.cbi.2013.09.005>.
- Chen MW, Castillo BAA, Lin DY, et al. 2018. Levels of PCDD/Fs, PBDEs, and PBDD/Fs in Breast Milk from Southern Taiwan. *Bull Environ Contam Toxicol* 100(3):369-375. <https://doi.org/10.1007/s00128-018-2278-8>.
- Chen Q, Ding X, Lei J, et al. 2020. Comparison of the biological behaviors of palatal mesenchymal and epithelial cells induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin in vitro. *Toxicol Lett* 333:90-96. <https://doi.org/10.1016/j.toxlet.2020.08.001>.
- Chen Q, Zhou Y, Ji C, et al. 2023. Quantitative integration of mode of action information in dose-response modeling and POD estimation for nonmutagenic carcinogens: A case study of TCDD. *Environ Health Perspect* 131(12):127022. <https://doi.org/10.1289/EHP12677>.
- Chevrier J, Warner M, Gunier RB, et al. 2014. Serum dioxin concentrations and thyroid hormone levels in the Seveso Women's Health Study. *Am J Epidemiol* 180(5):490-498. <https://doi.org/10.1093/aje/kwu160>.
- Chiu C, Thomas RS, Lockwood J, et al. 1983. Polychlorinated hydrocarbons from power plants, wood burning, and municipal incinerators. *Chemosphere* 12:607-616. [https://doi.org/10.1016/0045-6535\(83\)90218-7](https://doi.org/10.1016/0045-6535(83)90218-7).
- Chmilla S, Kadow S, Winter M, et al. 2010. 2,3,7,8-Tetrachlorodibenzo-p-dioxin impairs stable establishment of oral tolerance in mice. *Toxicol Sci* 118(1):98-107. <https://doi.org/10.1093/toxsci/kfq232>.
- Cho MR, Shin JY, Hwang JH, et al. 2011. Associations of fat mass and lean mass with bone mineral density differ by levels of persistent organic pollutants: National Health and Nutrition Examination Survey 1999-2004. *Chemosphere* 82(9):1268-1276. <https://doi.org/10.1016/j.chemosphere.2010.12.031>.
- Choudhry GG, Hutzinger O. 1982. Photochemical formation and degradation of polychlorinated dibenzofurans and dibenzo-p-dioxins. *Residue Rev* 84:113-161. https://doi.org/10.1007/978-1-4612-5756-1_3.
- Choudhry GG, Webster GRB. 1987. Quantum yields of polychlorodibenzo-p-dioxins in water-acetonitrile mixtures and their environmental phototransformation rates. In: Zika RG, Cooper WJ, eds. *Photochemistry of environmental aquatic systems*. Vol. 327. Washington, DC: American Chemical Society, 61-74.
- Choudhry GG, Webster GRB. 1989. Environmental photochemistry of PCDDs: 2 Quantum yields of the direct phototransformation of 1,2,3,7-tetra-, 1,3,6,8-tetra-, 1,2,3,4,6,7,8-hepta-, and 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin in aqueous acetonitrile and their sunlight half-lives. *J Agric Food Chem* 37:254-261. <https://doi.org/10.1021/JF00085A059>.
- Chovancová J, Conka K, Kocan A, et al. 2011. PCDD, PCDF, PCB and PBDE concentrations in breast milk of mothers residing in selected areas of Slovakia. *Chemosphere* 83(10):1383-1390. <https://doi.org/10.1016/j.chemosphere.2011.02.070>.
- Christian BJ, Inhorn SL, Peterson RE. 1986. Relationship of the wasting syndrome to lethality in rats treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 82(2):239-255. [https://doi.org/10.1016/0041-008x\(86\)90199-7](https://doi.org/10.1016/0041-008x(86)90199-7).
- Christmann W, Kloepfel KD, Partscht H, et al. 1989. PCDD/PCDF and chlorinated phenols in wood preserving formulations for household use. *Chemosphere* 18:861-865. [https://doi.org/10.1016/0045-6535\(89\)90210-5](https://doi.org/10.1016/0045-6535(89)90210-5).
- CIL. 1995. Chlorodioxins. In: *Environmental contaminant standards 1994-1995*. Andover, MA: Cambridge Isotope Laboratories, 4-10.
- Cirnies-Ross C, Stanmore B, Millar G. 1996. Dioxins in diesel exhaust. *Nature* 381:379. <https://doi.org/10.1038/381379A0>.
- Clement RE, Tosine HM, Ali B. 1985. Levels of polychlorinated dibenzo-p-dioxin and dibenzofuran in woodburning stoves, fireplaces. *Chemosphere* 14:815. [https://doi.org/10.1016/0045-6535\(85\)90194-8](https://doi.org/10.1016/0045-6535(85)90194-8).

8. REFERENCES

- Clement RE, Tashiro C, Suter S, et al. 1989. Chlorinated dibenzo-p-dioxins (CDDs) and dibenzofurans (CDFs) in effluents and sludges from pulp and paper mills. *Chemosphere* 18:1189-1197. [https://doi.org/10.1016/0045-6535\(89\)90254-3](https://doi.org/10.1016/0045-6535(89)90254-3).
- Clewell HJ. 1995. The application of physiologically based pharmacokinetic modeling in human health risk assessment of hazardous substances. *Toxicol Lett* 79(1-3):207-217. [https://doi.org/10.1016/0378-4274\(95\)03372-r](https://doi.org/10.1016/0378-4274(95)03372-r).
- Coggon D, Ntani G, Harris EC, et al. 2015. Soft tissue sarcoma, non-Hodgkin's lymphoma and chronic lymphocytic leukaemia in workers exposed to phenoxy herbicides: extended follow-up of a UK cohort. *Occup Environ Med* 72(6):435-441. <https://doi.org/10.1136/oemed-2014-102654>.
- Cohen GM, Bracken WM, Iyer RP, et al. 1979. Anticarcinogenic effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on benzo(a)pyrene and 7,12-dimethylbenz(a)anthracene tumor initiation and its relationship to DNA binding. *Cancer Res* 39:4027-4033.
- Collins JJ, Bodner KM, Aylward LL, et al. 2016. Mortality risk among workers with exposure to dioxins. *Occup Med* 66(9):706-712. <https://doi.org/10.1093/occmed/kqw167>.
- Conacher HBS, Page BD, Ryan JJ. 1993. Industrial chemical contamination of foods. *Food Addit Contam* 10(1):129-143. <https://doi.org/10.1080/02652039309374136>.
- Congressional Research Service. 2016. Ocean dumping act: A summary of the law. Washington, DC: Congressional Research Service. RS20028. https://www.gpo.gov/documents/gcil_crs_oda.pdf. June 26, 2024.
- Connor KT, Aylward LL. 2006. Human response to dioxin: aryl hydrocarbon receptor (AhR) molecular structure, function, and dose-response data for enzyme induction indicate an impaired human AhR. *J Toxicol Environ Health B Crit Rev* 9(2):147-171. <https://doi.org/10.1080/15287390500196487>.
- Consonni D, Pesatori AC, Zocchetti C, et al. 2008. Mortality in a population exposed to dioxin after the Seveso, Italy, accident in 1976: 25 years of follow-up. *Am J Epidemiol* 167(7):847-858. <https://doi.org/10.1093/aje/kwm371>.
- Consonni D, Sindaco R, Bertazzi PA. 2012. Blood levels of dioxins, furans, dioxin-like PCBs, and TEQs in general populations: a review, 1989-2010. *Environ Int* 44:151-162. <https://doi.org/10.1016/j.envint.2012.01.004>.
- Cook RR, Bond GG, Olson RA, et al. 1986. Evaluation of the mortality experience of workers exposed to the chlorinated dioxins. *Chemosphere* 15:1769-1776. [https://doi.org/10.1016/0045-6535\(86\)90466-2](https://doi.org/10.1016/0045-6535(86)90466-2).
- Cook RR, Bond GG, Olson RA, et al. 1987. Update of the mortality experience of workers exposed to chlorinated dioxins. *Chemosphere* 16:2111-2116. [https://doi.org/10.1016/0045-6535\(87\)90217-7](https://doi.org/10.1016/0045-6535(87)90217-7).
- Cook PM, Kuehl DW, Walker MK, et al. 1991. Bioaccumulation and toxicity of TCDD and related compounds in aquatic ecosystems. In: Gallo MA, Scheuplein JR, Van Der Heijden KA, eds. *Banbury report 35: Biological basis for risk assessment of dioxins and related compounds*. Plainview, NY: Banbury Center Meeting Cold Spring Harbor Laboratory Press, 143-167.
- Corbet RL, Muir DCG, Webster GRB. 1983. Fate of 1,3,6,8-T4CDD in an outdoor aquatic system. *Chemosphere* 12(4-5):523-528. [https://doi.org/10.1016/0045-6535\(83\)90204-7](https://doi.org/10.1016/0045-6535(83)90204-7).
- Corsini E, Oukka M, Pieters R, et al. 2011. Alterations in regulatory T-cells: rediscovered pathways in immunotoxicology. *J Immunotoxicol* 8(4):251-257. <https://doi.org/10.3109/1547691x.2011.598885>.
- Courtney KD. 1976. Mouse teratology studies with chlorodibenzo-p-dioxins. *Bull Environ Contam Toxicol* 16(6):674-681. <https://doi.org/10.1007/BF01685572>.
- Courtney KD, Putnam JP, Andrews JE. 1978. Metabolic studies with TCDD (dioxin) treated rats. *Arch Environ Contam Toxicol* 7:385-396. <https://doi.org/10.1007/BF02332066>.
- Couture LA, Elwell MR, Birnbaum LS. 1988. Dioxin-like effects observed in male rats following exposure to octachlorodibenzo-p-dioxin (OCDD) during a 13-week study. *Toxicol Appl Pharmacol* 93(1):31-46. [https://doi.org/10.1016/0041-008x\(88\)90023-3](https://doi.org/10.1016/0041-008x(88)90023-3).

8. REFERENCES

- Couture-Haws L, Harris MW, McDonald MM, et al. 1991. Hydronephrosis in mice exposed to TCDD-contaminated breast milk: Identification of the peak period of sensitivity and assessment of potential recovery. *Toxicol Appl Pharmacol* 107(3):413-428. [https://doi.org/10.1016/0041-008x\(91\)90305-x](https://doi.org/10.1016/0041-008x(91)90305-x).
- Covaci A, de Boer J, Ryan JJ, et al. 2002. Distribution of organobrominated and organochlorinated contaminants in Belgian human adipose tissue. *Environ Res* 88(3):210-218. <https://doi.org/10.1006/enrs.2002.4334>.
- Cramer G, Bolder M, Henry S, et al. 1991. USFDA assessment of exposure to 2,3,7,8-TCDD and 2,3,7,8-TCDF from foods contacting bleached paper products. *Chemosphere* 23(8-10):1537-1550. [https://doi.org/10.1016/0045-6535\(91\)90179-H](https://doi.org/10.1016/0045-6535(91)90179-H).
- Cranmer M, Louie S, Kennedy RH, et al. 2000. Exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is associated with hyperinsulinemia and insulin resistance. *Toxicol Sci* 56(2):431-436. <https://doi.org/10.1093/TOXSCI/56.2.431>.
- CRITFC. 1994. A fish consumption survey of the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River basin. Portland, OR: Columbia River Inter-Tribal Fish Commission. CRITFC Technical Report No. 94-3. <https://www.critfc.org/wp-content/uploads/2015/06/94-3report.pdf>. May 15, 2023.
- Crofton KM, Craft ES, Hedge JM, et al. 2005. Thyroid-hormone-disrupting chemicals: evidence for dose-dependent additivity or synergism. *Environ Health Perspect* 113(11):1549-1554. <https://doi.org/10.1289/ehp.8195>.
- Crosby DG, Wong AS. 1976. Photochemical generation of chlorinated dioxins. *Chemosphere* 5:327-332. [https://doi.org/10.1016/0045-6535\(76\)90007-2](https://doi.org/10.1016/0045-6535(76)90007-2).
- Crosby DG, Moilanen KW, Wong AS. 1973. Environmental generation and degradation of dibenzodioxins and dibenzofurans. *Environ Health Perspect* 5:259-266. <https://doi.org/10.1289/EHP.7305259>.
- Crouch CR, Lebofsky M, Schramm KW, et al. 2005. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and 1,2,3,4,7,8-hexachlorodibenzo-p-dioxin (HxCDD) alter body weight by decreasing insulin-like growth factor I (IGF-I) signaling. *Toxicol Sci* 85(1):560-571. <https://doi.org/10.1093/TOXSCI/KFI106>.
- Crow KD. 1978. Chloracne - an up to date assessment. *Ann Occup Hyg* 21:297-298.
- Crump KS, Canady R, Kogevinas M. 2003. Meta-analysis of dioxin cancer dose response for three occupational cohorts. *Environ Health Perspect* 111(5):681-687. <https://doi.org/10.1289/ehp.5831>.
- Crunkilton RL, Smith LM, Petty JD, et al. 1987. Residues of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the Spring River, Missouri. *Water Air Soil Pollut* 32:219-231. <https://doi.org/10.1007/BF00227695>.
- Cummings AM, Metcalf JL, Birnbaum L. 1996. Promotion of endometriosis by 2,3,7,8-tetrachlorodibenzo-p-dioxin in rats and mice: Time-dose dependence and species comparison. *Toxicol Appl Pharmacol* 138:131-139. <https://doi.org/10.1006/TAAP.1996.0106>.
- Cummings AM, Hedge JM, Birnbaum LS. 1999. Effect of prenatal exposure to TCDD on the promotion of endometriotic lesion growth by TCDD in adult female rats and mice. *Toxicol Sci* 52(1):45-49. <https://doi.org/10.1093/TOXSCI/52.1.45>.
- Curtis LR, Kerkvliet NI, Baecher-Steppan L, et al. 1990. 2,3,7,8-Tetrachlorodibenzo-p-dioxin pretreatment of female mice altered tissue distribution but not hepatic metabolism of a subsequent dose. *Fundam Appl Toxicol* 14:523-531. [https://doi.org/10.1016/0272-0590\(90\)90256-J](https://doi.org/10.1016/0272-0590(90)90256-J).
- Czuczwa JM, Hites RA. 1984. Environmental fate of combustion-generated polychlorinated dioxins and furans. *Environ Sci Technol* 18(6):444-450. <https://doi.org/10.1021/es00124a010>.
- Czuczwa JM, Hites RA. 1986a. Airborne dioxins and dibenzofurans: sources and fates. *Environ Sci Technol* 20(2):195-200. <https://doi.org/10.1021/es00144a015>.
- Czuczwa JM, Hites RA. 1986b. Sources and fates of PCDD and PCDF. *Chemosphere* 15:1417-1420.
- Dahl P, Lindstrom G, Wiberg K, et al. 1995. Absorption of polychlorinated biphenyls, dibenzo-p-dioxins and dibenzofurans by breast-fed infants. *Chemosphere* 30:2297-2306. [https://doi.org/10.1016/0045-6535\(95\)00102-E](https://doi.org/10.1016/0045-6535(95)00102-E).

8. REFERENCES

- Dao VT, Kido T, Honma S, et al. 2016. Low birth weight of Vietnamese infants is related to their mother's dioxin and glucocorticoid levels. *Environ Sci Pollut Res Int* 23(11):10922-10929. <https://doi.org/10.1007/s11356-016-6233-0>.
- 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. <https://doi.org/10.1016/j.envint.2009.11.001>.
- Dasenbrock C, Bittmann H, Creutzenberg O, et al. 1992. Cleft palate and liver weight data of two different mixtures of PCDDs in pregnant mice related to organ dosage. *Chemosphere* 25:1153-1157. [https://doi.org/10.1016/0045-6535\(92\)90122-8](https://doi.org/10.1016/0045-6535(92)90122-8).
- Davis D, Safe S. 1989. Dose-response immunotoxicities of commercial polychlorinated biphenyls (PCBs) and their interaction with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Lett* 48:35-43. [https://doi.org/10.1016/0378-4274\(89\)90183-5](https://doi.org/10.1016/0378-4274(89)90183-5).
- Davis BJ, McCurdy EA, Miller BD, et al. 2000. Ovarian tumors in rats induced by chronic 2,3,7,8-tetrachlorodibenzo-p-dioxin treatment. *Cancer Res* 60(19):5414-5419.
- De Felip E, Porpora MG, di DA, et al. 2004. Dioxin-like compounds and endometriosis: A study on Italian and Belgian women of reproductive age. *Toxicol Lett* 150(2):203-209. <https://doi.org/10.1016/J.TOXLET.2004.01.008>.
- de Gannes M, Koch SE, Puga A, et al. 2021. Developmental and lifelong dioxin exposure induces measurable changes in cardiac structure and function in adulthood. *Sci Rep* 11(1):10378. <https://doi.org/10.1038/s41598-021-89825-w>.
- De Heer C, Verlaan APJ, Penninks AH, et al. 1994a. Time course of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)-induced thymic atrophy in the Wistar rat. *Toxicol Appl Pharmacol* 128(1):97-104. <https://doi.org/10.1006/taap.1994.1185>.
- De Heer C, Schuuman H, Vos JG, et al. 1994b. Lymphodepletion of the thymus cortex in rats after a single oral intubation of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Chemosphere* 29(9-11):2295-2299. [https://doi.org/10.1016/0045-6535\(94\)90397-2](https://doi.org/10.1016/0045-6535(94)90397-2).
- De Vault D, Dunn W, Bergqvist P, et al. 1989. Polychlorinated dibenzofurans and polychlorinated dibenzo-p-dioxins in Great Lakes fish: A baseline and interlake comparison. *Environ Toxicol Chem* 8:1013-1022. <https://doi.org/10.1002/ETC.5620081107>.
- Dearfield KL, Edwards SR, O'Keefe MM, et al. 2013. Dietary estimates of dioxins consumed in U.S. Department of Agriculture-regulated meat and poultry products. *J Food Prot* 76(9):1597-1607. <https://doi.org/10.4315/0362-028x.Jfp-13-046>.
- DeCaprio AP, McMartin DM, O'Keefe PW, et al. 1986. Subchronic oral toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the guinea pig: Comparisons with a PCB-containing transformer fluid pyrolysate. *Fundam Appl Toxicol* 6:454-463. [https://doi.org/10.1016/0272-0590\(86\)90219-8](https://doi.org/10.1016/0272-0590(86)90219-8).
- Del Pino Sans J, Clements KJ, Suvorov A, et al. 2016. Developmental exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin may alter LH release patterns by abolishing sex differences in GABA/glutamate cell number and modifying the transcriptome of the male anteroventral periventricular nucleus. *Neuroscience* 329:239-253. <https://doi.org/10.1016/j.neuroscience.2016.04.051>.
- Della Porta G, Dragani TA, Sozzi G. 1987. Carcinogenic effects of infantile and long-term 2,3,7,8-tetrachlorodibenzo-p-dioxin treatment in the mouse. *Tumori* 73(2):99-107. <https://doi.org/10.1177/030089168707300203>.
- Denison MS, Wilkinson CF, Okey AB. 1986. Ah receptor for 2,3,7,8-tetrachlorodibenzo-p-dioxin: Comparative studies in mammalian and nonmammalian species. *Chemosphere* 15:1665-1672. [https://doi.org/10.1016/0045-6535\(86\)90452-2](https://doi.org/10.1016/0045-6535(86)90452-2).
- Denison MS, Soshilov AA, He G, et al. 2011. Exactly the same but different: promiscuity and diversity in the molecular mechanisms of action of the aryl hydrocarbon (dioxin) receptor. *Toxicol Sci* 124(1):1-22. <https://doi.org/10.1093/toxsci/kfr218>.

8. REFERENCES

- des Rosiers PE. 1983. Remedial measures for wastes containing polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs): destruction, containment or process modification. *Ann Occup Hyg* 27(1):57-72. <https://doi.org/10.1093/annhyg/27.1.57>.
- Des Rosiers PE. 1986. Methodologies for materials contaminated with PCDDs and related compounds. *Chemosphere* 15:1513-1528. [https://doi.org/10.1016/0045-6535\(86\)90432-7](https://doi.org/10.1016/0045-6535(86)90432-7).
- Des Rosiers PE. 1987. National dioxin study. *ACS Symp Ser* 338:34-53. <https://doi.org/10.1021/bk-1987-0338.ch003>.
- DeVito MJ, Ma X, Babisch JG, et al. 1994. Dose-response relationships in mice following subchronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin: CYP1A1, CYP1A2, estrogen receptor, and protein tyrosine phosphorylation. *Toxicol Appl Pharmacol* 124(1):82-90. <https://doi.org/10.1006/taap.1994.1011>.
- DeVito MJ, Ross DG, Dupuy AE, et al. 1998. Dose-response relationships for disposition and hepatic sequestration of polyhalogenated dibenzo-p-dioxins, dibenzofurans, and biphenyls following subchronic treatment in mice. *Toxicol Sci* 46:223-234. <https://doi.org/10.1006/TOXS.1998.2530>.
- DeVito M, Bokkers B, van Duursen MBM, et al. 2024. The 2022 world health organization reevaluation of human and mammalian toxic equivalency factors for polychlorinated dioxins, dibenzofurans and biphenyls. *Regul Toxicol Pharmacol* 146:105525. <https://doi.org/10.1016/j.yrtph.2023.105525>.
- Dewailly E, Weber J, Gingras S, et al. 1991. Coplanar PCBs in human milk in the Province of Quebec, Canada: Are they more toxic than dioxin for breast fed infants? *Bull Environ Contam Toxicol* 47:491-498. <https://doi.org/10.1007/BF01700935>.
- Dewailly E, Nantel A, Bruneau S, et al. 1992. Breast milk contamination of PCDDs, PCDFs and PCBs in Arctic Quebec: A preliminary assessment. *Chemosphere* 25(7-10):1245-1249. [https://doi.org/10.1016/0045-6535\(92\)90137-G](https://doi.org/10.1016/0045-6535(92)90137-G).
- Dewailly E, Bruneau S, Ayotte P, et al. 1993. Health status at birth of Inuit newborn prenatally exposed to organochlorines. *Chemosphere* 27:359-366. [https://doi.org/10.1016/0045-6535\(93\)90313-T](https://doi.org/10.1016/0045-6535(93)90313-T).
- Dhanabalan S, D'Cruz S C, Mathur PP. 2010. Effects of corticosterone and 2,3,7,8-tetrachloro-dibenzo-p-dioxin on epididymal antioxidant system in adult rats. *J Biochem Mol Toxicol* 24(4):242-249. <https://doi.org/10.1002/jbt.20332>.
- Dhanabalan S, Jubendradass R, Latha P, et al. 2011. Effect of restraint stress on 2,3,7,8 tetrachloro dibenzo-p-dioxin induced testicular and epididymal toxicity in rats. *Hum Exp Toxicol* 30(7):567-578. <https://doi.org/10.1177/0960327110376548>.
- Dienhart MK, Sommer RJ, Peterson RE, et al. 2000. Gestational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin induces developmental defects in the rat vagina. *Toxicol Sci* 56(1):141-149. <https://doi.org/10.1093/toxsci/56.1.141>.
- Diliberto JJ, Akubue PI, Luebke RW, et al. 1995. Dose-response relationships of tissue distribution and induction of CYP1A1 and CYP1A2 enzymatic activities following acute exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in mice. *Toxicol Appl Pharmacol* 130:197-208. <https://doi.org/10.1006/TAAP.1995.1025>.
- Diliberto JJ, Jackson JA, Birnbaum LS. 1996. Comparison of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) disposition following pulmonary, oral, dermal and parenteral exposures to rats. *Toxicol Appl Pharmacol* 138:158-168. <https://doi.org/10.1006/TAAP.1996.0109>.
- Diliberto JJ, Burgin D, Birnbaum LS. 1997. Role of CYP1A2 in hepatic sequestration of dioxin: Studies using CYP1A2 knock-out mice. *Biochem Biophys Res Commun* 236:431-433. <https://doi.org/10.1006/BBRC.1997.6973>.
- Diliberto JJ, De VMJ, Ross DG, et al. 1998. Time-course and dose-response relationships of subchronic dosing with [3H] 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on dosimetry and CYP1A1 and CYP1A2 activities in mice. *Organohalogen Compounds* 37:381-384.
- Diliberto JJ, Burgin DE, Birnbaum LS. 1999. Effects of CYP1A2 on disposition of 2,3,7,8-tetrachlorodibenzo-p-dioxin, 2,3,4,7,8-pentachlorodibenzofuran, and 2,2',4,4',5,5'-hexachlorobiphenyl in CYP1A2 knockout and parental (C57BL/6N and 129/Sv) strains of mice. *Toxicol Appl Pharmacol* 159(1):52-64. <https://doi.org/10.1006/TAAP.1999.8720>.

8. REFERENCES

- Diliberto JJ, Abbott BD, Birnbaum LS. 2000. Use of AhR knockout (AhR^{-/-}) mice to investigate the role of the Ah receptor on disposition of TCDD. *Organohalogen Compounds* 49:120-123.
- Diliberto JJ, DeVito MJ, Ross DG, et al. 2001. Subchronic exposure of [³H]-2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in female B6C3F1 mice: relationship of steady-state levels to disposition and metabolism. *Toxicol Sci* 61(2):241-255. <https://doi.org/10.1093/TOXSCI/61.2.241>.
- Dimich-Ward H, Hertzman C, Teschke K, et al. 1996. Reproductive effects of paternal exposure to chlorophenate wood preservatives in the sawmill industry. *Scand J Work Environ Health* 22:267-273. <https://doi.org/10.5271/SJWEH.141>.
- Ding T, McConaha M, Boyd KL, et al. 2011. Developmental dioxin exposure of either parent is associated with an increased risk of preterm birth in adult mice. *Reprod Toxicol* 31(3):351-358. <https://doi.org/10.1016/j.reprotox.2010.11.003>.
- Ding T, Lambert LA, Aronoff DM, et al. 2018. Sex-dependent influence of developmental toxicant exposure on Group B Streptococcus-mediated preterm birth in a murine model. *Reprod Sci* 25(5):662-673. <https://doi.org/10.1177/1933719117741378>.
- Dobbs AJ, Grant C. 1979. Photolysis of highly chlorinated dibenzo-p-dioxins by sunlight. *Nature* 278:163-165. <https://doi.org/10.1038/278163a0>.
- DOE. 2023a. [CDD compounds]. PAC Database. U.S. Department of Energy. <https://pacteels.pnnl.gov/>. July 20, 2023.
- DOE. 2023b. Definitions of PACs. PAC Database. U.S. Department of Energy. <https://pacteels.pnnl.gov/#/definitions>. July 25, 2023.
- Donat-Vargas C, Moreno-Franco B, Laclaustra M, et al. 2020. Exposure to dietary polychlorinated biphenyls and dioxins, and its relationship with subclinical coronary atherosclerosis: The Aragon Workers' Health Study. *Environ Int* 136:105433. <https://doi.org/10.1016/j.envint.2019.105433>.
- Doucette WJ, Andren AW. 1988. Aqueous solubility of selected biphenyl, furan and dioxin congeners. *Chemosphere* 17:243-252. [https://doi.org/10.1016/0045-6535\(88\)90217-2](https://doi.org/10.1016/0045-6535(88)90217-2).
- Dougherty EJ, McPeters AL, Overcash MR, et al. 1993. Theoretical analysis of a method for in situ decontamination of soil containing 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Environ Sci Technol* 27(3):505-515. <https://doi.org/10.1021/ES00040A009>.
- Duarte-Davidson R, Harrad SJ, Allen SC, et al. 1992. The relative contribution of individual PCBs, PCDDs, and PCDFs to toxic equivalent values derived from bulked human breast milk samples from the UK. *Chemosphere* 25:1653-1663. [https://doi.org/10.1016/0045-6535\(92\)90312-F](https://doi.org/10.1016/0045-6535(92)90312-F).
- Dulin D, Drossman H, Mill T. 1986. Products and quantum yields for photolysis of chloroaromatics in water. *Environ Sci Technol* 20(1):72-77. <https://doi.org/10.1021/es00143a009>.
- Dwyer H, Themelis NJ. 2015. Inventory of U.S. 2012 dioxin emissions to atmosphere. *Waste Manag* 46:242-246. <https://doi.org/10.1016/j.wasman.2015.08.009>.
- Eadon G, Kaminsky L, Silkworth J, et al. 1986. Calculation of 2,3,7,8-TCDD equivalent concentrations of complex environmental contaminant mixtures. *Environ Health Perspect* 70:221-227. <https://doi.org/10.1289/ehp.8670221>.
- Ebert E, Price P, Keenan R. 1996. Estimating exposures to dioxin-like compounds for subsistence anglers in North America. *Organohalogen Compounds* 30:66-69.
- ECETOC. 1992. Exposure of man to dioxins: A perspective on industrial waste incineration. European Centre for Ecotoxicology and Toxicology of Chemicals. Technical Report No. 49. <https://www.ecetoc.org/wp-content/uploads/2021/10/ECETOC-TR-049.pdf>. March 4, 2024.
- Edgerton SA, Czuczwa JM, Rench JD, et al. 1989. Ambient air concentrations of polychlorinated dibenzo-p-dioxins and dibenzofurans in Ohio: Sources and health risk assessment. *Chemosphere* 18:1713-1730. [https://doi.org/10.1016/0045-6535\(89\)90455-4](https://doi.org/10.1016/0045-6535(89)90455-4).
- Eduljee G. 1987. Volatility of TCDD and PCB from soil. *Chemosphere* 16(4):907-920. [https://doi.org/10.1016/0045-6535\(87\)90024-5](https://doi.org/10.1016/0045-6535(87)90024-5).
- Egeland GM, Sweeney MG, Fingerhut MA, et al. 1994. Total serum testosterone and gonadotropins in workers exposed to dioxins. *Am J Epidemiol* 139:272-281. <https://doi.org/10.1093/oxfordjournals.aje.a116994>.

8. REFERENCES

- Ehrlich R, Wenning RJ, Johnson GW, et al. 1994. A mixing model for polychlorinated dibenzo-p-dioxins and dibenzofurans in surface sediment from Newark Bay, New Jersey, using polytopic vector analysis. *Arch Environ Contam Toxicol* 27(4):486-500.
<https://doi.org/10.1007/BF00214840>.
- Eisenreich SJ, Looney BB, Thornton JD. 1981. Airborne organic contaminants in the Great Lakes ecosystem. *Environ Sci Technol* 15(1):30-38. <https://doi.org/10.1021/ES00083A002>.
- Eitzer BD. 1993. Comparison of point and nonpoint sources of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans to sediments of the Housatonic River. *Environ Sci Technol* 27(8):1632-1637. <https://doi.org/10.1021/ES00045A021>.
- Eitzer BD, Hites RA. 1989a. Dioxins and furans in the ambient atmosphere: A baseline study. *Chemosphere* 18(1-6):593-598. [https://doi.org/10.1016/0045-6535\(89\)90171-9](https://doi.org/10.1016/0045-6535(89)90171-9).
- Eitzer BD, Hites RA. 1989b. Polychlorinated dibenzo-p-dioxins and dibenzofurans in the ambient atmosphere of Bloomington, Indiana. *Environ Sci Technol* 23:1389-1395.
<https://doi.org/10.1021/ES00069A010>.
- El-Masri HA, Mumtaz MM, Yushak ML. 2004. Application of physiologically-based pharmacokinetic modeling to investigate the toxicological interaction between chlorpyrifos and parathion in the rat. *Environ Toxicol Pharmacol* 16(1-2):57-71. <https://doi.org/10.1016/j.etap.2003.10.002>.
- 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. <https://doi.org/10.3390/ijerph7072988>.
- El-Tawil OS, Elsaieed EM. 2005. Induction of oxidative stress in the reproductive system of rats after subchronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Bull Environ Contam Toxicol* 75(1):15-22. <https://doi.org/10.1007/s00128-005-0712-1>.
- Emond C, Birnbaum LS, DeVito MJ. 2004. Physiologically based pharmacokinetic model for developmental exposures to TCDD in the rat. *Toxicol Sci* 80(1):115-133.
<https://doi.org/10.1093/toxsci/kfh117>.
- Emond C, Michalek JE, Birnbaum LS, et al. 2005. Comparison of the use of a physiologically based pharmacokinetic model and a classical pharmacokinetic model for dioxin exposure assessments. *Environ Health Perspect* 113(12):1666-1668. <https://doi.org/10.1289/ehp.8016>.
- Emond C, Birnbaum LS, DeVito MJ. 2006. Use of a physiologically based pharmacokinetic model for rats to study the influence of body fat mass and induction of CYP1A2 on the pharmacokinetics of TCDD. *Environ Health Perspect* 114(9):1394-1400. <https://doi.org/10.1289/ehp.8805>.
- Emond C, DeVito M, Warner M, et al. 2016. An assessment of dioxin exposure across gestation and lactation using a PBPK model and new data from Seveso. *Environ Int* 92-93:23-32.
<https://doi.org/10.1016/j.envint.2016.03.015>.
- Emond C, Ruiz P, Mumtaz M. 2017. Physiologically based pharmacokinetic toolkit to evaluate environmental exposures: Applications of the dioxin model to study real life exposures. *Toxicol Appl Pharmacol* 315:70-79. <https://doi.org/10.1016/j.taap.2016.12.007>.
- Emond C, DeVito MJ, Dilberto JJ, et al. 2018. The influence of obesity on the pharmacokinetics of dioxin in mice: An assessment using classical and PBPK modeling. *Toxicol Sci* 164(1):218-228.
<https://doi.org/10.1093/toxsci/kfy078>.
- Endo T, Kakeyama M, Uemura Y, et al. 2012. Executive function deficits and social-behavioral abnormality in mice exposed to a low dose of dioxin in utero and via lactation. *PLoS ONE* 7(12):e50741. <https://doi.org/10.1371/journal.pone.0050741>.
- EPA. 1982. Aquatic fate process data for organic priority pollutants. Washington, DC: U.S. Environmental Protection Agency. EPA440481014.
<https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=9100O12M.txt>. April 18, 2024.
- EPA. 1984. Ambient water quality criteria document for 2,3,7,8-tetrachlorodibenzo-p-dioxin. Cincinnati, OH: U.S. Environmental Protection Agency. EPA440584007.
<https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=30006A1Q.txt>. April 18, 2024.

8. REFERENCES

- EPA. 1985. Drinking water criteria document for 2,3,7,8-tetrachlorodibenzo-p-dioxin. Cincinnati, OH: U.S. Environmental Protection Agency. EPA600X841941.
<https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB86117983.xhtml>. April 18, 2024.
- EPA. 1986a. Broad scan analysis of the FY82 National human adipose tissue survey specimens: Volume 1. Executive summary. Washington, D.C.: U.S. Environmental Protection Agency.
EPA560586035. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000HPAT.txt>. April 18, 2024.
- EPA. 1986b. Hazardous waste management system: Land disposal restriction. U.S. Environmental Protection Agency. Fed Regist 51(216):40572-40623. <https://www.loc.gov/item/fr051216/>. April 18, 2024.
- EPA. 1987a. USEPA contract laboratory program: Statement of work for organics analysis: Multi-media, multi-concentration. Washington, DC: U.S. Environmental Protection Agency.
- EPA. 1987b. 2,3,7,8-TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin): Environmental chemistry. Athens, GA: U.S. Environmental Protection Agency. EPA600D87086. PB87174793.
<https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB87174793.xhtml>. April 18, 2024.
- EPA. 1987c. The National Dioxin Study; tiers 3, 5, 6, and 7. Washington DC: U.S. Environmental Protection Agency. EPA440487003. PB87213963.
<https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB87213963.xhtml>. April 18, 2024.
- EPA. 1988. Land disposal: Waste specified prohibitions-dioxin-containing wastes. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 268.31.
<https://www.govinfo.gov/content/pkg/CFR-2023-title40-vol29/pdf/CFR-2023-title40-vol29-sec268-31.pdf>. April 18, 2024.
- EPA. 1989. Interim procedures for estimating risks associated with exposure to mixtures of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs) and 1989 update. Risk Assessment Forum. Washington, DC: U.S. Environmental Protection Agency. EPA625389016. PB90145756.
<https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB90145756.xhtml>. April 18, 2024.
- EPA. 1990a. Dibenzo-para-dioxins/dibenzofurans in bleached wood pulp and paper product referral for action. U.S. Environmental Protection Agency. Fed Regist 55(248):53047-53049.
<https://www.loc.gov/item/fr055248/>. April 18, 2024.
- EPA. 1990b. Standards for owners and operators of hazardous waste treatment, storage, and disposal facilities. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 264.342.
<https://www.govinfo.gov/content/pkg/CFR-2023-title40-vol28/pdf/CFR-2023-title40-vol28-part264.pdf>. April 18, 2024.
- EPA. 1991a. Proposed regulation of land application of sludge from pulp and paper mills using chlorine and chlorine derivative bleaching processes. U.S. Environmental Protection Agency. Fed Regist 56(91):21802. <https://www.loc.gov/item/fr056091/>. April 18, 2024.
- EPA. 1991b. Public meeting on EPA's scientific reassessment of dioxin. U.S. Environmental Protection Agency. Fed Regist 56(196):50903-50904. <https://www.loc.gov/item/fr056196/>. April 18, 2024.
- EPA. 1991c. Atmospheric transport and deposition of polychlorinated dibenzo-p-dioxins and dibenzofurans. Washington, DC: U.S. Environmental Protection Agency. EPA600391002. PB91144667. <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB91144667.xhtml>. April 18, 2024.
- EPA. 1992. National study of chemical residues in fish. Volume 1. Washington DC: U.S. Environmental Protection Agency. EPA823R92008a.
<https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=20003VSF.txt>. April 18, 2024.
- EPA. 1995. Guidance for assessing chemical contaminant data for use in fish advisories. Volume 1. Fish sampling and analysis. Washington, DC: U.S. Environmental Protection Agency.
EPA823R95007. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=20003Y7D.txt>. May 15, 2023.
- EPA. 1996a. Drinking water regulations and health advisories. Washington, DC: U.S. Environmental Protection Agency. EPA822B96002.
<https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=20003GXD.txt>. April 18, 2024.

8. REFERENCES

- EPA. 1996b. National listing of fish and wildlife consumption advisories. Washington DC: U.S. Environmental Protection Agency. EPA823C96011.
- EPA. 1998a. Update: listing of fish and wildlife advisories. U.S. Environmental Protection Agency. EPA823F98009. PB98153174. <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB98153174.xhtml>. April 18, 2024.
- EPA. 1998b. Fact sheet: Update: Listing of fish and wildlife advisories, 1997. Washington, DC: U.S. Environmental Protection Agency. EPA823F98009. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=20003TAO.txt>. May 15, 2023.
- EPA. 1998c. Approach for addressing dioxin in soil at CERCLA and RCRA sites. Washington, DC: U.S. Environmental Protection Agency. OSWER Directive 9200.4-26; April 13, 1998. <https://semspub.epa.gov/work/05/166816.pdf>. April 18, 2024.
- EPA. 2006. Inventory of sources and environmental releases of dioxin-like compounds in the United States for the years 1987, 1995, and 2000. Washington, DC: U.S. Environmental Protection Agency. PB2007104361. EPA600P03002F. <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB2007104361.xhtml>. August 16, 2023.
- EPA. 2007a. Method 8290A: Polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) by high-resolution gas chromatography/high resolution mass spectrometry (HRGC/HRMS). U.S. Environmental Protection Agency. <https://www.epa.gov/sites/default/files/2016-01/documents/sw846method8290a.pdf>. August 16, 2023.
- EPA. 2007b. 2001 National sewage sludge survey report. Washington, DC: U.S. Environmental Protection Agency. EPA822R07006. <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P1005KU6.txt>. August 16, 2023.
- EPA. 2009. National primary drinking water regulations. Washington, DC: U.S. Environmental Protection Agency. EPA816F09004. https://www.epa.gov/sites/production/files/2016-06/documents/npwdr_complete_table.pdf. August 2, 2019.
- EPA. 2012a. EPA's reanalysis of key issues related to dioxin toxicity and response to NAS Comments, Volume 1. Washington, DC: U.S. Environmental Protection Agency. EPA600R10038F. https://cfpub.epa.gov/ncea/iris/iris_documents/documents/supdocs/dioxinv1sup.pdf. June 27, 2024.
- EPA. 2012b. CDDs. Estimation Programs Interface Suite™ for Microsoft® Windows, v 4.11. Washington, DC: U.S. Environmental Protection Agency. <https://www.epa.gov/tsca-screening-tools/epi-suitetm-estimation-program-interface>. August 30, 2022.
- EPA. 2013. National Dioxin Air Monitoring Network (NDAMN) report of the report of the results of atmospheric measurements of polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), and dioxin-like polychlorinated biphenyls (PCBs) in rural and remote areas of the United States from June 1998 through November 2004. Washington, DC: U.S. Environmental Protection Agency. PB2014104547. EPA600R13183F. <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB2014104547.xhtml>. November 9, 2022.
- EPA. 2018a. 2018 Edition of the drinking water standards and health advisories. Washington, DC: U.S. Environmental Protection Agency. EPA822F18001. <https://www.epa.gov/system/files/documents/2022-01/dwtable2018.pdf>. June 15, 2022.
- EPA. 2018b. Compiled AEGL 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. 2021. Pentachlorophenol: Final registration review decision (Case Number 2505). U.S. Environmental Protection Agency. Docket Number EPA-HQ-OPP-2014-0653. <https://www.regulations.gov/document/EPA-HQ-OPP-2014-0653-0071>. August 2, 2023.
- EPA. 2022. Toxic chemical release inventory reporting forms and instructions: Revised 2021 version. U.S. Environmental Protection Agency. EPA740B22002.

