

9. REFERENCES

- Abbate C, Giorgianni C, Munao F, et al. 1993. Neurotoxicity induced by exposure to toluene. An electrophysiologic study. *Int Arch Occup Environ Health* 64:389-392.
- ACGIH. 1999. TLVs and BEIs: Threshold limit values for chemical substances and physical agents: Biological exposure indices. Cincinnati, OH: American Conference of Governmental Industrial Hygienists, 67, 102.
- ACGIH. 2001. Documentation of the recommended biological exposure index for toluene. Cincinnati, OH: American Conference of Governmental Industrial Hygienists, 1-13.
- ACGIH. 2007. Toluene. Documentation of the threshold limit values and biological exposure indices. Cincinnati, Ohio: American Conference of Governmental Industrial Hygienists, 1-10.
- ACGIH. 2010. Toluene. Documentation of the biological exposure indices. Cincinnati, Ohio: American Conference of Governmental Industrial Hygienists, 1-18.
- ACGIH. 2013. Toluene (CASRN 108-88-3). Threshold limit values for chemical substances and physical agents and biological exposure indices. Cincinnati, OH: American Conference of Governmental Industrial Hygienists, 57, 114.
- Acton DW, Barker JF. 1992. *In situ* biodegradation potential of aromatic hydrocarbons in anaerobic groundwaters. *J Contam Hydrol* 9:325-352.
- Adams WD, Golden JE. 1992. Comparison of the effects of geologic environment on volatile organic plume development. *J Hazard Mat* 29:17-41.
- Adlercreutz H. 1995. Phytoestrogens: Epidemiology and a possible role in cancer protection. *Environ Health Perspect Suppl* 103(7):103-112.
- ATSDR. 1989. Decision guide for identifying substance-specific data needs related to toxicological profiles; Notice. Agency for Toxic Substances and Disease Registry, Division of Toxicology. *Fed Regist* 54(174):37618-37634.
- ATSDR. 2000. Toxicological Profile for Toluene. Atlanta, GA: Agency for Toxic Substance and Disease Registry, U.S. Department of Health and Human Services, Public Health Service.
- ATSDR. 2015. Toluene. Full SPL data. Substance priority list (SPL) resource page. Agency for Toxic Substances and Disease Registry, Centers for Disease Control and Prevention. <http://www.atsdr.cdc.gov/SPL/resources/index.html>. August 26, 2016.
- Ahmed S, Tin Win S, Yamamoto S, et al. 2007. Increased hippocampal mRNA expression of neuronal synaptic plasticity related genes in mice chronically exposed to toluene at a low-level human occupational-exposure. *Neurotoxicology* 28(1):168-174.