8. REFERENCES

- https://ordspub.epa.gov/ords/guideme_ext/guideme_ext/guideme/file/ry_2021_rfi.pdf. August 22, 2023.
- EPA. 2023. East Palestine, Ohio train derailment: Soil sampling data. U.S. Environmental Protection Agency. <https://www.epa.gov/east-palestine-oh-train-derailment/soil-and-sediment-data>. September 5, 2023.
- EPA. 2024. General. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 220. <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-H/part-220>. June 26, 2024.
- Erdemli ME, Yigitcan B, Erdemli Z, et al. 2020. Thymoquinone protection against 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin induced nephrotoxicity in rats. *Biotech Histochem* 95(8):567-574. <https://doi.org/10.1080/10520295.2020.1735520>.
- Erickson JD, Mulinare J, McClain PW, et al. 1984. Vietnam veterans' risks for fathering babies with birth defects. *JAMA* 252:903-912. <https://doi.org/10.1001/JAMA.1984.03350070021017>.
- Eriksson M, Hardell L, Berg NO, et al. 1981. Soft-tissue sarcomas and exposure to chemical substances: A case-referent study. *Br J Ind Med* 38:27-33. <https://doi.org/10.1136/oem.38.1.27>.
- Eriksson M, Hardell L, Adami HO. 1990. Exposure to dioxins as a risk factor for soft tissue sarcoma: A population-based case-control study. *J Natl Cancer Inst* 82:486-490. <https://doi.org/10.1093/JNCI/82.6.486>.
- Ernst M, Flesch-Janys D, Morgenstern I, et al. 1998. Immune cell functions in industrial workers after exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin: Dissociation of antigen-specific T-cell responses in cultures of diluted whole blood and of isolated peripheral blood mononuclear cells. *Environ Health Perspect* 106(Suppl 2):701-705. <https://doi.org/10.1289/ehp.98106701>.
- Eskenazi B, Mocarelli P, Warner M, et al. 2002a. Serum dioxin concentrations and endometriosis: A cohort study in Seveso, Italy. *Environ Health Perspect* 110(7):629-634. <https://doi.org/10.1289/EHP.02110629>.
- Eskenazi B, Warner M, Mocarelli P, et al. 2002b. Serum dioxin concentrations and menstrual cycle characteristics. *Am J Epidemiol* 156(4):383-392. <https://doi.org/10.1093/aje/kwf046>.
- Eskenazi B, Mocarelli P, Warner M, et al. 2003. Maternal serum dioxin levels and birth outcomes in women of Seveso, Italy. *Environ Health Perspect* 111(7):947-953. <https://doi.org/10.1289/EHP.6080>.
- Eskenazi B, Warner M, Marks AR, et al. 2005. Serum dioxin concentrations and age at menopause. *Environ Health Perspect* 113(7):858-862. <https://doi.org/10.1289/ehp.7820>.
- Eskenazi B, Warner M, Samuels S, et al. 2007. Serum dioxin concentrations and risk of uterine leiomyoma in the Seveso Women's Health Study. *Am J Epidemiol* 166(1):79-87. <https://doi.org/10.1093/aje/kwm048>.
- Eskenazi B, Warner M, Marks AR, et al. 2010. Serum dioxin concentrations and time to pregnancy. *Epidemiology* 21(2):224-231. <https://doi.org/10.1097/EDE.0b013e3181cb8b95>.
- Eskenazi B, Ames J, Rauch S, et al. 2021. Dioxin exposure associated with fecundability and infertility in mothers and daughters of Seveso, Italy. *Hum Reprod* 36(3):794-807. <https://doi.org/10.1093/humrep/deaa324>.
- Evans RG, Webb KB, Knutsen AP, et al. 1988. A medical follow-up of the health effects of long-term exposure to 2,3,7,8-TCDD. *Arch Environ Health* 43:273-278. <https://doi.org/10.1080/00039896.1988.10545949>.
- Everett CJ, Thompson OM. 2016. Association of dioxins, furans and dioxin-like PCBs in human blood with nephropathy among US teens and young adults. *Rev Environ Health* 31(2):195-201. <https://doi.org/10.1515/reveh-2015-0031>.
- Facchetti S, Balasso A, Fichtner C, et al. 1986. Studies on the absorption of TCDD by plant species. In: Rappe C, Choudhary G, Keith LH, eds. *Chlorinated dioxins and dibenzofurans in perspective*. Chelsea, MI: Lewis Publishers, Inc., 225-235.
- Fader KA, Nault R, Ammendolia DA, et al. 2015. 2,3,7,8-Tetrachlorodibenzo-p-dioxin alters lipid metabolism and depletes immune cell populations in the jejunum of C57BL/6 mice. *Toxicol Sci* 148(2):567-580. <https://doi.org/10.1093/toxsci/kfv206>.

8. REFERENCES

- Fader KA, Nault R, Kirby MP, et al. 2017a. Convergence of hepcidin deficiency, systemic iron overloading, heme accumulation, and REV-ERBa/β activation in aryl hydrocarbon receptor-elicited hepatotoxicity. *Toxicol Appl Pharmacol* 321:1-17. <https://doi.org/10.1016/j.taap.2017.02.006>.
- Fader KA, Nault R, Zhang C, et al. 2017b. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)-elicited effects on bile acid homeostasis: Alterations in biosynthesis, enterohepatic circulation, and microbial metabolism. *Sci Rep* 7(1):5921. <https://doi.org/10.1038/s41598-017-05656-8>.
- Fader KA, Nault R, Raehtz S, et al. 2018. 2,3,7,8-Tetrachlorodibenzo-p-dioxin dose-dependently increases bone mass and decreases marrow adiposity in juvenile mice. *Toxicol Appl Pharmacol* 348:85-98. <https://doi.org/10.1016/j.taap.2018.04.013>.
- Faith RE, Moore JA. 1977. Impairment of thymus-dependent immune functions by exposure of developing immune system to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *J Toxicol Environ Health* 3:451-464. <https://doi.org/10.1080/15287397709529578>.
- Fan F, Rozman KK. 1995. Short- and long-term biochemical effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin in female Long-Evans rats. *Toxicol Lett* 75:209-216.
- Fan F, Wierda D, Rozman KK. 1996. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on humoral and cell-mediated immunity in Sprague-Dawley rats. *Toxicology* 106(1-3):221-228. [https://doi.org/10.1016/0300-483x\(95\)03193-j](https://doi.org/10.1016/0300-483x(95)03193-j).
- FDA. 2006. PCDD/PCDF exposure estimates from TDS samples collected in 2001-2004. U.S. Food and Drug Administration. <https://wayback.archive-it.org/7993/20170406021806/https://www.fda.gov/Food/FoodborneIllnessContaminants/ChemicalContaminants/ucm077498.htm>. January 1, 2022.
- FDA. 2007. Dioxin analysis results/exposure estimates. U.S. Food and Drug Administration. <https://www.fda.gov/food/environmental-contaminants-food/dioxin-analysis-resultsexposure-estimates>. March 7, 2024.
- FDA. 2022. Subpart B - Requirements for specific standardized beverages. Bottled water. U.S. Food and Drug Administration. Code of Federal Regulations. 21 CFR 165.110. <https://www.govinfo.gov/content/pkg/CFR-2022-title21-vol2/pdf/CFR-2022-title21-vol2-sec165-110.pdf>. January 4, 2023.
- FDA. 2023. Substances added to food. U.S. Food and Drug Administration. <https://www.cfsanappexternal.fda.gov/scripts/fdcc/?set=FoodSubstances>. January 4, 2023.
- Fenton SE, Hamm JT, Birnbaum LS, et al. 2002. Persistent abnormalities in the rat mammary gland following gestational and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Toxicol Sci* 67(1):63-74. <https://doi.org/10.1093/toxsci/67.1.63>.
- Fernández M, Paradisi M, D'Intino G, et al. 2010. A single prenatal exposure to the endocrine disruptor 2,3,7,8-tetrachlorodibenzo-p-dioxin alters developmental myelination and remyelination potential in the rat brain. *J Neurochem* 115(4):897-909. <https://doi.org/10.1111/j.1471-4159.2010.06974.x>.
- Ferrario J, Byrne C, McDaniel D, et al. 1996. Determination of 2,3,7,8-chlorine substituted dibenzo-p-dioxins and furans at the part per trillion level in United States beef fat using high resolution gas chromatography/high resolution mass spectrometry. *Anal Chem* 68:647-652. <https://doi.org/10.1021/ac950702k>.
- Ferrario J, Byrne C, Lorber M, et al. 1997. A statistical survey of dioxin-like compounds in United States poultry fat. *Organohalogen Compounds* 32:245-251.
- Fierens S, Mairesse H, Heilier F, et al. 2003. Dioxin/polychlorinated biphenyl body burden, diabetes and endometriosis: Findings in a population-based study in Belgium. *Biomarkers* 8(6):529-534. <https://doi.org/10.1080/1354750032000158420>.
- Filgo AJ, Foley JF, Puvanesarajah S, et al. 2016. Mammary gland evaluation in juvenile toxicity studies: Temporal developmental patterns in the male and female Harlan Sprague-Dawley rat. *Toxicol Pathol* 44(7):1034-1058. <https://doi.org/10.1177/0192623316663864>.
- Filippini G, Bordo B, Crenna P, et al. 1981. Relationship between clinical and electrophysiological findings and indicators of heavy exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Scand J Work Environ Health* 7:257-262. <https://doi.org/10.5271/SJWEH.2553>.

8. REFERENCES

- Fine JS, Gasiewicz TA, Silverstone AE. 1989. Lymphocyte stem cell alterations following perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Mol Pharmacol* 35:18-25.
- Fingerhut MA, Haring-Sweeney M, Patterson DG, et al. 1989. Levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the serum of U.S. chemical workers exposed to dioxin contaminated products: Interim results. *Chemosphere* 19:835-840. [https://doi.org/10.1016/0045-6535\(89\)90418-9](https://doi.org/10.1016/0045-6535(89)90418-9).
- Fingerhut MA, Halperin WE, Marlow DA, et al. 1991. Cancer mortality in workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *N Engl J Med* 324(4):212-218. <https://doi.org/10.1056/NEJM199101243240402>.
- Finley B, Fehling K, Warmerdam J, et al. 2009. Oral bioavailability of polychlorinated dibenzo-p-dioxins/dibenzofurans in industrial soils. *Hum Ecol Risk Assess* 15:1146-1167. <https://doi.org/10.1080/10807030903304765>.
- Finnilä MA, Ziopoulos P, Herlin M, et al. 2010. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on bone material properties. *J Biomech* 43(6):1097-1103. <https://doi.org/10.1016/j.jbiomech.2009.12.011>.
- Firestone D, Niemann RA, Schneider LF, et al. 1986. Dioxin residues in fish and other foods. In: Rappe C, Choudhary G, Keith LH, eds. *Chlorinated dioxins and dibenzofurans in perspective*. Chelsea, MI: Lewis Publishers, Inc., 355-365.
- Flaws JA, Sommer RJ, Silbergeld EK, et al. 1997. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) induces genital dysmorphogenesis in the female rat. *Toxicol Appl Pharmacol* 147(2):351-362. <https://doi.org/10.1006/taap.1997.8295>.
- Flesch-Janys D, Berger J, Gurn P, et al. 1995. Exposure to polychlorinated dioxins and furans (PCDD/F) and mortality in a cohort of workers from a herbicide-producing plant in Hamburg, Federal Republic of Germany. *Am J Epidemiol* 142(11):1165-1175. <https://doi.org/10.1093/oxfordjournals.aje.a117575>.
- Flesch-Janys D, Becher H, Gurn P, et al. 1996. Elimination of polychlorinated dibenzo-p-dioxins and dibenzofurans in occupationally exposed persons. *J Toxicol Environ Health* 47:363-378. <https://doi.org/10.1080/009841096161708>.
- Flesch-Janys D, Steindorf K, Gurn P, et al. 1998. Estimation of the cumulated exposure to polychlorinated dibenzo-p-dioxins/furans and standardized mortality ratio analysis of cancer mortality by dose in an occupationally exposed cohort. *Environ Health Perspect* 106(Suppl 2):655-662. <https://doi.org/10.1289/ehp.98106655>.
- Fletcher CL, McKay WA. 1993. Polychlorinated dibenzo-p-dioxins PCDDs and dibenzofurans PCDFs in the aquatic environment a literature review. *Chemosphere* 26(6):1041-1069. [https://doi.org/10.1016/0045-6535\(93\)90194-A](https://doi.org/10.1016/0045-6535(93)90194-A).
- Fletcher N, Hanberg A, Håkansson H. 2001. Hepatic vitamin a depletion is a sensitive marker of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure in four rodent species. *Toxicol Sci* 62(1):166-175. <https://doi.org/10.1093/toxsci/62.1.166>.
- Fletcher N, Wahlstrom D, Lundberg R, et al. 2005. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) alters the mRNA expression of critical genes associated with cholesterol metabolism, bile acid biosynthesis, and bile transport in rat liver: A microarray study. *Toxicol Appl Pharmacol* 207(1):1-24. <https://doi.org/10.1016/J.TAAP.2004.12.003>.
- Floret N, Mauny F, Challier B, et al. 2003. Dioxin emissions from a solid waste incinerator and risk of non-Hodgkin lymphoma. *Epidemiology* 14(4):392-398. <https://doi.org/10.1097/01.ede.0000072107.90304.01>.
- Focant JF, Frery N, Bidondo ML, et al. 2013. Levels of polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans and polychlorinated biphenyls in human milk from different regions of France. *Sci Total Environ* 452-453:155-162. <https://doi.org/10.1016/j.scitotenv.2013.02.057>.
- Forsberg B, Nordstrom S. 1985. Miscarriages around a herbicide manufacturing company in Sweden. *Ambio* 14:110-111.

8. REFERENCES

- Foster WG, Ruka MP, Gareau P, et al. 1997. Morphologic characteristics of endometriosis in the mouse model: Application to toxicology. *Can J Physiol Pharmacol* 75:1188-1196.
<https://doi.org/10.1139/CJPP-75-10-11-1188>.
- Foster WG, Holloway AC, Hughes CL. 2005. Dioxin-like activity and maternal thyroid hormone levels in second trimester maternal serum. *Am J Obstet Gynecol* 193(6):1900-1907.
<https://doi.org/10.1016/j.ajog.2005.08.013>.
- Franczak A, Nynca A, Valdez KE, et al. 2006. Effects of acute and chronic exposure to the aryl hydrocarbon receptor agonist 2,3,7,8-tetrachlorodibenzo-p-dioxin on the transition to reproductive senescence in female Sprague-Dawley rats. *Biol Reprod* 74(1):125-130.
<https://doi.org/10.1095/biolreprod.105.044396>.
- Frawley R, DeVito M, Walker NJ, et al. 2014. Relative potency for altered humoral immunity induced by polybrominated and polychlorinated dioxins/furans in female B6C3F1/N mice. *Toxicol Sci* 139(2):488-500. <https://doi.org/10.1093/toxsci/kfu041>.
- Freeman RA, Schroy JM. 1986. Modeling the transport of 2,3,7,8-TCDD and other low volatility chemicals in soils. *Environ Progress* 5:28-33. <https://doi.org/10.1002/EP.670050110>.
- Freeman RA, Schroy JM, Hileman FD, et al. 1986. Environmental mobility of 2,3,7,8-TCDD and companion chemicals in a roadway soil matrix. Chlorinated dioxins and dibenzofurans in perspective. Chelsea, MI: Lewis Publishers, Inc. 171-183.
- Friedman CL, Cantwell MG, Lohmann R. 2012. Passive sampling provides evidence for Newark Bay as a source of polychlorinated dibenzo-p-dioxins and furans to the New York/New Jersey, USA, atmosphere. *Environ Toxicol Chem* 31(2):253-261. <https://doi.org/10.1002/etc.742>.
- Fries GF, Marrow GS. 1975. Retention and excretion of 2,3,7,8-tetrachlorodibenzo-p-dioxin by rats. *J Agric Food Chem* 23:265-269. <https://doi.org/10.1021/JF60198A039>.
- Fries GF, Paustenbach DJ. 1990. Evaluation of potential transmission of 2,3,7,8-tetrachlorodibenzo-p-dioxin-contaminated incinerator emissions to human via foods. *J Toxicol Environ Health* 29(1):1-43. <https://doi.org/10.1080/15287399009531369>.
- Friesen KJ, Muir DCG, Webster GRB. 2002. Evidence of sensitized photolysis of polychlorinated dibenzo-p-dioxins in natural waters under sunlight conditions. *Environ Sci Technol* 24(11):1739-1744. <https://doi.org/10.1021/es00081a018>.
- Fujisawa N, Tohyama C, Yoshioka W. 2019. Cardiotoxicity induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure through lactation in mice. *J Toxicol Sci* 44(7):505-513.
<https://doi.org/10.2131/jts.44.505>.
- Fujiwara K, Yamada T, Mishima K, et al. 2008. Morphological and immunohistochemical studies on cleft palates induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin in mice. *Congenit Anom* 48(2):68-73. <https://doi.org/10.1111/j.1741-4520.2008.00181.x>.
- Fürst P, Fürst C, Wilmers K. 1992. PCDDs and PCDFs in human milk statistical evaluation of a 6-years survey 1992. *Chemosphere* 25(7-10):1029-1038. [https://doi.org/10.1016/0045-6535\(92\)90103-X](https://doi.org/10.1016/0045-6535(92)90103-X).
- Fürst P, Fürst C, Wilmers K. 1994. Human milk as a bioindicator for body burden of PCDDs, PCDFs, organochlorine pesticides, and PCBs. *Environ Health Perspect* 102(Suppl 1):187-193.
<https://doi.org/10.1289/ehp.102-1566908>.
- Fürst P, Meemken HA, Krüger C, et al. 1987. Polychlorinated dibenzodioxins and dibenzofurans in human milk samples from Western Germany. *Chemosphere* 16(8-9):1983-1988.
[https://doi.org/10.1016/0045-6535\(87\)90198-6](https://doi.org/10.1016/0045-6535(87)90198-6).
- Fürst P, Krüger C, Meemken HA, et al. 1989. PCDD and PCDF levels in human milk - dependence on the period of lactation. *Chemosphere* 18:439-444. [https://doi.org/10.1016/0045-6535\(89\)90153-7](https://doi.org/10.1016/0045-6535(89)90153-7).
- Gandhi N, Gewurtz SB, Drouillard KG, et al. 2019. Dioxins in Great Lakes fish: Past, present and implications for future monitoring. *Chemosphere* 222:479-488.
<https://doi.org/10.1016/j.chemosphere.2018.12.139>.
- Gasiewicz TA, Rucci G. 1991. Alpha-naphthoflavone acts as an antagonist of 2,3,7,8-tetrachlorodibenzo-p-dioxin by forming an inactive complex with the Ah receptor. *Mol Pharmacol* 40:607-612.

8. REFERENCES

- Gasiewicz TA, Geiger LE, Rucci G, et al. 1983. Distribution, excretion, and metabolism of 2,3,7,8-tetrachlorodibenzo-p-dioxin in C57BL/6J, DBA/2J, and B6D2F1/J mice. *Drug Metab Dispos* 11:397-403.
- Gasiewicz TA, Henry EC, Collins LL. 2008. Expression and activity of aryl hydrocarbon receptors in development and cancer. *Crit Rev Eukaryot Gene Expr* 18(4):279-321.
<https://doi.org/10.1615/CRITREVEUKARGENEEXPR.V18.I4.10>.
- Gehrs BC, Riddle MM, Williams WC, et al. 1997a. Alterations in the developing immune system of the F344 rat after perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. I. Effects on the fetus and the neonate. *Toxicology* 122(3):219-228. [https://doi.org/10.1016/s0300-483x\(97\)00098-x](https://doi.org/10.1016/s0300-483x(97)00098-x).
- Gehrs BC, Riddle MM, Williams WC, et al. 1997b. Alterations in the developing immune system of the F344 rat after perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. II. Effects on the pup and the adult. *Toxicology* 122(3):229-240. [https://doi.org/10.1016/s0300-483x\(97\)00099-1](https://doi.org/10.1016/s0300-483x(97)00099-1).
- Geiger LE, Neal RA. 1981. Mutagenicity testing of 2,3,7,8-tetrachlorodibenzo-p-dioxin in histidine auxotrophs of *Salmonella typhimurium*. *Toxicol Appl Pharmacol* 59:125-129.
[https://doi.org/10.1016/0041-008X\(81\)90459-2](https://doi.org/10.1016/0041-008X(81)90459-2).
- Geusau A, Tschachler E, Meixner M, et al. 2001a. Cutaneous elimination of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Br J Dermatol* 145(6):938-943. <https://doi.org/10.1046/j.1365-2133.2001.04540.x>.
- Geusau A, Abraham K, Geissler K, et al. 2001b. Severe 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) intoxication: clinical and laboratory effects. *Environ Health Perspect* 109(8):865-869.
<https://doi.org/10.1289/EHP.01109865>.
- Geyer HJ, Scheunert I, Filser JG, et al. 1986. Bioconcentration potential (BCP) of 2,3,7,8-Tetrachlorodibenzop-dioxin (2,3,7,8-TCDD) in terrestrial organisms including humans. *Chemosphere* 15(9-12):1495-1502. [https://doi.org/10.1016/0045-6535\(86\)90430-3](https://doi.org/10.1016/0045-6535(86)90430-3).
- Giavini E, Prati M, Vismara C. 1982. Rabbit teratology study: 2,3,7,8-Tetrachlorodibenzo-p-dioxin. *Environ Res* 27(1):74-78. [https://doi.org/10.1016/0013-9351\(82\)90058-5](https://doi.org/10.1016/0013-9351(82)90058-5).
- Giavini E, Prati M, Vismara C. 1983. Embryotoxic effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin administered to female rats before mating. *Environ Res* 31(1):105-110.
[https://doi.org/10.1016/0013-9351\(83\)90066-x](https://doi.org/10.1016/0013-9351(83)90066-x).
- Gibbs J, Hansen M, Ferrario J. 2003. Ambient air sampling for dioxins, furans and coplanar PCBs in an urban industrialized corridor in Calcasieu Parish, Louisiana. *Organohalogen Compounds* 61:514-517.
- Gilbert P, Saint-Ruf G, Poncelet F, et al. 1980. Genetic effects of chlorinated anilines and azobenzenes on *Salmonella typhimurium*. *Arch Environ Contam Toxicol* 9:533-541.
<https://doi.org/10.1007/BF01056933>.
- Giovannini A, Rivezzi G, Carideo P, et al. 2014. Dioxins levels in breast milk of women living in Caserta and Naples: assessment of environmental risk factors. *Chemosphere* 94:76-84.
<https://doi.org/10.1016/j.chemosphere.2013.09.017>.
- Goetz CG, Bolla KI, Rogers SM. 1994. Neurologic health outcomes and Agent Orange: Institute of Medicine report. *Neurology* 44:801-809. <https://doi.org/10.1212/WNL.44.5.801>.
- Goldman PJ. 1972. [Severest acute chloracne. A mass poisoning by 2,3,7,8-tetrachlorodibenzo-p-dioxin]. *Hautarzt* 24:149-152. (German)
- Gordon CJ, Miller DB. 1998. Thermoregulation in rats exposed perinatally to dioxin: core temperature stability to altered ambient temperature, behavioral thermoregulation, and febrile response to lipopolysaccharide. *J Toxicol Environ Health A* 54(8):647-662.
<https://doi.org/10.1080/009841098158665>.
- Gordon CJ, Gray LE, Monteiro-Riviere NA, et al. 1995. Temperature regulation and metabolism in rats exposed perinatally to dioxin: Permanent change in regulated body temperature? *Toxicol Appl Pharmacol* 133(1):172-176. <https://doi.org/10.1006/taap.1995.1138>.
- Gorski JR, Muzy G, Weber LWD, et al. 1988. Some endocrine and morphological aspects of the acute toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Toxicol Pathol* 16:313-320.
<https://doi.org/10.1177/019262338801600301>.

8. REFERENCES

- Gough M. 1991. Human exposure from dioxin in soil-a meeting report. *J Toxicol Environ Health* 32:205-245. <https://doi.org/10.1080/1528739109531477>.
- Gray LE, Ostby JS. 1995. In utero 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) alters reproductive morphology and function in female rat offspring. *Toxicol Appl Pharmacol* 133(2):285-294. <https://doi.org/10.1006/taap.1995.1153>.
- Gray LE, Kelce WR, Monosson E, et al. 1995. Exposure to TCDD during development permanently alters reproductive function in male Long Evans rats and hamsters: Reduced ejaculated and epididymal sperm numbers and sex accessory gland weights in offspring with normal androgenic status. *Toxicol Appl Pharmacol* 131(1):108-118. <https://doi.org/10.1006/taap.1995.1052>.
- Gray LE, Wolf C, Mann P, et al. 1997a. In utero exposure to low doses of 2,3,7,8-tetrachlorodibenzo-p-dioxin alters reproductive development of female Long Evans hooded rat offspring. *Toxicol Appl Pharmacol* 146(2):237-244. <https://doi.org/10.1006/taap.1997.8222>.
- Gray LE, Ostby JS, Kelce WR. 1997b. A dose-response analysis of the reproductive effects of a single gestational dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin in male Long Evans Hooded rat offspring. *Toxicol Appl Pharmacol* 146(1):11-20. <https://doi.org/10.1006/taap.1997.8223>.
- Green S, Moreland F, Sheu C. 1977. Cytogenic effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on rat bone marrow cells. *FDA By-Lines* 6:292.
- Greig JB. 1984. Differences between skin and liver toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in mice. *Banbury Rep Biological Mechanisms Dioxin Action* 18:391-397.
- Greig JB, Francis JE, Kay SJ, et al. 1987. Pleiotropic effect of the gene hairless on hepatotoxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in mice. *Arch Toxicol* 60(5):350-354. <https://doi.org/10.1007/BF00295754>.
- Gross ML, Lay JO, Lyon PA, et al. 1984. 2,3,7,8-Tetrachlorodibenzo-p-dioxin levels in adipose tissue of Vietnam veterans. *Environ Res* 33:261-268. [https://doi.org/10.1016/0013-9351\(84\)90022-7](https://doi.org/10.1016/0013-9351(84)90022-7).
- Grufferman S, Lupo PJ, Vogel RI, et al. 2014. Parental military service, agent orange exposure, and the risk of rhabdomyosarcoma in offspring. *J Pediatr* 165(6):1216-1221. <https://doi.org/10.1016/j.jpeds.2014.08.009>.
- Gül S, Gül M, Yigitcan B. 2018. Melatonin preserves ovarian tissues of rats exposed to chronic TCDD: An electron microscopic approach to effects of TCDD on ovarian cells. *Toxicol Ind Health* 34(4):228-236. <https://doi.org/10.1177/0748233717754174>.
- Guo YM, Wang SY, Wang XR, et al. 2000. Effect of TCDD on maternal toxicity and chorionic gonadotropin-bioactivity in the immediate post-implantation period of macaque. *Biomed Environ Sci* 13(1):26-31.
- Gupta A, Ketchum N, Roehrborn CG, et al. 2006. Serum dioxin, testosterone, and subsequent risk of benign prostatic hyperplasia: a prospective cohort study of Air Force veterans. *Environ Health Perspect* 114(11):1649-1654. <https://doi.org/10.1289/ehp.8957>.
- Haake JM, Safe S, Mayura K, et al. 1987. Aroclor 1254 as an antagonist of the teratogenicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Lett* 38:299-306. [https://doi.org/10.1016/0378-4274\(87\)90012-9](https://doi.org/10.1016/0378-4274(87)90012-9).
- Haavisto T, Nurmiela K, Pohjanvirta R, et al. 2001. Prenatal testosterone and luteinizing hormone levels in male rats exposed during pregnancy to 2,3,7,8-tetrachlorodibenzo-p-dioxin and diethylstilbestrol. *Mol Cell Endocrinol* 178(1-2):169-179. [https://doi.org/10.1016/s0303-7207\(01\)00425-7](https://doi.org/10.1016/s0303-7207(01)00425-7).
- Haavisto TE, Myllymaki SA, Adamsson NA, et al. 2006. The effects of maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on testicular steroidogenesis in infantile male rats. *Int J Androl* 29(2):313-322. <https://doi.org/10.1111/j.1365-2605.2005.00568.x>.
- Hagenmaier H, Wiesmueller T, Golor G, et al. 1990. Transfer of various polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDDs and PCDFs) via placenta and through milk in a marmoset monkey. *Arch Toxicol* 64:601-615. <https://doi.org/10.1007/BF01974688>.
- Hahn ME, Goldstein JA, Linko P, et al. 1989. Interaction of hexachlorobenzene with the receptor for 2,3,7,8-tetrachlorodibenzo-p-dioxin in vitro and in vivo: Evidence that hexachlorobenzene is a weak

8. REFERENCES

- Ah receptor agonist. *Arch Biochem Biophys* 270:344-355. [https://doi.org/10.1016/0003-9861\(89\)90037-4](https://doi.org/10.1016/0003-9861(89)90037-4).
- Hajjima A, Endo T, Zhang Y, et al. 2010. In utero and lactational exposure to low doses of chlorinated and brominated dioxins induces deficits in the fear memory of male mice. *Neurotoxicology* 31(4):385-390. <https://doi.org/10.1016/j.neuro.2010.04.004>.
- Håkansson H, Waern F, Ahlborg UG. 1987. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in the lactating rat on maternal and neonatal vitamin A status. *J Nutr* 117:580-586. <https://doi.org/10.1093/JN/117.3.580>.
- Håkansson H, Johansson L, Ahlborg UG, et al. 1989. Hepatic vitamin A storage in relation to paired feed restriction and to TCDD-treatment. *Chemosphere* 19(1-6):919-920. [https://doi.org/10.1016/0045-6535\(89\)90432-3](https://doi.org/10.1016/0045-6535(89)90432-3).
- Hakk H, Dilberto JJ. 2002. Comparison of overall metabolism of 2,3,7,8-TCDD in CYP1A2 (-/-) knockout and C57BL/6N parental strains of mice. *Organohalogen Compounds* 55:461-464.
- Hakk H, Dilberto JJ. 2003. Comparison of overall metabolism of 1,2,3,7,8-PeCDD in CYP1A2 (-/-) knockout and C57BL/6N parental strains of mice. *Organohalogen Compounds* 64:293-296.
- Hakk H, Feil VJ, Larsen G. 1998. The binding of 2,3,7,8-tetrachlorodibenzo-p-dioxin metabolites with rat urinary and biliary carrier proteins. *Organohalogen Compounds* 37:395-399.
- Hakk H, Larsen G, Feil VJ. 1999. The binding of 1,2,3,7,8-pentachlorodibenzo-p-dioxin metabolites with rat urinary and biliary carrier proteins. *Organohalogen Compounds* 40:125-128.
- Hakk H, Larsen G, Feil V. 2001. Tissue distribution, excretion, and metabolism of 1,2,7,8-tetrachlorodibenzo-p-dioxin in the rat. *Chemosphere* 42(8):975-983. [https://doi.org/10.1016/S0045-6535\(00\)00131-4](https://doi.org/10.1016/S0045-6535(00)00131-4).
- Hakk H, Dilberto JJ, Birnbaum LS. 2009. The effect of dose on 2,3,7,8-TCDD tissue distribution, metabolism and elimination in CYP1A2 (-/-) knockout and C57BL/6N parental strains of mice. *Toxicol Appl Pharmacol* 241(1):119-126. <https://doi.org/10.1016/j.taap.2009.08.009>.
- Halperin W, Vogt R, Sweeney MH, et al. 1998. Immunological markers among workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Occup Environ Med* 55(11):742-749. <https://doi.org/10.1136/oem.55.11.742>.
- Hamm JT, Sparrow BR, Wolf D, et al. 2000. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin alters postnatal development of seminal vesicle epithelium. *Toxicol Sci* 54(2):424-430. <https://doi.org/10.1093/toxsci/54.2.424>.
- Han Y, Liu W, Li H, et al. 2017. Gas-particle partitioning of polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls in flue gases from municipal solid waste incinerators. *Aerosol Air Qual Res* 17:2847-2857.
- Hanberg A, Håkansson H, Ahlborg UG. 1989. "ED50" values for TCDD-induced reduction of body weight gain, liver enlargement, and thymic atrophy in Hartley guinea pigs, Sprague-Dawley rats, C57BL/6 mice, and golden Syrian hamsters. *Chemosphere* 19:813-816. [https://doi.org/10.1016/0045-6535\(89\)90414-1](https://doi.org/10.1016/0045-6535(89)90414-1).
- Hanify JA, Metcalf P, Nobbs, et al. 1981. Aerial spraying of 2,4,5-T and human birth malformations: An epidemiological investigation. *Science* 212:349-351. <https://doi.org/10.1126/SCIENCE.7209535>.
- Hardell L, Sandström A. 1979. Case-control study: Soft-tissue sarcomas and exposure to phenoxyacetic acids and chlorophenols. *Br J Cancer* 39:711-717. <https://doi.org/10.1038/bjc.1979.125>.
- Hardell L, Eriksson M. 1988. The association between soft tissue sarcomas and exposure to phenoxyacetic acids, a new case referent study. *Cancer* 62:652-656. [https://doi.org/10.1002/1097-0142\(19880801\)62:3<652::AID-CNCR2820620334>3.0.CO;2-4](https://doi.org/10.1002/1097-0142(19880801)62:3<652::AID-CNCR2820620334>3.0.CO;2-4).
- Hardell L, Eriksson M, Degereman A. 1995. Meta-analysis of four Swedish case-control studies on exposure to pesticides as risk-factor for soft-tissue sarcoma including the relation to tumour localization and histopathological type. *Int J Oncol* 6:847-851. <https://doi.org/10.3892/IJO.6.4.847>.
- Harper PA, Riddick DS, Okey AB. 2006. Regulating the regulator: Factors that control levels and activity of the aryl hydrocarbon receptor. *Biochem Pharmacol* 72(3):267-279. <https://doi.org/10.1016/J.BCP.2006.01.007>.

8. REFERENCES

- Harrill JA, Parks BB, Wauthier E, et al. 2015. Lineage-dependent effects of aryl hydrocarbon receptor agonists contribute to liver tumorigenesis. *Hepatology* 61(2):548-560. <https://doi.org/10.1002/hep.27547>.
- Harrill JA, Layko D, Nyska A, et al. 2016. Aryl hydrocarbon receptor knockout rats are insensitive to the pathological effects of repeated oral exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *J Appl Toxicol* 36(6):802-814. <https://doi.org/10.1002/jat.3211>.
- Harris M, Zacharewski T, Astroff B, et al. 1989. Characterization of 6-methyl-1,3,8-trichloro-dibenzofuran (MCDF) as a 2,3,7,8-TCDD antagonist in male rats: Induction of monooxygenases. *Chemosphere* 19:769-772. [https://doi.org/10.1016/0045-6535\(89\)90406-2](https://doi.org/10.1016/0045-6535(89)90406-2).
- Hassan MQ, Mohammadpour H, Hermansky SJ, et al. 1987. Comparative effects of BHA and ascorbic acid on the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in rats. *Gen Pharmacol* 5:547-550. [https://doi.org/10.1016/0306-3623\(87\)90078-4](https://doi.org/10.1016/0306-3623(87)90078-4).
- Hassoun EA. 1987. In vivo and in vitro interactions of TCDD and other ligands of the Ah-receptor: Effect on embryonic and fetal tissues. *Arch Toxicol* 61:145-149. <https://doi.org/10.1007/BF00661373>.
- Hassoun E, D'Argy R, Dencker L, et al. 1984. Teratogenicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in BXD recombinant inbred strains. *Toxicol Lett* 23:37-42.
- Hattemer-Frey HA, Travis CC. 1989. Comparison of human exposure to dioxin from municipal waste incineration and background environmental contamination. *Chemosphere* 18:643-649. [https://doi.org/10.1016/0045-6535\(89\)90177-X](https://doi.org/10.1016/0045-6535(89)90177-X).
- Hattori Y, Takeda T, Fujii M, et al. 2014. Dioxin-induced fetal growth retardation: the role of a preceding attenuation in the circulating level of glucocorticoid. *Endocrine* 47(2):572-580. <https://doi.org/10.1007/s12020-014-0257-3>.
- Hauge PM, Belton TJ, Ruppel BE, et al. 1994. 2,3,7,8-TCDD and 2,3,7,8-TCDF in Blue crabs and American lobsters from the Hudson-Raritan estuary and the New York Bight. *Bull Environ Contam Toxicol* 52(5):734-741. <https://doi.org/10.1007/BF00195496>.
- Haws LC, Su SH, Harris M, et al. 2006. Development of a refined database of mammalian relative potency estimates for dioxin-like compounds. *Toxicol Sci* 89(1):4-30. <https://doi.org/10.1093/TOXSCI/KFI294>.
- Hayashi S, Watanabe J, Nakachi K, et al. 1994. Interindividual difference in expression of human Ah receptor and related P450 genes. *Carcinogenesis* 15:801-806. <https://doi.org/10.1093/CARCIN/15.5.801>.
- Hebert CD, Birnbaum LS. 1987. The influence of aging on intestinal absorption of TCDD in rats. *Toxicol Lett* 37:47-55. [https://doi.org/10.1016/0378-4274\(87\)90166-4](https://doi.org/10.1016/0378-4274(87)90166-4).
- Hebert CD, Harris MW, Elwell MR, et al. 1990. Relative toxicity and tumor-promoting ability of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), 2,3,4,7,8-pentachlorodibenzofuran (PCDF), and 1,2,3,4,7,8-hexachlorodibenzofuran (HDCF) in hairless mice. *Toxicol Appl Pharmacol* 102(2):362-377. [https://doi.org/10.1016/0041-008x\(90\)90033-q](https://doi.org/10.1016/0041-008x(90)90033-q).
- Hebert CE, Norstrom RJ, Simon M, et al. 1994. Temporal trends and sources of PCDDs and PCDFs in the great lakes: herring gull egg monitoring, 1981-1991. *Environ Sci Technol* 28(7):1268-1277. <https://doi.org/10.1021/es00056a014>.
- Hebert C, Gamberg M, Mychasiw L, et al. 1996. Polychlorinated dibenzodioxins, dibenzofurans and non-ortho polychlorinated biphenyls in caribou (*Rangifer tarandus*) from the Canadian Arctic. *Sci Total Environ* 185:195-204. [https://doi.org/10.1016/0048-9697\(95\)05065-5](https://doi.org/10.1016/0048-9697(95)05065-5).
- Heilier JF, Nackers F, Verougstraete V, et al. 2005. Increased dioxin-like compounds in the serum of women with peritoneal endometriosis and deep endometriotic (adenomyotic) nodules. *Fertil Steril* 84(2):305-312. <https://doi.org/10.1016/J.FERTNSTERT.2005.04.001>.
- Heimler I, Trewin AL, Chaffin CL, et al. 1998. Modulation of ovarian follicle maturation and effects on apoptotic cell death in Holtzman rats exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in utero and lactationally. *Reprod Toxicol* 12(1):69-73. [https://doi.org/10.1016/s0890-6238\(97\)00101-9](https://doi.org/10.1016/s0890-6238(97)00101-9).

8. REFERENCES

- Hellou J, Payne JF. 1993. Polychlorinated dibenzo-p-dioxins and dibenzofurans in cod (*Gadus morhua*) from the Northwest Atlantic. *Mar Environ Res* 36(2):117-128. [https://doi.org/10.1016/0141-1136\(93\)90084-D](https://doi.org/10.1016/0141-1136(93)90084-D).
- Henck JW, New MA, Kociba RJ, et al. 1981. 2,3,7,8-tetrachlorodibenzo-p-dioxin: Acute oral toxicity in hamsters. *Toxicol Appl Pharmacol* 59:405-407. [https://doi.org/10.1016/0041-008X\(81\)90212-X](https://doi.org/10.1016/0041-008X(81)90212-X).
- Henriksen GL, Michalek JE, Swaby JA, et al. 1996. Serum dioxin, testosterone, and gonadotropins in veterans of operation ranch hand. *Epidemiology* 7:352-357. <https://doi.org/10.1097/00001648-199607000-00003>.
- Henriksen GL, Ketchum NS, Michalek JE, et al. 1997. Serum dioxin and diabetes mellitus in veterans of operation ranch hand. *Epidemiology* 8:252-258. <https://doi.org/10.1097/00001648-199705000-00005>.
- Herlin M, Finnilä MA, Ziopoulos P, et al. 2013. New insights to the role of aryl hydrocarbon receptor in bone phenotype and in dioxin-induced modulation of bone microarchitecture and material properties. *Toxicol Appl Pharmacol* 273(1):219-226. <https://doi.org/10.1016/j.taap.2013.09.002>.
- Hermansky SJ, Holczlau TL, Murray WJ, et al. 1988. Biochemical and functional effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in the heart of female rats. *Toxicol Appl Pharmacol* 95(2):175-184. [https://doi.org/10.1016/0041-008X\(88\)90154-8](https://doi.org/10.1016/0041-008X(88)90154-8).
- Hesso A, Hameila M, Tornaeus J. 1992. Polychlorinated dioxins, furans and non-ortho polychlorinated biphenyls in blood of exposed laboratory personnel. *Chemosphere* 25:1053-1059. [https://doi.org/10.1016/0045-6535\(92\)90106-2](https://doi.org/10.1016/0045-6535(92)90106-2).
- Hilarides RJ, Gray KA, Guzzetta J, et al. 1994. Radiolytic degradation of 2,3,7,8-TCDD in artificially contaminated soils. *Environ Sci Technol* 28(13):2249-2258. <https://doi.org/10.1021/es00062a008>.
- Hochstein JR, Aulerich RJ, Bursian SJ. 1988. Acute toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin to mink. *Arch Environ Contam Toxicol* 17:33-37. <https://doi.org/10.1007/BF01055151>.
- Hochstein MS, Render JA, Bursian SJ, et al. 2001. Chronic toxicity of dietary 2,3,7,8-tetrachlorodibenzo-p-dioxin to mink. *Vet Hum Toxicol* 43(3):134-139.
- Hodson PV, McWhirter M, Ralph K, et al. 1992. Effects of bleached draft mill effluent on fish in the St. Maurice River, Quebec. *Environ Toxicol Chem* 11(11):1635-1651. <https://doi.org/10.1002/ETC.5620111113>.
- Hoegberg P, Schmidt CK, Nau H, et al. 2003. 2,3,7,8-Tetrachlorodibenzo-p-dioxin induces lecithin: Retinol acyltransferase transcription in the rat kidney. *Chem Biol Interact* 145(1):1-16. [https://doi.org/10.1016/s0009-2797\(02\)00157-6](https://doi.org/10.1016/s0009-2797(02)00157-6).
- Hoffman R, Stehr-Green PA, Webb KB, et al. 1986. Health effects of long-term exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *JAMA* 255(15):2031-2038. <https://doi.org/10.1001/JAMA.1986.03370150073031>.
- Hoffman JC, Blazer VS, Walsh HH, et al. 2020. Influence of demographics, exposure, and habitat use in an urban, coastal river on tumor prevalence in a demersal fish. *Sci Total Environ* 712:136512. <https://doi.org/10.1016/j.scitotenv.2020.136512>.
- Hogaboam JP, Moore AJ, Lawrence BP. 2008. The aryl hydrocarbon receptor affects distinct tissue compartments during ontogeny of the immune system. *Toxicol Sci* 102(1):160-170. <https://doi.org/10.1093/toxsci/kfm283>.
- Hojo R, Stern S, Zareba G, et al. 2002. Sexually dimorphic behavioral responses to prenatal dioxin exposure. *Environ Health Perspect* 110(3):247-254. <https://doi.org/10.1289/EHP.02110247>.
- Hojo R, Zareba G, Kai JW, et al. 2006. Sex-specific alterations of cerebral cortical cell size in rats exposed prenatally to dioxin. *J Appl Toxicol* 26(1):25-34. <https://doi.org/10.1002/jat.1101>.
- Hojo R, Kakeyama M, Kurokawa Y, et al. 2008. Learning behavior in rat offspring after in utero and lactational exposure to either TCDD or PCB126. *Environ Health Prev Med* 13(3):169-180. <https://doi.org/10.1007/s12199-008-0026-0>.
- Holladay SD, Lindstrom P, Blaylock BL, et al. 1991. Perinatal thymocyte antigen expression and postnatal immune development altered by gestational exposure to tetrachlorodibenzo-p-dioxin (TCDD). *Teratology* 44(4):385-393. <https://doi.org/10.1002/tera.1420440405>.