* Not cited in text

9. REFERENCES

- AIHA. 2013. Emergency response planning guidelines (ERPG). Fairfax, VA: American Industrial Hygiene Association. <https://www.aiha.org/get-involved/AIHAGuidelineFoundation/EmergencyResponsePlanningGuidelines/Pages/default.aspx>. January 08, 2014.
- Aitio A, Pekari K, Jarvisalo J. 1984. Skin absorption as a source of error in biological monitoring. *Scand J Work Environ Health* 10:317-320.
- Akbas E, Derici E, Soylemez F, et al. 2004. An investigation of effects of toluene and cigarette smoking on some blood parameters and lymphocyte life span. *Cell Biol Toxicol* 20(1):33-40.
- Al-Batanony MA, Abdel-Rasoul GM, Abu-Salem MA, et al. 2012. Cohort study on respiratory and neurological disorders among workers in a bone glue factory in Egypt. *Int J Occup Environ Med* 3(2):84-91.
- Alcorn CJ, Simpson RJ, Leahy D, et al. 1991. *In vitro* studies of intestinal drug absorption: Determination of partition and distribution coefficient with brush border membrane vesicles. *Biochem Pharmacol* 42(12):2259-2264.
- Alexopoulos EC, Chatzis C, Linos A. 2006. An analysis of factors that influence personal exposure to toluene and xylene in residents of Athens, Greece. *BMC Public Health* 6:50.
- Alfaro-Rodriguez A, Bueno-Nava A, Gonzalez-Pina R, et al. 2011. Chronic exposure to toluene changes the sleep-wake pattern and brain monoamine content in rats. *Acta Neurobiol Exp* 71(2):183-192.
- Al-Ghamdi SS, Raftery MJ, Yaqoob MM. 2003. Acute solvent exposure induced activation of cytochrome P4502E1 causes proximal tubular cell necrosis by oxidative stress. *Toxicol in Vitro* 17(3):335-341.
- Al-Ghamdi SS, Raftery MJ, Yaqoob MM. 2004. Toluene and *p*-xylene induced LLC-PK1 apoptosis. *Drug Chem Toxicol* 27(4):425-432.
- Ali N, Tardif R. 1999. Toxicokinetic modeling of the combined exposure to toluene and *n*-hexane in rats and humans. *J Occup Health* 41:95-103.
- Altman PL, Dittmer DS. 1974. *Biological handbooks: Biology data book*. Vol. III. 2nd ed. Bethesda, MD: Federation of American Societies for Experimental Biology, 1987-2008, 2041.
- Altshuller AP, Lonneman WA, Sutterfield FD, et al. 1971. Hydrocarbon composition of the atmosphere of the Los Angeles Basin-1967. *Environ Sci Technol* 5(10):1009-1016.
- Ameno K, Fuke C, Ameno S, et al. 1989. A fatal case of oral ingestion of toluene. *Forensic Sci Int* 41:255-260.
- Ameno K, Kiriu T, Fuke C, et al. 1992. Regional brain distribution of toluene in rats and in a human autopsy. *Arch Toxicol* 66:153-156.
- Andersen I, Lundqvist GR, Molhave L, et al. 1983. Human response to controlled levels of toluene in six-hour exposures. *Scand J Work Environ Health* 9:405-418.

9. REFERENCES

- 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, Clewell HJ, Gargas ML, et al. 1987. Physiologically based pharmacokinetics and the risk assessment process for methylene chloride. *Toxicol Appl Pharmacol* 87(2):185-205.
- Anderson C, Sundberg K, Groth O. 1986. Animal model for assessment of skin irritancy. *Contact Dermatitis* 15:143-151.
- Anderson HR, Dick B, Macnair RS, et al. 1982. An investigation of 140 deaths associated with volatile substance abuse in the United Kingdom (1971-1981). *Hum Toxicol* 1:207-221.
- Anderson HR, Macnair RS, Ramsey JD. 1985. Epidemiology: Deaths from abuse of volatile substances: A national epidemiological study. *Br Med J* 290:304-307.
- Anderson MA. 1992. Influence of surfactants on vapor-liquid partitioning. *Environ Sci Technol* 26:2186-2191.
- Andersson K, Fuxe K, Toftgard R, et al. 1980. Toluene-induced activation of certain hypothalamic and median eminence catecholamine nerve terminal systems of the male rat and its effects on anterior pituitary hormone secretion. *Toxicol Lett* 5:393-398.
- Andersson K, Nilsen OG, Toftgard R, et al. 1983b. Increased amine turnover in several hypothalamic noradrenaline nerve terminal systems and changes in prolactin secretion in the male rat by exposure to various concentrations of toluene. *Neurotoxicology* 4(4):43-55.
- Andersson R, Carlsson A, Nordqvist MB, et al. 1983a. Urinary excretion of hippuric acid and o-cresol after laboratory exposure of humans to toluene. *Int Arch Occup Environ Health* 53:101-108.
- Angerer J. 1979. Occupational chronic exposure to organic solvents: VII. Metabolism of toluene in man. *Int Arch Occup Environ Health* 43:63-67.
- *Angerer J, Kramer A. 1997. Occupational chronic exposure to organic solvents. XVI. Ambient and biological monitoring of workers exposed to toluene. *Int Arch Occup Environ Health* 69(2):91-96.
- Angerer J, Schildbach M, Kramer A. 1998a. *S-p*-toluylmercapturic acid in the urine of workers exposed to toluene: A new biomarker for toluene exposure. *Arch Toxicol* 72(2):119-123.
- Angerer J, Schildbach M, Kramer A. 1998b. Gas chromatographic method for the simultaneous determination of *S-p*-toluylmercapturic acid and *S*-phenylmercapturic acid in human urine. *J Anal Toxicol* 22:211-214.
- Antilla A, Pukkala E, Riala R, et al. 1998. Cancer incidence among Finnish workers exposed to aromatic hydrocarbons. *Int Arch Occup Environ Health* 71:187-193.
- Apawu AK, Matthews TA, Bowen SE. 2014. Striatal dopamine dynamics in mice following acute and repeated toluene exposure. *Psychopharmacology* [Epub ahead of print].
- API. 1978. Teratology study in rats. Toluene. Final report. Washington, D.C.: American Petroleum Institute. LBI Project No. 20698-4.