8. REFERENCES

- Holmstedt B. 1980. Prolegomena to Seveso, Ecclesiastes 1:18. *Arch Toxicol* 44:211-230. <https://doi.org/10.1007/BF00278030>.
- Holsapple MP, Dooley RK, McNerney PJ, et al. 1986a. Direct suppression of antibody-responses by chlorinated dibenzodioxins in cultured spleen-cells from (C57BL/6XC3H)F1 and DBA/2 mice. *Immunopharmacology* 12:175-186. [https://doi.org/10.1016/0162-3109\(86\)90001-9](https://doi.org/10.1016/0162-3109(86)90001-9).
- Holsapple MP, McCay JA, Barnes DW. 1986b. Immunosuppression without liver induction by subchronic exposure to 2,7-dichlorodibenzo-p-dioxin in adult female B6C3F1 mice. *Toxicol Appl Pharmacol* 83:445-455. [https://doi.org/10.1016/0041-008X\(86\)90227-9](https://doi.org/10.1016/0041-008X(86)90227-9).
- Hong R, Taylor K, Abonour R. 1989. Immune abnormalities associated with chronic TCDD exposure in rhesus. *Chemosphere* 18:313-320. [https://doi.org/10.1016/0045-6535\(89\)90136-7](https://doi.org/10.1016/0045-6535(89)90136-7).
- Hood DB, Woods L, Brown L, et al. 2006. Gestational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure effects on sensory cortex function. *Neurotoxicology* 27(6):1032-1042. <https://doi.org/10.1016/J.NEURO.2006.05.022>.
- Hooiveld M, Heederik DJ, Kogevinas M, et al. 1998. Second follow-up of a Dutch cohort occupationally exposed to phenoxy herbicides, chlorophenols, and contaminants. *Am J Epidemiol* 147(9):891-901. <https://doi.org/10.1093/oxfordjournals.aje.a009543>.
- Horstmann M, McLachlan MS. 1994b. Textiles as a source of polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/F) in human skin and sewage sludge. *Environ Sci Pollut Res Int* 1(1):15-20. <https://doi.org/10.1007/bf02986918>.
- Hortsmann M, McLachlan M. 1994a. Textiles as a source of CDD/CDF in human skin and sewage sludge. *Environ Sci Pollut Res* 1(1):15-20. <https://doi.org/10.1007/BF02986918>.
- Hosnijeh FS, Boers D, Portengen L, et al. 2011. Long-term effects on humoral immunity among workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Occup Environ Med* 68(6):419-424. <https://doi.org/10.1136/oem.2010.058016>.
- Hosnijeh FS, Lenters V, Boers D, et al. 2012a. Changes in lymphocyte subsets in workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Occup Environ Med* 69(11):781-786. <https://doi.org/10.1136/oemed-2011-100463>.
- Hosnijeh FS, Boers D, Portengen L, et al. 2012b. Plasma cytokine concentrations in workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Front Oncol* 2:37. <https://doi.org/10.3389/fonc.2012.00037>.
- Houlihan M, Wemken N, Keogh M, et al. 2021. Concentrations of polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs) and polychlorinated biphenyls (PCBs) in human milk from Ireland: temporal trends and implications for nursing infant exposure. *J Environ Expo Assess* 1:2.
- Hsu CN, Lin YJ, Lu PC, et al. 2018. Maternal resveratrol therapy protects male rat offspring against programmed hypertension induced by TCDD and dexamethasone exposures: Is it relevant to aryl hydrocarbon receptor? *Int J Mol Sci* 19(8):2459. <https://doi.org/10.3390/ijms19082459>.
- Hsu CN, Chan JYH, Yu HR, et al. 2020. Targeting on gut microbiota-derived metabolite trimethylamine to protect adult male rat offspring against hypertension programmed by combined maternal high-fructose intake and dioxin exposure. *Int J Mol Sci* 21(15):5488. <https://doi.org/10.3390/ijms21155488>.
- Hu Z, Li J, Li B, et al. 2019. Annual changes in concentrations and health risks of PCDD/Fs, DL-PCBs and organochlorine pesticides in ambient air based on the Global Monitoring Plan in São Paulo. *Environ Pollut* 255(Pt 2):113310. <https://doi.org/10.1016/j.envpol.2019.113310>.
- Huang W, Koller LD. 1998. 2,3,7,8-Tetrachlorodibenzo-p-dioxin co-stimulates staphylococcal enterotoxin beta (SEB) cytokine production and phenotypic cell cycling in Long-Evans rats. *Int J Immunopharmacol* 20(1-3):39-56.
- Huang W, Koller LD. 1999. Effect of a single or repeated dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on T cell subpopulations in the Long-Evans rat. *Toxicol Lett* 109(1-2):97-104. [https://doi.org/10.1016/S0378-4274\(99\)00125-3](https://doi.org/10.1016/S0378-4274(99)00125-3).

8. REFERENCES

- Huang CY, Wu CL, Yang YC, et al. 2015. Association between dioxin and diabetes mellitus in an endemic area of exposure in Taiwan: A population-based study. *Medicine* 94(42):e1730. <https://doi.org/10.1097/MD.0000000000001730>.
- Huang CY, Wu CL, Wu JS, et al. 2016. Association between blood dioxin level and chronic kidney disease in an endemic area of exposure. *PLoS ONE* 11(3):e0150248. <https://doi.org/10.1371/journal.pone.0150248>.
- Hui LL, Lam HS, Lau EYY, et al. 2016. Prenatal dioxin exposure and neurocognitive development in Hong Kong 11-year-old children. *Environ Res* 150:205-212. <https://doi.org/10.1016/j.envres.2016.06.003>.
- Hui LL, Lam HS, Lau EYY, et al. 2019. Prenatal exposure to dioxins and subsequent neurocognitive and developmental function in Hong Kong Chinese children. *Hong Kong Med J* 25(1 Suppl 3):35-39.
- Huisman M, Koopman-Esseboom C, Fidler V, et al. 1995a. Perinatal exposure to polychlorinated biphenyls and dioxins and its effect on neonatal neurological development. *Early Hum Develop* 41:111-127. [https://doi.org/10.1016/0378-3782\(94\)01611-R](https://doi.org/10.1016/0378-3782(94)01611-R).
- Huisman M, Koopman-Esseboom C, Lanting CI, et al. 1995b. Neurological condition in 18-month-old children perinatally exposed to polychlorinated biphenyls and dioxins. *Early Hum Develop* 43:165-176. [https://doi.org/10.1016/0378-3782\(95\)01674-0](https://doi.org/10.1016/0378-3782(95)01674-0).
- Hülster A, Muller J, Marschner H. 1994. Soil-plant transfer of polychlorinated dibenzo-p-dioxins to vegetables of the cucumber family (Curcurbitaceae). *Envir Sci Technol* 28(6):1110-1115.
- Hunt GT, Maisel BE. 1992. Atmospheric concentrations of PCDDs/PCDFs in southern California. *J Air Waste Manage Assoc* 42(5):672-680.
- Huntley SL, Iannuzzi TJ, Avantaggio JD, et al. 1997. Combined sewer overflows (CSOs) as sources of sediment contamination in the lower Passaic River, New Jersey: Polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans, and polychlorinated biphenyls. *Chemosphere* 34(2):233-250. [https://doi.org/10.1016/S0045-6535\(96\)00374-8](https://doi.org/10.1016/S0045-6535(96)00374-8).
- Hurst CH, Abbott BD, DeVito MJ, et al. 1998a. 2,3,7,8-Tetrachlorodibenzo-p-dioxin in pregnant Long Evans rats: Disposition to maternal and embryo/fetal tissues. *Toxicol Sci* 45(2):129-136. <https://doi.org/10.1093/TOXSCI/45.2.129>.
- Hurst C, Abbott B, De VM, et al. 1998b. Acute administration of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in Long Evans rats. Comparison of fetal tissue levels and adverse developmental effects. *Organohalogen Compounds* 38:359-362.
- Hurst CH, DeVito MJ, Setzer RW, et al. 2000a. Acute administration of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in pregnant Long Evans rats: Association of measured tissue concentrations with developmental effects. *Toxicol Sci* 53(2):411-420. <https://doi.org/10.1093/TOXSCI/53.2.411>.
- Hurst CH, DeVito MJ, Birnbaum LS. 2000b. Tissue disposition of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in maternal and developing Long-Evans rats following subchronic exposure. *Toxicol Sci* 57(2):275-283. <https://doi.org/10.1093/TOXSCI/57.2.275>.
- Hurst CH, Abbott B, Schmid JE, et al. 2002. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) disrupts early morphogenetic events that form the lower reproductive tract in female rat fetuses. *Toxicol Sci* 65(1):87-98. <https://doi.org/10.1093/toxsci/65.1.87>.
- Hussain S, Ehrenberg L, Lofroth G, et al. 1972. Mutagenic effects of TCDD on bacterial systems. *Ambio* 1:32-33.
- Hutzinger O, Blumich MJ, Berg M, et al. 1985. Sources and fate of PCDDs and PCDFs: An overview. *Chemosphere* 14:581-600. [https://doi.org/10.1016/0045-6535\(85\)90167-5](https://doi.org/10.1016/0045-6535(85)90167-5).
- Huuskonen H, Undila M, Pohjanvirta R, et al. 1994. Developmental toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in the most TCDD-resistant and -susceptible rat strains. *Toxicol Appl Pharmacol* 124(2):174-180. <https://doi.org/10.1006/taap.1994.1021>.
- Huwe J, Petroske E, Feil V. 1997. Dihydroxy conjugates of 1,3,7,8- and 1,4,7,8-tetrachlorodibenzo-p-dioxins in rat bile. *Organohalogen Compounds* 34:188-190.

8. REFERENCES

- Huwe JK, Feil VJ, Larsen GL, et al. 1998. Metabolism and disposition of 1,4,7,8-tetrachlorodibenzo-p-dioxin in rats. *Chemosphere* 37(9-12):1885-1893. [https://doi.org/10.1016/S0045-6535\(98\)00255-0](https://doi.org/10.1016/S0045-6535(98)00255-0).
- Iamiceli AL, Abate V, Abballe A, et al. 2021. Biomonitoring of the adult population living near the waste incinerator of Turin: Serum concentrations of PCDDs, PCDFs, and PCBs after three years from the plant start-up. *Chemosphere* 272:129882. <https://doi.org/10.1016/j.chemosphere.2021.129882>.
- IARC. 1977. IARC monographs on the evaluation of the carcinogenic risk of chemicals to man. Volume 15: Some fumigants, the herbicides 2,4-D and 2,4,5-T, chlorinated dibenzodioxins and miscellaneous industrial chemicals. Lyon, France: International Agency for Research on Cancer. <https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Some-Fumigants-The-Herbicides-2-4-D-And-2-4-5-T-Chlorinated-Dibenzodioxins-And-Miscellaneous-Industrial-Chemicals-1977>. April 18, 2024.
- IARC. 1986a. Occupational exposures to chlorophenols. International Agency for Research on Cancer. IARC Monogr 41:319-338.
- IARC. 1986b. Occupational exposures to chlorophenoxy herbicides. International Agency for Research on Cancer. IARC Monogr 41:357-380.
- IARC. 1997. Polychlorinated dibenzo-para-dioxins. IARC monographs on the evaluation of carcinogenic risks to humans. Volume 69: Polychlorinated dibenzo-para-dioxins and polychlorinated dibenzofurans. Lyon, France: International Agency for Research on Cancer. 33-342. <https://publications.iarc.fr/87>. December 14, 2022.
- IARC. 2012. 2,3,7,8-Tetrachlorodibenzopara-dioxin, 2,3,4,7,8-pentachlorodibenzofuran, and 3,3',4,4',5-pentachlorobiphenyl IARC monographs on the evaluation of carcinogenic risks to humans. Volume 100F: Chemical agents and related occupations. Lyon, France: International Agency for Research on Cancer. 338-378. <https://monographs.iarc.who.int/wp-content/uploads/2018/06/mono100F-27.pdf>. December 14, 2022.
- Ikeda M, Inukai N, Mitsui T, et al. 2002. Changes in fetal brain aromatase activity following in utero 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure in rats. *Environ Toxicol Pharmacol* 11(1):1-7. [https://doi.org/10.1016/s1382-6689\(01\)00094-1](https://doi.org/10.1016/s1382-6689(01)00094-1).
- Ikeda M, Mitsui T, Setani K, et al. 2005a. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in rats disrupts brain sexual differentiation. *Toxicol Appl Pharmacol* 205(1):98-105. <https://doi.org/10.1016/j.taap.2004.09.010>.
- Ikeda M, Tamura M, Yamashita J, et al. 2005b. Repeated in utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure affects male gonads in offspring, leading to sex ratio changes in F2 progeny. *Toxicol Appl Pharmacol* 206(3):351-355. <https://doi.org/10.1016/j.taap.2004.11.019>.
- Ikeno T, Miyashita C, Nakajima S, et al. 2018. Effects of low-level prenatal exposure to dioxins on cognitive development in Japanese children at 42 months. *Sci Total Environ* 618:1423-1430. <https://doi.org/10.1016/j.scitotenv.2017.09.267>.
- İlhan S, Ateşşahin D, Ateşşahin A, et al. 2015. 2,3,7,8-Tetrachlorodibenzo-p-dioxin-induced hypertension: the beneficial effects of melatonin. *Toxicol Ind Health* 31(4):298-303. <https://doi.org/10.1177/0748233712472521>.
- Ilsen A, Briet JM, Koppe JG, et al. 1996. Signs of enhanced neuromotor maturation in children due to perinatal load with background levels of dioxins. *Chemosphere* 33:1317-1326. [https://doi.org/10.1016/0045-6535\(96\)00269-X](https://doi.org/10.1016/0045-6535(96)00269-X).
- Inouye K, Shinkyo R, Takita T, et al. 2002. Metabolism of polychlorinated dibenzo-p-dioxins (PCDDs) by human cytochrome P450-dependent monooxygenase systems. *J Agric Food Chem* 50(19):5496-5502. <https://doi.org/10.1021/JF020415Z>.
- Inouye K, Ito T, Fujimaki H, et al. 2003. Suppressive effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on the high-affinity antibody response in C57BL/6 mice. *Toxicol Sci* 74(2):315-324. <https://doi.org/10.1093/TOXSCI/KFG132>.

8. REFERENCES

- Inouye K, Pan X, Imai N, et al. 2005. T cell-derived IL-5 production is a sensitive target of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Chemosphere* 60(7):907-913. <https://doi.org/10.1016/j.chemosphere.2005.01.014>.
- Inui H, Wakai T, Gion K, et al. 2008. Differential uptake for dioxin-like compounds by zucchini subspecies. *Chemosphere* 73(10):1602-1607. <https://doi.org/10.1016/j.chemosphere.2008.08.013>.
- Inui H, Wakai T, Gion K, et al. 2011. Congener specificity in the accumulation of dioxins and dioxin-like compounds in zucchini plants grown hydroponically. *Biosci Biotechnol Biochem* 75(4):705-710. <https://doi.org/10.1271/bbb.100833>.
- IRIS. 2002. Chemical assessment summary: Hexachlorodibenzo-p-dioxin (HxCDD), mixture of 1,2,3,6,7,8-HxCDD and 1,2,3,7,8,9-HxCDD; CASRN 57653-85-7 and 19408-74-3. Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency. https://iris.epa.gov/static/pdfs/0166_summary.pdf. January 4, 2023.
- IRIS. 2012. Chemical assessment summary: 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD); CASRN 1746-01-6. Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency. https://iris.epa.gov/static/pdfs/1024_summary.pdf. January 4, 2023.
- Isensee AR. 1978. Bioaccumulation of 2,3,7,8-tetrachlorodibenzo-para-dioxin. *Ecol Bull* 27:255-262.
- Ishida T, Matsumoto Y, Takeda T, et al. 2010. Distribution of 14C-2,3,7,8-tetrachlorodibenzo-p-dioxin to the brain and peripheral tissues of fetal rats and its comparison with adults. *J Toxicol Sci* 35(4):563-569. <https://doi.org/10.2131/jts.35.563>.
- Ishihara K, Warita K, Tanida T, et al. 2007. Does paternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) affect the sex ratio of offspring? *J Vet Med Sci* 69(4):347-352. <https://doi.org/10.1292/jvms.69.347>.
- Ishihara K, Ohsako S, Tasaka K, et al. 2010. When does the sex ratio of offspring of the paternal 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure decrease: in the spermatozoa stage or at fertilization? *Reprod Toxicol* 29(1):68-73. <https://doi.org/10.1016/j.reprotox.2009.09.009>.
- Ishimura R, Ohsako S, Miyabara Y, et al. 2002. Increased glycogen content and glucose transporter 3 mRNA level in the placenta of Holtzman rats after exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 178(3):161-171. <https://doi.org/10.1006/taap.2001.9333>.
- Iszatt N, Stigum H, Govarts E, et al. 2016. Perinatal exposure to dioxins and dioxin-like compounds and infant growth and body mass index at seven years: A pooled analysis of three European birth cohorts. *Environ Int* 94:399-407. <https://doi.org/10.1016/j.envint.2016.04.040>.
- Ito T, Inouye K, Fujimaki H, et al. 2002. Mechanism of TCDD-induced suppression of antibody production: Effect on T cell-derived cytokine production in the primary immune reaction of mice. *Toxicol Sci* 70(1):46-54. <https://doi.org/10.1093/toxsci/70.1.46>.
- Ito T, Inouye K, Nohara K, et al. 2008. TCDD exposure exacerbates atopic dermatitis-related inflammation in NC/Nga mice. *Toxicol Lett* 177(1):31-37. <https://doi.org/10.1016/j.toxlet.2007.12.011>.
- Jablonska O, Shi Z, Valdez KE, et al. 2010. Temporal and anatomical sensitivities to the aryl hydrocarbon receptor agonist 2,3,7,8-tetrachlorodibenzo-p-dioxin leading to premature acyclicity with age in rats. *Int J Androl* 33(2):405-412. <https://doi.org/10.1111/j.1365-2605.2009.01031.x>.
- Jacobs H, Dennefeld C, Féret B, et al. 2011. Retinoic acid drives aryl hydrocarbon receptor expression and is instrumental to dioxin-induced toxicity during palate development. *Environ Health Perspect* 119(11):1590-1595. <https://doi.org/10.1289/ehp.1003075>.
- Jansing P, Korff R. 1994. Blood levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin and γ -globulins in a follow-up investigation of employees with chloracne. *J Dermatol Sci* 8:91-95. [https://doi.org/10.1016/0923-1811\(94\)90001-9](https://doi.org/10.1016/0923-1811(94)90001-9).
- Jarman WM, Burns SA, Chang RR, et al. 1993. Determination of PCDDs, PCDFs, and PCBs in California Peregrine falcons (FALCO PEREGRINUS) and their eggs. *Environ Toxic Chem* 12(1):105-114. <https://doi.org/10.1002/ETC.5620120112>.
- JECFA. 2002. Polychlorinated dibenzodioxins, polychlorinated dibenzofurans and coplanar polychlorinated biphenyls. Evaluation of certain food additives and contaminants: Fifty-seventh

8. REFERENCES

- report of the Joint FAO/WHO Expert Committee on Food Additives. Geneva: World Health Organization. 121-146. WHO Technical Report Series No. 909.
https://apps.who.int/iris/bitstream/handle/10665/42578/WHO_TRS_909.pdf. January 9, 2023.
- Jennings AM, Wild G, Ward JD, et al. 1988. Immunological abnormalities 17 years after accidental exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Br J Ind Med* 45:701-704.
<https://doi.org/10.1136/oem.45.10.701>.
- Jin MH, Hong CH, Lee HY, et al. 2010. Toxic effects of lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on development of male reproductive system: involvement of antioxidants, oxidants, and p53 protein. *Environ Toxicol* 25(1):1-8.
<https://doi.org/10.1002/tox.20466>.
- Jirasek L, Kalensky J, Kubec K, et al. 1976. [Chloracne, porphyria cutanea tarda and other intoxication by herbicides]. *Hautarzt* 27:328-333. (German)
- Joffrin N, Noirez P, Antignac JP, et al. 2018. Release and toxicity of adipose tissue-stored TCDD: Direct evidence from a xenografted fat model. *Environ Int* 121(Pt 2):1113-1120.
<https://doi.org/10.1016/j.envint.2018.10.027>.
- Johnson KL, Cummings AM, Birnbaum LS. 1997. Promotion of endometriosis in mice by polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls. *Environ Health Perspect* 105(7):750-755. <https://doi.org/10.1289/ehp.97105750>.
- Johnson KJ, Passage J, Lin H, et al. 2020. Dioxin male rat reproductive toxicity mode of action and relative potency of 2,3,7,8-tetrachlorodibenzo-p-dioxin and 2,3,7,8-tetrachlorodibenzofuran characterized by fetal pituitary and testis transcriptome profiling. *Reprod Toxicol* 93:146-162.
<https://doi.org/10.1016/j.reprotox.2020.02.008>.
- Jokinen MP, Walker NJ, Brix AE, et al. 2003. Increase in cardiovascular pathology in female Sprague-Dawley rats following chronic treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin and 3,3',4,4',5-pentachlorobiphenyl. *Cardiovasc Toxicol* 3(4):299-310. <https://doi.org/10.1385/CT:3:4:299>.
- Jones EL, Krizek HA. 1962. A technic for testing acnegenic potency in rabbits applied to the potent acnegen 2,3,7,8-tetrachlorodibenzo-p-dioxin. *J Invest Dermatol* 39:511-517.
<https://doi.org/10.1038/JID.1962.150>.
- Jones PD, Giesy JP, Newsted JL, et al. 1994. Accumulation of 2,3,7,8-tetrachlorodibenzo-p-dioxin equivalents by double-crested cormorant (*Phalacrocorax auritus*, Pelicaniformes) chicks in the North American Great Lakes. *Ecotoxicol Environ Saf* 27:192-209.
<https://doi.org/10.1006/EESA.1994.1016>.
- Josephson J. 1983. Chlorinated dioxins and furans in the environment. *Environ Sci Technol* 17:124A-128A. <https://doi.org/10.1021/ES00109A716>.
- Jung D, Berg PA, Edler L, et al. 1998. Immunologic findings in workers formerly exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin and its congeners. *Environ Health Perspect* 106(Suppl 2):689-695.
<https://doi.org/10.1289/ehp.98106689>.
- Jung NK, Park JY, Park JH, et al. 2010. Attenuation of cell cycle progression by 2,3,7,8-tetrachlorodibenzo-p-dioxin eliciting ovulatory blockade in gonadotropin-primed immature rats. *Endocr J* 57(10):863-871. <https://doi.org/10.1507/endocrj.k10e-220>.
- Kabir A, Zendehdel R, Tayefeh-Rahimian R. 2018. Dioxin exposure in the manufacture of pesticide production as a risk factor for death from prostate cancer: A meta-analysis. *Iran J Public Health* 47(2):148-155.
- Kahn PC, Gochfeld M, Nygren M, et al. 1988. Dioxins and dibenzofurans in blood and adipose tissue of Agent Orange-exposed Vietnam veterans and matched controls. *JAMA* 259:1661-1667.
<https://doi.org/10.1001/JAMA.1988.03720110023029>.
- Kahn LG, Han X, Koshy TT, et al. 2018. Adolescents exposed to the World Trade Center collapse have elevated serum dioxin and furan concentrations more than 12 years later. *Environ Int* 111:268-278.
<https://doi.org/10.1016/j.envint.2017.11.026>.
- Kakeyama M, Sone H, Miyabara Y, et al. 2003. Perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin alters activity-dependent expression of BDNF mRNA in the neocortex and male rat sexual

8. REFERENCES

- behavior in adulthood. *Neurotoxicology* 24(2):207-217. [https://doi.org/10.1016/S0161-813X\(02\)00214-0](https://doi.org/10.1016/S0161-813X(02)00214-0).
- Kakeyama M, Endo T, Yamanouchi K, et al. 2007. Maternal exposure to a low dose dioxin affects the paired associative learning behavior of offspring of Long-Evans rats. *Organohalogen Compounds* 69:401-404.
- Kakeyama M, Sone H, Tohyama C. 2008. Perinatal exposure of female rats to 2,3,7,8-tetrachlorodibenzo-p-dioxin induces central precocious puberty in the offspring. *J Endocrinol* 197(2):351-358. <https://doi.org/10.1677/JOE-08-0062>.
- Kakeyama M, Endo T, Zhang Y, et al. 2014. Disruption of paired-associate learning in rat offspring perinatally exposed to dioxins. *Arch Toxicol* 88(3):789-798. <https://doi.org/10.1007/s00204-013-1161-y>.
- Kakizuka S, Takeda T, Komiya Y, et al. 2015. Dioxin-produced alteration in the profiles of fecal and urinary metabolomes: A change in bile acids and its relevance to toxicity. *Biol Pharm Bull* 38(10):1484-1495. <https://doi.org/10.1248/bpb.b15-00235>.
- Kang HK, Dalager NA, Needham LL, et al. 2006. Health status of Army Chemical Corps Vietnam veterans who sprayed defoliant in Vietnam. *Am J Ind Med* 49(11):875-884. <https://doi.org/10.1002/ajim.20385>.
- Kaplan BL, Crawford RB, Kovalova N, et al. 2011. TCDD adsorbed on silica as a model for TCDD contaminated soils: Evidence for suppression of humoral immunity in mice. *Toxicology* 282(3):82-87. <https://doi.org/10.1016/j.tox.2011.01.013>.
- Kasai N, Sakaki T, Shinkyo R, et al. 2004. Sequential metabolism of 2,3,7-trichlorodibenzo-p-dioxin (2,3,7-triCDD) by cytochrome P450 and UDP-glucuronosyltransferase in human liver microsomes. *Drug Metab Dispos* 32(8):870-875.
- Kattainen H, Tuukkanen J, Simanainen U, et al. 2001. In utero/lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure impairs molar tooth development in rats. *Toxicol Appl Pharmacol* 174(3):216-224. <https://doi.org/10.1006/taap.2001.9216>.
- Kaye CI, Rao S, Simpson SJ, et al. 1985. Evaluation of chromosomal damage in males exposed to Agent Orange and their families. *J Craniofac Genet Dev Bio* 1:259-265.
- Kearney PC, Isensee AR, Helling CS, et al. 1971. Environmental significance of chlorodioxins. *Adv Chem Ser* 120:105-111. <https://doi.org/10.1021/ba-1973-0120.ch011>.
- Keller JM, Huet-Hudson YM, Leamy LJ. 2007. Qualitative effects of dioxin on molars vary among inbred mouse strains. *Arch Oral Biol* 52(5):450-454. <https://doi.org/10.1016/j.archoralbio.2006.10.017>.
- Keller JM, Zelditch ML, Huet YM, et al. 2008. Genetic differences in sensitivity to alterations of mandible structure caused by the teratogen 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Pathol* 36(7):1006-1013. <https://doi.org/10.1177/0192623308327409>.
- Kelling CK, Christian BJ, Inhorn SL, et al. 1985. Hypophagia-induced weight loss in mice, rats, and guinea pigs treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Fundam Appl Toxicol* 5(4):700-712. [https://doi.org/10.1016/0272-0590\(85\)90194-0](https://doi.org/10.1016/0272-0590(85)90194-0).
- Kelling CK, Menahan LA, Peterson RE. 1987. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin treatment on mechanical function of the rat heart. *Toxicol Appl Pharmacol* 91(3):497-501. [https://doi.org/10.1016/0041-008x\(87\)90072-x](https://doi.org/10.1016/0041-008x(87)90072-x).
- Kelly TJ, Czuczwa JM, Sticksel PR, et al. 1991. Atmospheric and tributary inputs of toxic substances to Lake Erie. *J Great Lakes Res* 17(4):504-516. [https://doi.org/10.1016/S0380-1330\(91\)71386-5](https://doi.org/10.1016/S0380-1330(91)71386-5).
- Kerger B, Corbett G, El-Sururi S, et al. 1995. Validating dermal exposure assessment techniques for dioxin using body burden data and pharmacokinetic modeling. *Organohalogen Compounds* 25:137-141.
- Kerger BD, Leung HW, Scott P, et al. 2006. Age- and concentration-dependent elimination half-life of 2,3,7,8-tetrachlorodibenzo-p-dioxin in Seveso children. *Environ Health Perspect* 114(10):1596-1602. <https://doi.org/10.1289/ehp.8884>.

8. REFERENCES

- Kerkvliet NI. 1995. Immunological effects of chlorinated dibenzo-p-dioxins. *Environ Health Perspect* 103(Suppl 9):47-53. <https://doi.org/10.1289/ehp.95103s947>.
- Kerkvliet N. 2009. AHR-mediated immunomodulation: The role of altered gene transcription. *Biochem Pharmacol* 77:746-760. <https://doi.org/10.1016/j.bcp.2008.11.021>.
- Kerkvliet NI. 2012. TCDD: an environmental immunotoxicant reveals a novel pathway of immunoregulation-a 30-year odyssey. *Toxicol Pathol* 40(2):138-142. <https://doi.org/10.1177/0192623311427710>.
- Kerkvliet NI, Brauner JA. 1987. Mechanisms of 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin (HpCDD)-induced humoral immune suppression: Evidence of primary defect in T-cell regulation. *Toxicol Appl Pharmacol* 87(1):18-31. [https://doi.org/10.1016/0041-008x\(87\)90080-9](https://doi.org/10.1016/0041-008x(87)90080-9).
- Ketchum NS, Michalek JE. 2005. Postservice mortality of Air Force veterans occupationally exposed to herbicides during the Vietnam War: 20-year follow-up results. *Mil Med* 170(5):406-413. <https://doi.org/10.7205/MILMED.170.5.406>.
- Khairy MA, Lohmann R. 2020a. Assessing benthic bioaccumulation of polychlorinated dioxins/furans and polychlorinated biphenyls in the lower Passaic River (NJ, USA) based on in situ passive sampling. *Environ Toxicol Chem* 39(6):1174-1185. <https://doi.org/10.1002/etc.4716>.
- Khairy MA, Lohmann R. 2020b. Supplemental material: Assessing benthic bioaccumulation of polychlorinated dioxins/furans and polychlorinated biphenyls in the lower Passaic River (NJ, USA) based on in situ passive sampling. *Environ Toxicol Chem* 39(6) <https://doi.org/10.1002/etc.4716>.
- Khera KS, Ruddick JA. 1973. Polychlorodibenzo-p-dioxins: Perinatal effects and the dominant lethal test in Wistar rats. In: Blair EH, ed. *Chlorodioxins-origin and fate (Advances in Chemistry Series : No 120)*. Washington, DC: American Chemical Society, 70-84.
- Kieatiwong S, Nguyen LV, Herbert VR, et al. 1990. Photolysis of chlorinated dioxins in organic solvents and on soils. *Environ Sci Technol* 24:1575-1580. <https://doi.org/10.1021/ES00080A018>.
- Kim HA, Kim EM, Park YC, et al. 2003. Immunotoxicological effects of Agent Orange exposure to the Vietnam War Korean veterans. *Ind Health* 41(3):158-166. <https://doi.org/10.2486/INDHEALTH.41.158>.
- Kim JB, Kang WY, Moon SG, et al. 2012. Clinical outcome of veterans with acute coronary syndrome who had been exposed to agent orange. *Chonnam Med J* 48(1):47-51. <https://doi.org/10.4068/cmj.2012.48.1.47>.
- Kim KH, Kim W, Kang WY, et al. 2014. The impact of Agent Orange on characteristics of coronary artery lesion and repeat revascularization. *Int J Cardiol* 174(1):187-189. <https://doi.org/10.1016/j.ijcard.2014.03.182>.
- Kimbrough RD, Carter CD, Liddle JA, et al. 1977. Epidemiology and pathology of a tetrachloro-dibenzodioxin poisoning episode. *Arch Environ Health* 32(2):77-85. <https://doi.org/10.1080/00039896.1977.10667259>.
- Kimbrough RD, Falk H, Stehr P, et al. 1984. Health implications of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) contamination of residential soil. *J Toxicol Environ Health* 14:47-93.
- Kimura E, Kubo K, Matsuyoshi C, et al. 2015. Developmental origin of abnormal dendritic growth in the mouse brain induced by in utero disruption of aryl hydrocarbon receptor signaling. *Neurotoxicol Teratol* 52(Pt A):42-50. <https://doi.org/10.1016/j.ntt.2015.10.005>.
- Kimura E, Endo T, Yoshioka W, et al. 2016. In utero and lactational dioxin exposure induces Sema3b and Sema3g gene expression in the developing mouse brain. *Biochem Biophys Res Commun* 476(2):108-113. <https://doi.org/10.1016/j.bbrc.2016.05.048>.
- Kinoshita H, Abe J, Akadegawa K, et al. 2006. Breakdown of mucosal immunity in gut by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Environ Health Prev Med* 11(5):256-263. <https://doi.org/10.1007/bf02898015>.
- Kissel JC, Robarge GM. 1988. Assessing the elimination of 2,3,7,8-TCDD from humans with a physiologically based pharmacokinetic model. *Chemosphere* 17:2017-2027. [https://doi.org/10.1016/0045-6535\(88\)90012-4](https://doi.org/10.1016/0045-6535(88)90012-4).

8. REFERENCES

- Kiukkonen A, Viluksela M, Sahlberg C, et al. 2002. Response of the incisor tooth to 2,3,7,8-tetrachlorodibenzo-p-dioxin in a dioxin-resistant and a dioxin-sensitive rat strain. *Toxicol Sci* 69(2):482-489. <https://doi.org/10.1093/TOXSCI/69.2.482>.
- Klawans HL. 1987. Dystonia and tremor following exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Mov Disord* 2:255-261. <https://doi.org/10.1002/mds.870020403>.
- Klee AJ. 1988. New approaches to the decontamination of hazardous wastes. In: Abbou R, ed. *Hazardous waste: Detection, control, treatment*. Amsterdam, The Netherlands: Elsevier Science Publishers B.V., 721-729.
- Kleeman JM, Olson JR, Chen SM, et al. 1986a. Metabolism and disposition of 2,3,7,8-tetrachlorodibenzo-p-dioxin in rainbow trout. *Toxicol Appl Pharmacol* 83:391-401. [https://doi.org/10.1016/0041-008X\(86\)90221-8](https://doi.org/10.1016/0041-008X(86)90221-8).
- Kleeman JM, Olson JR, Chen SM, et al. 1986b. 2,3,7,8-Tetrachlorodibenzo-p-dioxin metabolism and disposition in yellow perch. *Toxicol Appl Pharmacol* 83:402-411. [https://doi.org/10.1016/0041-008X\(86\)90222-X](https://doi.org/10.1016/0041-008X(86)90222-X).
- Knerr S, Schrenk D. 2006. Carcinogenicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in experimental models. *Mol Nutr Food Res* 50(10):897-907. <https://doi.org/10.1002/mnfr.200600006>.
- Knutsen HK, Kvalem HE, Haugen M, et al. 2011. Sex, BMI and age in addition to dietary intakes influence blood concentrations and congener profiles of dioxins and PCBs. *Mol Nutr Food Res* 55(5):772-782. <https://doi.org/10.1002/mnfr.201000243>.
- Ko K, Theobald HM, Peterson RE. 2002. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in the C57BL/6J mouse prostate: Lobe-specific effects on branching morphogenesis. *Toxicol Sci* 70(2):227-237. <https://doi.org/10.1093/TOXSCI/70.2.227>.
- Kociba RJ, Keeler PA, Park CN, et al. 1976. 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD): results of a 13-week oral toxicity study in rats. *Toxicol Appl Pharmacol* 35(3):553-574. [https://doi.org/10.1016/0041-008X\(76\)90078-8](https://doi.org/10.1016/0041-008X(76)90078-8).
- Kociba RJ, Keyes DG, Beyer JE, et al. 1978. Results of a two-year chronic toxicity and oncogenicity study of 2,3,7,8-tetrachlorodibenzo-p-dioxin in rats. *Toxicol Appl Pharmacol* 46(2):279-303. [https://doi.org/10.1016/0041-008X\(78\)90075-3](https://doi.org/10.1016/0041-008X(78)90075-3).
- Koester CJ, Hites RA. 1992a. Wet and dry deposition of chlorinated dioxins and furans. *Environ Sci Technol* 26(7):1375-1382. <https://doi.org/10.1021/es00031a015>.
- Koester CJ, Hites RA. 1992b. Photo degradation of polychlorinated dioxins and dibenzofurans adsorbed to fly ash. *Environ Sci Technol* 26(3):502-507. <https://doi.org/10.1021/ES00027A008>.
- Kogevinas M, Saracci R, Winkelmann R, et al. 1993. Cancer incidence and mortality in women occupationally exposed to chlorophenoxy herbicides, chlorophenols, and dioxins. *Cancer Causes Control* 4(6):547-553. <https://doi.org/10.1007/BF00052430>.
- Kogevinas M, Kauppinen T, Winkelmann R, et al. 1995. Soft tissue sarcoma and non-Hodgkin's lymphoma in workers exposed to phenoxy herbicides, chlorophenols, and dioxins: two nested case-control studies. *Epidemiol* 6:396-402. <https://doi.org/10.1097/0001648-199507000-00012>.
- Kogevinas M, Becher H, Benn T, et al. 1997. Cancer mortality in workers exposed to phenoxy herbicides, chlorophenols, and dioxins. An expanded and updated international cohort study. *Am J Epidemiol* 145(12):1061-1075. <https://doi.org/10.1093/oxfordjournals.aje.a009069>.
- Kohn MC, Lucier GW, Clark GC, et al. 1993. A mechanistic model of effects of dioxin on gene expression in the rat liver. *Toxicol Appl Pharmacol* 120(1):138-154. <https://doi.org/10.1006/taap.1993.1096>.
- Kohn MC, Walker NJ, Kim AH, et al. 2001. Physiological modeling of a proposed mechanism of enzyme induction by TCDD. *Toxicology* 162(3):193-208. [https://doi.org/10.1016/S0300-483X\(01\)00363-8](https://doi.org/10.1016/S0300-483X(01)00363-8).
- Kono Y, Oka A, Tada H, et al. 2015. Perinatal dioxin exposure and psychosocial and behavioral development in school-aged children. *Early Hum Dev* 91(9):499-503. <https://doi.org/10.1016/j.earlhumdev.2015.06.001>.

8. REFERENCES

- Koopman-Esseboom C, Morse DC, Weisglas-Kuperus N, et al. 1994. Effects of dioxins and polychlorinated biphenyls on thyroid hormone status of pregnant women and their infants. *Pediatr Res* 36:468-473. <https://doi.org/10.1203/00006450-199611000-00005>.
- Koppe AK, Boverhof DR, Burgoon LD, et al. 2008. Comparative toxicogenomic examination of the hepatic effects of PCB126 and TCDD in immature, ovariectomized C57BL/6 mice. *Toxicol Sci* 102(1):61-75. <https://doi.org/10.1093/TOXSCI/KFM289>.
- Koppe AK, Burgoon LD, Ibrahim-Aibo D, et al. 2010. PCB153-elicited hepatic responses in the immature, ovariectomized C57BL/6 mice: comparative toxicogenomic effects of dioxin and non-dioxin-like ligands. *Toxicol Appl Pharmacol* 243(3):359-371. <https://doi.org/10.1016/j.taap.2009.12.003>.
- Kopf PG, Scott JA, Agbor LN, et al. 2010. Cytochrome P4501A1 is required for vascular dysfunction and hypertension induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Sci* 117(2):537-546. <https://doi.org/10.1093/toxsci/kfq218>.
- Koppe JG. 1995. Nutrition and breast-feeding. *Eur J Obstet Gynecol Reprod Biol* 61(1):73-78. [https://doi.org/10.1016/0028-2243\(95\)02156-m](https://doi.org/10.1016/0028-2243(95)02156-m).
- Koppe JG, Pluim HJ, Olie K, et al. 1991. Breast milk, dioxins and the possible effects on the health of newborn infants. *Sci Total Environ* 106(1-2):33-41. [https://doi.org/10.1016/0048-9697\(91\)90018-a](https://doi.org/10.1016/0048-9697(91)90018-a).
- Korrick SA, Lee MM, Williams PL, et al. 2011. Dioxin exposure and age of pubertal onset among Russian boys. *Environ Health Perspect* 119(9):1339-1344. <https://doi.org/10.1289/ehp.1003102>.
- Koshakji RP, Harbison RD, Bush MT. 1984. Studies on the metabolic fate of [¹⁴C]2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in the mouse. *Toxicol Appl Pharmacol* 73:69-77. [https://doi.org/10.1016/0041-008X\(84\)90054-1](https://doi.org/10.1016/0041-008X(84)90054-1).
- Koshioka M, Yamada T, Kanazawa J, et al. 1989a. Photodegradation products of tetrachlorodibenzo-p-dioxins under xenon lamp irradiation. *J Pestic Sci* 14:175-179. <https://doi.org/10.1584/JPESTICS.14.175>.
- Koshioka M, Yamada T, Kanazawa J, et al. 1989b. Photolysis of tetrachlorodibenzo-p-dioxins. *Chemosphere* 19:681-684. [https://doi.org/10.1016/0045-6535\(89\)90390-1](https://doi.org/10.1016/0045-6535(89)90390-1).
- Koshioka M, Yamada T, Kanazawa J, et al. 1989c. Wavelength-dependence of photodegradation of tetrachlorodibenzo-p-dioxins. *J Pestic Sci* 14:181-187. <https://doi.org/10.1584/JPESTICS.14.181>.
- Kouri RE, Ratrie H, Whitmire CE. 1974. Genetic control of susceptibility to 3-methylcholanthrene-induced lung subcutaneous sarcomas. *J Cancer* 13:714-720. <https://doi.org/10.1002/IJC.2910130515>.
- Kouri RE, Rude TH, Joglekar R, et al. 1978. 2,3,7,8-Tetrachlorodibenzo-p-dioxin as cocarcinogen causing 3-methylcholanthrene-initiated subcutaneous tumors in mice genetically "nonresponsive" at Ah locus. *Cancer Res* 38:2777-2783.
- Kransler KM, McGarrigle BP, Olson JR. 2007. Comparative developmental toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the hamster, rat and guinea pig. *Toxicology* 229(3):214-225. <https://doi.org/10.1016/j.tox.2006.10.019>.
- Kransler KM, McGarrigle BP, Swartz DD, et al. 2009. Lung development in the Holtzman rat is adversely affected by gestational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Sci* 107(2):498-511. <https://doi.org/10.1093/toxsci/kfn235>.
- Kreuzer PE, Csanady GA, Baur C, et al. 1997. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and congeners in infants. A toxicokinetic model of human lifetime body burden by TCDD with special emphasis on its uptake by nutrition. *Arch Toxicol* 71(6):383-400. <https://doi.org/10.1007/s002040050402>.
- Krowke R, Chahoud I, Baumann-Wilschke I, et al. 1989. Pharmacokinetics and biological activity of 2,3,7,8-tetrachlorodibenzo-p-dioxin: 2. Pharmacokinetics in rats using a loading-dose/maintenance-dose regime with high doses. *Arch Toxicol* 63:356-360. <https://doi.org/10.1007/BF00303123>.
- Kuehl DW, Cook PM, Batterman AR. 1985. Studies on the bioavailability of 2,3,7,8-TCDD from municipal incinerator fly ash to freshwater fish. *Chemosphere* 14:871-872. [https://doi.org/10.1016/0045-6535\(85\)90237-1](https://doi.org/10.1016/0045-6535(85)90237-1).

8. REFERENCES

- Kuehl DW, Butterworth BC, DeVita WM, et al. 1987a. Environmental contamination by polychlorinated dibenzo-p-dioxins and dibenzofurans associated with pulp and paper mill discharge. *Biomed Environ Mass Spectrom* 14:443-447. <https://doi.org/10.1002/BMS.1200140811>.
- Kuehl DW, Cook PM, Batterman AR, et al. 1987b. Bioavailability of polychlorinated dibenzo-p-dioxins and dibenzofurans from contaminated Wisconsin River sediment to carp. *Chemosphere* 16:667-679. [https://doi.org/10.1016/0045-6535\(87\)90003-8](https://doi.org/10.1016/0045-6535(87)90003-8).
- Kuehl DW, Cook PM, Batterman AR, et al. 1987c. Isomer dependent bioavailability of polychlorinated dibenzofurans from municipal incinerator fly ash to carp. *Chemosphere* 16:657-666. [https://doi.org/10.1016/0045-6535\(87\)90002-6](https://doi.org/10.1016/0045-6535(87)90002-6).
- Kuehl DW, Butterworth BC, McBride A, et al. 1989. Contamination of fish by 2,3,7,8-tetrachlorodibenzo-p-dioxin: A survey of fish from major watersheds in the United States. *Chemosphere* 18:1997-2014. [https://doi.org/10.1016/0045-6535\(89\)90483-9](https://doi.org/10.1016/0045-6535(89)90483-9).
- Kulkarni PS, Crespo JG, Afonso CA. 2008. Dioxins sources and current remediation technologies-a review. *Environ Int* 34(1):139-153. <https://doi.org/10.1016/j.envint.2007.07.009>.
- LaFleur L, Bousquet T, Ramage K, et al. 1990. Analysis of TCD and TCDF on the ppq-level in milk and food sources. *Chemosphere* 20(10-12):1657-1662. [https://doi.org/10.1016/0045-6535\(90\)90326-O](https://doi.org/10.1016/0045-6535(90)90326-O).
- LaGoy P. 1987. Estimated soil ingestion rates for use in risk assessment. *Risk Anal* 7:355-359. <https://doi.org/10.1111/J.1539-6924.1987.TB00471.X>.
- Lai ZW, Fiore NC, Gasiewicz TA, et al. 1998. 2,3,7,8-Tetrachlorodibenzo-p-dioxin and diethylstilbestrol affect thymocytes at different stages of development in fetal thymus organ culture. *Toxicol Appl Pharmacol* 149(2):167-177. <https://doi.org/10.1006/taap.1998.8368>.
- LaKind JS, Hays SM, Aylward LL, et al. 2009. Perspective on serum dioxin levels in the United States: an evaluation of the NHANES data. *J Expo Sci Environ Epidemiol* 19(4):435-441. <https://doi.org/10.1038/jes.2008.63>.
- Lamb JCIV, Moore JA. 1981. Development and viability of offspring of male mice treated with chlorinated phenoxy acids and 2,3,7,8-tetrachlorodibenzo-p-dioxin. *J Toxicol Environ Health* 8:835-844. <https://doi.org/10.1080/15287398109530119>.
- Lamb CL, Cholico GN, Pu X, et al. 2016. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) increases necroinflammation and hepatic stellate cell activation but does not exacerbate experimental liver fibrosis in mice. *Toxicol Appl Pharmacol* 311:42-51. <https://doi.org/10.1016/j.taap.2016.09.025>.
- Lambertino A, Persky V, Freels S, et al. 2021. Associations of PCBS, dioxins and furans with follicle-stimulating hormone and luteinizing hormone in postmenopausal women: National Health and Nutrition Examination Survey 1999-2002. *Chemosphere* 262:128309. <https://doi.org/10.1016/j.chemosphere.2020.128309>.
- Landers JP, Bunce NJ. 1991. The Ah receptor and the mechanism of dioxin toxicity. *Biochem J* 276:273-287. <https://doi.org/10.1042/BJ2760273>.
- Latchoumycandane C, Chitra C, Mathur P. 2002. Induction of oxidative stress in rat epididymal sperm after exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Arch Toxicol* 76(2):113-118. <https://doi.org/10.1007/s00204-001-0308-4>.
- Laurent C, Marchand P, Feidt C, et al. 2005. Tissue distribution and bioconcentration factors of PCDD/Fs in the liver and adipose tissue following chronic ingestion of contaminated milk in rats. *Chemosphere* 60(7):929-938. <https://doi.org/10.1016/J.CHEMOSPHERE.2005.01.041>.
- Lawrence GS, Gobas F. 1997. A pharmacokinetic analysis of interspecies extrapolation in dioxin risk assessment. *Chemosphere* 35(3):427-452. [https://doi.org/10.1016/S0045-6535\(97\)00108-2](https://doi.org/10.1016/S0045-6535(97)00108-2).
- Lawrence BP, Vorderstrasse BA. 2004. Activation of the aryl hydrocarbon receptor diminishes the memory response to homotypic influenza virus infection but does not impair host resistance. *Toxicol Sci* 79(2):304-314. <https://doi.org/10.1093/TOXSCI/KFH094>.
- Lawson CC, Schnorr TM, Whelan EA, et al. 2004. Paternal occupational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin and birth outcomes of offspring: Birth weight, preterm delivery, and birth defects. *Environ Health Perspect* 112(14):1403-1408. <https://doi.org/10.1289/ehp.7051>.

8. REFERENCES

- Lee CC, Yao YJ, Chen HL, et al. 2006. Fatty liver and hepatic function for residents with markedly high serum PCDD/Fs levels in Taiwan. *J Toxicol Environ Health A* 69(5):367-380.
<https://doi.org/10.1080/15287390500244972>.
- Lee Y, Wang L, Zhu J, et al. 2018. Atmospheric PM_{2.5} and polychlorinated dibenzo-p-dioxins and dibenzofurans in Taiwan. *Aerosol Air Qual Res* 18:762-779.
- Lee HA, Kyeong S, Kim DH. 2022. Long-term effects of defoliant exposure on brain atrophy progression in humans. *Neurotoxicology* 92:25-32. <https://doi.org/10.1016/j.neuro.2022.07.002>.
- Leeder JS, Kearns GL. 1997. Pharmacogenetics in pediatrics: implications for practice. *Pediatr Clin North Am* 44(1):55-77. [https://doi.org/10.1016/s0031-3955\(05\)70463-6](https://doi.org/10.1016/s0031-3955(05)70463-6).
- Leung H, Ku RH, Paustenbach DJ, et al. 1988. A physiologically based pharmacokinetic model for 2,3,7,8-tetrachlorodibenzo-p-dioxin in C57BL/6J and DBA/2J mice. *Toxicol Lett* 42(1):15-28. [https://doi.org/10.1016/0378-4274\(88\)90098-7](https://doi.org/10.1016/0378-4274(88)90098-7).
- Leung H, Wendling JM, Orth R, et al. 1990a. Relative distribution of 2,3,7,8-tetrachlorodibenzo-p-dioxin in human hepatic and adipose tissues. *Toxicol Lett* 50:275-282.
[https://doi.org/10.1016/0378-4274\(90\)90020-M](https://doi.org/10.1016/0378-4274(90)90020-M).
- Leung H, Paustenbach DJ, Murray FJ, et al. 1990b. A physiological pharmacokinetic description of the tissue distribution and enzyme-inducing properties of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the rat. *Toxicol Appl Pharmacol* 103:399-410. [https://doi.org/10.1016/0041-008X\(90\)90313-J](https://doi.org/10.1016/0041-008X(90)90313-J).
- Levy CJ. 1988. Agent Orange exposure and post-traumatic stress disorder. *J Nerv Ment Dis* 176:242-245.
- Lewis BC, Hudgins S, Lewis A, et al. 2001. In utero and lactational treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin impairs mammary gland differentiation but does not block the response to exogenous estrogen in the postpubertal female rat. *Toxicol Sci* 62(1):46-53.
<https://doi.org/10.1093/toxsci/62.1.46>.
- Li X, Rozman KK. 1995. Subchronic effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and their reversibility in male Sprague-Dawley rats. *Toxicology* 97(1-3):133-140.
[https://doi.org/10.1016/0300-483x\(94\)02938-q](https://doi.org/10.1016/0300-483x(94)02938-q).
- Li X, Johnson DC, Rozman KK. 1995a. Reproductive effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in female rats: Ovulation, hormonal regulation, and possible mechanism(s). *Toxicol Appl Pharmacol* 133(2):321-327. <https://doi.org/10.1006/taap.1995.1157>.
- Li X, Johnson DC, Rozman KK. 1995b. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on estrous cyclicity and ovulation in female Sprague-Dawley rats. *Toxicol Lett* 78(3):219-222.
[https://doi.org/10.1016/0378-4274\(95\)03252-g](https://doi.org/10.1016/0378-4274(95)03252-g).
- Li X, Weber LWD, Rozman KK. 1995c. Toxicokinetics of 2,3,7,8-tetrachlorodibenzo-p-dioxin in female Sprague-Dawley rats including placental and lactational transfer to fetuses and neonates. *Fundam Appl Toxicol* 27:70-76. <https://doi.org/10.1006/FAAT.1995.1109>.
- Li B, Liu HY, Dai LJ, et al. 2006. The early embryo loss caused by 2,3,7,8-tetrachlorodibenzo-p-dioxin may be related to the accumulation of this compound in the uterus. *Reprod Toxicol* 21(3):301-306.
<https://doi.org/10.1016/j.reprotox.2005.09.008>.
- Li CH, Shi B, He W, et al. 2010. Is it possible to antagonize 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced cleft palate by prenatal administration of folic acid? An experimental study. *Toxicol Ind Health* 26(5):281-286. <https://doi.org/10.1177/0748233710364964>.
- Liem AK, van Zorge JA. 1995. Dioxins and related compounds: Status and regulatory aspects. *Environ Sci Pollut Res Int* 2(1):46-56. <https://doi.org/10.1007/bf02987513>.
- Liem A, Hoogerbrugge R, Koostra PR, et al. 1991. Occurrence of dioxins in cow's milk in the vicinity of municipal waste incinerators and a metal reclamation plant in the Netherlands. *Chemosphere* 23(11-12):1675-1684. [https://doi.org/10.1016/0045-6535\(91\)90016-7](https://doi.org/10.1016/0045-6535(91)90016-7).
- Lignell S, Aune M, Darnerud PO, et al. 2016. Maternal body burdens of PCDD/Fs and PBDEs are associated with maternal serum levels of thyroid hormones in early pregnancy: a cross-sectional study. *Environ Health* 15:55. <https://doi.org/10.1186/s12940-016-0139-7>.

8. REFERENCES

- Lim M, Jacobson-Kram D, Bowman RE, et al. 1987. Effect of chronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on sister chromatid exchange levels in peripheral lymphocytes of the Rhesus monkey. *Cell Biol Toxicol* 3:279-284. <https://doi.org/10.1007/BF00117865>.
- Lin W, White KL. 1993. Production of complement component C3 in vivo following 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure. *J Toxicol Environ Health* 39:273-285. <https://doi.org/10.1080/15287399309531751>.
- Lin TM, Simanainen U, Moore RW, et al. 2002a. Critical windows of vulnerability for effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on prostate and seminal vesicle development in C57BL/6 mice. *Toxicol Sci* 69(1):202-209. <https://doi.org/10.1093/TOXSCI/69.1.202>.
- Lin TM, Ko K, Moore RW, et al. 2002b. Effects of aryl hydrocarbon receptor null mutation and in utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on prostate and seminal vesicle development in C57BL/6 mice. *Toxicol Sci* 68(2):479-487. <https://doi.org/10.1093/TOXSCI/68.2.479>.
- Lin CM, Li CY, Mao IF. 2006. Birth outcomes of infants born in areas with elevated ambient exposure to incinerator generated PCDD/Fs. *Environ Int* 32(5):624-629. <https://doi.org/10.1016/J.ENVINT.2006.02.003>.
- Lin L, Shih SI, Su JW, et al. 2010. Dry and wet deposition of polychlorinated dibenzo-p-dioxins and dibenzofurans on the drinking water treatment plant. *Aerosol Air Qual Res* 10(3):231-244. <https://doi.org/10.4209/aaqr.2009.09.0059>.
- Lind PM, van Bavel B, Salihovic S, et al. 2012. Circulating levels of persistent organic pollutants (POPs) and carotid atherosclerosis in the elderly. *Environ Health Perspect* 120(1):38-43. <https://doi.org/10.1289/ehp.1103563>.
- Lofroth G, Zebuhr Y. 1992. Polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) in mainstream and sidestream cigarette smoke. *Bull Environ Contam Toxicol* 48:789-794. <https://doi.org/10.1007/BF00201136>.
- Longnecker MP, Michalek JE. 2000. Serum dioxin level in relation to diabetes mellitus among Air Force veterans with background levels of exposure. *Epidemiology* 11(1):44-48. <https://doi.org/10.1097/00001648-200001000-00010>.
- Loonen H, Tonkes M, Parsons JR, et al. 1993. Relative contributions of water and food to the bioaccumulation of a mixture of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans in guppies. *Sci Total Environ* 134(S1):491-498. [https://doi.org/10.1016/S0048-9697\(05\)80051-8](https://doi.org/10.1016/S0048-9697(05)80051-8).
- Loprieno N, Sbrana I, Rusciano D, et al. 1982. In vivo cytogenic studies on mice and rats exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). In: Hutzinger O, Frei RW, Merian E, et al., eds. *Chlorinated dioxins and related compounds: Impact on the environment*. New York, NY: Pergamon Press, 419-428.
- Lorber M, Saunders P, Ferrario J, et al. 1997. A statistical survey of dioxin-like compounds in United States pork fat. *Organohalogen Compounds* 32:80-86.
- Lorber MN, Winters DL, Griggs J, et al. 1998. A national survey of dioxin-like compounds in the United States milk supply. *Organohalogen Compounds* 38:87-97.
- Lorber M, Patterson D, Huwe J, et al. 2009. Evaluation of background exposures of Americans to dioxin-like compounds in the 1990s and the 2000s. *Chemosphere* 77(5):640-651. <https://doi.org/10.1016/j.chemosphere.2009.08.016>.
- Lu CF, Wang YM, Peng SQ, et al. 2009. Combined effects of repeated administration of 2,3,7,8-tetrachlorodibenzo-p-dioxin and polychlorinated biphenyls on kidneys of male rats. *Arch Environ Contam Toxicol* 57(4):767-776. <https://doi.org/10.1007/s00244-009-9323-x>.
- Lu C, Wang Y, Sheng Z, et al. 2010. NMR-based metabonomic analysis of the hepatotoxicity induced by combined exposure to PCBs and TCDD in rats. *Toxicol Appl Pharmacol* 248(3):178-184. <https://doi.org/10.1016/j.taap.2010.07.020>.

8. REFERENCES

- Lucier GW, Rumbaugh RC, McCoy Z, et al. 1986. Ingestion of soil contaminated with 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) alters hepatic enzyme activities in rats. *Fundam Appl Toxicol* 6:364-371. [https://doi.org/10.1016/0272-0590\(86\)90252-6](https://doi.org/10.1016/0272-0590(86)90252-6).
- Luebke RW, Copeland CB, Andrews DL. 1999. Effects of aging on resistance to *Trichinella spiralis* infection in rodents exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicology* 136(1):15-26. [https://doi.org/10.1016/s0300-483x\(99\)00050-5](https://doi.org/10.1016/s0300-483x(99)00050-5).
- Lustenhouwer JWA, Olie K, Hutzinger O. 1980. Chlorinated dibenzo-p-dioxins and related compounds in incinerator effluents. *Chemosphere* 9:501-522. [https://doi.org/10.1016/0045-6535\(80\)90035-1](https://doi.org/10.1016/0045-6535(80)90035-1).
- Luster MI, Clark G, Lawson LD, et al. 1979. Effects of brief in vitro exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on mouse lymphocytes. *J Environ Pathol Toxicol* 2:965-977.
- Luster MJ, Boorman GA, Dean JH, et al. 1980. Examination of bone marrow, immunologic parameters and host susceptibility following pre- and postnatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Int J Immunopharmacol* 2:301-310. <https://doi.org/10.1111/j.1365-2605.2005.00568.x>.
- Luster MI, Hong LH, Osborne R, et al. 1986. 1-Amino-3,7,8-trichlorodibenzo-p-dioxin: A specific antagonist for TCDD-induced myelotoxicity. *Biochem Biophys Res Commun* 139:747-756. [https://doi.org/10.1016/S0006-291X\(86\)80054-7](https://doi.org/10.1016/S0006-291X(86)80054-7).
- Ma XM, Chen X, Ma SW, et al. 2010. Protein expression profile in the testis of rats chronically exposed to low-dose 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Environ Chem* 92(9):1715-1727. <https://doi.org/10.1080/02772241003707447>.
- Mably TA, Moore RW, Peterson RE. 1992a. In utero and lactational exposure of male rats to 2,3,7,8-tetrachlorodibenzo-p-dioxin. 1. Effects on androgenic status. *Toxicol Appl Pharmacol* 114(1):97-107. [https://doi.org/10.1016/0041-008x\(92\)90101-w](https://doi.org/10.1016/0041-008x(92)90101-w).
- Mably TA, Moore RW, Goy RW, et al. 1992b. In utero and lactational exposure of male rats to 2,3,7,8-tetrachlorodibenzo-p-dioxin. 2. Effects on sexual behavior and the regulation of luteinizing hormone secretion in adulthood. *Toxicol Appl Pharmacol* 114(1):108-117. [https://doi.org/10.1016/0041-008x\(92\)90102-x](https://doi.org/10.1016/0041-008x(92)90102-x).
- Mably TA, Bjerke DL, Moore RW, et al. 1992c. In utero and lactational exposure of male rats to 2,3,7,8-tetrachlorodibenzo-p-dioxin. 3. Effects on spermatogenesis and reproductive capability. *Toxicol Appl Pharmacol* 114(1):118-126. [https://doi.org/10.1016/0041-008x\(92\)90103-y](https://doi.org/10.1016/0041-008x(92)90103-y).
- Madsen C, Larsen JC. 1989. Relative toxicity of chlorinated dibenzo-para-dioxins, and dibenzofurans measured by thymus weight and liver-enzyme induction in perinatally dosed rats 2,3,7,8-TCDD, 2,3,4,7,8-PCDF, 1,2,3,7,8-PCDD. *Chemosphere* 18:955-966. [https://doi.org/10.1016/0045-6535\(89\)90223-3](https://doi.org/10.1016/0045-6535(89)90223-3).
- Mai X, Dong Y, Xiang L, et al. 2020. Maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin suppresses male reproductive functions in their adulthood. *Hum Exp Toxicol* 39(7):890-905. <https://doi.org/10.1177/0960327120903489>.
- Malisch R. 1994. Determination of dioxins and furans in coloured candle wax. *Chemosphere* 29(9-11):1957-1963. [https://doi.org/10.1016/0045-6535\(94\)90361-1](https://doi.org/10.1016/0045-6535(94)90361-1).
- Mamantov A. 1984. Linear correlation between photolysis rates and toxicity of polychlorinated dibenzo-p-dioxins. *Environ Sci Technol* 18:808-810. <https://doi.org/10.1021/ES00128A016>.
- Manara L, Coccia P, Croci T. 1984. Prevention of TCDD toxicity in laboratory rodents by addition of charcoal or cholic acids to chow. *Food Chem Toxicol* 22:815-818. [https://doi.org/10.1016/0278-6915\(84\)90120-0](https://doi.org/10.1016/0278-6915(84)90120-0).
- Mannetje A, McLean D, Cheng S, et al. 2005. Mortality in New Zealand workers exposed to phenoxy herbicides and dioxins. *Occup Environ Med* 62(1):34-40. <https://doi.org/10.1136/oem.2004.015776>.
- Mannetje A, Coakley J, Bridgen P, et al. 2013. Current concentrations, temporal trends and determinants of persistent organic pollutants in breast milk of New Zealand women. *Sci Total Environ* 458-460:399-407. <https://doi.org/10.1016/j.scitotenv.2013.04.055>.

8. REFERENCES

- Mannetje A, Eng A, Walls C, et al. 2017. Sex ratio of the offspring of New Zealand phenoxy herbicide producers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Occup Environ Med* 74(1):24-29. <https://doi.org/10.1136/oemed-2016-103771>.
- Mannetje A, Eng A, Walls C, et al. 2018. Morbidity in New Zealand pesticide producers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Environ Int* 110:22-31. <https://doi.org/10.1016/j.envint.2017.09.018>.
- Manuwald U, Velasco Garrido M, Berger J, et al. 2012. Mortality study of chemical workers exposed to dioxins: follow-up 23 years after chemical plant closure. *Occup Environ Med* 69(9):636-642. <https://doi.org/10.1136/oemed-2012-100682>.
- Manz A, Berger J, Dwyer JH, et al. 1991. Cancer mortality among workers in chemical plant contaminated with dioxin. *Lancet* 338(8773):959-964. [https://doi.org/10.1016/0140-6736\(91\)91835-i](https://doi.org/10.1016/0140-6736(91)91835-i).
- Maranghi F, Tassinari R, Moracci G, et al. 2013. Dietary exposure of juvenile female mice to polyhalogenated seafood contaminants (HBCD, BDE-47, PCB-153, TCDD): comparative assessment of effects in potential target tissues. *Food Chem Toxicol* 56:443-449. <https://doi.org/10.1016/j.fct.2013.02.056>.
- Marklund S, Rappe C, Tyslind M, et al. 1987. Identification of polychlorinated dibenzofurans and dioxins in exhaust from cars run on leaded gasoline. *Chemosphere* 16:29-36. [https://doi.org/10.1016/0045-6535\(87\)90105-6](https://doi.org/10.1016/0045-6535(87)90105-6).
- Marklund S, Andersson R, Tysklin M, et al. 1990. Emissions of PCDDs and PCDFs in gasoline and diesel fueled cars. *Chemosphere* 20(5):553-561. [https://doi.org/10.1016/0045-6535\(90\)90111-6](https://doi.org/10.1016/0045-6535(90)90111-6).
- Marklund S, Tysklin M, Andersson R, et al. 1991. Environmental deposition of PCDDs and PCDFs as determined by the analysis of snow samples from the northern Sweden. *Chemosphere* 23:1359-1364. [https://doi.org/10.1016/0045-6535\(91\)90160-F](https://doi.org/10.1016/0045-6535(91)90160-F).
- Markowski VP, Zareba G, Stern S, et al. 2001. Altered operant responding for motor reinforcement and the determination of benchmark doses following perinatal exposure to low-level 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Environ Health Perspect* 109(6):621-627. <https://doi.org/10.1289/EHP.01109621>.
- Markowski VP, Cox C, Preston R, et al. 2002. Impaired cued delayed alternation behavior in adult rat offspring following exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on gestation day 15. *Neurotoxicol Teratol* 24(2):209-218. [https://doi.org/10.1016/s0892-0362\(02\)00186-1](https://doi.org/10.1016/s0892-0362(02)00186-1).
- Marple L, Brunck R, Throop L. 1986. Water solubility of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Environ Sci Technol* 20(2):180-182. <https://doi.org/10.1021/es00144a012>.
- Marshall NB, Kerkvliet NI. 2010. Dioxin and immune regulation: emerging role of aryl hydrocarbon receptor in the generation of regulatory T cells. *Ann N Y Acad Sci* 1183:25-37. <https://doi.org/10.1111/j.1749-6632.2009.05125.x>.
- Martinez S, Yaffe K, Li Y, et al. 2021. Agent Orange exposure and dementia diagnosis in US veterans of the Vietnam era. *JAMA Neurol* 78(4):473-477. <https://doi.org/10.1001/jamaneurol.2020.5011>.
- Martínez-Zamora MA, Mattioli L, Parera J, et al. 2015. Increased levels of dioxin-like substances in adipose tissue in patients with deep infiltrating endometriosis. *Hum Reprod* 30(5):1059-1068. <https://doi.org/10.1093/humrep/dev026>.
- Maruyama W, Yoshida K, Nakanishi J. 2001. Estimation of dioxin concentrations in tissues in Japanese breast-fed infant using a physiological model. *Organohalogen Compounds* 53:219-221.
- Maruyama W, Yoshida K, Tanaka T, et al. 2002. Possible range of dioxin concentration in human tissues: simulation with a physiologically based model. *J Toxicol Environ Health A* 65(24):2053-2073. <https://doi.org/10.1080/00984100290071829>.
- Masiol M, Mallon CT, Haines KM, et al. 2016. Airborne dioxins, furans, and polycyclic aromatic hydrocarbons Exposure to military personnel in Iraq. *J Occup Environ Med* 58(8 Suppl 1):S22-30. <https://doi.org/10.1097/JOM.0000000000000771>.

8. REFERENCES

- Mason G, Safe S. 1986. Synthesis, biologic and toxic effects of the major 2,3,7,8-tetrachlorodibenzo-p-dioxin metabolites in the rat. *Toxicology* 41:153-159. [https://doi.org/10.1016/0300-483X\(86\)90196-4](https://doi.org/10.1016/0300-483X(86)90196-4).
- Mastroiacovo P, Spagnolo A, Marni E, et al. 1988. Birth defects in the Seveso area after TCDD contamination. *JAMA* 259:1668-1672. <https://doi.org/10.1001/JAMA.1988.03720110030030>.
- Matsumura F, Benezet HJ. 1973. Studies on the bioaccumulation and microbial degradation of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Environ Health Perspectives* 5:253-258. <https://doi.org/10.1289/EHP.7305253>.
- Matulka RA, Morris DL, Wood SW, et al. 1997. Characterization of the role played by antigen challenge in the suppression of in vivo humoral immunity by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Arch Toxicol* 72(1):45-51. <https://doi.org/10.1007/s002040050467>.
- May G. 1973. Chloracne from the accidental production of tetrachlorodibenzodioxin. *Br J Med* 30:276-283. <https://doi.org/10.1136/oem.30.3.276>.
- Mayer AC, Fent KW, Chen IC, et al. 2021a. Characterizing exposures to flame retardants, dioxins, and furans among firefighters responding to controlled residential fires. *Int J Hyg Environ Health* 236:113782. <https://doi.org/10.1016/j.ijheh.2021.113782>.
- Mayer AC, Fent KW, Chen IC, et al. 2021b. Supplemental material: Characterizing exposures to flame retardants, dioxins, and furans among firefighters responding to controlled residential fires. *Int J Hyg Environ Health* 236. <https://doi.org/10.1016/j.ijheh.2021.113782>.
- McBride DI, Collins JJ, Humphry NF, et al. 2009. Mortality in workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin at a trichlorophenol plant in New Zealand. *J Occup Environ Med* 51(9):1049-1056. <https://doi.org/10.1097/JOM.0b013e3181b571ae>.
- McBride DI, Collins JJ, Bender TJ, et al. 2018. Cohort study of workers at a New Zealand agrochemical plant to assess the effect of dioxin exposure on mortality. *BMJ Open* 8(10):e019243. <https://doi.org/10.1136/bmjopen-2017-019243>.
- McConnell EE, Moore JA, Dalgard DW. 1978a. Toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in rhesus monkeys (*Macaca mulatta*) following a single oral dose. *Toxicol Appl Pharmacol* 43(1):175-187. [https://doi.org/10.1016/s0041-008x\(78\)80042-8](https://doi.org/10.1016/s0041-008x(78)80042-8).
- McConnell EE, Moore JA, Haseman JK, et al. 1978b. The comparative toxicity of chlorinated dibenzo-p-dioxins in mice and guinea pigs. *Toxicol Appl Pharmacol* 44(2):335-356. [https://doi.org/10.1016/0041-008x\(78\)90195-3](https://doi.org/10.1016/0041-008x(78)90195-3).
- McConnell EE, Lucier GW, Rumbaugh RC, et al. 1984. Dioxin in soil: Bioavailability after ingestion by rats and guinea pigs. *Science* 223:1077-1079. <https://doi.org/10.1126/SCIENCE.6695194>.
- McCrary JK, Maggard SP. 1993. Uptake and photodegradation of 2,3,7,8-tetrachlorodibenzo-p-dioxin sorbed to grass foliage. *Environ Sci Technol* 27:343-350. <https://doi.org/10.1021/ES00039A015>.
- McKee P, Burt A, McCurvin D, et al. 1990. Levels of dioxins, furans and other organic contaminants in harbour sediments near a wood preserving plant using pentachlorophenol and creosote. *Chemosphere* 20(10-12):1679-1685. [https://doi.org/10.1016/0045-6535\(90\)90329-R](https://doi.org/10.1016/0045-6535(90)90329-R).
- McLachlan MS. 1993. Digestive tract absorption of polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls in a nursing infant. *Toxicol Appl Pharmacol* 123:68-72. <https://doi.org/10.1006/TAAP.1993.1222>.
- McLachlan MS, Hinkel M, Reissinger M, et al. 1994. A study of the influence of sewage sludge fertilization on the concentrations of PCDD/F and PCB in soil and milk. *Environ Pollut* 85:337-343. [https://doi.org/10.1016/0269-7491\(94\)90056-6](https://doi.org/10.1016/0269-7491(94)90056-6).
- McNulty WP. 1984. Fetotoxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) for rhesus macaques (*Macaca mulatta*). *Am J Primatol* 6(1):41-47. <https://doi.org/10.1002/ajp.1350060105>.
- McNulty W. 1985. Toxicity and fetotoxicity of TCDD, TCDF, and PCB isomers in Rhesus Macaques (*Macaca mulatta*). *Environ Health Perspect* 60:77-88. <https://doi.org/10.1289/EHP.856077>.
- McNulty WP, Nielsen-Smith JO, Lay JO, et al. 1982. Persistence of TCDD in monkey adipose tissue. *Food Cosmet Toxicol* 20:985-987. [https://doi.org/10.1016/S0015-6264\(82\)80272-1](https://doi.org/10.1016/S0015-6264(82)80272-1).

8. REFERENCES

- McPeters AL, Overcash MR. 1993. Demonstrations of photodegradation by sunlight of 2,3,7,8-tetrachlorodibenzo-p-dioxins in 6 cm soil columns. *Chemosphere* 27:1221-1234. [https://doi.org/10.1016/0045-6535\(93\)90169-6](https://doi.org/10.1016/0045-6535(93)90169-6).
- Mehrle PM, Buckler DR, Little EE, et al. 1988. Toxicity and bioconcentration of 2,3,7,8-tetrachlorodibenzodioxin and 2,3,7,8-tetrachlorodibenzofuran in rainbow trout. *Environ Toxicol Chem* 7(1):47-62. <https://doi.org/10.1002/etc.5620070108>.
- Meyer C, O'Keefe P, Hilker D, et al. 1989. A survey of twenty community water systems in New York State for PCDDs and PCDFs. *Chemosphere* 19(1-6):21-26. [https://doi.org/10.1016/0045-6535\(89\)90284-1](https://doi.org/10.1016/0045-6535(89)90284-1).
- Meyne J, Allison DC, Bose K, et al. 1985. Hepatotoxic doses of dioxin do not damage mouse bone marrow chromosomes. *Mutat Res* 157:63-69. [https://doi.org/10.1016/0165-1218\(85\)90050-3](https://doi.org/10.1016/0165-1218(85)90050-3).
- Michalek JE, Tripathi RC. 1999. Pharmacokinetics of TCDD in veterans of Operation Ranch Hand: 15-year follow-up. *J Toxicol Environ Health A* 57(6):369-378. <https://doi.org/10.1080/009841099157584>.
- Michalek JE, Pirkle JL, Caudill SP, et al. 1996. Pharmacokinetics of TCDD in veterans of Operation Ranch Hand: 10-year follow-up. *J Toxicol Environ Health* 47:209-220. <https://doi.org/10.1080/009841096161744>.
- Michalek JE, Caudill SP, Tripathi RC. 1997. Pharmacokinetics of TCDD in veterans of Operation Ranch Hand: 10-year follow-up. *J Toxicol Environ Health* 52(6):557-558. <https://doi.org/10.1080/00984109708984081>.
- Michalek JE, Rahe AJ, Boyle CA. 1998. Paternal dioxin, preterm birth, intrauterine growth retardation, and infant death. *Epidemiology* 9:161-167. <https://doi.org/10.1097/00001648-199803000-00010>.
- Michalek JE, Akhtar FZ, Kiel JL. 1999a. Serum dioxin, insulin, fasting glucose, and sex hormone-binding globulin in veterans of Operation Ranch Hand. *J Clin Endocrinol Metab* 84(5):1540-1543. <https://doi.org/10.1210/JCEM.84.5.5663>.
- Michalek JE, Ketchum NS, Check IJ. 1999b. Serum dioxin and immunologic response in veterans of Operation Ranch Hand. *Am J Epidemiol* 149(11):1038-1046. <https://doi.org/10.1093/oxfordjournals.aje.a009749>.
- Michalek JE, Pirkle JL, Needham LL, et al. 2002. Pharmacokinetics of 2,3,7,8-tetrachlorodibenzo-p-dioxin in Seveso adults and veterans of operation Ranch Hand. *J Expo Anal Environ Epidemiol* 12(1):44-53. <https://doi.org/10.1038/sj.jea.7500211>.
- Miettinen HM, Alaluusua S, Tuomisto J, et al. 2002. Effect of in utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on rat molar development: the role of exposure time. *Toxicol Appl Pharmacol* 184(1):57-66. <https://doi.org/10.1006/taap.2002.9490>.
- Miettinen HM, Huuskonen H, Partanen AM, et al. 2004. Effects of epidermal growth factor receptor deficiency and 2,3,7,8-tetrachlorodibenzo-p-dioxin on fetal development in mice. *Toxicol Lett* 150(3):285-291. <https://doi.org/10.1016/j.toxlet.2004.02.009>.
- Miettinen HM, Pulkkinen P, Jamsa T, et al. 2005. Effects of in utero and lactational TCDD exposure on bone development in differentially sensitive rat lines. *Toxicol Sci* 85(2):1003-1012. <https://doi.org/10.1093/toxsci/kfi136>.
- Miettinen HM, Sorvari R, Alaluusua S, et al. 2006. The effect of perinatal TCDD exposure on caries susceptibility in rats. *Toxicol Sci* 91(2):568-575. <https://doi.org/10.1093/toxsci/kfj158>.
- Mikolajczyk S, Warenik-Bany M, Pajurek M. 2022a. Dioxins and PCBs in freshwater fish and sediments from Polish lakes. *Food Addit Contam Part B Surveill* 15(3):159-167. <https://doi.org/10.1080/19393210.2022.2055154>.
- Mikolajczyk S, Warenik-Bany M, Pajurek M. 2022b. Supplemental material: Dioxins and PCBs in freshwater fish and sediments from Polish lakes. *Food Addit Contam Part B Surveill* 15(3) <https://doi.org/10.1080/19393210.2022.2055154>.
- Miller GC, Herbert VR, Zepp RG. 1987. Chemistry and photochemistry of low-volatility organic chemicals on environmental surfaces. *Environ Sci Technol* 21:1164-1167. <https://doi.org/10.1021/ES00165A601>.

8. REFERENCES

- Miller GC, Herbert VR, Miille MJ, et al. 1989a. Photolysis of octachlorodibenzo-p-dioxin on soils: Production of 2,3,7,8-TCDD. *Chemosphere* 18:1265-1274. [https://doi.org/10.1016/0045-6535\(89\)90264-6](https://doi.org/10.1016/0045-6535(89)90264-6).
- Miller GC, Herbert VR, Miller WW. 1989b. Effect of sunlight on organic contaminants at the atmosphere-soil interface. In: Sawhney BL, Brown K, eds. *Reactions and movement of organic chemicals in soils*. Soil Science Society of America, Inc, 99-110. <https://doi.org/10.2136/sssaspecpub22>.
- Mimura J, Yamashita K, Nakamura K, et al. 1997. Loss of teratogenic response to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in mice lacking the Ah (dioxin) receptor. *Genes Cells* 2(10):645-654. <https://doi.org/10.1046/j.1365-2443.1997.1490345.x>.
- Miniero R, Ingelido AM, Abballe A, et al. 2017. Occupational exposure to PCDDs, PCDFs, and DL-PCBs in metallurgical plants of the Brescia (Lombardy Region, northern Italy) area. *Chemosphere* 166:418-421. <https://doi.org/10.1016/j.chemosphere.2016.09.134>.
- Mitchell KA, Lawrence BP. 2003. Exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) renders influenza virus-specific CD8+ T cells hyporesponsive to antigen. *Toxicol Sci* 74(1):74-84. <https://doi.org/10.1093/TOXSCI/KFG110>.
- Mitsuhashi T, Yonemoto J, Sone H, et al. 2010. In utero exposure to dioxin causes neocortical dysgenesis through the actions of p27Kip1. *Proc Natl Acad Sci U S A* 107(37):16331-16335. <https://doi.org/10.1073/pnas.1002960107>.
- Mitsui T, Sugiyama N, Maeda S, et al. 2006. Perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin suppresses contextual fear conditioning-accompanied activation of cyclic AMP response element-binding protein in the hippocampal CA1 region of male rats. *Neurosci Lett* 398(3):206-210. <https://doi.org/10.1016/j.neulet.2005.12.087>.
- Mitsui T, Taniguchi N, Kawasaki N, et al. 2011. Fetal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin induces expression of the chemokine genes Cxcl4 and Cxcl7 in the perinatal mouse brain. *J Appl Toxicol* 31(3):279-284. <https://doi.org/10.1002/jat.1612>.
- Miyashita C, Araki A, Mitsui T, et al. 2018a. Sex-related differences in the associations between maternal dioxin-like compounds and reproductive and steroid hormones in cord blood: The Hokkaido study. *Environ Int* 117:175-185. <https://doi.org/10.1016/j.envint.2018.04.046>.
- Miyashita C, Bamai YA, Araki A, et al. 2018b. Prenatal exposure to dioxin-like compounds is associated with decreased cord blood IgE and increased risk of wheezing in children aged up to 7years: The Hokkaido study. *Sci Total Environ* 610-611:191-199. <https://doi.org/10.1016/j.scitotenv.2017.07.248>.
- Miyazaki W, Fujiwara Y, Katoh T. 2016. The effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on the development and function of the blood-brain barrier. *Neurotoxicology* 52:64-71. <https://doi.org/10.1016/j.neuro.2015.11.003>.
- Mocarelli P, Pocchiari F, Nelson N. 1988. Preliminary report: 2,3,7,8-tetrachlorodibenzo -p-dioxin exposure to humans - Seveso, Italy. *MMWR Morb Mortal Wkly Rep* 37(48):733-736.
- Mocarelli P, Marocchi A, Brambilla P, et al. 1986. Clinical laboratory manifestations of exposure to dioxin in children. *JAMA* 256:2687-2695. <https://doi.org/10.1001/JAMA.1986.03380190057025>.
- Mocarelli P, Needham LL, Marocchi A, et al. 1991. Serum concentrations of 2,3,7,8-tetrachlorodibenzo-p-dioxin and test results from selected residents of Seveso, Italy. *J Toxicol Environ Health* 32:357-366. <https://doi.org/10.1080/15287399109531490>.
- Mocarelli P, Gerthoux PM, Ferrari E, et al. 2000. Paternal concentrations of dioxin and sex ratio of offspring (Comment in: Lancet 355(9218): 1838-1839). *Lancet* 355(9218):1858-1863. [https://doi.org/10.1016/S0140-6736\(00\)02290-X](https://doi.org/10.1016/S0140-6736(00)02290-X).
- Mocarelli P, Gerthoux PM, Patterson DG, et al. 2008. Dioxin exposure, from infancy through puberty, produces endocrine disruption and affects human semen quality. *Environ Health Perspect* 116(1):70-77. <https://doi.org/10.1289/ehp.10399>.