9. REFERENCES

- API. 1981. Mutagenicity evaluation of toluene in the mouse dominant lethal assay. Washington, DC: American Petroleum Institute. Project no. 21141-05.
- API. 1985. Two-generation reproduction/fertility study on a petroleum-derived hydrocarbon (toluene) Vol. 1. Washington, DC: American Petroleum Institute.
- API. 1991. Toluene: Effect on pregnancy of the rat by inhalation (status report) with cover letter dated 022191. Washington, DC: American Petroleum Institute. Submitted to U.S. Environmental Protection Agency under TSCA Section FYI. APT291279. OTS0000802.
- API. 1992. Initial submission: A preliminary study of the effect of toluene on pregnancy of the rat (inhalation exposure). Final report with cover letter dated 072292. Washington, DC: American Petroleum Institute. Submitted to U.S. Environmental Protection Agency under TSCA Section FYI. APT191309. OTS0000857.
- API. 1997. Brain glial fibrillary acidic protein (GFAP) as a marker of neurotoxicity during inhalation exposure to toluene. Washington, DC: American Petroleum Institute. API Publication Number 4647.
- Aranyi C, O'Shea WJ, Sherwood RL, et al. 1985. Effects of toluene inhalation on pulmonary host defenses of mice. *Toxicol Lett* 25:103-110.
- Arito H, Tsuruta H, Oguir M. 1988. Changes in sleep and wakefulness following single and repeated exposures to toluene vapor in rats. *Arch Toxicol* 62:76-80.
- Armstrong AQ, Hodson RE, Hwang H-M, et al. 1991. Environmental factors affecting toluene degradation in groundwater at a hazardous waste site. *Environ Toxicol Chem* 10:147-158.
- Arnold GL, Wilkens-Haug L. 1990. Toluene embryopathy syndrome [abstract]. *Am J Hum Genet* 47(suppl. 3):A46.
- Arnold GL, Kirby RS, Langendoerfer S, et al. 1994. Toluene embryopathy: Clinical delineation and developmental follow-up. *Pediatrics* 93(2):216-220.
- Arocha MA, Jackman AP, McCoy BJ. 1996. Adsorption kinetics of toluene on soil agglomerates: Soil as a biporous sorbent. *Environ Sci Technol* 30(5):1500-1507.
- Arthur CL, Killam LM, Motlagh S, et al. 1992. Analysis of substituted benzene compounds in groundwater using solid-phase microextraction. *Environ Sci Technol* 26(5):979-983.
- *Ashikaga R, Araki Y, Miura K, et al. 1995. Cranial MRI in chronic thinner intoxication. *Neuroradiology* 37(6):443-444.
- Ashley DL, Bonin MA, Cardinali FL, et al. 1992. Determining volatile organic compounds in human blood from a large sample population by using purge and trap gas chromatography/mass spectrometry. *Anal Chem* 64:1021-1029.
- Ashley DL, Bonin MA, Cardinali FL, et al. 1996. Measurement of volatile organic compounds in human blood. *Environ Health Perspect Suppl* 104:871-877.