8. REFERENCES

- Mocarelli P, Gerthoux PM, Needham LL, et al. 2011. Perinatal exposure to low doses of dioxin can permanently impair human semen quality. *Environ Health Perspect* 119(5):713-718. <https://doi.org/10.1289/ehp.1002134>.
- Moore JA, Gupta BN, Zinkl JG, et al. 1973. Postnatal effects of maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Environ Health Perspect* 5:81-85. <https://doi.org/10.1289/ehp.730581>.
- Moore RW, Potter CL, Theobald HM, et al. 1985. Androgenic deficiency in male rats treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 79:99-111. [https://doi.org/10.1016/0041-008X\(85\)90372-2](https://doi.org/10.1016/0041-008X(85)90372-2).
- Morales L, Dachs J, Gonzalez-Gaya B, et al. 2014. Background concentrations of polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls in the global oceanic atmosphere. *Environ Sci Technol* 48(17):10198-10207. <https://doi.org/10.1021/es5023619>.
- Moran FM, Hendrickx AG, Shideler S, et al. 2004. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on fatty acid availability and neural tube formation in cynomolgus macaque, *Macaca fascicularis*. *Birth Defects Res B Dev Reprod Toxicol* 71(1):37-46. <https://doi.org/10.1002/BDRB.10056>.
- Morán FM, Tarara R, Chen J, et al. 2001. Effect of dioxin on ovarian function in the cynomolgus macaque (*M. fascicularis*). *Reprod Toxicol* 15(4):377-383. [https://doi.org/10.1016/s0890-6238\(01\)00138-1](https://doi.org/10.1016/s0890-6238(01)00138-1).
- Mortelmans K, Haworth S, Speck W, et al. 1984. Mutagenicity testing of Agent Orange and related compounds. *Toxicol Appl Pharmacol* 75:137-146. <https://doi.org/10.1002/TOX.2540030205>.
- Moser GA, McLachlan MS. 2001. The influence of dietary concentration on the absorption and excretion of persistent lipophilic organic pollutants in the human intestinal tract. *Chemosphere* 45(2):201-211. [https://doi.org/10.1016/S0045-6535\(00\)00551-8](https://doi.org/10.1016/S0045-6535(00)00551-8).
- Moses M, Prioleau PG. 1985. Cutaneous histologic findings in chemical workers with and without chloracne with past exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *J Am Acad Dermatol* 12:497-506. [https://doi.org/10.1016/S0190-9622\(85\)70070-9](https://doi.org/10.1016/S0190-9622(85)70070-9).
- Moses M, Lilis R, Crow KD, et al. 1984. Health status of workers with past exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in the manufacture of 2,4,5-trichlorophenoxyacetic acid: Comparison of findings with and without chloracne. *Am J Ind Med* 5:161-182. <https://doi.org/10.1002/ajim.4700050303>.
- Mott L. 1995. The disproportionate impact of environmental health threats on children of color. *Environ Health Perspect* 103(Suppl 6):33-35. <https://doi.org/10.1289/ehp.95103s633>.
- Muir DCG, Yarechewski AL. 1988. Dietary accumulation of four chlorinated dioxin congeners by rainbow trout and fathead minnow. *Environ Toxicol Chem* 7:227-236. <https://doi.org/10.1002/ETC.5620070306>.
- Muir DCG, Townsend BE, Webster GRB. 1985. Bioavailability of 14C-1,3,6,8-tetrachlorodibenzo-p-dioxin and 14C-octachlorodibenzo-p-dioxin to aquatic insects in sediment and water. In: Keith LH, Rappe C, Choudhary G, eds. *Chlorinated dioxins and dibenzofurans in the total environment II*. Boston: Butterworth Publishers, 89-102.
- Muir DCG, Yarechewski AL, Knoll A, et al. 1986a. Bioconcentration and disposition of 1,3,6,8-tetrachlorodibenzo-p-dioxin and octachlorodibenzo-p-dioxin by rainbow trout and fathead minnows. *Environ Toxicol Chem* 5:261-272. <https://doi.org/10.1002/ETC.5620050305>.
- Muir DCG, Yarachewski AL, Webster GRB. 1986b. Bioconcentration of four chlorinated dioxins by rainbow trout and fathead minnows. In: Bahner RC, Hansen DJ, eds. *Aquatic toxicology and hazard assessment: eighth symposium*, Fort Mitchell, KY, April 15-17, 1984. Philadelphia, PA: ASTM, 442-454.
- Muir DCG, Lawrence S, Holoka M, et al. 1992. Partitioning of polychlorinated dioxins and furans between water, sediments and biota in lake mesocosms. *Chemosphere* 25(1-2):119-124. [https://doi.org/10.1016/0045-6535\(92\)90494-C](https://doi.org/10.1016/0045-6535(92)90494-C).

8. REFERENCES

- Mulcahy MT. 1980. Chromosome aberrations and "Agent Orange". *Med J Aust* 2:573-574.
<https://doi.org/10.5694/j.1326-5377.1980.tb100775.x>.
- Muller JF, Hulster AA, Papke OC, et al. 1994. Transfer of PCDD/PCDF from contaminated soils into carrots, lettuce and peas. *Chemosphere* 29(9-11):2175-2181. [https://doi.org/10.1016/0045-6535\(94\)90384-0](https://doi.org/10.1016/0045-6535(94)90384-0).
- Müller JF, Hulster A, Papke A, et al. 1993. Transfer pathways of PCDD/PCDF to fruits. *Chemosphere* 27(1-3):195-201. [https://doi.org/10.1016/0045-6535\(93\)90293-E](https://doi.org/10.1016/0045-6535(93)90293-E).
- Mumtaz MM, Ray M, Crowell SR, et al. 2012a. Translational research to develop a human PBPK models tool kit-volatile organic compounds (VOCs). *J Toxicol Environ Health A* 75(1):6-24.
<https://doi.org/10.1080/15287394.2012.625546>.
- Mumtaz M, Fisher J, Blount B, et al. 2012b. Application of physiologically based pharmacokinetic models in chemical risk assessment. *J Toxicol* 2012:904603. <https://doi.org/10.1155/2012/904603>.
- Murray FJ, Smith FA, Nitschke KD, et al. 1979. Three-generation reproduction study of rats given 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in the diet. *Toxicol Appl Pharmacol* 50(2):241-252.
[https://doi.org/10.1016/0041-008x\(79\)90149-2](https://doi.org/10.1016/0041-008x(79)90149-2).
- Mustafa A, Holladay SD, Goff M, et al. 2008. An enhanced postnatal autoimmune profile in 24 week-old C57BL/6 mice developmentally exposed to TCDD. *Toxicol Appl Pharmacol* 232(1):51-59.
<https://doi.org/10.1016/j.taap.2008.04.015>.
- Mustafa A, Holladay SD, Goff M, et al. 2009. Developmental exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin alters postnatal T cell phenotypes and T cell function and exacerbates autoimmune lupus in 24-week-old SNF1 mice. *Birth Defects Res A Clin Mol Teratol* 85(10):828-836.
<https://doi.org/10.1002/bdra.20603>.
- Muto H, Takizawa Y. 1989. Dioxins in cigarette smoke. *Arch Environ Health* 44:171-174.
<https://doi.org/10.1080/00039896.1989.9935882>.
- Nadal M, Mari M, Schuhmacher M, et al. 2019. Monitoring dioxins and furans in plasma of individuals living near a hazardous waste incinerator: Temporal trend after 20 years. *Environ Res* 173:207-211.
<https://doi.org/10.1016/j.envres.2019.03.051>.
- Nagai H, Kubo M, Abe R, et al. 2006. Constitutive activation of the aryl hydrocarbon receptor in T-lineage cells induces thymus involution independently of the Fas/Fas ligand signaling pathway. *Int Immunopharmacol* 6(2):279-286. <https://doi.org/10.1016/j.intimp.2005.08.015>.
- Nagayama J, Kiyohara C, Masuda Y, et al. 1985. Genetically mediated induction of aryl hydrocarbon hydroxylase activity in human lymphoblastoid cells by polychlorinated dibenzofuran isomers and 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Arch Toxicol* 56(4):230-235.
<https://doi.org/10.1007/BF00295159>.
- Nagayama J, Mohri N, Kiyohara C, et al. 1989. Comparative toxicologic study of 2,3,7,8-tetrachlorodibenzo-p-dioxin in Ah responsive and nonresponsive strains of mice. *Chemosphere* 19:927-932.
- Nakamoto M, Arisawa K, Uemura H, et al. 2013. Association between blood levels of PCDDs/PCDFs/dioxin-like PCBs and history of allergic and other diseases in the Japanese population. *Int Arch Occup Environ Health* 86(8):849-859. <https://doi.org/10.1007/s00420-012-0819-8>.
- Nakano S, Noguchi T, Takekoshi H, et al. 2005. Maternal-fetal distribution and transfer of dioxins in pregnant women in Japan, and attempts to reduce maternal transfer with Chlorella (*Chlorella pyrenoidosa*) supplements. *Chemosphere* 61(9):1244-1255.
<https://doi.org/10.1016/J.CHEMOSPHERE.2005.03.080>.
- NAS. 2003. Dioxin and dioxin-like chemicals in the food supply: Strategies to decrease exposure. Washington, DC: National Academy of Sciences.
http://www.nap.edu/openbook.php?record_id=10763&page=296. October 13, 2011.
- NAS. 2018. Veterans and Agent Orange: Update 11. Washington, DC: National Academies of Sciences. <https://doi.org/10.17226/25137>.
- NAS/NRC. 1989. Recommended dietary allowances. Washington DC: National Academy Press, National Academy of Sciences, National Research Council. 15-35. <https://doi.org/10.17226/1349>.

8. REFERENCES

- NAS/NRC. 2006. Human biomonitoring for environmental chemicals. Washington, DC: The National Academies Press, National Research Council. <https://doi.org/10.17226/11700>.
- Nau H, Bass R. 1981. Transfer of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) to the mouse embryo and fetus. *Toxicology* 20:299-308. [https://doi.org/10.1016/0300-483X\(81\)90037-8](https://doi.org/10.1016/0300-483X(81)90037-8).
- Nau H, Bass R, Neubert D. 1986. Transfer of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) via placenta and milk, and postnatal toxicity in the mouse. *Arch Toxicol* 59:36-40. <https://doi.org/10.1007/BF00263955>.
- Naville D, Reboucet D, Chauvin MA, et al. 2011. Direct and indirect impact of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on adult mouse Leydig cells: an in vitro study. *Toxicol Lett* 207(3):251-257. <https://doi.org/10.1016/j.toxlet.2011.09.019>.
- Nayyar T, Zawia NH, Hood DB. 2002. Transplacental effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on the temporal modulation of Sp1 DNA binding in the developing cerebral cortex and cerebellum. *Exp Toxicol Pathol* 53(6):461-468. <https://doi.org/10.1078/0940-2993-00219>.
- NCI/NTP. 1979. Bioassay of 2,7-dichlorodibenzo-p-dioxin (DCDD) for possible carcinogenicity. Bethesda MD: National Cancer Institute. National Toxicology Program. NCI-CG-TR-123. DHEW Publication (NIH) no. 79-1378. <https://ntp.niehs.nih.gov/publications/reports/tr/100s/tr123>. April 18, 2024.
- NCI/NTP. 1980. Bioassay of a mixture of 1,2,3,6,7,8-hexachlorodibenzo-p-dioxin and 1,2,3,7,8,9-hexachlorodibenzo-p-dioxin (gavage) for possible carcinogenicity: CAS No. 57653-85-7, CAS No. 19408-74-3. Research Triangle Park, NC: National Cancer Institute. National Toxicology Program. <https://ntp.niehs.nih.gov/publications/reports/tr/100s/tr198>. April 18, 2024.
- Needham LL, Patterson DG, Houk VN. 1991. Levels of TCDD in selected human populations and their relevance to human risk assessment. In: Banbury Report 35: Biological basis for risk assessment of dioxins and related compounds. Cold Spring Harbor Press, 229-247.
- Needham LL, Gerthoux PM, Patterson DG, et al. 1994. Half-life of 2,3,7,8-tetrachlorodibenzo-p-dioxin in serum of Seveso adults: Interim report. *Organohalogen Compounds* 21:81-85.
- Nelson CJ, Holson JF, Green HG, et al. 1979. Retrospective study of the relationship between agricultural use of 2,4,5-T and cleft palate occurrence in Arkansas. *Teratol* 19:377-384. <https://doi.org/10.1002/TERA.1420190315>.
- Nessel CS, Amoruso MA, Umbreit TH, et al. 1990. Hepatic aryl hydrocarbon hydroxylase and cytochrome P450 induction following the transpulmonary absorption of TCDD from intratracheally instilled particles. *Fundam Appl Toxicol* 15:500-509. <https://doi.org/10.1093/toxsci/15.3.500>.
- Nessel CS, Amoruso MA, Umbreit TH, et al. 1992. Pulmonary bioavailability and fine particle enrichment of 2,3,7,8-tetrachlorodibenzo-p-dioxin in respirable soil particles. *Fundam Appl Toxicol* 19(2):279-285. [https://doi.org/10.1016/0272-0590\(92\)90162-B](https://doi.org/10.1016/0272-0590(92)90162-B).
- Nestrick TJ, Lamparski LL, Townsend DI. 1980. Identification of tetrachlorodibenzo-p-dioxin isomers at the 1-ng level by photolytic degradation and pattern recognition techniques. *Anal Chem* 52:1865-1874. <https://doi.org/10.1021/ac50062a021>.
- Nestrick TJ, Lamparski LL, Frawley NN, et al. 1986. Perspectives of a large scale environmental survey for chlorinated dioxins: Overview and soil data. *Chemosphere* 15:1453-1460. [https://doi.org/10.1016/0045-6535\(86\)90424-8](https://doi.org/10.1016/0045-6535(86)90424-8).
- Neuberger M, Rappe C, Bergek S, et al. 1999. Persistent health effects of dioxin contamination in herbicide production. *Environ Res* 81(3):206-214. <https://doi.org/10.1006/ENRS.1999.3983>.
- Neubert D, Dillmann I. 1972. Embryotoxic effects in mice treated with 2,4,5-trichlorophenoxyacetic acid and 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Naunyn Schmiedebergs Arch Pharmacol* 272(3):243-264. <https://doi.org/10.1007/BF00499037>.
- Neubert D, Wiesmueller T, Abraham K, et al. 1990. Persistence of various polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDDs and PCDFs) in hepatic and adipose tissue of marmoset monkeys. *Arch Toxicol* 64:431-442. <https://doi.org/10.1007/BF01977624>.

8. REFERENCES

- Neubert R, Maskow L, Webb J, et al. 1993. Chlorinated dibenzo-p-dioxins and dibenzofurans and the human immune system. 1. Blood cell receptors in volunteers with moderately increased body burdens. *Life Sci* 53:1995-2006. [https://doi.org/10.1016/0024-3205\(93\)90021-T](https://doi.org/10.1016/0024-3205(93)90021-T).
- Neubert R, Maskow L, Delgado I, et al. 1995. Chlorinated dibenzo-p-dioxins and dibenzofurans and the human immune system. 2. In vitro proliferation of lymphocytes from workers with quantified moderately-increased body burdens. *Life Sci* 56:421-436. [https://doi.org/10.1016/0024-3205\(94\)00907-4](https://doi.org/10.1016/0024-3205(94)00907-4).
- Neugebauer J, Wittsiepe J, Kasper-Sonnenberg M, et al. 2015. The influence of low level pre- and perinatal exposure to PCDD/Fs, PCBs, and lead on attention performance and attention-related behavior among German school-aged children: results from the Duisburg Birth Cohort Study. *Int J Hyg Environ Health* 218(1):153-162. <https://doi.org/10.1016/j.ijheh.2014.09.005>.
- Ngo AD, Taylor R, Roberts CL. 2010. Paternal exposure to Agent Orange and spina bifida: a meta-analysis. *Eur J Epidemiol* 25(1):37-44. <https://doi.org/10.1007/s10654-009-9401-4>.
- Nguyen AT, Nishijo M, Hori E, et al. 2013a. Influence of maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on socioemotional behaviors in offspring rats. *Environ Health Insights* 7:1-14. <https://doi.org/10.4137/ehi.S10346>.
- Nguyen MN, Nishijo M, Nguyen AT, et al. 2013b. Effects of maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on parvalbumin- and calbindin-immunoreactive neurons in the limbic system and superior colliculus in rat offspring. *Toxicology* 314(1):125-134. <https://doi.org/10.1016/j.tox.2013.09.005>.
- Nguyen ATN, Nishijo M, Pham TT, et al. 2018. Sex-specific effects of perinatal dioxin exposure on eating behavior in 3-year-old Vietnamese children. *BMC Pediatr* 18(1):213. <https://doi.org/10.1186/s12887-018-1171-2>.
- NIOSH. 2019. 2,3,7,8-Tetrachloro-dibenzo-p-dioxin. NIOSH pocket guide to chemical hazards. Atlanta, GA: National Institute for Occupational Safety and Health. <https://www.cdc.gov/niosh/npg/npgd0594.html>. January 4, 2023.
- Nishijo M, Kuriwaki J, Hori E, et al. 2007. Effects of maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on fetal brain growth and motor and behavioral development in offspring rats. *Toxicol Lett* 173(1):41-47. <https://doi.org/10.1016/j.toxlet.2007.06.007>.
- Nishijo M, Tai PT, Nakagawa H, et al. 2012. Impact of perinatal dioxin exposure on infant growth: a cross-sectional and longitudinal studies in dioxin-contaminated areas in Vietnam. *PLoS ONE* 7(7):e40273. <https://doi.org/10.1371/journal.pone.0040273>.
- Nishijo M, Tran NN, Nakagawa H, et al. 2014. Effects of perinatal 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on development of taste preference in rat offspring. *J Addict Res Ther* 5:173. <https://doi.org/10.4172/2155-6105.1000173>.
- Nishijo M, Tai PT, Anh NT, et al. 2015. Urinary amino acid alterations in 3-year-old children with neurodevelopmental effects due to perinatal dioxin exposure in Vietnam: a nested case-control study for neurobiomarker discovery. *PLoS ONE* 10(1):e0116778. <https://doi.org/10.1371/journal.pone.0116778>.
- Nishijo M, Pham TT, Pham NT, et al. 2021. Nutritional intervention with dried bonito broth for the amelioration of aggressive behaviors in children with prenatal exposure to dioxins in Vietnam: A pilot study. *Nutrients* 13(5):1455. <https://doi.org/10.3390/nu13051455>.
- Nishimura N, Yonemoto J, Miyabara Y, et al. 2003. Rat thyroid hyperplasia induced by gestational and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Endocrinology* 144(5):2075-2083. <https://doi.org/10.1210/en.2002-220737>.
- Nishimura N, Yonemoto J, Miyabara Y, et al. 2005a. Altered thyroxin and retinoid metabolic response to 2,3,7,8-tetrachlorodibenzo-p-dioxin in aryl hydrocarbon receptor-null mice. *Arch Toxicol* 79(5):260-267. <https://doi.org/10.1007/s00204-004-0626-4>.
- Nishimura N, Yonemoto J, Nishimura H, et al. 2005b. Disruption of thyroid hormone homeostasis at weaning of Holtzman rats by lactational but not in utero exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Sci* 85(1):607-614. <https://doi.org/10.1093/toxsci/kfi122>.

8. REFERENCES

- Nishimura N, Yonemoto J, Nishimura H, et al. 2006. Localization of cytochrome P450 1A1 in a specific region of hydronephrotic kidney of rat neonates lactationally exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicology* 227(1-2):117-126. <https://doi.org/10.1016/j.tox.2006.07.020>.
- NLM. 2024. PubChem: 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin. National Library of Medicine. <https://pubchem.ncbi.nlm.nih.gov/compound/37270>. March 7, 2024.
- Nobmann ED, Byers T, Lanier AP, et al. 1992. The diet of Alaska native adults: 1987-1988. *Am J Clin Nutr* 55:1024-1032. <https://doi.org/10.1093/ajcn/55.5.1024>.
- Nohara K, Ushio H, Tsukumo S, et al. 2000. Alterations of thymocyte development, thymic emigrants and peripheral T cell population in rats exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicology* 145(2-3):227-235. [https://doi.org/10.1016/S0300-483X\(99\)00227-9](https://doi.org/10.1016/S0300-483X(99)00227-9).
- Nohara K, Izumi H, Tamura S, et al. 2002. Effect of low-dose 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on influenza A virus-induced mortality in mice. *Toxicology* 170:131-138. [https://doi.org/10.1016/S0300-483X\(01\)00535-2](https://doi.org/10.1016/S0300-483X(01)00535-2).
- Norback DH, Engblom JF, Allen JR. 1975. Tissue distribution and excretion of octachlorodibenzo-p-dioxin in the rat. *Toxicol Appl Pharmacol* 32:330-338. [https://doi.org/10.1016/0041-008X\(75\)90223-9](https://doi.org/10.1016/0041-008X(75)90223-9).
- Norris LA. 1981. The movement, persistence, and fate of the phenoxy herbicides and TCDD in the forest. *Residue Rev* 80:65-135. https://doi.org/10.1007/978-1-4612-5913-8_2.
- Norstrom RJ, Simon M, Muir DCG. 1990. Polychlorinated dibenzo-p-dioxins and dibenzofurans in marine mammals in the Canadian north. *Environ Pollut* 66:1-19. [https://doi.org/10.1016/0269-7491\(90\)90195-I](https://doi.org/10.1016/0269-7491(90)90195-I).
- Nowack N, Wittsiepe J, Kasper-Sonnenberg M, et al. 2015. Influence of low-level prenatal exposure to PCDD/Fs and PCBs on empathizing, systemizing and autistic traits: Results from the Duisburg Birth Cohort Study. *PLoS ONE* 10(6):e0129906. <https://doi.org/10.1371/journal.pone.0129906>.
- NTP. 1982a. Carcinogenesis bioassay of 2,3,7,8-tetrachlorodibenzo-p-dioxin (CAS no. 1746-01-6) in Swiss-Webster mice (dermal study). Bethesda, MD: National Toxicology Program. NTP-TR-201. NTP-80-32. NIH Publication No. 82-1757. <https://ntp.niehs.nih.gov/publications/reports/tr/200s/tr201>. April 18, 2024.
- NTP. 1982b. Carcinogenesis bioassay of 2,3,7,8-tetrachlorodibenzo-p-dioxin (CAS no. 1746-01-6) in Osborne-Mendel rats and B6C3F1 mice (gavage study). Bethesda, MD: National Toxicology Program. NTP-TR-209. NTP-80-31. NIH Publication No. 82-1765. <https://ntp.niehs.nih.gov/publications/reports/tr/200s/tr209>. April 18, 2024.
- NTP. 1989. Fifth annual report on carcinogens. Summary. Research Triangle Park, NC: National Toxicology Program. PB89231914. <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB89231914.xhtml>. April 19, 2024.
- NTP. 2006. NTP technical report on the toxicology and carcinogenesis studies of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) (CAS No. 1746-01-6) in female Harlan Sprague-Dawley rats (gavage studies). Research Triangle Park, NC: National Toxicology Program. NTP TR 521. NIH Publication No. 06-4468. <https://ntp.niehs.nih.gov/publications/reports/tr/500s/tr521>. April 18, 2024.
- NTP. 2013. Draft OHAT approach for systematic review and evidence integration for literature-based health assessments – February 2013. National Toxicology Program. https://ntp.niehs.nih.gov/ntp/ohat/evaluationprocess/draftohatapproach_february2013.pdf. October 4, 2023.
- NTP. 2015. OHAT risk of bias rating tool for human and animal studies. National Toxicology Program. https://ntp.niehs.nih.gov/ntp/ohat/pubs/riskofbiastool_508.pdf. March 19, 2019.
- NTP. 2021. 2,3,7,8-Tetrachlorodibenzo-p-dioxin. In: Report on carcinogens. 15th ed. National Toxicology Program, <https://ntp.niehs.nih.gov/ntp/roc/content/profiles/tetrachlorodibenzodioxin.pdf>. January 4, 2023.
- NTSB. 2023. Norfolk Southern Railway train derailment with subsequent hazardous material release and fires. National Transportation Safety Board. Preliminary Report RRD23MR005.

8. REFERENCES

- <https://www.ntsb.gov/investigations/Documents/RRD23MR005%20East%20Palestine%20OH%20Prelim.pdf>. May 25, 2023.
- Nyska A, Jokinen MP, Brix AE, et al. 2004. Exocrine pancreatic pathology in female Harlan Sprague-Dawley rats after chronic treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin and dioxin-like compounds. *Environ Health Perspect* 112(8):903-909. <https://doi.org/10.1289/EHP.6869>.
- Oehme M, Mano S, Mikalsen A, et al. 1987. Formation and presence of polyhalogenated and polycyclic compounds in the emissions of small and large scale municipal waste incinerators. *Chemosphere* 16:143-153. [https://doi.org/10.1016/0045-6535\(87\)90118-4](https://doi.org/10.1016/0045-6535(87)90118-4).
- Oehme M, Mano S, Bjerke B. 1989. Formation of polychlorinated dibenzofurans and dibenzo-p-dioxins by production processes for magnesium and refined nickel. *Chemosphere* 18:1379-1389. [https://doi.org/10.1016/0045-6535\(89\)90029-5](https://doi.org/10.1016/0045-6535(89)90029-5).
- O'Flaherty EJ. 1994. Physiologically based pharmacokinetic models in developmental toxicology. *Risk Anal* 14(4):605-611. <https://doi.org/10.1111/j.1539-6924.1994.tb00274.x>.
- Ogaki J, Takayama K, Miyata H, et al. 1987. Levels of PCDDs and PCDFs in human tissues and various foodstuffs in Japan. *Chemosphere* 16(8-9):2047-2056. [https://doi.org/10.1016/0045-6535\(87\)90206-2](https://doi.org/10.1016/0045-6535(87)90206-2).
- Ohsako S, Miyabara Y, Nishimura N, et al. 2001. Maternal exposure to a low dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) suppressed the development of reproductive organs of male rats: dose-dependent increase of mRNA levels of 5alpha-reductase type 2 in contrast to decrease of androgen receptor in the pubertal ventral prostate. *Toxicol Sci* 60(1):132-143. <https://doi.org/10.1093/toxsci/60.1.132>.
- Ohsako S, Miyabara Y, Sakaue M, et al. 2002. Developmental stage-specific effects of perinatal 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on reproductive organs of male rat offspring. *Toxicol Sci* 66(2):283-292. <https://doi.org/10.1093/toxsci/66.2.283>.
- Okey AB, Riddick DS, Harper PA. 1994. The Ah receptor: Mediator of the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and related compounds. *Toxicol Lett* 70(1):1-22. [https://doi.org/10.1016/0378-4274\(94\)90139-2](https://doi.org/10.1016/0378-4274(94)90139-2).
- Oku A, Tomari K, Kamada T, et al. 1995. Destruction of PCDDs and PCDFs. A convenient method using alkali-metal hydroxide in 1,3-dimethyl-2-imidazolidinone (DMI). *Chemosphere* 31(8):3873-3878. [https://doi.org/10.1016/0045-6535\(95\)00259-B](https://doi.org/10.1016/0045-6535(95)00259-B).
- Oliver RM. 1975. Toxic effects of 2,3,7,8-tetrachlorodibenzo-1,4-dioxin in laboratory workers. *Br J Ind Med* 32:49-53. <https://doi.org/10.1136/oem.32.1.49>.
- Olson JR. 1986. Metabolism and disposition of 2,3,7,8-tetrachlorodibenzo-p-dioxin in guinea pigs. *Toxicol Appl Pharmacol* 85:263-273. [https://doi.org/10.1016/0041-008X\(86\)90121-3](https://doi.org/10.1016/0041-008X(86)90121-3).
- Olson JR, Wroblewski VJ. 1985. Metabolism of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in isolated hepatocytes from guinea pigs and rats. *Chemosphere* 14:979-982. [https://doi.org/10.1016/0045-6535\(85\)90229-2](https://doi.org/10.1016/0045-6535(85)90229-2).
- Olson JR, McGarrigle BP. 1992. Comparative developmental toxicity of 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD). *Chemosphere* 25(1-2):71-74. [https://doi.org/10.1016/0045-6535\(92\)90482-7](https://doi.org/10.1016/0045-6535(92)90482-7).
- Olson JR, Holscher MA, Neal RA. 1980a. Toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the golden Syrian hamster. *Toxicol Appl Pharmacol* 55(1):67-78. [https://doi.org/10.1016/0041-008x\(80\)90221-5](https://doi.org/10.1016/0041-008x(80)90221-5).
- Olson JR, Gasiewicz TA, Neal RA, et al. 1980b. Tissue distribution excretion, and metabolism of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in the Golden Syrian Hamster. *Toxicol Appl Pharmacol* 56:78-85. [https://doi.org/10.1016/0041-008X\(80\)90132-5](https://doi.org/10.1016/0041-008X(80)90132-5).
- Ono R, Kagawa Y, Takahashi Y, et al. 2010. Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on scratching behavior in mice. *Int Immunopharmacol* 10(3):304-307. <https://doi.org/10.1016/j.intimp.2009.11.015>.
- Onuska FI, Mudroch A, Terry KA. 1983. Identification and determination of trace organic substances in sediment cores from the western basin of Lake Ontario. *J Great Lakes Res* 9:169-182. [https://doi.org/10.1016/S0380-1330\(83\)71886-1](https://doi.org/10.1016/S0380-1330(83)71886-1).

8. REFERENCES

- Opitz CA, Holfelder P, Prentzell MT, et al. 2023. The complex biology of aryl hydrocarbon receptor activation in cancer and beyond. *Biochem Pharmacol* 216:115798. <https://doi.org/10.1016/j.bcp.2023.115798>.
- Orazio CE, Kapila S, Puri RK, et al. 1992. Persistence of chlorinated dioxins and furans in the soil environment. *Chemosphere* 25(7-10):1469-1474. [https://doi.org/10.1016/0045-6535\(92\)90171-M](https://doi.org/10.1016/0045-6535(92)90171-M).
- Orban JE, Stanley JS, Schwemberger JG, et al. 1994. Dioxins and dibenzofurans in adipose tissue of the general U.S. population and selected subpopulations. *Am J Public Health* 84:439-445. <https://doi.org/10.2105/AJPH.84.3.439>.
- OSHA. 2021a. Occupational safety and health standards. Subpart Z - Toxic and hazardous substances. Air contaminants. Table Z-2. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1910.1000. <https://www.govinfo.gov/content/pkg/CFR-2021-title29-vol6/pdf/CFR-2021-title29-vol6-sec1910-1000.pdf>. August 28, 2022.
- OSHA. 2021b. 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.govinfo.gov/content/pkg/CFR-2021-title29-vol7/pdf/CFR-2021-title29-vol7-sec1915-1000.pdf>. August 28, 2022.
- OSHA. 2021c. 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. <https://www.govinfo.gov/content/pkg/CFR-2021-title29-vol8/pdf/CFR-2021-title29-vol8-sec1926-55.pdf>. August 28, 2022.
- Ott MG, Zober A. 1996. Cause specific mortality and cancer incidence among employees exposed to 2,3,7,8-TCDD after a 1953 reactor accident. *Occup Environ Med* 53(9):606-612. <https://doi.org/10.1136/oem.53.9.606>.
- Ott MG, Holder BB, Olson RO. 1980. A mortality analysis of employees engaged in the manufacture of 2,4,5-trichlorophenoxyacetic acid. *J Occup Med* 22:47-50. <https://doi.org/10.1097/00043764-198001000-00012>.
- Ott MG, Olson RA, Cook RR. 1987. Cohort mortality study of chemical workers with potential exposure to the higher chlorinated dioxins. *J Occup Med* 29:422-429.
- Ott MG, Zober A, Germann C. 1994. Laboratory results for selected target organs in 138 individuals occupationally exposed to TCDD. *Chemosphere* 29:9-11. [https://doi.org/10.1016/0045-6535\(94\)90411-1](https://doi.org/10.1016/0045-6535(94)90411-1).
- Oughton JA, Pereira CB, DeKrey GK, et al. 1995. Phenotypic analysis of spleen, thymus, and peripheral blood cells in aged C57BL/6 mice following long-term exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Fundam Appl Toxicol* 25:60-69. <https://doi.org/10.1006/faat.1995.1040>.
- Pagano JJ, Garner AJ. 2020. Concentrations, toxic equivalence, and age-corrected trends of legacy organic contaminants in Lake Champlain lake trout: 2012-2018. *Environ Res* 184:109329. <https://doi.org/10.1016/j.envres.2020.109329>.
- Pagano JJ, Garner AJ, McGoldrick DJ, et al. 2018. Age-corrected trends and toxic equivalence of PCDD/F and CP-PCBs in lake trout and walleye from the Great Lakes: 2004-2014. *Environ Sci Technol* 52(2):712-721. <https://doi.org/10.1021/acs.est.7b05568>.
- Papadopoulou E, Vafeiadi M, Agramunt S, et al. 2013. Maternal diet, prenatal exposure to dioxins and other persistent organic pollutants and anogenital distance in children. *Sci Total Environ* 461-462:222-229. <https://doi.org/10.1016/j.scitotenv.2013.05.005>.
- Papadopoulou E, Kogevinas M, Botsivali M, et al. 2014. Maternal diet, prenatal exposure to dioxin-like compounds and birth outcomes in a European prospective mother-child study (NewGeneris). *Sci Total Environ* 484:121-128. <https://doi.org/10.1016/j.scitotenv.2014.03.047>.
- Päpke O, Ball M, Lis ZA, et al. 1989a. PCDD and PCDF in indoor air of kindergartens in northern W. Germany. *Chemosphere* 18(1-6):617-626. [https://doi.org/10.1016/0045-6535\(89\)90174-4](https://doi.org/10.1016/0045-6535(89)90174-4).
- Päpke O, Ball M, Lis ZA, et al. 1989b. PCDD/PCDF in whole blood samples of unexposed persons. *Chemosphere* 19:941-948. [https://doi.org/10.1016/0045-6535\(89\)90437-2](https://doi.org/10.1016/0045-6535(89)90437-2).

8. REFERENCES

- Päpke O, Ball M, Lis A. 1992. Various PCDD/PCDF patterns in human blood resulting from different occupational exposures. *Chemosphere* 25:1101-1108. [https://doi.org/10.1016/0045-6535\(92\)90114-7](https://doi.org/10.1016/0045-6535(92)90114-7).
- Päpke O, Ball M, Lis A. 1993. Potential occupational exposure of municipal waste incinerator workers with PCDD/PCDF. *Chemosphere* 27:203-209. [https://doi.org/10.1016/0045-6535\(93\)90294-F](https://doi.org/10.1016/0045-6535(93)90294-F).
- Parsons JR. 1992. Influence of suspended sediment on the biodegradation of chlorinated dibenzo-p-dioxins. *Chemosphere* 25(12):1973-1980. [https://doi.org/10.1016/0045-6535\(92\)90036-Q](https://doi.org/10.1016/0045-6535(92)90036-Q).
- Patrizi B, Siciliani de Cumis M. 2018. TCDD toxicity mediated by epigenetic mechanisms. *Int J Mol Sci* 19(12):4101. <https://doi.org/10.3390/ijms19124101>.
- Patterson DG, Hoffman RE, Needham LL, et al. 1986a. 2,3,7,8-Tetrachlorodibenzo-p-dioxin levels in adipose tissue of exposed and control persons in Missouri. *JAMA* 256:2683-2686. <https://doi.org/10.1001/JAMA.1986.03380190053024>.
- Patterson DG, Holler JS, Lapeza CR, et al. 1986b. High-resolution gas chromatographic/high-resolution mass spectrometric analysis of human adipose tissue for 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Anal Chem* 58(4):705-713. <https://doi.org/10.1021/ac00295a010>.
- Patterson DG, Needham LL, Pirkle JL, et al. 1988. Correlation between serum and adipose tissue levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin in 50 persons from Missouri. *Arch Environ Contam Toxicol* 17(2):139-143. <https://doi.org/10.1007/BF01056017>.
- Patterson DG, Fingerhut MA, Roberts DW, et al. 1989a. Levels of polychlorinated dibenzo-p-dioxins and dibenzofurans in workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Am J Ind Med* 16:135-146. <https://doi.org/10.1002/ajim.4700160205>.
- Patterson DG, Fürst P, Alexander LR, et al. 1989b. Analysis of human serum for PCDDs/PCDFs: A comparison of three extraction procedures. *Chemosphere* 19:89-96. [https://doi.org/10.1016/0045-6535\(89\)90294-4](https://doi.org/10.1016/0045-6535(89)90294-4).
- Patterson DG, Todd GD, Turner WE, et al. 1994. Levels of non-ortho-substituted (coplanar), mono- and di-ortho-substituted polychlorinated biphenyls, dibenzo-p-dioxins, and dibenzofurans in human serum and adipose tissue. *Environ Health Perspect* 102(supp 1):195-204. <https://doi.org/10.1289/EHP.94102S1195>.
- Patterson DG, Turner WE, Caudill SP, et al. 2008. Total TEQ reference range (PCDDs, PCDFs, cPCBs, mono-PCBs) for the U.S. population 2001-2002. *Chemosphere* 73:S261-S277. <https://doi.org/10.1016/j.chemosphere.2007.08.074>.
- Patterson DG, Wong LL, 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. <https://doi.org/10.1021/ES801966W>.
- Paustenbach DJ, Shu HP, Murray FJ. 1986. A critical examination of assumptions used in risk assessments of dioxin contaminated soil. *Regul Toxicol Pharmacol* 6(3):284-307. [https://doi.org/10.1016/0273-2300\(86\)90019-x](https://doi.org/10.1016/0273-2300(86)90019-x).
- Paustenbach D, Finley B, Lau V, et al. 1991. An evaluation of the inhalation hazard posed by dioxin-contaminated soils. *J Air Waste Manage Assn* 41:1334-1340.
- Paustenbach DJ, Wenning RJ, Lau V, et al. 1992. Recent developments on the hazards posed by 2,3,7,8-tetrachlorodibenzo-p-dioxin in soil: Implications for setting risk-based cleanup levels at residential and industrial sites. *J Toxicol Environ Health* 36(2):103-150. <https://doi.org/10.1080/15287399209531628>.
- Pauwels A, Schepens PJ, D'Hooghe T, et al. 2001. The risk of endometriosis and exposure to dioxins and polychlorinated biphenyls: A case-control study of infertile women. *Human Reprod* 16(10):2050-2055. <https://doi.org/10.1093/HUMREP/16.10.2050>.
- Pavuk M, Schecter AJ, Akhtar FZ, et al. 2003. Serum 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) levels and thyroid function in air force veterans of the Vietnam War. *Ann Epidemiol* 13(5):335-343. [https://doi.org/10.1016/S1047-2797\(02\)00422-2](https://doi.org/10.1016/S1047-2797(02)00422-2).

8. REFERENCES

- Pazderova-Vejlupková J, Nemcova M, Pickova J, et al. 1981. The development and prognosis of chronic intoxication by tetrachlorodibenzo-p-dioxin in men. *Arch Environ Health* 36(1):5-11. <https://doi.org/10.1080/00039896.1981.10667598>.
- Pearson RG, McLaughlin DL, McIlveen WD. 1990. Concentrations of PCDD and PCDF in Ontario soils from the vicinity of refuse and sewage sludge incinerators and remote rural and urban locations. *Chemosphere* 20(10-12):1543-1548. [https://doi.org/10.1016/0045-6535\(90\)90310-P](https://doi.org/10.1016/0045-6535(90)90310-P).
- Pedersen M, Halldorsson TI, Mathiesen L, et al. 2010. Dioxin-like exposures and effects on estrogenic and androgenic exposures and micronuclei frequency in mother-newborn pairs. *Environ Int* 36(4):344-351. <https://doi.org/10.1016/j.envint.2010.02.002>.
- Pegram RA, Diliberto JJ, Moore TC, et al. 1995. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) distribution and cytochrome P4501A induction in young adult and senescent male mice. *Toxicol Lett* 76:119-126. [https://doi.org/10.1016/0378-4274\(94\)03212-P](https://doi.org/10.1016/0378-4274(94)03212-P).
- Pelcl T, Skrha J, Prazny M, et al. 2018. Diabetes, cardiovascular disorders and 2,3,7,8-tetrachlorodibenzo-p-dioxin body burden in Czech patients 50 years after the intoxication. *Basic Clin Pharmacol Toxicol* 123(3):356-359. <https://doi.org/10.1111/bcpt.13013>.
- Pelclova D, Fenclova Z, Dlaskova Z, et al. 2001. Biochemical, neuropsychological, and neurological abnormalities following 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure. *Arch Environ Health* 56(6):493-500. <https://doi.org/10.1080/00039890109602897>.
- Pelclova D, Prazny M, Skrha J, et al. 2007. 2,3,7,8-TCDD exposure, endothelial dysfunction and impaired microvascular reactivity. *Hum Exp Toxicol* 26(9):705-713. <https://doi.org/10.1177/0960327107083971>.
- Pereira WE, Rostad CE, Sisak ME. 1985. Geochemical investigation of polychlorinated dibenzo-p-dioxins in the subsurface environment at an abandoned wood-treatment facility. *Environ Toxicol Chem* 4:629-639. <https://doi.org/10.1002/etc.5620040507>.
- Pesatori AC, Consonni S, Tironi A, et al. 1993. Cancer in a young population in a dioxin-contaminated area. *Int J Epidemiol* 22:1010-1013. <https://doi.org/10.1093/IJE/22.6.1010>.
- Pesatori AC, Zocchetti C, Guercilena S, et al. 1998. Dioxin exposure and non-malignant health effects: A mortality study. *Occup Environ Med* 55:126-131. <https://doi.org/10.1136/oem.55.2.126>.
- Pesatori AC, Consonni D, Rubagotti M, et al. 2009. Cancer incidence in the population exposed to dioxin after the "Seveso accident": Twenty years of follow-up. *Environ Health* 8:39. <https://doi.org/10.1186/1476-069X-8-39>.
- Petreas MX, Wiesmüller T, Palmer FH, et al. 1992. Aquatic life as biomonitor of dioxin/furan and coplanar polychlorinated biphenyl contamination in the Sacramento-San Joaquin river delta. *Chemosphere* 25(4):621-631. [https://doi.org/10.1016/0045-6535\(92\)90292-y](https://doi.org/10.1016/0045-6535(92)90292-y).
- Petroff BK, Gao X, Rozman KK, et al. 2000. Interaction of estradiol and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in an ovulation model: Evidence for systemic potentiation and local ovarian effects. *Reprod Toxicol* 14(3):247-255. [https://doi.org/10.1016/s0890-6238\(00\)00075-7](https://doi.org/10.1016/s0890-6238(00)00075-7).
- Petroff BK, Gao X, Ohshima K, et al. 2002. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on serum inhibin concentrations and inhibin immunostaining during follicular development in female Sprague-Dawley rats. *Reprod Toxicol* 16(2):97-105. [https://doi.org/10.1016/S0890-6238\(02\)00007-2](https://doi.org/10.1016/S0890-6238(02)00007-2).
- Petroske E, Huwe JK, Feil VJ, et al. 1997. Identification of NIH-shifted metabolites of 1,3,7,8-tetrachlorodibenzo-p-dioxin in the rat by NMR comparison with synthesized isomers. *Chemosphere* 34(5-7):1549-1555. [https://doi.org/10.1016/S0045-6535\(97\)00450-5](https://doi.org/10.1016/S0045-6535(97)00450-5).
- Pham DT, Nguyen HM, Boivin TG, et al. 2015. Predictors for dioxin accumulation in residents living in Da Nang and Bien Hoa, Vietnam, many years after Agent Orange use. *Chemosphere* 118:277-283. <https://doi.org/10.1016/j.chemosphere.2014.09.064>.
- Pham NT, Nishijo M, Pham TT, et al. 2019. Perinatal dioxin exposure and neurodevelopment of 2-year-old Vietnamese children in the most contaminated area from Agent Orange in Vietnam. *Sci Total Environ* 678:217-226. <https://doi.org/10.1016/j.scitotenv.2019.04.425>.

8. REFERENCES

- Pham TN, Nishijo M, Pham TT, et al. 2020. Dioxin exposure and sexual dimorphism of gaze behavior in prepubertal Vietnamese children living in Da Nang, a hot spot for dioxin contamination. *Sci Total Environ* 749:141083. <https://doi.org/10.1016/j.scitotenv.2020.141083>.
- Pham NT, Nishijo M, Nghiem TTG, et al. 2021. Effects of perinatal dioxin exposure on neonatal electroencephalography (EEG) activity of the quiet sleep stage in the most contaminated area from Agent Orange in Vietnam. *Int J Hyg Environ Health* 232:113661. <https://doi.org/10.1016/j.ijheh.2020.113661>.
- Philippi M, Schmid J, Wipf HK, et al. 1982. A microbial metabolite of TCDD. *Experientia* 38:659-661. <https://doi.org/10.1007/BF01964077>.
- Phillips LJ, Birchard GF. 1991. Regional variations in human toxics exposure in the USA: An analysis based on the national human adipose tissue survey. *Arch Environ Contam Toxicol* 21:159-168. <https://doi.org/10.1007/BF01055332>.
- Phuong NTN, Thuy TT, Phuong PK. 1989a. An estimate of reproductive abnormalities in women inhabiting herbicide sprayed and non-herbicide sprayed areas in the south of Vietnam, 1952-1981. *Chemosphere* 18:843-846. [https://doi.org/10.1016/0045-6535\(89\)90206-3](https://doi.org/10.1016/0045-6535(89)90206-3).
- Piper WN, Rose JQ, Gehring PJ. 1973. Excretion and tissue distribution of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the rat. *Environ Health Perspect* 5:241-244. <https://doi.org/10.1289/ehp.7305241>.
- Pirkle J, Wolfe W, Patterson D, et al. 1989. Estimates of the half-life of 2,3,7,8-tetrachlorodibenzo-p-dioxin in Vietnam veterans of Operation Ranch Hand. *J Toxicol Environ Health* 27:165-171. <https://doi.org/10.1080/15287398909531288>.
- Pitot HC, Goldsworthy T, Campbell HA. 1980. Quantitative evaluation of the promotion by 2,3,7,8-tetrachlorodibenzo-p-dioxin of hepatocarcinogenesis from diethylnitrosamine. *Cancer Res* 40:3616-3620.
- Pitt JA, Buckalew AR, House DE, et al. 2000. Adrenocorticotropin (ACTH) and corticosterone secretion by perfused pituitary and adrenal glands from rodents exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Toxicology* 151(1-3):25-35. [https://doi.org/10.1016/S0300-483X\(00\)00257-2](https://doi.org/10.1016/S0300-483X(00)00257-2).
- Plimmer JR, Klingebiel UI, Crosby DG, et al. 1973. Photochemistry of dibenzo-p-dioxins. In: Blair EH, ed. *Chlorodioxins-origin and fate (Advances in Chemistry Series : No 120)*. Washington, DC: American Chemical Society, 44-54.
- Pluim HJ, van der Slikke JW, Koppe JG, et al. 1993a. Levels of PCDDs and PCDFs in human milk: Dependence on several parameters and dietary habits. *Chemosphere* 26(10):1889-1894. [https://doi.org/10.1016/0045-6535\(93\)90082-G](https://doi.org/10.1016/0045-6535(93)90082-G).
- Pluim HJ, Wever J, Koppe JG, et al. 1993b. Intake and fecal excretion of chlorinated dioxins and dibenzofurans in breast-fed infants at different ages. *Chemosphere* 26:1947-1952. [https://doi.org/10.1016/0045-6535\(93\)90021-V](https://doi.org/10.1016/0045-6535(93)90021-V).
- Pluim HJ, Koope JG, Olie K, et al. 1994a. Clinical laboratory manifestations of exposure to background levels of dioxins in the perinatal period. *Act Paediatr* 83:583-587. <https://doi.org/10.1111/j.1651-2227.1994.tb13086.x>.
- Pluim HJ, van der Slikke JW, Olie K, et al. 1994b. Dioxins and vitamin K status of the newborn. *J Environ Sci Health A* 29:793-802. <https://doi.org/10.1080/10934529409376072>.
- Pluim HJ, van der Goot M, Olie K, et al. 1996. Missing effects of background dioxin exposure on development of breast-fed infants during the first half year of life. *Chemosphere* 33:1307-1315. [https://doi.org/10.1016/0045-6535\(96\)00268-8](https://doi.org/10.1016/0045-6535(96)00268-8).
- Pocchiari F, Silano V, Zampieri A. 1979. Human health effects from accidental release of tetrachlorodibenzo-p-dioxin (TCDD) at Seveso, Italy. *Ann NY Acad Sci* 320:311-320. <https://doi.org/10.1111/j.1749-6632.1979.tb56614.x>
- Podoll RT, Jaber HM, Mill T. 1986. Tetrachlorodibenzodioxin: Rates of volatilization and photolysis in the environment. *Environ Sci Technol* 20:490-492. <https://doi.org/10.1021/es00147a008>.
- Pohjanvirta R, Miettinen H, Sankari S, et al. 2012. Unexpected gender difference in sensitivity to the acute toxicity of dioxin in mice. *Toxicol Appl Pharmacol* 262(2):167-176. <https://doi.org/10.1016/j.taap.2012.04.032>.

8. REFERENCES

- Pohl HR, Hibbs BF. 1996. Breast-feeding exposure of infants to environmental contaminants - a public health risk assessment viewpoint: chlorinated dibenzodioxins and chlorinated dibenzofurans. *Toxicol Ind Health* 12(5):105-114. <https://doi.org/10.1177/074823379601200501>.
- Pohl H, DeRosa C, Holler J. 1995. Public health assessment for dioxins exposure from soil. *Chemosphere* 31(1):2437-2454. [https://doi.org/10.1016/0045-6535\(95\)00114-N](https://doi.org/10.1016/0045-6535(95)00114-N).
- Poiger H, Schlatter C. 1980. Influence of solvents and adsorbents on dermal and intestinal absorption of TCDD. *Food Cosmet Toxicol* 18:477-481. [https://doi.org/10.1016/0015-6264\(80\)90160-1](https://doi.org/10.1016/0015-6264(80)90160-1).
- Poiger H, Buser HR. 1984. The metabolism of TCDD in the dog and rat. *Banbury Rep* 18:39-47.
- Poiger H, Schlatter C. 1985. Influence of phenobarbital and TCDD on the hepatic metabolism of TCDD in the dog. *Experientia* 41:376-378. <https://doi.org/10.1007/BF02004514>.
- Poiger H, Schlatter C. 1986. Pharmacokinetics of 2,3,7,8-TCDD in man. *Chemosphere* 15:1489-1494. [https://doi.org/10.1016/0045-6535\(86\)90429-7](https://doi.org/10.1016/0045-6535(86)90429-7).
- Poiger H, Weber H, Schlatter CH. 1982. Special aspects of metabolism and kinetics of TCDD in dogs and rats: Assessment of toxicity of TCDD-metabolites(s) in guinea pigs. In: Hutzinger O, Frei RW, Merian E, et al., eds. *Chlorinated dioxins and related compounds: Impact on the environment*. New York, NY: Pergamon Press, 317-325.
- Poland A, Glover E. 1979. An estimate of the maximum in vivo covalent binding of 2,3,7,8-tetrachlorodibenzo-p-dioxin to rat liver protein, ribosomal RNA and DNA. *Cancer Res* 39:3341-3344.
- Poland A, Knutson JC. 1982. 2,3,7,8-Tetrachlorodibenzo-p-dioxin and related halogenated aromatic hydrocarbons: Examination of the mechanism of toxicity. *Ann Rev Pharmacol Toxicol* 22:517-554.
- Poland AP, Smith D, Metter G, et al. 1971. A health survey of workers in a 2,4-D and 2,4,5-T plant with special attention to chloracne, porphyria cutanea tarda, and psychologic parameters. *Arch Environ Health* 22:316-327. <https://doi.org/10.1080/00039896.1971.10665850>.
- Poland A, Palen D, Glover E. 1982. Tumour promotion by TCDD in skin of HRS/J hairless mice. *Nature* 300(5889):271-273. <https://doi.org/10.1038/300271a0>.
- Poland A, Knutson JC, Glover E. 1984. Histologic changes produced by 2,3,7,8-tetrachlorodibenzo-p-dioxin in the skin of mice carrying mutations that affect the integument. *J Invest Dermatol* 83:454-459. <https://doi.org/10.1111/1523-1747.ep12273574>.
- Poland A, Palen D, Glover E. 1994. Analysis of the four alleles of the murine aryl hydrocarbon receptor. *Mol Pharmacol* 46:915-921.
- Porte C, Albaiges J. 1993. Bioaccumulation patterns of hydrocarbons and polychlorinated biphenyls in bivalves, crustaceans, and fishes. *Arch Environ Contam Toxicol* 26:273-281. <https://doi.org/10.1007/BF00203552>.
- Potter CL, Moore RW, Inhorn SL, et al. 1986. Thyroid status and thermogenesis in rats treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 84(1):45-55. [https://doi.org/10.1016/0041-008x\(86\)90415-1](https://doi.org/10.1016/0041-008x(86)90415-1).
- Powers BE, Lin TM, Vanka A, et al. 2005. Tetrachlorodibenzo-p-dioxin exposure alters radial arm maze performance and hippocampal morphology in female AhR mice. *Genes Brain Behav* 4(1):51-59. <https://doi.org/10.1111/j.1601-183X.2004.00098.x>.
- Prasad Singh N, Nagarkatti M, Nagarkatti P. 2020. From suppressor T cells to regulatory T cells: How the journey that began with the discovery of the toxic effects of TCDD led to better understanding of the role of AhR in immunoregulation. *Int J Mol Sci* 21(21). <https://doi.org/10.3390/ijms2117849>.
- Pratt IS, Anderson WA, Crowley D, et al. 2012. Polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs) and polychlorinated biphenyls (PCBs) in breast milk of first-time Irish mothers: impact of the 2008 dioxin incident in Ireland. *Chemosphere* 88(7):865-872. <https://doi.org/10.1016/j.chemosphere.2012.03.095>.
- Pruell RJ, Rubinstein NI, Taplin BK, et al. 1993. Accumulation of polychlorinated organic contaminants from sediment by three benthic marine species. *Arch Environ Contam Toxicol* 24(3):290-297. <https://doi.org/10.1007/BF01128727>.

8. REFERENCES

- Puhvel SM, Sakamoto M. 1988. Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on murine skin. *J Invest Dermatol* 90(3):354-358. <https://doi.org/10.1111/1523-1747.ep12456367>.
- Puhvel SM, Sakamoto M, Ertl DC, et al. 1982. Hairless mice as models for chloracne: A study of cutaneous changes induced by topical application of established chloracnegens. *Toxicol Appl Pharmacol* 64(3):492-503. [https://doi.org/10.1016/0041-008x\(82\)90247-2](https://doi.org/10.1016/0041-008x(82)90247-2).
- Raab U, Preiss U, Albrecht M, et al. 2008. Concentrations of polybrominated diphenyl ethers, organochlorine compounds and nitro musks in mother's milk from Germany (Bavaria). *Chemosphere* 72(1):87-94. <https://doi.org/10.1016/j.chemosphere.2008.01.053>.
- Rasmaja A, Viluksela M, Rozman KK. 1996. Decreased liver type I 5'-deiodinase and increased brown adipose tissue type II 5'-deiodinase activity in 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)-treated Long-Evans rats. *Toxicology* 114(3):199-205. [https://doi.org/10.1016/s0300-483x\(96\)03488-9](https://doi.org/10.1016/s0300-483x(96)03488-9).
- Randerath K, Putman KL, Randerath E, et al. 1988. Organ-specific effects of long-term feeding 2,3,7,8-tetrachlorodibenzo-p-dioxin and 1,2,3,7,8-pentachlorodibenzo-p-dioxin on I-compounds in hepatic and renal DNA of female Sprague-Dawley rats. *Carcinogenesis* 9:2285-2289. <https://doi.org/10.1093/CARCIN/9.12.2285>.
- Randerath K, Putman KL, Randerath E, et al. 1989. Liver DNA alterations by 2,3,7,8-tetrachlorodibenzo-p-dioxin and 1,2,3,7,8-pentachlorodibenzo-p-dioxin in the female rat. *Chemosphere* 18:681-685. [https://doi.org/10.1016/0045-6535\(89\)90182-3](https://doi.org/10.1016/0045-6535(89)90182-3).
- Rappe C. 1992. Dietary exposure and human levels of PCDDs and PCDFs. *Chemosphere* 25:231-234. [https://doi.org/10.1016/0045-6535\(92\)90521-R](https://doi.org/10.1016/0045-6535(92)90521-R).
- Rappe C, Nygren M, Marklund S, et al. 1985. Assessment of human exposure to polychlorinated dibenzofurans and dioxins. *Environ Health Perspect* 60:303-304. <https://doi.org/10.1289/ehp.8560303>.
- Rappe C, Lindström G, Glas B, et al. 1990. Levels of PCDDs and PCDFs in milk cartons and in commercial milk. *Chemosphere* 20(10-12):1649-1656. [https://doi.org/10.1016/0045-6535\(90\)90325-n](https://doi.org/10.1016/0045-6535(90)90325-n).
- Rappe C, Bergqvist P, Kjeller L, et al. 1991. Levels and patterns of PCDD and PCDF contamination in fish, crab, and lobsters from Newark Bay and the New York Bight. *Chemosphere* 22(3-4):239-266. [https://doi.org/10.1016/0045-6535\(91\)90314-4](https://doi.org/10.1016/0045-6535(91)90314-4).
- Rasinger JD, Carroll TS, Maranghi F, et al. 2018. Low dose exposure to HBCD, CB-153 or TCDD induces histopathological and hormonal effects and changes in brain protein and gene expression in juvenile female BALB/c mice. *Reprod Toxicol* 80:105-116. <https://doi.org/10.1016/j.reprotox.2018.06.010>.
- Rawn DFK, Sadler AR, Casey VA, et al. 2017. Dioxins/furans and PCBs in Canadian human milk: 2008-2011. *Sci Total Environ* 595:269-278. <https://doi.org/10.1016/j.scitotenv.2017.03.157>.
- Ray S, Swanson HI. 2009. Activation of the aryl hydrocarbon receptor by TCDD inhibits senescence: a tumor promoting event? *Biochem Pharmacol* 77(4):681-688. <https://doi.org/10.1016/j.bcp.2008.11.022>.
- Rayne S, Ikonomou MG, Butt CM, et al. 2005. Polychlorinated dioxins and furans from the World Trade Center attacks in exterior window films from lower Manhattan in New York City. *Environ Sci Technol* 39(7):1995-2003. <https://doi.org/10.1021/es049211k>.
- Rebourcet D, Odet F, Vérot A, et al. 2010. The effects of an in utero exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on male reproductive function: identification of Ccl5 as a potential marker. *Int J Androl* 33(2):413-424. <https://doi.org/10.1111/j.1365-2605.2009.01020.x>.
- Reed LW, Hunt GT, Maisel BE, et al. 1990. Baseline assessment of PCDDs/PCDFs in the vicinity of the Elk River, Minnesota generating station. *Chemosphere* 21:159-171. [https://doi.org/10.1016/0045-6535\(90\)90388-A](https://doi.org/10.1016/0045-6535(90)90388-A).
- Reggiani G. 1980. Acute human exposure to TCDD in Seveso, Italy. *J Toxicol Environ Health* 6:27-43. <https://doi.org/10.1080/15287398009529828>.
- Rennert A, Wittsiepe J, Kasper-Sonnenberg M, et al. 2012. Prenatal and early life exposure to polychlorinated dibenzo-p-dioxins, dibenzofurans and biphenyls may influence

8. REFERENCES

- dehydroepiandrosterone sulfate levels at prepubertal age: results from the Duisburg birth cohort study. *J Toxicol Environ Health A* 75(19-20):1232-1240.
<https://doi.org/10.1080/15287394.2012.709375>.
- RePORTER. 2022. Chlorinated dibenzo-p-dioxins. Research Portfolio Online Reporting Tools. National Institutes of Health. <https://reporter.nih.gov/>. March 1, 2024.
- Rier SE, Martin DC, Bowman RE, et al. 1993. Endometriosis in Rhesus monkeys (*Macaca mulatta*) following chronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Fundam Appl Toxicol* 21(4):433-441. <https://doi.org/10.1006/faat.1993.1119>.
- Rier SE, Coe CL, Lemieux AM, et al. 2001a. Increased tumor necrosis factor-alpha production by peripheral blood leukocytes from TCDD-exposed rhesus monkeys. *Toxicol Sci* 60(2):327-337. <https://doi.org/10.1093/toxsci/60.2.327>.
- Rier SE, Turner WE, Martin DC, et al. 2001b. Serum levels of TCDD and dioxin-like chemicals in Rhesus monkeys chronically exposed to dioxin: correlation of increased serum PCB levels with endometriosis. *Toxicol Sci* 59(1):147-159. <https://doi.org/10.1093/toxsci/59.1.147>.
- Ring C, Blanchette A, Klaren WD, et al. 2023. A multi-tiered hierarchical Bayesian approach to derive toxic equivalency factors for dioxin-like compounds. *Regul Toxicol Pharmacol* 143:105464. <https://doi.org/10.1016/j.yrtph.2023.105464>.
- Rippen G, Wesp H. 1993. Kale uptake of PCDD/PCDF, PCB and PAH under field conditions: Importance of gaseous dry deposition. *Organohalogen Compounds* 12:111-114.
- Riss A, Hagenmaier H, Weberruss U, et al. 1990. Comparison of PCDD/PCDF levels in soil, grass, cow's milk, human blood and spruce needles in an area of PCDD/PCDF contamination through emissions from a metal reclamation plant. *Chemosphere* 21(12):1451-1456. [https://doi.org/10.1016/0045-6535\(90\)90050-4](https://doi.org/10.1016/0045-6535(90)90050-4).
- Rogers AM, Anderson ME, Back KC. 1982. Mutagenicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin and perfluoro-n-decanoic acid in L5178y mouse lymphoma cells. *Mutat Res* 105:445-449. [https://doi.org/10.1016/0165-7992\(82\)90192-0](https://doi.org/10.1016/0165-7992(82)90192-0).
- Rohde S, Moser GA, Pepke O, et al. 1997. Fecal clearance of PCDD/Fs in occupationally exposed persons. *Organohalogen Compounds* 33:408-413.
- Rohde S, Moser GA, Papke O, et al. 1999. Clearance of PCDD/Fs via the gastrointestinal tract in occupationally exposed persons. *Chemosphere* 38(14):3397-3410. [https://doi.org/10.1016/S0045-6535\(98\)00551-7](https://doi.org/10.1016/S0045-6535(98)00551-7).
- Roman BL, Pollenz RS, Peterson RE. 1998a. Responsiveness of the adult male rat reproductive tract to 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure: Ah receptor and ARNT expression, CYP1A1 induction, and Ah receptor down-regulation. *Toxicol Appl Pharmacol* 150:228-239. <https://doi.org/10.1006/TAAP.1998.8388>.
- Roman BL, Timms BG, Prins GS, et al. 1998b. In utero and lactational exposure of the male rat to 2,3,7,8-tetrachlorodibenzo-p-dioxin impairs prostate development. 2. Effects on growth and cytodifferentiation. *Toxicol Appl Pharmacol* 150:254-270. <https://doi.org/10.1006/TAAP.1998.8395>.
- Rooney AA, Boyles AL, Wolfe MS, et al. 2014. Systematic review and evidence integration for literature-based environmental health science assessments. *Environ Health Perspect* 122(7):711-718. <https://doi.org/10.1289/ehp.1307972>.
- Rordorf BF. 1989. Prediction of vapor pressures, boiling points and enthalpies of fusion for twenty-nine halogenated dibenzo-p-dioxins and fifty-five dibenzofurans by vapor pressure correlation method. *Chemosphere* 18:783-788. [https://doi.org/10.1016/0045-6535\(89\)90196-3](https://doi.org/10.1016/0045-6535(89)90196-3).
- Rose JQ, Ramsey JC, Wentzler TH, et al. 1976. The fate of 2,3,7,8-tetrachlorodibenzo-p-dioxin following single and repeated oral doses to the rat. *Toxicol Appl Pharmacol* 36:209-226. [https://doi.org/10.1016/0041-008X\(76\)90001-6](https://doi.org/10.1016/0041-008X(76)90001-6).
- Roth W, Voorman R, Aust SD. 1988. Activity of thyroid hormone-inducible enzymes following treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 92(1):65-74. [https://doi.org/10.1016/0041-008x\(88\)90228-1](https://doi.org/10.1016/0041-008x(88)90228-1).

8. REFERENCES

- Rowland RE, Edwards LA, Podd JV. 2007. Elevated sister chromatid exchange frequencies in New Zealand Vietnam War veterans. *Cytogen Genome Res* 116(4):248-251.
<https://doi.org/10.1159/000100407>.
- Roy TA, Hammerstrom K, Schaum J. 2008. Percutaneous absorption of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) from soil. *J Toxicol Environ Health A* 71(23):1509-1515.
<https://doi.org/10.1080/15287390802349875>.
- Rozman KK, Lebofsky M, Pinson DM. 2005. Chronic toxicity and carcinogenicity of 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin displays a distinct dose/time toxicity threshold ($c \times t = k$) and a life-prolonging subthreshold effect. *Food Chem Toxicol* 43(5):729-740.
<https://doi.org/10.1016/j.fct.2005.01.013>.
- RTECS. 1996. Dioxins. Registry of Toxic Effects on Chemical Substances. National Institute of Occupational Safety and Health, MDL Information Systems, Inc.
- Ruiz P, Ray M, Fisher J, et al. 2011. Development of a human Physiologically Based Pharmacokinetic (PBPK) Toolkit for environmental pollutants. *Int J Mol Sci* 12(11):7469-7480.
<https://doi.org/10.3390/ijms12117469>.
- Ryan JJ, Lizotte R, Lau BPY. 1985. Chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans in Canadian human adipose tissue. *Chemosphere* 14:697-706. [https://doi.org/10.1016/0045-6535\(85\)90177-8](https://doi.org/10.1016/0045-6535(85)90177-8).
- Ryan JJ, Schechter A, Sun WF, et al. 1986. Distribution of chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans in human tissues from the general population. In: Rappe C, Choudhary G, Keith LH, eds. *Chlorinated dioxins and dibenzofurans in perspective*. Chelsea, MI: Lewis Publishers, Inc., 3-16.
- Ryan JJ, Gasiewicz TA, Brown JR. 1990. Human body burden of polychlorinated dibenzofurans associated with toxicity based on the Yusho and Yucheng incidents. *Fundam Appl Toxicol* 15:722-731. [https://doi.org/10.1016/0272-0590\(90\)90188-P](https://doi.org/10.1016/0272-0590(90)90188-P).
- Ryan JJ, Conacher HBS, Panopio LG, et al. 1991. Gas chromatographic separations of all 136 tetra- to octa- polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans on nine different stationary phases. *J Chromatogr* 541:131-183. [https://doi.org/10.1016/S0021-9673\(01\)95990-4](https://doi.org/10.1016/S0021-9673(01)95990-4).
- Ryan JJ, Shewchuk C, Lau P, et al. 1992. Polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans in Canadian bleached paperboard milk containers (1988-1989) and their transfer to fluid milk. *J Agric Food Chem* 40:919-923. <https://doi.org/10.1021/JF00017A045>.
- Ryan JJ, Levesque D, Panopio LG, et al. 1993a. Elimination of polychlorinated dibenzofurans (PCDFs) and polychlorinated biphenyls (PCBs) from human blood in the Yusho and Yu-Cheng rice oil poisonings. *Arch Environ Contam Toxicol* 24:504-512. <https://doi.org/10.1007/BF01146170>.
- Ryan JJ, Lizotte R, Panopio LG, et al. 1993b. Polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) in human milk samples collected across Canada in 1986-87. *Food Addit Contam* 10(4):419-428. <https://doi.org/10.1080/02652039309374165>.
- Ryan JJ, Beaudoin N, Mills P, et al. 1997. Dioxin-like compounds in total diet food, Canada 1992-93. *Organohalogen Compounds* 32:229-232.
- Safe S. 1986. Comparative toxicology and mechanism of action of polychlorinated dibenzo-p-dioxins and dibenzofurans. *Annu Rev Pharmacol Toxicol* 26:371-399.
- Safe S. 1987. Determination of 2,3,7,8-TCDD toxic equivalent factors (TEFs): Support for the use of the in vitro induction assay. *Chemosphere* 16:791-802. [https://doi.org/10.1016/0045-6535\(87\)90012-9](https://doi.org/10.1016/0045-6535(87)90012-9).
- Safe TM, Luebke AE. 2016. Prenatal low dosage dioxin (TCDD) exposure impairs cochlear function resulting in auditory neuropathy. *Hear Res* 331:7-12. <https://doi.org/10.1016/j.heares.2015.09.015>.
- Salisbury TB, Marcinkiewicz JL. 2002. In utero and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin and 2,3,4,7,8-pentachlorodibenzofuran reduces growth and disrupts reproductive parameters in female rats. *Biol Reprod* 66(6):1621-1626.
<https://doi.org/10.1095/biolreprod66.6.1621>.

8. REFERENCES

- Sanabria M, Cucielo MS, Guerra MT, et al. 2016. Sperm quality and fertility in rats after prenatal exposure to low doses of TCDD: A three-generation study. *Reprod Toxicol* 65:29-38. <https://doi.org/10.1016/j.reprotox.2016.06.019>.
- Sanderson JT, Elliott JE, Norstrom RJ, et al. 1994. Monitoring biological effects of polychlorinated dibenzo-p-dioxins, dibenzofurans, and biphenyls in Great Blue Heron chicks in British Columbia. *J Toxicol Environ Health* 41(4):434-450. <https://doi.org/10.1080/15287399409531855>.
- Santostefano MJ, Johnson KL, Whisnant NA, et al. 1996. Subcellular localization of TCDD differs between the liver, lungs, and kidneys after acute and subchronic exposure: Species/dose comparisons and possible mechanism. *Fundam Appl Toxicol* 34:265-275. <https://doi.org/10.1093/TOXSCI/34.2.265>.
- Santostefano MJ, Wang X, Richardson VM, et al. 1998. A pharmacodynamic analysis of TCDD-induced cytochrome P450 gene expression in multiple tissues: dose- and time-dependent effects. *Toxicol Appl Pharmacol* 151:294-310. <https://doi.org/10.1006/TAAP.1998.8466>.
- Saracci R, Kogevinas M, Bertazzi PA, et al. 1991. Cancer mortality in workers exposed to chlorophenoxy herbicides and chlorophenols. *Lancet* 338(8774):1027-1032. [https://doi.org/10.1016/0140-6736\(91\)91898-5](https://doi.org/10.1016/0140-6736(91)91898-5).
- Sarihan ME, Parlakpinar H, Ciftci O, et al. 2015. Protective effects of melatonin against 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced cardiac injury in rats. *Eur J Pharmacol* 762:214-220. <https://doi.org/10.1016/j.ejphar.2015.04.054>.
- Savvateeva D, Numata J, Pieper R, et al. 2020. Physiologically based toxicokinetic models and in silico predicted partition coefficients to estimate tetrachlorodibenzo-p-dioxin transfer from feed into growing pigs. *Arch Toxicol* 94(1):187-196. <https://doi.org/10.1007/s00204-019-02617-0>.
- Sawahata T, Olson JR, Neal RA. 1982. Identification of metabolites of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) formed on incubation with isolated rat hepatocytes. *Biochem Biophys Res Commun* 105:341-346. [https://doi.org/10.1016/S0006-291X\(82\)80050-8](https://doi.org/10.1016/S0006-291X(82)80050-8).
- Sax NI, Lewis RJ, eds. 1987. Dioxin. In: Hawley's condensed chemical dictionary. 11th ed. New York, NY: Van Nostrand Reinhold, 424-425.
- Schantz S, Bowman RE. 1989. Learning in monkeys exposed perinatally to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Neurotoxicol Teratol* 11:13-19. [https://doi.org/10.1016/0892-0362\(89\)90080-9](https://doi.org/10.1016/0892-0362(89)90080-9).
- Schantz SL, Ferguson SA, Bowman RE. 1992. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on behavior of monkey in peer groups. *Neurotoxicol Teratol* 14:433-446. [https://doi.org/10.1016/0892-0362\(92\)90054-e](https://doi.org/10.1016/0892-0362(92)90054-e).
- Schantz SL, Laughlin NK, Van VHC, et al. 1986. Maternal care by rhesus monkeys of infant monkey exposed to either lead or 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Neurotoxicology* 7(2):637-650.
- Schaum J, Cleverly D, Lorber M, et al. 1994. Updated analysis of U.S. sources of dioxin-like compounds and background exposure levels. *Organohalogen Compounds* 20:178-184.
- Schechter A. 1985. Medical surveillance of exposed persons after exposure to PCBs, chlorinated dibenzodioxins and dibenzofurans after PCB transformer or capacitor incidents. *Environ Health Perspect* 60:333-338. <https://doi.org/10.1289/EHP.8560333>.
- Schechter A, Tiernan T. 1985. Occupational exposure to polychlorinated dioxins, polychlorinated furans, polychlorinated biphenyls, and biphenylenes after an electrical panel and transformer accident in an office building in Binghamton, NY. *Environ Health Perspect* 60:305-313. <https://doi.org/10.1289/ehp.8560305>.
- Schechter A, Gasiewicz TA. 1987a. Health hazard assessment of chlorinated dioxins and dibenzofurans contained in human milk. *Chemosphere* 16:2147-2154. [https://doi.org/10.1016/0045-6535\(87\)90223-2](https://doi.org/10.1016/0045-6535(87)90223-2).
- Schechter A, Gasiewicz TA. 1987b. Human breast milk levels of dioxins and dibenzofurans: Significance with respect to current risk assessments. In: Exner JH, ed. Solving hazardous waste problems. Vol. 338. American Chemical Society, 162-173. <https://doi.org/10.1021/bk-1987-0338.ch012>.

8. REFERENCES

- Schechter A, Ryan JJ. 1988. Polychlorinated dibenzo-para-dioxin and dibenzofuran levels in human adipose tissues from workers 32 years after occupational exposure to 2,3,7,8-TCDD. *Chemosphere* 17(5):915-920. [https://doi.org/10.1016/0045-6535\(88\)90063-x](https://doi.org/10.1016/0045-6535(88)90063-x).
- Schechter A, Ryan JJ. 1991. Brominated and chlorinated dioxin blood levels in a chemist 34 years after exposure to 2,3,7,8-tetrachlorodibenzodioxin and 2,3,7,8-tetrabromodibenzodioxin. *Chemosphere* 23:1921-1924. [https://doi.org/10.1016/0045-6535\(91\)90039-G](https://doi.org/10.1016/0045-6535(91)90039-G).
- Schechter A, Li L. 1997. Dioxins, dibenzofurans, dioxin-like PCBs, and DDE in U.S. fast food, 1995. *Chemosphere* 34(5-7):1449-1457. [https://doi.org/10.1016/S0045-6535\(97\)00441-4](https://doi.org/10.1016/S0045-6535(97)00441-4).
- Schechter A, Ryan JJ, Lizotte R, et al. 1985a. Chlorinated dibenzodioxins and dibenzofurans in human adipose tissue from exposed and control New York State patients. *Chemosphere* 14:933-937. [https://doi.org/10.1016/0045-6535\(85\)90219-X](https://doi.org/10.1016/0045-6535(85)90219-X).
- Schechter A, Tiernan T, Schaffner F, et al. 1985b. Patient fat biopsies for chemical analysis and liver biopsies for ultrastructural characterization after exposure to polychlorinated dioxins, furans and PCBs. *Environ Health Perspect* 60:241-254. <https://doi.org/10.1289/ehp.8560241>.
- Schechter A, Ryan JJ, Constable JD. 1986a. Chlorinated dibenzo-p-dioxin and dibenzofuran levels in human adipose tissue and milk samples from the north and south of Vietnam. *Chemosphere* 15:1613-1620. [https://doi.org/10.1016/0045-6535\(86\)90445-5](https://doi.org/10.1016/0045-6535(86)90445-5).
- Schechter A, Ryan JJ, Gitlitz G. 1986b. Chlorinated dioxin and dibenzofurans levels in human adipose tissues from exposed and control populations. In: Rappe C, Choudhary G, Keith LH, eds. *Chlorinated dioxins and dibenzofurans in perspective*. Chelsea, MI: Lewis Publishers, Inc., 51-56.
- Schechter A, Constable JD, Arghestani S, et al. 1987a. Elevated levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin in adipose tissue of certain U.S. veterans of the Vietnam war. *Chemosphere* 16:1997-2001. [https://doi.org/10.1016/0045-6535\(87\)90200-1](https://doi.org/10.1016/0045-6535(87)90200-1).
- Schechter A, Ryan JJ, Constable JD. 1987b. Polychlorinated dibenzo-p-dioxin and polychlorinated dibenzofuran levels in human breast milk from Vietnam compared with cow's milk and human breast milk from the North American continent. *Chemosphere* 16:2003-2016. [https://doi.org/10.1016/0045-6535\(87\)90201-3](https://doi.org/10.1016/0045-6535(87)90201-3).
- Schechter A, Dekin A, Weerasinghe NCA, et al. 1988. Sources of dioxins in the environment: A study of PCDDs and PCDFs in ancient, frozen Eskimo tissue. *Chemosphere* 17(4):627-631. [https://doi.org/10.1016/0045-6535\(88\)90242-1](https://doi.org/10.1016/0045-6535(88)90242-1).
- Schechter A, Constable JD, Bangert JV, et al. 1989a. Elevated body burdens of 2,3,7,8-tetrachlorodibenzo-p-dioxin in adipose tissue of United States Vietnam veterans. *Chemosphere* 18:431-438. [https://doi.org/10.1016/0045-6535\(89\)90152-5](https://doi.org/10.1016/0045-6535(89)90152-5).
- Schechter A, Ryan JJ, Constable JD. 1989b. Chlorinated dioxins and dibenzofurans in human milk from Japan, India, and the United States of America. *Chemosphere* 18(1-6):975-980. [https://doi.org/10.1016/0045-6535\(89\)90225-7](https://doi.org/10.1016/0045-6535(89)90225-7).
- Schechter A, Fürst P, Fürst C, et al. 1989c. Levels of polychlorinated dibenzodioxins and dibenzofurans in cow's milk and in soybean derived infant formulas sold in the United States and other countries. *Chemosphere* 19:913-918. [https://doi.org/10.1016/0045-6535\(89\)90431-1](https://doi.org/10.1016/0045-6535(89)90431-1).
- Schechter A, Fürst P, Krüger C, et al. 1989d. Levels of polychlorinated dibenzofurans, dibenzodioxins, PCBs, DDT, and DDE, hexachlorobenzene, dieldrin, hexachlorocyclohexanes, and oxychlordane in human breast milk from the United States, Thailand, Vietnam, and Germany. *Chemosphere* 18:445-454. [https://doi.org/10.1016/0045-6535\(89\)90154-9](https://doi.org/10.1016/0045-6535(89)90154-9).
- Schechter A, Fürst P, Ryan JJ, et al. 1989e. Polychlorinated dioxins and dibenzofurans levels from human milk from several locations in the United States, Germany, and Vietnam. *Chemosphere* 19:979-984. [https://doi.org/10.1016/0045-6535\(89\)90444-X](https://doi.org/10.1016/0045-6535(89)90444-X).
- Schechter A, Pspke O, Ball M. 1990a. Evidence for transplacental transfer of dioxins from mother to fetus: Chlorinated dioxin dibenzofuran levels in the livers of stillborn infants. *Chemosphere* 21:1017-1022. [https://doi.org/10.1016/0045-6535\(90\)90124-C](https://doi.org/10.1016/0045-6535(90)90124-C).