9. REFERENCES

- Askergren A, Allgren L, Karlsson C, et al. 1981a. Studies on kidney function in subjects exposed to organic solvents. *Acta Med Scand* 209:479-483.
- Askergren A, Brandt R, Gullquist R, et al. 1981b. Studies on kidney function in subjects exposed to organic solvents: IV. Effects on 51-Cr-EDTA clearance. *Acta Med Scand* 210:373-376.
- Assmuth T, Kalevi K. 1992. Concentrations and toxicological significance of trace organic compounds in municipal solid waste landfill gas. *Chemosphere* 24(9):1207-1216.
- Atay AA, Kismet E, Turkbay T, et al. 2005. Bone mass toxicity associated with inhalation exposure to toluene. *Biol Trace Elem Res* 105(1-3):197-203.
- Atkinson R. 1990. Gas-phase tropospheric chemistry of organic compounds: A review. *Atmos Environ* 24A(1):1-41.
- Austin SG, Schnatter AR. 1983. A case-control study of chemical exposures and brain tumors in petrochemical workers. *J Occup Med* 25(4):313-320.
- Ayan M, Tas U, Sogut E, et al. 2013. The apoptotic effect of a high dose of toluene on liver tissue during the acute phase: An experimental study. *Toxicol Ind Health* 29(8):728-736.
- Aydin K, Sencer S, Demir T, et al. 2002. Cranial MR findings in chronic toluene abuse by inhalation. *Am J Neuroradiol* 23(7):1173-1179.
- Aydin K, Sencer S, Ogel K, et al. 2003. Single-voxel proton MR spectroscopy in toluene abuse. *Magn Reson Imaging* 21(7):777-785.
- Backer LC, Egeland GM, Ashley DL, et al. 1997. Exposure to regular gasoline and ethanol oxyfuel during refueling in Alaska. *Environ Health Perspect* 105(8):850-5.
- Baelum J. 1990. Toluene in alveolar air during controlled exposure to constant and to varying concentrations. *Int Arch Occup Environ Health* 62:59-64.
- Baelum J, Andersen I, Lundqvist GR, et al. 1985. Response of solvent-exposed printers and unexposed controls to six-hour toluene exposure. *Scand J Work Environ Health* 11:271-280.
- Baelum J, Dossing M, Hansen SH, et al. 1987. Toluene metabolism during exposure to varying concentrations combined with exercise. *Int Arch Occup Environ Health* 59:281-294.
- Baelum J, Molhave L, Honore Hansen S, et al. 1993. Hepatic metabolism of toluene after gastrointestinal uptake in humans. *Scand J Work Environ Health* 19(1):55-62.
- Baelum J, Molhave L, Honore Hansen S, et al. 1998. Metabolic interaction between toluene, trichloroethylene and n-hexane in humans. *Scand J Work Environ Health* 24(1):30-37.
- Bale AS, Jackson MD, Krantz QT, et al. 2007. Evaluating the NMDA-glutamate receptor as a site of action for toluene, *in vivo*. *Toxicol Sci* 98(1):159-166.
- Bale AS, Meacham CA, Benignus VA, et al. 2005. Volatile organic compounds inhibit human and rat neuronal nicotinic acetylcholine receptors expressed in *Xenopus oocytes*. *Toxicol Appl Pharmacol* 205(1):77-88.

9. REFERENCES

- Bale AS, Smothers CT, Woodward JJ. 2002. Inhibition of neuronal nicotinic acetylcholine receptors by the abused solvent, toluene. *Br J Pharmacol* 137(3):375-383.
- Balfour WD, Wetherold RG, Lewis DL. 1985. Evaluation of air emissions from hazardous waste treatment, storage and disposal facilities. Cincinnati, OH: U.S. Environmental Protection Agency, Land Pollution Control Division, Hazardous Waste Engineering Research Laboratory, Office of Research and Development.
- Ballesta PP, Ferradas EG, Aznar AM. 1992. Simultaneous passive sampling of volatile organic compounds. *Chemosphere* 25(12):1797-1809.
- Baltrenas P, Baltrenaite E, Sereviciene V, et al. 2011. Atmospheric BTEX concentrations in the vicinity of the crude oil refinery of the Baltic region. *Environ Monit Assess* 182(1-4):115-127.
- Banfer VW. 1961. [Studies on the effect of pure toluene on the blood picture of photogravure printers and helper workers.] *Zent Arbeitsmed* 11:35-40. (German)
- Barnes DG, Dourson M. 1988. Reference dose (RfD): Description and use in health risk assessments. *Regul Toxicol Pharmacol* 8(4):471-486.
- Barrefors G. 1996. Monitoring of benzene, toluene and p-xylene in urban air with differential optical absorption spectroscopy technique. *Sci Total Environ* 189/190:287-292.
- Baskerville JR, Tichenor GA, Rosen PB. 2001. Toluene induced hypokalaemia: Case report and literature review. *Emerg Med J* 18(6):514-516.
- Bass M. 1970. Sudden sniffing death. *JAMA* 212(12):2075-2079.
- Batis JC, Hannigan JH, Bowen SE. 2010. Differential effects of inhaled toluene on locomotor activity in adolescent and adult rats. *Pharmacol Biochem Behav* 96(4):438-448.
- Bauchinger M, Schmid E, Dresch J, et al. 1982. Chromosome change in lymphocytes after occupational exposure to toluene. *Mutat Res* 102:439-445.
- Baydas G, Ozveren F, Tuzcu M, et al. 2005. Effects of thinner exposure on the expression pattern of neural cell adhesion molecules, level of lipid peroxidation in the brain and cognitive function in rats. *Eur J Pharmacol* 512(2-3):181-187.
- Baydas G, Reiter RJ, Nedzvetskii VS, et al. 2003. Melatonin protects the central nervous system of rats against toluene-containing thinner intoxication by reducing reactive gliosis. *Toxicol Lett* 137(3):169-174.
- Beasley TE, Evansky PA, Bushnell PJ. 2012. Behavioral effects of sub-acute inhalation of toluene in adult rats. *Neurotoxicol Teratol* 34(1):83-89.
- Beasley TE, Evansky PA, Gilbert ME, et al. 2010. Behavioral effects of subchronic inhalation of toluene in adult rats. *Neurotoxicol Teratol* 32(6):611-619.
- Beavers JD, Himmelstein JS, Hammond SK, et al. 1996. Exposure in a household using gasoline-contaminated water: A pilot study. *J Occup Environ Med* 38(1):35-38.

9. REFERENCES

- Beckley JT, Evins CE, Fedarovich H, et al. 2013. Medial prefrontal cortex inversely regulates toluene-induced changes in markers of synaptic plasticity of mesolimbic dopamine neurons. *J Neurosci* 33(2):804-813.
- Beckstead MJ, Weiner JL, Eger EI, 2nd, et al. 2000. Glycine and γ -aminobutyric acid_A receptor function is enhanced by inhaled drugs of abuse. *Mol Pharmacol* 57(6):1199-1205.
- Beller HR, Grbic-Galic D, Reinhard M. 1992a. Microbial degradation of toluene under sulfate-reducing conditions and the influence of iron on the process. *Appl Environ Microbiol* 58(3):786-793.
- Beller HR, Reinhard M, Grbic-Galic D. 1992b. Metabolic by-products of anaerobic toluene degradation by sulfate-reducing enrichment cultures. *Appl Environ Microbiol* 58(9):3192-3195.
- Benignus VA, Boyes WK, Kenyon EM, et al. 2007. Quantitative comparisons of the acute neurotoxicity of toluene in rats and humans. *Toxicol Sci* 100(1):146-155.
- Benignus VA, Coleman T, Eklund CR, et al. 2006. A general physiological and toxicokinetic (GPAT) model for simulating complex toluene exposure scenarios in humans. *Toxicol Mech Methods* 16(1):27-36.
- Benignus VA, Muller KE, Barton CN, et al. 1981. Toluene levels in blood and brain of rats during and after respiratory exposure. *Toxicol Appl Pharmacol* 61:326-334.
- Benignus VA, Muller KE, Graham JA, et al. 1984. Toluene levels in blood and brain of rats as a function of toluene level in inspired air. *Environ Res* 33:39-46.
- Benoit FM, Davidson WR, Lovett AM, et al. 1985. Breath analysis by API/MS human exposure to volatile organic solvents. *Int Arch Occup Environ Health* 55:113-120.
- Berenguer P, Soulage C, Fautrel A, et al. 2004. Behavioral and neurochemical effects induced by subchronic combined exposure to toluene at 40 ppm and noise at 80 dB-A in rats. *Physiol Behav* 81(3):527-534.
- Berenguer P, Soulage C, Perrin D, et al. 2003. Behavioral and neurochemical effects induced by subchronic exposure to 40 ppm toluene in rats. *Pharmacol Biochem Behav* 74(4):997-1003.
- Berger GS, ed. 1994. Epidemiology of endometriosis. In: *Endometriosis: Advanced management and surgical techniques*. New York, NY: Springer-Verlag, 3-7.
- Bergman K. 1983. Application and results of whole-body autoradiography in distribution studies of organic solvents. *CRC Crit Rev Toxicol* 12(1):59-118.
- Bernardo MS, Goncalves M, Lapa N, et al. 2009. Determination of aromatic compounds in eluates of pyrolysis solid residues using HS-GC-MS and DLLME-GC-MS. *Talanta* 80(1):104-108.
- Beyer CE, Stafford D, LeSage MG, et al. 2001. Repeated exposure to inhaled toluene induces behavioral and neurochemical cross-sensitization to cocaine in rats. *Psychopharmacology* 154(2):198-204.
- Biedermann M, Grob K, Morchio G. 1995. Original paper: On the origin of benzene, toluene, ethylbenzene and xylene in extra virgin olive oil. *Z Lebensm Unters Forsch* 200:266-272.