8. REFERENCES

- Schechter A, Ryan JJ, Constable JD, et al. 1990b. Partitioning of 2,3,7,8-chloroinated dibenzo-p-dioxins and dibenzofurans between adipose tissue and plasma lipid of 20 Massachusetts Vietnam veterans. *Chemosphere* 20:951-958. [https://doi.org/10.1016/0045-6535\(90\)90205-8](https://doi.org/10.1016/0045-6535(90)90205-8).
- Schechter A, Fürst P, Fürst C, et al. 1991a. Dioxins, dibenzofurans and selected chlorinated organic compounds in human milk and blood from Cambodia, Germany, Thailand, the USA, the USSR, and Vietnam. *Chemosphere* 23:1903-1912. [https://doi.org/10.1016/0045-6535\(91\)90037-E](https://doi.org/10.1016/0045-6535(91)90037-E).
- Schechter AJ, Malkin R, Papke O. 1991b. Dioxin levels in blood of municipal incinerator workers. *Med Sci Res* 19(11):331-332.
- Schechter A, Päpke O, Ball M, et al. 1991c. Partitioning of dioxins and dibenzofurans: Whole blood, blood plasma and adipose tissue. *Chemosphere* 23(11-12):1913-1919. [https://doi.org/10.1016/0045-6535\(91\)90038-f](https://doi.org/10.1016/0045-6535(91)90038-f).
- Schechter A, Ryan JJ, Papke O, et al. 1993. Elevated dioxin levels in the blood of male and female Russian workers with and without chloracne 25 years after phenoxyherbicide exposure: the UFA "Khimprom" incident. *Chemosphere* 27:253-258. [https://doi.org/10.1016/0045-6535\(93\)90299-K](https://doi.org/10.1016/0045-6535(93)90299-K).
- Schechter A, Startin J, Wright C, et al. 1994a. Dioxins in U.S. food and estimated daily intake. *Chemosphere* 29(9-11):2261-2265. [https://doi.org/10.1016/0045-6535\(94\)90393-X](https://doi.org/10.1016/0045-6535(94)90393-X).
- Schechter A, Ryan J, Papke O. 1994b. Elevated dioxin blood levels in Russian chemical workers and their children following maternal exposure. *Chemosphere* 29(9-11):2361-2370. [https://doi.org/10.1016/0045-6535\(94\)90405-7](https://doi.org/10.1016/0045-6535(94)90405-7).
- Schechter A, Ryan JJ, Masuda Y, et al. 1994c. Chlorinated and brominated dioxins and dibenzofurans in human tissue following exposure. *Environ Health Perspect* 102(Suppl 1):135-147. <https://doi.org/10.1289/ehp.94102s1135>.
- Schechter A, Startin J, Wright C, et al. 1994d. Congener-specific levels of dioxins and dibenzofurans in U.S. food and estimated daily dioxin toxic equivalent intake. *Environ Health Perspectives* 102(11):962-966. <https://doi.org/10.1289/EHP.94102962>.
- Schechter A, Dai LC, Thuy LTB, et al. 1995. Agent Orange and the Vietnamese: The persistence of elevated dioxin levels in human tissues. *Am J Public Health* 85:516-522. <https://doi.org/10.2105/AJPH.85.4.516>.
- Schechter A, Papke O, Lis A, et al. 1996a. Decrease in milk and blood dioxin levels over two years in a mother nursing twins: Estimates of decreased maternal and increased infant dioxin body burden from nursing. *Chemosphere* 32:543-549. [https://doi.org/10.1016/0045-6535\(95\)00248-0](https://doi.org/10.1016/0045-6535(95)00248-0).
- Schechter A, McGee H, Stanley JS, et al. 1996b. Dioxins and dioxin-like chemicals in blood and semen of American Vietnam veterans from the state of Michigan. *Amer J Ind Med* 30:647-654. [https://doi.org/10.1002/\(SICI\)1097-0274\(199612\)30:6<647::AID-AJIM1>3.0.CO;2-O](https://doi.org/10.1002/(SICI)1097-0274(199612)30:6<647::AID-AJIM1>3.0.CO;2-O).
- Schechter A, Startin J, Wright C, et al. 1996c. Concentrations of polychlorinated dibenzo-p-dioxins and dibenzofurans in human placental and fetal tissues from the U.S. and in placentas from Yu-Cheng exposed mothers. *Chemosphere* 32:551-557. [https://doi.org/10.1016/0045-6535\(96\)00002-1](https://doi.org/10.1016/0045-6535(96)00002-1).
- 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. <https://doi.org/10.1080/152873901750128326>.
- Schechter A, Quynh HT, Papke O, et al. 2006. Agent Orange, dioxins, and other chemicals of concern in Vietnam: update 2006. *J Occup Environ Med* 48(4):408-413. <https://doi.org/10.1097/01.jom.0000194153.77646.7d>.
- Schlaud M, Seidler A, Salje A, et al. 1995. Organochlorine residues in human breast milk: analysis through a sentinel practice network. *J Epidemiol Community Health* 49(Suppl 1):17-21. https://doi.org/10.1136/jech.49.suppl_1.17.
- Schlummer M, Moser GA, McLachlan M. 1998. Digestive tract adsorption of PCDDs, PCBs and HCB in humans: Mass balances and mechanistic considerations. *Toxicol Appl Pharmacol* 152(1):128-137. <https://doi.org/10.1006/TAAP.1998.8487>.

8. REFERENCES

- Schnorr TM, Lawson CC, Whelan EA, et al. 2001. Spontaneous abortion, sex ratio, and paternal occupational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Environ Health Perspect* 109(11):1127-1132. <https://doi.org/10.1289/EHP.011091127>.
- Schrey P, Wittsiepe J, Mackrodt P, et al. 1998. Human fecal PCDD/F-excretion exceeds the dietary intake. *Chemosphere* 37(9-12):1825-1831. [https://doi.org/10.1016/S0045-6535\(98\)00248-3](https://doi.org/10.1016/S0045-6535(98)00248-3).
- Schroll R, Bierling B, Cao G, et al. 1994. Uptake pathways of organic chemicals from soil by agricultural plants. *Chemosphere* 28(2):297-303. [https://doi.org/10.1016/0045-6535\(94\)90126-0](https://doi.org/10.1016/0045-6535(94)90126-0).
- Schroy JM, Hileman FD, Cheng SC. 1985. Physical/chemical properties of 2,3,7,8-TCDD (2,3,7,8-tetrachlorodibenzo-p-dioxin). *Chemosphere* 14:877-880.
- Schuhmacher M, Fàbrega F, Kumar V, et al. 2014. A PBPK model to estimate PCDD/F levels in adipose tissue: comparison with experimental values of residents near a hazardous waste incinerator. *Environ Int* 73:150-157. <https://doi.org/10.1016/j.envint.2014.07.020>.
- Schwarz M, Appel KE. 2005. Carcinogenic risks of dioxin: mechanistic considerations. *Regul Toxicol Pharmacol* 43(1):19-34. <https://doi.org/10.1016/j.yrtph.2005.05.008>.
- Schwetz BA, Norris JM, Sparschu GL, et al. 1973. Toxicology of chlorinated dibenzo-p-dioxins. *Environ Health Perspect* 5:87-99. <https://doi.org/10.1289/ehp.730587>.
- Schwetz BA, Quast JF, Keeler A, et al. 1978. Results of two year toxicity and reproduction studies on pentachlorophenol in rats. In: Rao KR, ed. *Pentachlorophenol: Chemistry, pharmacology, and environmental toxicology*. New York, NY: Plenum Press, 301-309. https://doi.org/10.1007/978-1-4615-8948-8_26.
- Scott MA, Tarara RP, Hendrickx AG, et al. 2001. Exposure to the dioxin 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) induces squamous metaplasia in the endocervix of cynomolgus macaques. *J Med Primatol* 30(3):156-160. <https://doi.org/10.1111/j.1600-0684.2001.tb00004.x>.
- Secor CL, Mills EL, Harshbarger, et al. 1993. Bioaccumulation of toxicants, element and nutrient composition, and soft tissue histology of Zebra mussels (*Dreissena polymorpha*) from New York state waters. *Chemosphere* 26(8):1559-1575. [https://doi.org/10.1016/0045-6535\(93\)90224-S](https://doi.org/10.1016/0045-6535(93)90224-S).
- Sedman RM, Esparza JR. 1991. Evaluation of the public health risks associated with semivolatile metal and dioxin emissions from hazardous waste incinerators. *Environ Health Perspect* 94:181-187. <https://doi.org/10.2307/3431311>.
- Seefeld MS, Peterson RE. 1984. Digestible energy and efficiency of feed utilization in rats treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 74:214-222. [https://doi.org/10.1016/0041-008X\(84\)90145-5](https://doi.org/10.1016/0041-008X(84)90145-5).
- Seefeld MD, Corbett SW, Keesey RE, et al. 1984a. Characterization of the wasting syndrome in rats treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 73(2):311-322. [https://doi.org/10.1016/0041-008X\(84\)90337-5](https://doi.org/10.1016/0041-008X(84)90337-5).
- Seefeld MD, Keesey RE, Peterson RE. 1984b. Body weight regulation in rats treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 76(3):526-536. [https://doi.org/10.1016/0041-008X\(84\)90357-0](https://doi.org/10.1016/0041-008X(84)90357-0).
- Seiler JP. 1973. A survey on the mutagenicity of various pesticides. *Experientia* 29:622-623. <https://doi.org/10.1007/BF01926706>.
- Seo B, Li M, Hansen LG, et al. 1995. Effects of gestational and lactational exposure to coplanar polychlorinated biphenyl (PCB) congeners or 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on thyroid hormone concentrations in weanling rats. *Toxicol Lett* 78(3):253-262. [https://doi.org/10.1016/0378-4274\(95\)03329-j](https://doi.org/10.1016/0378-4274(95)03329-j).
- Seo BW, Sparks AJ, Medora K, et al. 1999. Learning and memory in rats gestationally and lactationally exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Neurotoxicol Teratol* 21(3):231-239. [https://doi.org/10.1016/s0892-0362\(98\)00049-x](https://doi.org/10.1016/s0892-0362(98)00049-x).
- Seo BW, Powers BE, Widholm JJ, et al. 2000. Radial arm maze performance in rats following gestational and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Neurotoxicol Teratol* 22(4):511-519. [https://doi.org/10.1016/S0892-0362\(00\)00070-2](https://doi.org/10.1016/S0892-0362(00)00070-2).

8. REFERENCES

- Servos MR, Muir DCG, Barrie Webster GR. 1989a. The effect of dissolved organic matter on the bioavailability of polychlorinated dibenzo-p-dioxins. *Aquat Toxicol* 14(2):169-184. [https://doi.org/10.1016/0166-445x\(89\)90026-x](https://doi.org/10.1016/0166-445x(89)90026-x).
- Servos M, Muir D, Whittle D, et al. 1989b. Bioavailability of octachlorodibenzo-p-dioxin in aquatic systems. *Chemosphere* 19(1-6):969-972.
- Servos MR, Muir DCG, Webster GRB. 1992. Environmental fate of polychlorinated dibenzo-p-dioxins in lake enclosures. *Can J Fish Aquat Sci* 49(4):722-734. <https://doi.org/10.1139/F92-081>.
- Sewall CH, Lucier GW, Tritscher AM, et al. 1993. TCDD-mediated changes in hepatic epidermal growth factor receptor may be a critical event in the hepatocarcinogenic action of TCDD. *Carcinogenesis* 14(9):1885-1893. <https://doi.org/10.1093/CARCIN/14.9.1885>.
- Sewall CH, Flagler N, Vanden Heuvel JP, et al. 1995. Alterations in thyroid function in female Sprague-Dawley rats following chronic treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 132(2):237-244. <https://doi.org/10.1006/taap.1995.1104>.
- Sha R, Chen Y, Wang Y, et al. 2021. Gestational and lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in mice: Neurobehavioral effects on female offspring. *Sci Total Environ* 752:141784. <https://doi.org/10.1016/j.scitotenv.2020.141784>.
- Shear N, Schmidt C, Huntley S, et al. 1996. Evaluation of the factors relating combined sewer overflows with sediment contamination of the Lower Passaic River. *Mar Poll Bull* 32(3):288-304. [https://doi.org/10.1016/0025-326X\(95\)00164-I](https://doi.org/10.1016/0025-326X(95)00164-I).
- Shen ES, Guengerich FP, Olson JR. 1989. Biphasic response for hepatic microsomal enzyme induction by 2,3,7,8-tetrachlorodibenzo-p-dioxin in C57BL/6J and DBA/2J mice. *Biochem Pharmacol* 38:4075-4084. [https://doi.org/10.1016/0006-2952\(89\)90689-8](https://doi.org/10.1016/0006-2952(89)90689-8).
- Shen H, Ding G, Wu Y, et al. 2012. Polychlorinated dibenzo-p-dioxins/furans (PCDD/Fs), polychlorinated biphenyls (PCBs), and polybrominated diphenyl ethers (PBDEs) in breast milk from Zhejiang, China. *Environ Int* 42:84-90. <https://doi.org/10.1016/j.envint.2011.04.004>.
- Sherman RK, Clement RE, Tashiro C. 1990. The distribution of polychlorinated dibenzo-p-dioxins and dibenzofurans in Jackfish Bay, Lake Superior, in relation to a Kraft pulp mill effluent. *Chemosphere* 20(10-12):1641-1648. [https://doi.org/10.1016/0045-6535\(90\)90324-M](https://doi.org/10.1016/0045-6535(90)90324-M).
- Sherman WR, Keenan RE, Gunster DG, et al. 1992. Reevaluation of dioxin bioconcentration and bioaccumulation factors for regulatory purposes. *J Toxicol Environ Health* 37:211-229. <https://doi.org/10.1080/15287399209531666>.
- Shiu WY, Doucette W, Gobas FAPC, et al. 1988. Physical-chemical properties of chlorinated dibenzo-p-dioxins. *Environ Sci Technol* 22:651-658. <https://doi.org/10.1021/ES00171A006>.
- Shiverick KT, Muther TF. 1983. 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) effects on hepatic microsomal steroid metabolism and serum estradiol of pregnant rats. *Biochem Pharmacol* 32(6):991-995. [https://doi.org/10.1016/0006-2952\(83\)90616-0](https://doi.org/10.1016/0006-2952(83)90616-0).
- Shu H, Teitelbaum P, Webb AS, et al. 1988. Bioavailability of soil-bound TCDD: Dermal bioavailability in the rat. *Fundam Appl Toxicol* 10:335-343. [https://doi.org/10.1016/0272-0590\(88\)90319-3](https://doi.org/10.1016/0272-0590(88)90319-3).
- Silkworth J, McMartin D, DeCaprio A, et al. 1982. Acute toxicity in guinea pigs and rabbits of soot from a polychlorinated biphenyl-containing transformer fire. *Toxicol Appl Pharmacol* 65:425-439. [https://doi.org/10.1016/0041-008X\(82\)90388-X](https://doi.org/10.1016/0041-008X(82)90388-X).
- Silkworth JB, Cutler DS, Sack G. 1989a. Immunotoxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in a complex environmental mixture from the Love Canal. *Fundam Appl Toxicol* 12:303-312. [https://doi.org/10.1016/0272-0590\(89\)90047-X](https://doi.org/10.1016/0272-0590(89)90047-X).
- Silkworth JB, Cutler DS, Antrim L, et al. 1989b. Teratology of 2,3,7,8-tetrachlorodibenzo-p-dioxin in a complex environmental mixture from the Love Canal. *Fundam Appl Toxicol* 13(1):1-15. [https://doi.org/10.1016/0272-0590\(89\)90302-3](https://doi.org/10.1016/0272-0590(89)90302-3).
- Simanainen U, Tuomisto JT, Tuomisto J, et al. 2002. Structure-activity relationships and dose responses of polychlorinated dibenzo-p-dioxins for short-term effects in 2,3,7,8-tetrachlorodibenzo-p-dioxin-

8. REFERENCES

- resistant and -sensitive rat strains. *Toxicol Appl Pharmacol* 181(1):38-47. <https://doi.org/10.1006/taap.2002.9386>.
- Simanainen U, Adamsson A, Tuomisto JT, et al. 2004a. Adult 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure and effects on male reproductive organs in three differentially TCDD-susceptible rat lines. *Toxicol Sci* 81(2):401-407. <https://doi.org/10.1093/TOXSCI/KFH212>.
- Simanainen U, Haavisto T, Tuomisto JT, et al. 2004b. Pattern of male reproductive system effects after in utero and lactational 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure in three differentially TCDD-sensitive rat lines. *Toxicol Sci* 80(1):101-108. <https://doi.org/10.1093/toxsci/kfh142>.
- Sine C, ed.,. 1990. In: Farm chemicals handbook. Willoughby, OH: Meister Publishing Co., C87, C261.
- Singer R, Moses M, Valciukas J, et al. 1982. Nerve conduction velocity studies of workers employed in the manufacture of phenoxy herbicides. *Environ Res* 29:297-311. [https://doi.org/10.1016/0013-9351\(82\)90032-9](https://doi.org/10.1016/0013-9351(82)90032-9).
- Smialowicz RJ, DeVito MJ, Riddle MM, et al. 1997. Opposite effects of 2,2',4,4',5,5'-hexachlorobiphenyl and 2,3,7,8-tetrachlorodibenzo-p-dioxin on the antibody response to sheep erythrocytes in mice. *Fundam Appl Toxicol* 37(2):141-149. <https://doi.org/10.1006/faat.1997.2323>.
- Smialowicz RJ, DeVito MJ, Williams WC, et al. 2008. Relative potency based on hepatic enzyme induction predicts immunosuppressive effects of a mixture of PCDDs/PCDFs and PCBs. *Toxicol Appl Pharmacol* 227(3):477-484. <https://doi.org/10.1016/j.taap.2007.11.018>.
- Smith FA, Schwetz BA, Nitschke KD. 1976. Teratogenicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in CF-1 mice. *Toxicol Appl Pharmacol* 38(3):517-523. [https://doi.org/10.1016/0041-008x\(76\)90183-6](https://doi.org/10.1016/0041-008x(76)90183-6).
- Smith AH, Francis JE, Kay SJ, et al. 1981. Hepatic toxicity and uroporphyrinogen decarboxylase activity following a single dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin to mice. *Biochem Pharmacol* 30:2825-2830. [https://doi.org/10.1016/0006-2952\(81\)90421-4](https://doi.org/10.1016/0006-2952(81)90421-4).
- Smith AH, Fisher DO, Dip NP, et al. 1982. Congenital defects and miscarriages among New Zealand 2,4,5-T sprayers. *Arch Environ Health* 37:197-200. <https://doi.org/10.1080/00039896.1982.10667564>.
- Smith RM, O'Keefe PW, Aldous KM, et al. 1983. 2,3,7,8-Tetrachlorodibenzo-p-dioxin in sediment samples from Love Canal storm sewers and creeks. *Environ Sci Technol* 17(1):6-10. <https://doi.org/10.1021/es00107a004>.
- Smith AH, Pearce NE, Fisher DO, et al. 1984. Soft tissue sarcoma and exposure to phenoxyherbicides and chlorophenols in New Zealand. *J Natl Cancer Inst* 73:1111-1117. <https://doi.org/10.1093/JNCI/73.5.1111>.
- Smith RM, O'Keefe PW, Hilker DR, et al. 1986. Determination of picogram per cubic meter concentrations of tetra- and pentachlorinated dibenzofurans and dibenzo-p-dioxins in indoor air by high-resolution gas chromatography/high-resolution mass spectrometry. *Anal Chem* 58:2414-2420. <https://doi.org/10.1021/ac00125a014>.
- Smith RM, O'Keefe P, Aldous K, et al. 1992. Measurement of PCDFs and PCDDs in air samples and lake sediments at several locations in upstate New York. *Chemosphere* 25(1-2):95-98. [https://doi.org/10.1016/0045-6535\(92\)90488-D](https://doi.org/10.1016/0045-6535(92)90488-D).
- Sobolewski M, Conrad K, Allen JL, et al. 2014. Sex-specific enhanced behavioral toxicity induced by maternal exposure to a mixture of low dose endocrine-disrupting chemicals. *Neurotoxicology* 45:121-130. <https://doi.org/10.1016/j.neuro.2014.09.008>.
- Sommer RJ, Ippolito DL, Peterson RE. 1996. In utero and lactational exposure of the male Holtzman rat to 2,3,7,8-tetrachlorodibenzo-p-dioxin: decreased epididymal and ejaculated sperm numbers without alterations in sperm transit rate. *Toxicol Appl Pharmacol* 140(1):146-153. <https://doi.org/10.1006/taap.1996.0207>.
- Son DS, Ushinohama K, Gao X, et al. 1999. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) blocks ovulation by a direct action on the ovary without alteration of ovarian steroidogenesis: Lack of a

8. REFERENCES

- direct effect on ovarian granulosa and thecal-interstitial cell steroidogenesis in vitro. *Reprod Toxicol* 13(6):521-530. [https://doi.org/10.1016/S0890-6238\(99\)00048-9](https://doi.org/10.1016/S0890-6238(99)00048-9).
- Sparschu GL, Dunn FL, Lisowe RW, et al. 1971a. Study of the effects of high levels of 2,4,5-trichlorophenoxyacetic acid on foetal development in the rat. *Food Cosmet Toxicol* 9(4):527-530. [https://doi.org/10.1016/0015-6264\(71\)90083-6](https://doi.org/10.1016/0015-6264(71)90083-6).
- Sparschu GL, Dunn FL, Rowe VK. 1971b. Study of the teratogenicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the rat. *Food Cosmet Toxicol* 9(3):405-412. [https://doi.org/10.1016/0015-6264\(71\)90045-9](https://doi.org/10.1016/0015-6264(71)90045-9).
- Stahl BU, Kettrup A, Rozman K. 1992. Comparative toxicity of four chlorinated dibenzo-p-dioxins (CDDs) and their mixture. Part I: Acute toxicity and toxic equivalency factors (TEFs). *Arch Toxicol* 66(7):471-477. <https://doi.org/10.1007/BF01970671>.
- Stanley JS, Boggess KE, Onstot J, et al. 1986. PCDDs and PCDFs in human adipose tissue from the EPA FY82 NHATS repository. *Chemosphere* 15:1605-1612. [https://doi.org/10.1016/0045-6535\(86\)90444-3](https://doi.org/10.1016/0045-6535(86)90444-3).
- Startin JR, Rose M, Offen C. 1989. Analysis of PCDDs and PCDFs in human milk from the UK. *Chemosphere* 19(1-6):985-988. [https://doi.org/10.1016/0045-6535\(89\)90445-1](https://doi.org/10.1016/0045-6535(89)90445-1).
- Steenland K, Piacitelli L, Deddens J, et al. 1999. Cancer, heart disease, and diabetes in workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *J Natl Cancer Inst* 91(9):779-786. <https://doi.org/10.1093/jnci/91.9.779>.
- Steenland K, Deddens J, Piacitelli L. 2001. Risk assessment for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) based on an epidemiologic study. *Am J Epidemiol* 154(5):451-458. <https://doi.org/10.1093/aje/154.5.451>.
- Stehl RH, Papenfuss RR, Bredeweg RA, et al. 1973. Stability of pentachlorophenol and chlorinated dioxins to sunlight, heat, and combustion. *Adv Chem Ser* 120:119-125. <https://doi.org/10.1021/ba-1973-0120.ch013>.
- Stehr PA, Stein G, Falk H, et al. 1986. A pilot epidemiologic study of possible health effects associated with 2,3,7,8-tetrachlorodibenzo-p-dioxin contaminations in Missouri. *Arch Environ Health* 41:16-22. <https://doi.org/10.1080/00039896.1986.9935760>.
- Stockbauer JW, Hoffman RE, Schramm WF, et al. 1988. Reproductive outcomes of mothers with potential exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Am J Epidemiol* 128(2):410-419. <https://doi.org/10.1093/oxfordjournals.aje.a114981>.
- Stølevik SB, Nygaard UC, Namork E, et al. 2011. Prenatal exposure to polychlorinated biphenyls and dioxins is associated with increased risk of wheeze and infections in infants. *Food Chem Toxicol* 49(8):1843-1848. <https://doi.org/10.1016/j.fct.2011.05.002>.
- Stølevik SB, Nygaard UC, Namork E, et al. 2013. Prenatal exposure to polychlorinated biphenyls and dioxins from the maternal diet may be associated with immunosuppressive effects that persist into early childhood. *Food Chem Toxicol* 51:165-172. <https://doi.org/10.1016/j.fct.2012.09.027>.
- Su PH, Chen JY, Chen JW, et al. 2010. Growth and thyroid function in children with in utero exposure to dioxin: a 5-year follow-up study. *Pediatr Res* 67(2):205-210. <https://doi.org/10.1203/PDR.0b013e3181c8f04b>.
- Su PH, Huang PC, Lin CY, et al. 2012. The effect of in utero exposure to dioxins and polychlorinated biphenyls on reproductive development in eight year-old children. *Environ Int* 39(1):181-187. <https://doi.org/10.1016/j.envint.2011.09.009>.
- Su PH, Chen HY, Chen SJ, et al. 2015. Thyroid and growth hormone concentrations in 8-year-old children exposed in utero to dioxins and polychlorinated biphenyls. *J Toxicol Sci* 40(3):309-319. <https://doi.org/10.2131/jts.40.309>.
- Sugita-Konishi Y, Kobayashi K, Naito H, et al. 2003. Effect of lactational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on the susceptibility to *Listeria* infection. *Biosci Biotechnol Biochem* 67(1):89-93. <https://doi.org/10.1271/bbb.67.89>.

8. REFERENCES

- Sun S, Zhao J, Leng J, et al. 2010. Levels of dioxins and polybrominated diphenyl ethers in human milk from three regions of northern China and potential dietary risk factors. *Chemosphere* 80(10):1151-1159. <https://doi.org/10.1016/j.chemosphere.2010.06.021>.
- Sun XL, Kido T, Honma S, et al. 2016. Influence of dioxin exposure upon levels of prostate-specific antigen and steroid hormones in Vietnamese men. *Environ Sci Pollut Res Int* 23(8):7807-7813. <https://doi.org/10.1007/s11356-015-5931-3>.
- Sun XL, Kido T, Honma S, et al. 2017. The relationship between dioxins exposure and risk of prostate cancer with steroid hormone and age in Vietnamese men. *Sci Total Environ* 595:842-848. <https://doi.org/10.1016/j.scitotenv.2017.04.013>.
- Sun XL, Okamoto R, Kido T, et al. 2020. Association of dioxin in maternal breast milk and salivary steroid hormone levels in preschool children: A five-year follow-up study of a Vietnam cohort. *Chemosphere* 241:124899. <https://doi.org/10.1016/j.chemosphere.2019.124899>.
- Suskind RR, Hertzberg VS. 1984. Human health effects of 2,4,5-T and its toxic contaminants. *J Am Med Assoc* 251:2372-2380. <https://doi.org/10.1001/JAMA.1984.03340420038023>.
- Suzuki G, Nakano M, Nakano S. 2005. Distribution of PCDDs/PCDFs and Co-PCBs in human maternal blood, cord blood, placenta, milk, and adipose tissue: dioxins showing high toxic equivalency factor accumulate in the placenta. *Biosci Biotechnol Biochem* 69(10):1836-1847. <https://doi.org/10.1271/bbb.69.1836>.
- Svensson BG, Nilsson A, Hansson M, et al. 1991. Exposure to dioxins and dibenzofurans through the consumption of fish. *N Engl J Med* 324(1):8-12. <https://doi.org/10.1056/NEJM199101033240102>.
- Svensson B, 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* 65:351-358. <https://doi.org/10.1007/BF00383243>.
- Swann RL, Laskowski DA, McCall PJ, et al. 1983. A rapid method for the estimation of the environmental parameters octanol/water partition coefficient, soil sorption constant, water to air ratio, and water solubility. *Residue Rev* 85:17-28. https://doi.org/10.1007/978-1-4612-5462-1_3.
- Swanson SE, Rappe C, Malmstrom J, et al. 1988. Emissions of PCDDs and PCDFs from the pulp industry. *Chemosphere* 17:681-691. [https://doi.org/10.1016/0045-6535\(88\)90248-2](https://doi.org/10.1016/0045-6535(88)90248-2).
- Sweeney LM, Gearhart JM. 2020. Examples of physiologically based pharmacokinetic modeling applied to risk assessment. In: Fisher JW, Gearhart JM, Lin Z, eds. *Physiologically based pharmacokinetic (PBPK) modeling*. Academic Press, 281-299. <https://doi.org/10.1016/B978-0-12-818596-4.00011-4>.
- Sweeney MH, Fingerhut MA, Arezzo J, et al. 1993. Peripheral neuropathy after occupational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Am J Ind Med* 23:845-858. <https://doi.org/10.1002/ajim.4700230603>.
- Sweeney MH, Fingerhut MA, Patterson DG, et al. 1990. Comparison of serum levels of 2,3,7,8-TCDD in TCP production workers and in an unexposed comparison group. *Chemosphere* 20(7-9):993-1000. [https://doi.org/10.1016/0045-6535\(90\)90211-b](https://doi.org/10.1016/0045-6535(90)90211-b).
- Tai PT, Nishijo M, Anh NT, et al. 2013. Dioxin exposure in breast milk and infant neurodevelopment in Vietnam. *Occup Environ Med* 70(9):656-662. <https://doi.org/10.1136/oemed-2012-101021>.
- Tai PT, Nishijo M, Nghi TN, et al. 2016. Effects of perinatal dioxin exposure on development of children during the first 3 years of life. *J Pediatr* 175:159-166.e152. <https://doi.org/10.1016/j.jpeds.2016.04.064>.
- Tai PT, Thao PN, Tong HV, et al. 2020. Effects of perinatal dioxin exposure on learning abilities of 8-year-old children in Vietnam. *Int J Hyg Environ Health* 223(1):132-141. <https://doi.org/10.1016/j.ijheh.2019.09.010>.
- Takeda T, Fujii M, Hattori Y, et al. 2014. Maternal exposure to dioxin imprints sexual immaturity of the pups through fixing the status of the reduced expression of hypothalamic gonadotropin-releasing hormone. *Mol Pharmacol* 85(1):74-82. <https://doi.org/10.1124/mol.113.088575>.

8. REFERENCES

- Takeda T, Fujii M, Izumoto W, et al. 2020. Gestational dioxin exposure suppresses prolactin-stimulated nursing in lactating dam rats to impair development of postnatal offspring. *Biochem Pharmacol* 178:114106. <https://doi.org/10.1016/j.bcp.2020.114106>.
- Tan YM, Chan M, Chukwudebe A, et al. 2020. PBPK model reporting template for chemical risk assessment applications. *Regul Toxicol Pharmacol* 115:104691. <https://doi.org/10.1016/j.yrtph.2020.104691>.
- Tang H, Cui K, Xing J, et al. 2017. Part I: PM_{2.5} and polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/Fs) in the ambient air of Southern China. *Aerosol Air Qual Res* 17:1550-1569.
- Tao Y, Liu X, Cui L, et al. 2020. Oct4 plays a role in 2,3,7,8-tetrachlorobenzo-p-dioxin (TCDD) inducing cleft palate and inhibiting mesenchymal proliferation. *Toxicology* 438:152444. <https://doi.org/10.1016/j.tox.2020.152444>.
- Tarkowski S, Yrjanheikki E. 1989. Polychlorinated dibenzodioxins and dibenzofurans in human milk: an interim health risk evaluation. *Chemosphere* 18(1-6):1107-1113. [https://doi.org/10.1016/0045-6535\(89\)90243-9](https://doi.org/10.1016/0045-6535(89)90243-9).
- Tashiro C, Clement RE, Lusis M, et al. 1989a. Monitoring dioxins and furans in precipitation samples. *Chemosphere* 18:777-782. [https://doi.org/10.1016/0045-6535\(89\)90195-1](https://doi.org/10.1016/0045-6535(89)90195-1).
- Tashiro C, Clement RE, Reid N, et al. 1989b. Determination of dioxins and furans in precipitation collected in urban and rural Ontario locations. *Chemosphere* 19:535-540. [https://doi.org/10.1016/0045-6535\(89\)90366-4](https://doi.org/10.1016/0045-6535(89)90366-4).
- Taura J, Takeda T, Fujii M, et al. 2014. 2,3,4,7,8-Pentachlorodibenzofuran is far less potent than 2,3,7,8-tetrachlorodibenzo-p-dioxin in disrupting the pituitary-gonad axis of the rat fetus. *Toxicol Appl Pharmacol* 281(1):48-57. <https://doi.org/10.1016/j.taap.2014.09.001>.
- Temchura VV, Frericks M, Nacken W, et al. 2005. Role of the aryl hydrocarbon receptor in thymocyte emigration in vivo. *Eur J Immunol* 35(9):2738-2747. <https://doi.org/10.1002/eji.200425641>.
- ten Tusscher GW, Leijss MM, de Boer LC, et al. 2014. Neurodevelopmental retardation, as assessed clinically and with magnetoencephalography and electroencephalography, associated with perinatal dioxin exposure. *Sci Total Environ* 491-492:235-239. <https://doi.org/10.1016/j.scitotenv.2014.02.100>.
- Tenchini ML, Crimando C, Pacchetti G, et al. 1983. A comparative cytogenetic study on cases of induced abortions in TCDD-exposed and nonexposed women. *Environ Mutagen* 5:73-85. <https://doi.org/10.1002/EM.2860050109>.
- Tepper A, Burr S, Piacitelli L, et al. 1997. Serum levels of polychlorinated dibenzo-p-dioxins and dibenzofurans in pulp and paper mill workers. *Chemosphere* 34(5-7):1587-1603. [https://doi.org/10.1016/S0045-6535\(97\)00455-4](https://doi.org/10.1016/S0045-6535(97)00455-4).
- Thackaberry EA, Nunez BA, Ivnitski-Steele ID, et al. 2005a. Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on murine heart development: Alteration in fetal and postnatal cardiac growth, and postnatal cardiac chronotropy. *Toxicol Sci* 88(1):242-249. <https://doi.org/10.1093/toxsci/kfi302>.
- Thackaberry EA, Jiang Z, Johnson CD, et al. 2005b. Toxicogenomic profile of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the murine fetal heart: modulation of cell cycle and extracellular matrix genes. *Toxicol Sci* 88(1):231-241. <https://doi.org/10.1093/TOXSCI/KFI301>.
- Theobald HM, Ingall GB, Mably TA, et al. 1991. Response of the antral mucosa of the rat stomach to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 108(1):167-179. [https://doi.org/10.1016/0041-008x\(91\)90280-r](https://doi.org/10.1016/0041-008x(91)90280-r).
- Thiess AM, Frentzel-Beyme R, Link R. 1982. Mortality study of persons exposed to dioxin in a trichlorophenol-process accident that occurred in the BASF/AG on November 17, 1953. *Am J Ind Med* 3:179-189. <https://doi.org/10.1002/ajim.4700030209>.
- Thigpen JE, Faith RE, McConnell EE, et al. 1975. Increased susceptibility of bacterial infection as a sequela of exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Infect Immun* 12:1319-1324. <https://doi.org/10.1128/iai.12.6.1319-1324.1975>.

8. REFERENCES

- Thoma H. 1988. PCDD/F-concentrations in chimney soot from house heating systems. *Chemosphere* 17:1369-1379. [https://doi.org/10.1016/0045-6535\(88\)90090-2](https://doi.org/10.1016/0045-6535(88)90090-2).
- Thoma H, Mucke W, Kauert G. 1990. Comparison of the polychlorinated dibenzo-p-dioxin and dibenzofuran in human tissue and human liver. *Chemosphere* 20:433-442. [https://doi.org/10.1016/0045-6535\(90\)90074-4](https://doi.org/10.1016/0045-6535(90)90074-4).
- Thomas PT, Hinsdill RD. 1979. The effect of perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on the immune response of young mice. *Drug Chem Toxicol* 2(1-2):77-98. <https://doi.org/10.3109/01480547908993183>.
- Thömke F, Jung D, Besser R, et al. 1999. Increased risk of sensory neuropathy in workers with chloracne after exposure to 2,3,7,8-polychlorinated dioxins and furans. *Acta Neurol Scand* 100(1):1-5. <https://doi.org/10.1111/j.1600-0404.1999.tb00716.x>.
- Thömke F, Jung D, Besser R, et al. 2002. Cranial nerve function in workers exposed to polychlorinated dioxins and furans. *Acta Neurol Scand* 106(3):155-158. <https://doi.org/10.1034/j.1600-0404.2002.01239.x>.
- Thunberg T, Ahlborg UG, Johnsson H. 1979. Vitamin A (retinol) status in the rat after a single oral dose of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Arch Toxicol* 42:265-274. <https://doi.org/10.1007/BF00334840>.
- Thunberg T, Ahlborg UG, Wahlstrom B. 1984. Comparison between the effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin and six other compounds on the vitamin A storage, the UDP-glucuronosyltransferase and the aryl hydrocarbon hydroxylase activity in the rat liver. *Arch Toxicol* 55:16-19. <https://doi.org/10.1007/BF00316580>.
- Tiernan TO, Taylor ML, Garrett JH, et al. 1985. Sources and fate of polychlorinated dibenzodioxins, dibenzofurans and related compounds in human environments. *Environ Health Perspect* 59:145-158. <https://doi.org/10.2307/3429887>.
- Tiernan TO, Wagel DJ, Vanness GF, et al. 1989. PCDD/PCDF in the ambient air of metropolitan area in the US. *Chemosphere* 19:541-546. [https://doi.org/10.1016/0045-6535\(89\)90367-6](https://doi.org/10.1016/0045-6535(89)90367-6).
- Todaka T, Hirakawa H, Kajiwara J, et al. 2008. Concentrations of polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans, and dioxin-like polychlorinated biphenyls in blood and breast milk collected from 60 mothers in Sapporo City, Japan. *Chemosphere* 72(8):1152-1158. <https://doi.org/10.1016/j.chemosphere.2008.03.050>.
- Tomasini MC, Beggiato S, Ferraro L, et al. 2012. Prenatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin produces alterations in cortical neuron development and a long-term dysfunction of glutamate transmission in rat cerebral cortex. *Neurochem Int* 61(5):759-766. <https://doi.org/10.1016/j.neuint.2012.07.004>.
- Tomaszewski KE, Montgomery CA, Melnick RL. 1988. Modulation of 2,3,7,8-tetrachlorodibenzo-p-dioxin toxicity in F344 rats by di(2-ethylhexyl)phthalate. *Chem Biol Interact* 65:205-222. [https://doi.org/10.1016/0009-2797\(88\)90107-X](https://doi.org/10.1016/0009-2797(88)90107-X).
- Tong HY, Monson SJ, Gross ML, et al. 1989. Elevated levels of 2,3,7,8-TCDD in the tissue of an agricultural sprayer of herbicides: A single case study. *Chemosphere* 18:469-476. [https://doi.org/10.1016/0045-6535\(89\)90156-2](https://doi.org/10.1016/0045-6535(89)90156-2).
- Tonn T, Esser C, Schneider EM, et al. 1996. Persistence of decreased T-helper cell function in industrial workers 20 years after exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Environ Health Perspect* 104(4):422-426. <https://doi.org/10.1289/ehp.96104422>.
- Toth K, Somfai-Relle S, Sugar J, et al. 1979. Carcinogenicity testing of herbicide 2,4,5-trichlorophenoxyethanol containing dioxin and of pure dioxin in Swiss mice. *Nature* 278:548-549. <https://doi.org/10.1038/278548a0>.
- Toth K, Olah E, Somfai-Relle S, et al. 1984. Effect of herbicide 2,4,5-trichlorophenoxyethanol (TCPE) containing dioxin on mutation and induction of sister chromatid exchanges. *Carcinogenesis* 5:1725-1728. <https://doi.org/10.1093/CARCIN/5.12.1725>.
- Towara J, Hiller B, Hutzinger O, et al. 1992. PCDD/F in distillation residues from dry cleaners. *Chemosphere* 25:1509-1516. [https://doi.org/10.1016/0045-6535\(92\)90178-T](https://doi.org/10.1016/0045-6535(92)90178-T).

8. REFERENCES

- Townsend JC, Bodner KM, Van PPFD, et al. 1982. Survey of reproductive events of wives of employees exposed to chlorinated dioxins. *Am J Epidemiol* 115:695-713.
<https://doi.org/10.1093/oxfordjournals.aje.a113352>.
- Tran NN, Pham TT, Ozawa K, et al. 2016. Impacts of perinatal dioxin exposure on motor coordination and higher cognitive development in Vietnamese preschool children: A five-year follow-up. *PLoS ONE* 11(1):e0147655. <https://doi.org/10.1371/journal.pone.0147655>.
- Travis CC, Hattemer-Frey HA. 1987. Human exposure to 2,3,7,8-TCDD. *Chemosphere* 16:2331-2342.
<https://doi.org/10.1080/026520300283379>.
- Travis CC, Hattemer-Frey HA. 1991. Human exposure to dioxin. *Sci Total Environ* 104(1-2):97-127.
[https://doi.org/10.1016/0048-9697\(91\)90010-c](https://doi.org/10.1016/0048-9697(91)90010-c).
- TRI21. 2022. Dioxin-like compounds. TRI explorer: Providing access to EPA's toxics release inventory data. Washington, DC: Toxics Release Inventory. U.S. Environmental Protection Agency. <http://www.epa.gov/triexplorer/>. December 5, 2021.
- Tritscher AM, Goldstein JA, Portier CJ, et al. 1992. Dose-response relationships for chronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in a rat tumor promotion model: Quantification and immunolocalization of CYP1A1 and CYP1A2 in the liver. *Cancer Res* 52:3436-3442.
- Tritscher AM, Mahler J, Portier CJ, et al. 2000. Induction of lung lesions in female rats following chronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Pathol* 28(6):761-769.
<https://doi.org/10.1177/019262330002800601>.
- Tsai PC, Huang W, Lee YC, et al. 2006. Genetic polymorphisms in CYP1A1 and GSTM1 predispose humans to PCBs/PCDFs-induced skin lesions. *Chemosphere* 63:1410-1418.
<https://doi.org/10.1016/J.CHEMOSPHERE.2005.08.012>.
- Tsushimoto G, Mastumura F, Sago R, et al. 1982. Fate of 2,3,7,8-TCDD in an outdoor pond and in model aquatic ecosystems. *Environ Toxicol Chem* 1:61-68.
<https://doi.org/10.1002/ETC.5620010108>.
- Tulp MTM, Hutzinger O. 1978. Rat metabolism of polychlorinated dibenzo-p-dioxins. *Chemosphere* 7:761-768. [https://doi.org/10.1016/0045-6535\(78\)90115-7](https://doi.org/10.1016/0045-6535(78)90115-7).
- Turner JN, Collins DN. 1983. Liver morphology in guinea pigs administered either pyrolysis products of a polychlorinated biphenyl transformer fluid or 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Appl Pharmacol* 67(3):417-429. [https://doi.org/10.1016/0041-008X\(83\)90326-5](https://doi.org/10.1016/0041-008X(83)90326-5).
- Turteltaub KW, Felton JS, Gledhill BL, et al. 1990. Accelerator mass spectrometry in biomedical dosimetry: Relationship between low-level exposure and covalent binding of heterocyclic amine carcinogens to DNA. *Proc Natl Acad Sci U S A* 87:5288-5292.
<https://doi.org/10.1073/PNAS.87.14.5288>.
- Tyskling M, Faengmark I, Marklund S, et al. 1993. Atmospheric transport and transformation of polychlorinated dibenzo-p-dioxins and dibenzofurans. *Environ Sci Technol* 27(10):2190-2197.
<https://doi.org/10.1021/ES00047A028>.
- U.S. Congress. 1991. Dioxin treatment technologies background paper. Washington, DC: Office of Technology Assessment. U.S. Government Printing Office. OTA-BP-0-93. PB92152511.
<https://ntrln.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB92152511.xhtml>. April 18, 2024.
- Ulaszewska MM, Zuccato E, Capri E, et al. 2011. The effect of waste combustion on the occurrence of polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs) and polychlorinated biphenyls (PCBs) in breast milk in Italy. *Chemosphere* 82(1):1-8.
<https://doi.org/10.1016/j.chemosphere.2010.10.044>.
- Umbreit TH, Patel D, Gallo MA. 1985. Acute toxicity of TCDD contaminated soil from an industrial site. *Chemosphere* 14:945-947. [https://doi.org/10.1016/0045-6535\(85\)90221-8](https://doi.org/10.1016/0045-6535(85)90221-8).
- Umbreit TH, Hesse EJ, Gallo MA. 1986a. Bioavailability of dioxin in soil from a 2,4,5-T manufacturing site. *Science* 232:497-499. <https://doi.org/10.1126/SCIENCE.3961492>.
- Umbreit TH, Hesse EJ, Gallo MA. 1986b. Comparative toxicity of TCDD contaminated soil from Times Beach, Missouri, and Newark, New Jersey. *Chemosphere* 15:2121-2124.
[https://doi.org/10.1016/0045-6535\(86\)90528-X](https://doi.org/10.1016/0045-6535(86)90528-X).