9. REFERENCES

- Biedermann M, Grob K, Morchio G. 1996. Original paper: On the origin of benzene, toluene, ethylbenzene, and the xylenes in virgin olive oil--further results. *Z Lebensm Unters Forsch* 203(3):224-229.
- Bieniek G, Kurkiewicz S, Wilczok T. 2004. Occupational exposure to aromatic hydrocarbons at a coke plant: Part I. Identification of hydrocarbons in air and their metabolites in urine by a gas chromatography-mass spectrometry method. *J Occup Health* 46(3):175-180.
- Bikashvili TZ, Chilachava LR, Gelazonia LK, et al. 2012. Effect of chronic inhalation of toluene on behavior of rats of various age groups in multi-branched maze. *Bull Exp Biol Med* 152(5):587-589.
- Bird MG, Wetmore BA, Letinski DJ, et al. 2010. Influence of toluene co-exposure on the metabolism and genotoxicity of benzene in mice using continuous and intermittent exposures. *Chem Biol Interact* 184(1-2):233-239.
- Bjornaes S, Naalsund LU. 1988. Biochemical changes in different brain areas after toluene inhalation. *Toxicology* 49:367-374.
- Blair A, Hartge P, Stewart PA, et al. 1998. Mortality and cancer incidence of aircraft maintenance workers exposed to trichloroethylene and other organic solvents and chemicals: Extended follow up. *Occup Environ Med* 55:161-171.
- Blair C, Walls J, Davies NW, et al. 2010. Volatile organic compounds in runners near a roadway: Increased blood levels after short-duration exercise. *Br J Sports Med* 44(10):731-735.
- Boey KW, Foo SC, Jeyaratnam J. 1997. Effects of occupational exposure to toluene: A neuropsychological study on workers in Singapore. *Ann Acad Med Singapore* 26(2):184-187.
- Boman A, Hagelthorn G, Magnusson K. 1995. Percutaneous absorption of organic solvents during intermittent exposure in guinea pigs. *Acta Derm Venereol* 75(2):114-119.
- *Boor JW, Hurtig HI. 1977. Persistent cerebellar ataxia after exposure to toluene. *Ann Neurol* 2:440-442.
- Bos RP, Brouns RM, van Doorn R, et al. 1981. Nonmutagenicity of toluene, *o*-, *m*- and *p*-xylene, *o*-methylbenzylalcohol and *o*-methylbenzylsulfate in the Ames assay. *Mutat Res* 88:273-279.
- Bowen SE. 2011. Two serious and challenging medical complications associated with volatile substance misuse: Sudden sniffing death and fetal solvent syndrome. *Subst Use Misuse* 46:68-72.
- Bowen SE, Balster RL. 1998. A direct comparison of inhalant effects on locomotor activity and schedule-controlled behavior in mice. *Exp Clin Psychopharmacol* 6(3):235-247.
- Bowen SE, Hannigan JH. 2013. Binge toluene exposure in pregnancy and pre-weaning developmental consequences in rats. *Neurotoxicol Teratol* 38:29-35.
- Bowen SE, McDonald P. 2009. Abuse pattern of toluene exposure alters mouse behavior in a waiting-for-reward operant task. *Neurotoxicol Teratol* 31(1):18-25.
- Bowen SE, Batis JC, Mohammadi MH, et al. 2005. Abuse pattern of gestational toluene exposure and early postnatal development in rats. *Neurotoxicol Teratol* 27(1):105-116.