8. REFERENCES

- Umbreit TH, Hesse EJ, Gallo MA. 1987. Reproductive toxicity in female mice of dioxin-contaminated soils from a 2,4,5-trichlorophenoxyacetic acid manufacturing site. *Arch Environ Contam Toxicol* 16:461-466. <https://doi.org/10.1007/BF01055268>.
- UNEP. 2023. Results of the 2016-2019 WHO/UNEP human milk survey on persistent organic pollutants. Geneva, Switzerland: United Nations Environment Programme. <https://doi.org/10.59117/20.500.11822/44829>.
- Urban P, Pelclova D, Lukas E, et al. 2007. Neurological and neurophysiological examinations on workers with chronic poisoning by 2,3,7,8-TCDD: follow-up 35 years after exposure. *Eur J Neurol* 14(2):213-218. <https://doi.org/10.1111/j.1468-1331.2006.01618.x>.
- Urban JD, Wikoff DS, Bunch AT, et al. 2014. A review of background dioxin concentrations in urban/suburban and rural soils across the United States: implications for site assessments and the establishment of soil cleanup levels. *Sci Total Environ* 466-467:586-597. <https://doi.org/10.1016/j.scitotenv.2013.07.065>.
- USAF. 1991. Air Force health study: An epidemiological investigation of health effects in Air Force personnel following exposure to herbicides. Introduction, background and conclusions. Brooks Air Force Base, TX: U.S. Air Force. ADA237515. AL-TR-91-0009. <https://apps.dtic.mil/sti/pdfs/ADA237515.pdf>. May 15, 2023.
- Ushinohama K, Son D, Roby KF, et al. 2001. Impaired ovulation by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in immature rats treated with equine chorionic gonadotropin. *Reprod Toxicol* 15(3):275-280. [https://doi.org/10.1016/S0890-6238\(01\)00128-9](https://doi.org/10.1016/S0890-6238(01)00128-9).
- Vafeiadi M, Agramunt S, Papadopoulou E, et al. 2013. In utero exposure to dioxins and dioxin-like compounds and anogenital distance in newborns and infants. *Environ Health Perspect* 121(1):125-130. <https://doi.org/10.1289/ehp.1205221>.
- Vafeiadi M, Agramunt S, Pedersen M, et al. 2014. In utero exposure to compounds with dioxin-like activity and birth outcomes. *Epidemiology* 25(2):215-224. <https://doi.org/10.1097/ede.0000000000000046>.
- Valenzuela CM, García AG, Avila VC, et al. 2022. Applying the Global Monitoring Plan and analysis of POPs results in atmospheric air in Mexico (2017-2018). *Chemosphere* 303(Part 2):135154. <https://doi.org/10.1016/j.chemosphere.2022.135154>.
- Valic E, Jahn O, Papke O, et al. 2004. Transient increase in micronucleus frequency and DNA effects in the comet assay in two patients after intoxication with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Int Arch Occup Environ Health* 77(5):301-306. <https://doi.org/10.1007/S00420-004-0508-3>.
- Valli K, Wariishi H, Gold MH. 1992. Degradation of 2,7-dichlorodibenzo-p-dioxin by the lignin-degrading Basidiomycete *Phanerochaete chrysosporium*. *J Bacteriol* 174(7):2131-2137. <https://doi.org/10.1128/jb.174.7.2131-2137.1992>.
- Van Birgelen AP, Van der Kolk J, Fase KM, et al. 1995. Subchronic dose-response study of 2,3,7,8-tetrachlorodibenzo-p-dioxin in female Sprague-Dawley rats. *Toxicol Appl Pharmacol* 132(1):1-13. <https://doi.org/10.1006/taap.1995.1080>.
- Van Birgelen APJM, Dilberto JJ, DeVito MJ, et al. 1996. Tissue CYP1A1 activity reflects tissue 2,3,7,8-tetrachlorodibenzo-para-dioxin concentration. *Organohalogen Compounds* 29:439-442.
- van den Berg M, Olie K, Hutzinger O. 1983. Uptake and selection in rats of orally administered chlorinated dioxins and dibenzofurans from fly-ash and fly-ash extract. *Chemosphere* 12:537-544. [https://doi.org/10.1016/0045-6535\(83\)90206-0](https://doi.org/10.1016/0045-6535(83)90206-0).
- van den Berg M, de Vroom E, van Greevenbroek M, et al. 1985. Bioavailability of PCDDs and PCDFs adsorbed on fly ash in rat, guinea pig and Syrian golden hamster. *Chemosphere* 14(6-7):865-869. [https://doi.org/10.1016/0045-6535\(85\)90204-8](https://doi.org/10.1016/0045-6535(85)90204-8).
- Van den Berg M, Meerman L, Olie K, et al. 1986a. Retention of PCDDs and PCDFs in the liver of the rat and hamster after oral administration of a municipal incinerator fly ash extract. *Toxicol Environ Chem* 12:267-284. <https://doi.org/10.1080/02772248609357163>.

8. REFERENCES

- van den Berg M, van der Wielen FWM, Olie K, et al. 1986b. Presence of PCDDs and PCDFs in human breast milk from the Netherlands. *Chemosphere* 15:693-706. [https://doi.org/10.1016/0045-6535\(86\)90035-4](https://doi.org/10.1016/0045-6535(86)90035-4).
- van den Berg M, Sinke M, Wever H. 1987a. Vehicle dependent bioavailability of polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) in the rat. *Chemosphere* 16:1193-1203. [https://doi.org/10.1016/0045-6535\(87\)90056-7](https://doi.org/10.1016/0045-6535(87)90056-7).
- Van den Berg M, Heeremans C, Veenhoven E, et al. 1987b. Transfer of polychlorinated dibenzo-p-dioxins and dibenzofurans to fetal and neonatal rats. *Fundam Appl Toxicol* 9:635-644. <https://doi.org/10.1093/TOXSCI/9.4.635>.
- van den Berg M, van Wijnen J, Wever H, et al. 1989. Selective retention of toxic polychlorinated dibenzo-p-dioxins and dibenzofurans in the liver of the rat after intravenous administration of a mixture. *Toxicology* 55:173-182. [https://doi.org/10.1016/0300-483X\(89\)90184-4](https://doi.org/10.1016/0300-483X(89)90184-4).
- Van den Berg M, De JJ, Poiger H, et al. 1994. The toxicokinetics and metabolism of polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) and their relevance to toxicity. *Crit Rev Toxicol* 24:1-74. <https://doi.org/10.3109/10408449409017919>.
- Van den Berg M, Birnbaum LS, Denison M, et al. 2006. The 2005 World Health Organization reevaluation of human and Mammalian toxic equivalency factors for dioxins and dioxin-like compounds. *Toxicol Sci* 93(2):223-241. <https://doi.org/10.1093/toxsci/kfl055>.
- Van Luong H, Tai PT, Nishijo M, et al. 2018. Association of dioxin exposure and reproductive hormone levels in men living near the Bien Hoa airbase, Vietnam. *Sci Total Environ* 628-629:484-489. <https://doi.org/10.1016/j.scitotenv.2018.02.094>.
- Van Miller JR, Marlar RJ, Allen JR. 1976. Tissue distribution and excretion of tritiated tetrachlorodibenzo-p-dioxin in non-human primates and rats. *Food Cosmet Toxicol* 14:31-34. [https://doi.org/10.1016/S0015-6264\(76\)80360-4](https://doi.org/10.1016/S0015-6264(76)80360-4).
- Van Miller JP, Lalich JJ, Allen JR. 1977. Increased incidence of neoplasms in rats exposed to low levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Chemosphere* 6:537-544. [https://doi.org/10.1016/0045-6535\(77\)90073-X](https://doi.org/10.1016/0045-6535(77)90073-X).
- Vanden Heuvel JP, Clark GC, Thompson CL, et al. 1993. CYP1A1 mRNA levels as a human exposure biomarker: use of quantitative polymerase chain reaction to measure CYP1A1 expression in human peripheral blood lymphocytes. *Carcinogenesis* 14:2003-2006. <https://doi.org/10.1093/CARCIN/14.10.2003>.
- Vartiainen T, Jaakkola JJK, Saarikoski S, et al. 1998. Birth weight and sex of children and the correlation to the body burden of PCDDs/PCDFs and PCBs of the mother. *Environ Health Perspect* 106:61-66. <https://doi.org/10.1289/EHP.9810661>.
- Vecchi A, Sironi M, Canegrati MA, et al. 1983. Comparison of the immunosuppressive effects in mice of 2,3,7,8-tetrachlorodibenzo-p-dioxin and 2,3,7,8-tetrachlorodibenzofuran. In: Choudhary G, Keith LH, Rappe C, eds. *Chlorinated dioxins and dibenzofurans in the total environment*. Boston, MA: Butterworth Publishers, 397-405.
- Veith A, Moorthy B. 2018. Role of cytochrome P450s in the generation and metabolism of reactive oxygen species. *Curr Opin Toxicol* 7:44-51. <https://doi.org/10.1016/j.cotox.2017.10.003>.
- Vena J, Boffetta P, Becher H, et al. 1998. Exposure to dioxin and nonneoplastic mortality in the expanded IARC international cohort study of phenoxy herbicide and chlorophenol production workers and sprayers. *Environ Health Perspect* 106(Suppl 2):645-653. <https://doi.org/10.1289/ehp.98106645>.
- Venier M, Ferrario J, Hites RA. 2009. Polychlorinated dibenzo-p-dioxins and dibenzofurans in the atmosphere around the Great Lakes. *Environ Sci Technol* 43(4):1036-1041. <https://doi.org/10.1021/es802644w>.
- 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. <https://doi.org/10.1016/j.envint.2010.11.009>.

8. REFERENCES

- Vigh É, Colombo A, Benfenati E, et al. 2013. Individual breast milk consumption and exposure to PCBs and PCDD/Fs in Hungarian infants: a time-course analysis of the first three months of lactation. *Sci Total Environ* 449:336-344. <https://doi.org/10.1016/j.scitotenv.2013.01.024>.
- Viluksela M, Stahl BU, Rozman KK. 1994. Subchronic (13-week) toxicity of heptachlorodibenzo-p-dioxin in male Sprague-Dawley rats. *Chemosphere* 29:2381-2393. [https://doi.org/10.1016/0045-6535\(94\)90407-3](https://doi.org/10.1016/0045-6535(94)90407-3).
- Viluksela M, Stahl BU, Birnbaum LS, et al. 1998a. Subchronic/chronic toxicity of a mixture of four chlorinated dibenzo-p-dioxins in rats. I. Design, general observations, hematology, and liver concentrations. *Toxicol Appl Pharmacol* 151(1):57-69. <https://doi.org/10.1006/taap.1998.8384>.
- Viluksela M, Stahl BU, Birnbaum LS, et al. 1998b. Subchronic/chronic toxicity of a mixture of four chlorinated dibenzo-p-dioxins in rats. II. Biochemical effects. *Toxicol Appl Pharmacol* 151(1):70-78. <https://doi.org/10.1006/taap.1998.8412>.
- Viluksela M, Unkila M, Pohjanvirta R, et al. 1999. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on liver phosphoenolpyruvate carboxykinase (PEPCK) activity, glucose homeostasis and plasma amino acid concentrations in the most TCDD-susceptible and the most TCDD-resistant rat strains. *Arch Toxicol* 73(6):323-336. <https://doi.org/10.1007/s002040050626>.
- Viluksela M, Raasmaja A, Lebofsky M, et al. 2004. Tissue-specific effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on the activity of 5'-deiodinases I and II in rats. *Toxicol Lett* 147(2):133-142. <https://doi.org/10.1016/j.toxlet.2003.10.025>.
- Virtanen HE, Koskenniemi JJ, Sundqvist E, et al. 2012. Associations between congenital cryptorchidism in newborn boys and levels of dioxins and PCBs in placenta. *Int J Androl* 35(3):283-293. <https://doi.org/10.1111/j.1365-2605.2011.01233.x>.
- Vorderstrasse BA, Bohn AA, Lawrence BP. 2003. Examining the relationship between impaired host resistance and altered immune function in mice treated with TCDD. *Toxicology* 188(1):15-28. [https://doi.org/10.1016/s0300-483x\(02\)00749-7](https://doi.org/10.1016/s0300-483x(02)00749-7).
- Vorderstrasse BA, Fenton SE, Bohn AA, et al. 2004. A novel effect of dioxin: Exposure during pregnancy severely impairs mammary gland differentiation. *Toxicol Sci* 78(2):248-257. <https://doi.org/10.1093/toxsci/kfh062>.
- Vorderstrasse BA, Cundiff JA, Lawrence BP. 2006. A dose-response study of the effects of prenatal and lactational exposure to TCDD on the immune response to influenza a virus. *J Toxicol Environ Health A* 69(6):445-463. <https://doi.org/10.1080/15287390500246985>.
- Vos JG, Moore JA, Zinkl JG. 1973. Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on the immune system of laboratory animals. *Environ Health Perspect* 5:149-162. <https://doi.org/10.1289/ehp.7305149>.
- Wacker R, Poiger H, Schlatter C. 1986. Pharmacokinetics and metabolism of 1,2,3,7,8-pentachlorodibenzo-p-dioxin in the rat. *Chemosphere* 15:1473-1476.
- Wahba ZZ, Lawson TW, Murray WJ, et al. 1989. Factors influencing the induction of DNA single strand breaks in rats by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Toxicology* 58:57-69. [https://doi.org/10.1016/0300-483X\(89\)90104-2](https://doi.org/10.1016/0300-483X(89)90104-2).
- Walden R, Schiller CM. 1985. Comparative toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in four (sub)strains of adult male rats. *Toxicol Appl Pharmacol* 77:490-495. [https://doi.org/10.1016/0041-008X\(85\)90189-9](https://doi.org/10.1016/0041-008X(85)90189-9).
- Walker NJ, Tritscher AM, Sills RC, et al. 2000. Hepatocarcinogenesis in female Sprague-Dawley rats following discontinuous treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Sci* 54(2):330-337. <https://doi.org/10.1093/TOXSCI/54.2.330>.
- Wang X, Santostefano MJ, Evans MV, et al. 1997. Determination of parameters responsible for pharmacokinetic behavior of TCDD in female Sprague-Dawley rats. *Toxicol Appl Pharmacol* 147:151-168. <https://doi.org/10.1006/TAAP.1997.8242>.
- Wang SL, Lin CY, Guo YL, et al. 2004. Infant exposure to polychlorinated dibenzo-p-dioxins, dibenzofurans and biphenyls (PCDD/Fs, PCBs)-correlation between prenatal and postnatal exposure. *Chemosphere* 54(10):1459-1473. <https://doi.org/10.1016/J.CHEMOSPHERE.2003.08.012>.

8. REFERENCES

- Wang SL, Su PH, Jong SB, et al. 2005. In utero exposure to dioxins and polychlorinated biphenyls and its relations to thyroid function and growth hormone in newborns. *Environ Health Perspect* 113(11):1645-1650. <https://doi.org/10.1289/ehp.7994>.
- Wang Z, Hang JG, Feng H, et al. 2019. Effects of perinatal dioxin exposure on development of children: a 3-year follow-up study of China cohort. *Environ Sci Pollut Res Int* 26(20):20780-20786. <https://doi.org/10.1007/s11356-019-05362-0>.
- Ward CT, Matsumura F. 1978. Fate of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in a model aquatic environment. *Arch Environ Contam Toxicol* 7:349-357. <https://doi.org/10.1007/BF02332062>.
- Warner M, Samuels S, Mocarelli P, et al. 2004. Serum dioxin concentrations and age at menarche. *Environ Health Perspect* 112(13):1289-1292. <https://doi.org/10.1097/00001648-200407000-00296>.
- Warner M, Eskenazi B, Olive DL, et al. 2007. Serum dioxin concentrations and quality of ovarian function in women of Seveso. *Environ Health Perspect* 115(3):336-340. <https://doi.org/10.1289/ehp.9667>.
- Warner M, Mocarelli P, Samuels S, et al. 2011. Dioxin exposure and cancer risk in the Seveso women's health study. *Environ Health Perspect* 119(12):1700-1705. <https://doi.org/10.1289/ehp.1103720>.
- Warner M, Mocarelli P, Brambilla P, et al. 2013. Diabetes, metabolic syndrome, and obesity in relation to serum dioxin concentrations: the Seveso women's health study. *Environ Health Perspect* 121(8):906-911. <https://doi.org/10.1289/ehp.1206113>.
- Warner M, Mocarelli P, Brambilla P, et al. 2014. Serum TCDD and TEQ concentrations among Seveso women, 20 years after the explosion. *J Expo Sci Environ Epidemiol* 24(6):588-594. <https://doi.org/10.1038/jes.2013.70>.
- Warner M, Rauch S, Ames J, et al. 2020a. Prenatal dioxin exposure and thyroid hormone levels in the Seveso second generation study. *Environ Res* 183:109280. <https://doi.org/10.1016/j.envres.2020.109280>.
- Warner M, Rauch S, Brambilla P, et al. 2020b. Prenatal dioxin exposure and glucose metabolism in the Seveso second generation study. *Environ Int* 134:105286. <https://doi.org/10.1016/j.envint.2019.105286>.
- Warren TK, Mitchell KA, Lawrence BP. 2000. Exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) suppresses the humoral and cell-mediated immune responses to influenza A virus without affecting cytolytic activity in the lung. *Toxicol Sci* 56(1):114-123. <https://doi.org/10.1093/TOXSCI/56.1.114>.
- Watanabe MX, Kunisue T, Tao L, et al. 2010. Dioxin-like and perfluorinated compounds in pigs in an Indian open waste dumping site: toxicokinetics and effects on hepatic cytochrome P450 and blood plasma hormones. *Environ Toxicol Chem* 29(7):1551-1560. <https://doi.org/10.1002/etc.189>.
- Watanabe MX, Kunisue T, Ueda N, et al. 2013. Toxicokinetics of dioxins and other organochlorine compounds in Japanese people: association with hepatic CYP1A2 expression levels. *Environ Int* 53:53-61. <https://doi.org/10.1016/j.envint.2012.12.008>.
- Webb K, Ayres S, Slavin R, et al. 1984. Results of a pilot study of health effects due to 2,3,7,8-tetrachlorodibenzodioxin contamination-Missouri. Centers for Disease Control and Prevention. *MMWR Morb Mortal Wkly Rep* 33(5):54-61.
- Webb KB, Evans RG, Knutsen AP, et al. 1989. Medical evaluation of subjects with known body levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *J Toxicol Environ Health* 28:183-193. <https://doi.org/10.1080/15287398909531339>.
- Weber H, Birnbaum LS. 1985. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and 2,3,7,8-tetrachlorodibenzofuran (TCDF) in pregnant C57BL/6N mice: Distribution to the embryo and excretion. *Arch Toxicol* 57:159-162. <https://doi.org/10.1007/BF00290880>.
- Weber H, Poiger H, Schlatter C. 1982. Acute oral toxicity of TCDD-metabolites in male guinea pigs. *Toxicol Lett* 14:117-122. [https://doi.org/10.1016/0378-4274\(82\)90018-2](https://doi.org/10.1016/0378-4274(82)90018-2).
- Weber H, Harris MW, Haseman JK, et al. 1985. Teratogenic potency of TCDD, TCDF, and TCDD-TCDF combinations in C57BL/6N mice. *Toxicol Lett* 26:159-167. [https://doi.org/10.1016/0378-4274\(85\)90161-4](https://doi.org/10.1016/0378-4274(85)90161-4).

8. REFERENCES

- Weber LW, Zesch A, Rozman K. 1991a. Penetration, distribution and kinetics of 2,3,7,8-tetrachlorodibenzo-p-dioxin in human skin in vitro. *Arch Toxicol* 65(5):421-428. <https://doi.org/10.1007/BF02284267>.
- Weber TJ, Ou X, Hart C, et al. 1991b. Modulation of protein phosphorylation in rat aortic smooth muscle cells by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in vivo [abstract 1335]. *Toxicologist* 11:340.
- Weber LWD, Lebofsky M, Stahl BU, et al. 1995. Correlation between toxicity and effects on intermediate metabolism in 2,3,7,8-tetrachlorodibenzo-p-dioxin-treated male C57BL/6J and DBA/2J mice. *Toxicol Appl Pharmacol* 131:155-162. <https://doi.org/10.1006/TAAP.1995.1057>.
- Webster GRB, Friesen KL, Sarna LP, et al. 1985. Environmental fate modelling of chlorodioxins: Determination of physical constants. *Chemosphere* 14:609-622. [https://doi.org/10.1016/0045-6535\(85\)90169-9](https://doi.org/10.1016/0045-6535(85)90169-9).
- Weerasinghe NCA, Schechter AJ, Pan JC, et al. 1986. Levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) in adipose tissue of Vietnam veterans seeking medical assistance. *Chemosphere* 15:1787-1794. [https://doi.org/10.1016/0045-6535\(86\)90468-6](https://doi.org/10.1016/0045-6535(86)90468-6).
- Weisglas-Kuperus N, Sas TCJ, Koopman-Esseboom C, et al. 1995. Immunologic effects of background prenatal and postnatal exposure to dioxins and polychlorinated biphenyls in Dutch infants. *Pediatr Res* 38(3):404-410. <https://doi.org/10.1203/00006450-199509000-00022>.
- Weissberg JB, Zinkl JG. 1973. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin upon hemostasis and hematologic function in the rat. *Environ Health Perspect* 5:119-124. <https://doi.org/10.1289/ehp.7305119>.
- Welsch-Pausch K, McLachlan MS, Umlauf G. 1995. Determination of the principal pathways of polychlorinated dibenzo-p-dioxins and dibenzofurans to *Lolium multiflorum* (Welsh ray grass). *Environ Sci Technol* 29(4):1090-1098. <https://doi.org/10.1021/es00004a031>.
- Wendling J, Hileman F, Orth R, et al. 1989. An analytical assessment of the bioavailability of dioxin contaminated soils to animals. *Chemosphere* 18(1-6):925-932. [https://doi.org/10.1016/0045-6535\(89\)90219-1](https://doi.org/10.1016/0045-6535(89)90219-1).
- Wendling JM, Orth RG, Poiger H. 1990. Determination of [³H]-2,3,7,8-tetrachlorodibenzo-p-dioxin in human feces to ascertain its relative metabolism in man. *Anal Chem* 62:796-800. <https://doi.org/10.1021/ac00207a005>.
- Wenning RJ, Harris MA, Paustenbach DJ, et al. 1992. Potential sources of 1,2,8,9-tetrachlorodibenzo-p-dioxin in the aquatic environment. *Ecotoxicol Environ Saf* 23(2):133-146. [https://doi.org/10.1016/0147-6513\(92\)90054-7](https://doi.org/10.1016/0147-6513(92)90054-7).
- Wesselink A, Warner M, Samuels S, et al. 2014. Maternal dioxin exposure and pregnancy outcomes over 30 years of follow-up in Seveso. *Environ Int* 63:143-148. <https://doi.org/10.1016/j.envint.2013.11.005>.
- White KL, Lysy HH, McCay JA, et al. 1986. Modulation of serum complement levels following exposure to polychlorinated dibenzo-p-dioxins. *Toxicol Appl Pharmacol* 84(2):209-219. [https://doi.org/10.1016/0041-008x\(86\)90128-6](https://doi.org/10.1016/0041-008x(86)90128-6).
- Whitlock JP. 1993. Mechanistic aspects of dioxin action. *Chem Res Toxicol* 6:754-763. <https://doi.org/10.1021/TX00036A003>.
- Whittle DM, Mageau C, Duncan RK, et al. 1993. Canadian National Dioxin Sampling Program: Dioxins and furans in biota near 46 pulp and paper mills using the chlorine bleaching process. *Chemosphere* 27(1-3):279-286. [https://doi.org/10.1016/0045-6535\(93\)90303-M](https://doi.org/10.1016/0045-6535(93)90303-M).
- WHO. 1991. Consultation on tolerable daily intake from food of PCDDs and PCDFs. Summary report. Bilthoven, Netherlands: World Health Organization.
- WHO. 2000. Air quality guidelines for Europe. World Health Organization. <https://apps.who.int/iris/handle/10665/107335>. November 23, 2022.
- WHO. 2022. Guidelines for drinking-water quality. Fourth edition incorporating the first and second addenda. World Health Organization. <https://www.who.int/publications/item/9789240045064>. June 22, 2022.

8. REFERENCES

- WHO. 2023. Dioxins and their effects on human health. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/dioxins-and-their-effects-on-human-health>. June 18, 2024.
- Widholm JJ, Seo BW, Strupp BJ, et al. 2003. Effects of perinatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on spatial and visual reversal learning in rats. *Neurotoxicol Teratol* 25(4):459-471. [https://doi.org/10.1016/S0892-0362\(03\)00014-X](https://doi.org/10.1016/S0892-0362(03)00014-X).
- Wilhelm M, Wittsiepe J, Lemm F, et al. 2008. The Duisburg birth cohort study: influence of the prenatal exposure to PCDD/Fs and dioxin-like PCBs on thyroid hormone status in newborns and neurodevelopment of infants until the age of 24 months. *Mutat Res* 659(1-2):83-92. <https://doi.org/10.1016/J.MRREV.2007.11.002>.
- Williams DT, LeBel GL, Benoit FM. 1992. Polychlorodibenzodioxins and polychlorodibenzofurans in dioxazine dyes and pigments. *Chemosphere* 24(2):169-180. [https://doi.org/10.1016/0045-6535\(92\)90390-d](https://doi.org/10.1016/0045-6535(92)90390-d).
- Winneke G, Ranft U, Wittsiepe J, et al. 2014. Behavioral sexual dimorphism in school-age children and early developmental exposure to dioxins and PCBs: a follow-up study of the Duisburg Cohort. *Environ Health Perspect* 122(3):292-298. <https://doi.org/10.1289/ehp.1306533>.
- Winters D, Cleverly D, Meier K, et al. 1996. A statistical survey of dioxin-like compounds in United States beef: a progress report. *Chemosphere* 32(3):469-478. [https://doi.org/10.1016/0045-6535\(95\)00234-0](https://doi.org/10.1016/0045-6535(95)00234-0).
- Wittsiepe J, Erlenkamper B, Welge P, et al. 2007. Bioavailability of PCDD/F from contaminated soil in young Goettingen minipigs. *Chemosphere* 67(9):S355-S364. <https://doi.org/10.1016/J.CHEMOSPHERE.2006.05.129>.
- Wohlfahrt-Veje C, Audouze K, Brunak S, et al. 2014. Polychlorinated dibenzo-p-dioxins, furans, and biphenyls (PCDDs/PCDFs and PCBs) in breast milk and early childhood growth and IGF1. *Reproduction* 147(4):391-399. <https://doi.org/10.1530/rep-13-0422>.
- Wolf CJ, Ostby JS, Gray LEJ. 1999. Gestational exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) severely alters reproductive function of female hamster offspring. *Toxicol Sci* 51(2):259-264. <https://doi.org/10.1093/TOXSCI/51.2.259>.
- Wolfe RJ, Walker RJ. 1987. Subsistence economies in Alaska: Productivity, geography, and development impacts. *Arctic Anthropology* 24(2):56-81.
- Wolfe WH, Lathrop GD, Albanese RA, et al. 1985. An epidemiologic investigation of health effects in Air Force personnel following exposure to herbicides and associated dioxins. *Chemosphere* 14:707-716. [https://doi.org/10.1016/0045-6535\(85\)90178-X](https://doi.org/10.1016/0045-6535(85)90178-X).
- Wolfe WH, Michalek JE, Miner JC, et al. 1994. Determinants of TCDD half-life in veterans of Operation Ranch Hand. *J Toxicol Environ Health* 41:481-488. <https://doi.org/10.1080/15287399409531858>.
- Wolfe WH, Michalek JE, Miner JC, et al. 1995. Paternal serum dioxin and reproductive outcomes among veterans of Operation Ranch Hand. *Epidemiol* 6:17-22. <https://doi.org/10.1097/00001648-199501000-00005>.
- Wong LY, Millette MD, Uddin MS, et al. 2008. Serum dioxin levels in residents of Calcasieu and Lafayette parishes, Louisiana with comparison to the US population. *J Expo Sci Environ Epidemiol* 18(3):252-261. <https://doi.org/10.1038/sj.jes.7500609>.
- Worobec SM, DiBenedutto JP. 1984. Perspectives on occupational dermatoses. In: Drill VA, Lazar P, eds. *Cutaneous toxicity*. New York, NY: Raven Press, 253-268.
- WQP. 2022. [CDDs]. Water quality portal. Advisory Committee on Water Information (ACWI); Agricultural Research Service (ARS); Environmental Protection Agency (EPA); National Water Quality Monitoring Council (NWQMC); United States Geological Survey (USGS). <https://www.waterqualitydata.us/portal/>. October 27, 2023.
- Wright EJ, De Castro KP, Joshi AD, et al. 2017. Canonical and non-canonical aryl hydrocarbon receptor signaling pathways. *Curr Opin Toxicol* 2:87-92. <https://doi.org/10.1016/j.cotox.2017.01.001>.

8. REFERENCES

- Wroblewski VJ, Olson JR. 1985. Hepatic metabolism of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in the rat and guinea pig. *Toxicol Appl Pharmacol* 81:231-240. [https://doi.org/10.1016/0041-008X\(85\)90159-0](https://doi.org/10.1016/0041-008X(85)90159-0).
- Wu CH, Chen HL, Su HJ, et al. 2004. The topical application of 2,3,7,8-tetrachlorodibenzo-p-dioxin lacks skin tumor-promoting potency but induces hepatic injury and tumor necrosis factor-alpha expression in ICR male mice. *Food Chem Toxicol* 42(8):1217-1225. <https://doi.org/10.1016/J.FCT.2004.02.022>.
- Wuthe J, Link B, Walther J, et al. 1993. Dioxin and furan (PCDD/PCDF) levels in human blood from persons living in a contaminated area. *Chemosphere* 27(103):287-293. [https://doi.org/10.1016/0045-6535\(93\)90304-N](https://doi.org/10.1016/0045-6535(93)90304-N).
- Wyde ME, Braen AP, Hejtmancik M, et al. 2004. Oral and dermal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) induces cutaneous papillomas and squamous cell carcinomas in female hemizygous Tg.AC transgenic mice. *Toxicol Sci* 82(1):34-45. <https://doi.org/10.1093/TOXSCI/KFH233>.
- Xu P, Chen Z, Wu L, et al. 2019a. Health risk of childhood exposure to PCDD/Fs emitted from a municipal waste incinerator in Zhejiang, China. *Sci Total Environ* 689:937-944. <https://doi.org/10.1016/j.scitotenv.2019.06.425>.
- Xu C, Su X, Xu Y, et al. 2019b. Exploring the associations of serum concentrations of PCBs, PCDDs, and PCDFs with walking speed in the U.S. general population: Beyond standard linear models. *Environ Res* 178:108666. <https://doi.org/10.1016/j.envres.2019.108666>.
- Xu S, Hansen S, Rautio A, et al. 2022. Monitoring temporal trends of dioxins, organochlorine pesticides and chlorinated paraffins in pooled serum samples collected from Northern Norwegian women: The MISA cohort study. *Environ Res* 204(Pt A):111980. <https://doi.org/10.1016/j.envres.2021.111980>.
- Yamada T, Mishima K, Fujiwara K, et al. 2006. Cleft lip and palate in mice treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin: A morphological in vivo study. *Congenit Anom* 46(1):21-25. <https://doi.org/10.1111/j.1741-4520.2006.00097.x>.
- Yamada T, Hirata A, Sasabe E, et al. 2014. TCDD disrupts posterior palatogenesis and causes cleft palate. *J Craniomaxillofac Surg* 42(1):1-6. <https://doi.org/10.1016/j.jcms.2013.01.024>.
- Yamamoto T, Fukushima M. 1993. Modeling study on contribution of combustion source complex to PCDD/PCDF levels in urban air. *Chemosphere* 27(1-3):295-300. [https://doi.org/10.1016/0045-6535\(93\)90305-O](https://doi.org/10.1016/0045-6535(93)90305-O).
- Yamamoto K, Kudo M, Arito H, et al. 2015a. A cross-sectional analysis of dioxins and health effects in municipal and private waste incinerator workers in Japan. *Ind Health* 53(5):465-479. <https://doi.org/10.2486/indhealth.2015-0006>.
- Yamamoto K, Kudo M, Arito H, et al. 2015b. Isomer pattern and elimination of dioxins in workers exposed at a municipal waste incineration plant. *Ind Health* 53(5):454-464. <https://doi.org/10.2486/indhealth.2015-0008>.
- Yamashita N, Tanabe S, Ludwig JP, et al. 1992. Embryonic abnormalities and organochlorine contamination in double-crested cormorants (*Phalacrocorax auritus*) and Caspian Terns (*Hydroprogne caspia*) from the upper Great Lakes in 1988. *Environ Pollution* 19:163-173. [https://doi.org/10.1016/0269-7491\(93\)90066-W](https://doi.org/10.1016/0269-7491(93)90066-W).
- Yanders AF, Orazio CE, Puri RK, et al. 1989. On translocation of 2,3,7,8-tetrachlorodibenzo-p-dioxin: Time dependent analysis at the Times Beach experimental site. *Chemosphere* 19:429-432. [https://doi.org/10.1016/0045-6535\(89\)90347-0](https://doi.org/10.1016/0045-6535(89)90347-0).
- Yang YG, Lebrec H, Burleson GR. 1994. Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on pulmonary influenza virus titer and natural killer (NK) activity in rats. *Fundam Appl Toxicol* 23(1):125-131. <https://doi.org/10.1006/faat.1994.1088>.
- Yang JZ, Agarwal SK, Foster WG. 2000. Subchronic exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin modulates the pathophysiology of endometriosis in the cynomolgus monkey. *Toxicol Sci* 56(2):374-381. <https://doi.org/10.1093/toxsci/56.2.374>.

8. REFERENCES

- Yang YM, Huang DY, Liu GF, et al. 2005. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin on vitamin A metabolism in mice. *J Biochem Mol Toxicol* 19(5):327-335. <https://doi.org/10.1002/jbt.20097>.
- Ye M, Warner M, Mocarelli P, et al. 2018. Prenatal exposure to TCDD and atopic conditions in the Seveso second generation: a prospective cohort study. *Environ Health* 17(1):22. <https://doi.org/10.1186/s12940-018-0365-2>.
- Yellon SM, Singh D, Garrett TM, et al. 2000. Reproductive, neuroendocrine, and immune consequences of acute exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin in the Siberian hamster. *Biol Reprod* 63(2):538-543. <https://doi.org/10.1095/biolreprod63.2.538>.
- Yi SW, Ohrr H. 2014. Agent Orange exposure and cancer incidence in Korean Vietnam veterans: a prospective cohort study. *Cancer* 120(23):3699-3706. <https://doi.org/10.1002/cncr.28961>.
- Yi SW, Ohrr H, Hong JS, et al. 2013. Agent Orange exposure and prevalence of self-reported diseases in Korean Vietnam veterans. *J Prev Med Public Health* 46(5):213-225. <https://doi.org/10.3961/jpmph.2013.46.5.213>.
- Yi SW, Hong JS, Ohrr H, et al. 2014. Agent Orange exposure and disease prevalence in Korean Vietnam veterans: the Korean veterans health study. *Environ Res* 133:56-65. <https://doi.org/10.1016/j.envres.2014.04.027>.
- Yin HP, Xu JP, Zhou XQ, et al. 2012. Effects of vitamin E on reproductive hormones and testis structure in chronic dioxin-treated mice. *Toxicol Ind Health* 28(2):152-161. <https://doi.org/10.1177/0748233711408381>.
- Yockim RS, Isensee AR, Jones GE. 1978. Distribution and toxicity of TCDD and 2,4,5-T in an aquatic model ecosystem. *Chemosphere* 3:215-220. [https://doi.org/10.1016/0045-6535\(78\)90073-5](https://doi.org/10.1016/0045-6535(78)90073-5).
- Yonemoto J, Ichiki T, Takei T, et al. 2005. Maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin and the body burden in offspring of Long-Evans rats. *Environ Health Prev Med* 10(1):21-32. <https://doi.org/10.1265/ehpm.10.21>.
- Yorita Christensen KL, Carrico CK, Sanyal AJ, et al. 2013. Multiple classes of environmental chemicals are associated with liver disease: NHANES 2003-2004. *Int J Hyg Environ Health* 216(6):703-709. <https://doi.org/10.1016/j.ijheh.2013.01.005>.
- Yoshida J, Kumagai S, Tabuchi T, et al. 2006. Negative association between serum dioxin level and oxidative DNA damage markers in municipal waste incinerator workers. *Int Arch Occup Environ Health* 79(2):115-122. <https://doi.org/10.1007/S00420-005-0035-X>.
- Yoshioka W, Tohyama C. 2019. Mechanisms of developmental toxicity of dioxins and related compounds. *Int J Mol Sci* 20(3):617. <https://doi.org/10.3390/ijms20030617>.
- Yousefi Z, Walters RW. 1987. Use of soil columns to measure sorption of dioxins to soils. *Toxic Hazard Wastes* 19:181-193.
- Yu K, Zhang X, Tan X, et al. 2019. Transgenerational impairment of ovarian induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) associated with Igf2 and H19 in adult female rat. *Toxicology* 428:152311. <https://doi.org/10.1016/j.tox.2019.152311>.
- Yu K, Zhang X, Tan X, et al. 2020. Multigenerational and transgenerational effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on ovarian reserve and follicular development through AMH/AMHR2 pathway in adult female rats. *Food Chem Toxicol* 140:111309. <https://doi.org/10.1016/j.fct.2020.111309>.
- Yuan X, He X, Zhang X, et al. 2017. Comparative study of folic acid and α -naphthoflavone on reducing TCDD-induced cleft palate in fetal mice. *Cleft Palate Craniofac J* 54(2):216-222. <https://doi.org/10.1597/15-211>.
- Zack JA, Suskind RR. 1980. The mortality experience of workers exposed to tetrachlorodibenzodioxin in a trichlorophenol process accident. *J Occup Med* 22:11-14. <https://doi.org/10.1097/00043764-198001000-00005>.
- Zhang J, Jiang Y, Zhou J, et al. 2010. Elevated body burdens of PBDEs, dioxins, and PCBs on thyroid hormone homeostasis at an electronic waste recycling site in China. *Environ Sci Technol* 44(10):3956-3962. <https://doi.org/10.1021/es902883a>.

8. REFERENCES

- Zhang X, Ji M, Tan X, et al. 2018a. Impairment of ovaries by 2,3,7,8-tetrachlorobenzo-p-dioxin (TCDD) exposure in utero associated with BMP15 and GDF9 in the female offspring rat. *Toxicology* 410:16-25. <https://doi.org/10.1016/j.tox.2018.08.015>.
- Zhang HJ, Liu YN, Xian P, et al. 2018b. Maternal exposure to TCDD during gestation advanced sensory-motor development, but induced impairments of spatial learning and memory in adult male rat offspring. *Chemosphere* 212:678-686. <https://doi.org/10.1016/j.chemosphere.2018.08.118>.
- Zhang Z, Zhou M, He J, et al. 2020. Polychlorinated dibenzo-dioxins and polychlorinated dibenzofurans exposure and altered lung function: The mediating role of oxidative stress. *Environ Int* 137:105521. <https://doi.org/10.1016/j.envint.2020.105521>.
- Zhong Y, Overcash MR, McPeters AL. 1993. Near sunlight zone model for photodegradation of TCDD in soils containing organic solvents. *Chemosphere* 26(7):1263-1272. [https://doi.org/10.1016/0045-6535\(93\)90180-D](https://doi.org/10.1016/0045-6535(93)90180-D).
- Zimmering S, Mason JM, Valencia R, et al. 1985. Chemical mutagenesis testing in *Drosophila*: II. Results of 20 coded compounds tested for the National Toxicology Program. *Environ Mutagen* 7:87-100. <https://doi.org/10.1002/em.2860070309>.
- Zinkl JG, Vos JG, Moore JA, et al. 1973. Hematologic and chemical clinical chemistry of 2,3,7,8-tetrachlorodibenzo-p-dioxin in laboratory animals. *Environ Health Perspect* 5:111-118. <https://doi.org/10.1289/ehp.7305111>.
- Zober A, Messerer P, Huber P. 1990. Thirty-four-year mortality follow-up of BASF employees exposed to 2,3,7,8-TCDD after the 1953 accident. *Int Arch Occup Environ Health* 62(2):139-157. <https://doi.org/10.1007/BF00383591>.
- Zober A, Ott M, Fleig I, et al. 1993. Cytogenic studies in lymphocyte of workers exposed to 2,3,7,8-TCDD. *Int Arch Occup Environ Health* 65:157-161. <https://doi.org/10.1007/BF00381151>.
- Zober A, Ott MG, Messerer P. 1994. Morbidity follow up study of BASF employees exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) after a 1953 chemical reactor incident. *Occup Environ Med* 51:479-486. <https://doi.org/10.1136/oem.51.7.479>.
- Zook DR, Rappe C. 1994. Environmental sources, distribution, and fate of polychlorinated dibenzodioxins, dibenzofurans, and related organochlorines. In: Schecter A, ed. *Dioxins and health*. New York, NY: Plenum Press, 80-113.