9. REFERENCES

- Bowen SE, Charlesworth JD, Tokarz ME, et al. 2007. Decreased sensitivity in adolescent vs. adult rats to the locomotor activating effects of toluene. *Neurotoxicol Teratol.* 29(6):599-606.
- Bowen SE, Daniel J, Balster RL. 1999. Deaths associated with inhalant abuse in Virginia from 1987 to 1996. *Drug Alcohol Depend* 53:239-245.
- Bowen SE, Hannigan JH, Cooper PB. 2009b. Abuse pattern of gestational toluene exposure alters behavior in rats in a "waiting-for-reward" task. *Neurotoxicol Teratol* 31(2):89-97.
- Bowen SE, Irtenkauf S, Hannigan JH, et al. 2009a. Alterations in rat fetal morphology following abuse patterns of toluene exposure. *Reprod Toxicol* 27(2):161-169.
- Bowen SE, Kimar S, Irtenkauf S. 2010. Comparison of toluene-induced locomotor activity in four mouse strains. *Pharmacol Biochem Behav* 95(2):249-257.
- Bowen SE, Wiley JL, Balster RL. 1996. The effects of abused inhalants on mouse behavior in an elevated plus-maze. *Eur J Pharmacol* 312:131-136.
- Boyd I, Rubin G, Wessely S. 2012. Taking refuge from modernity: 21st century hermits. *J R Soc Med* 105(12):523-529. 10.1258/jrsm.2012.120060.
- Boyes WK, Bercegeay M, Degn L, et al. 2016. Toluene inhalation exposure for 13 weeks causes persistent changes in electroretinograms of Long-Evans rats. *Neurotoxicology* 53:257-270. 10.1016/j.neuro.2016.02.008.
- Boyes WK, Bercegeay M, Krantz QT, et al. 2007. Acute toluene exposure and rat visual function in proportion to momentary brain concentration. *Toxicol Sci* 99(2):572-581.
- Bratveit M, Hollund BE, Moen BE. 2004. Reduced exposure to organic solvents by use of water-based paint systems in car repair shops. *Int Arch Occup Environ Health* 77(1):31-38.
- Bray HG, Humphris BG, Thorpe WV. 1949. Metabolism of derivatives of toluene. *Biochem J* 45:241-244.
- Brooke I, Cocker J, Delic JI, et al. 1998. Dermal uptake of solvents from the vapour phase: An experimental study in humans. *Ann Occup Hyg* 42(8):531-540.
- Brown HS, Bishop DR, Rowan CA. 1984. The role of skin absorption as a route of exposure for volatile organic compounds (VOCs) in drinking water. *Am J Public Health* 74(5):479-484.
- Bruce BW, McMahon PB. 1996. Shallow ground-water quality beneath a major urban center: Denver, Colorado, USA. *J Hydrol* 186:129-151.
- Bruckner JV, Peterson RG. 1981a. Evaluation of toluene and acetone inhalant abuse: I. Pharmacology and pharmacodynamics. *Toxicol Appl Pharmacol* 61:27-38.
- Bruckner JV, Peterson RG. 1981b. Evaluation of toluene and acetone inhalant abuse: II. Model development and toxicology. *Toxicol Appl Pharmacol* 61:302-312.

9. REFERENCES

- *Brugnone F, Perbellini L, Apostoli P, et al. 1983. Decline of blood and alveolar toluene concentration following two accidental human poisonings. *Int Arch Occup Environ Health* 53:157-165
- Burmistrov SO, Arutyunyan AV, Stepanov MG, et al. 2001. Effect of chronic inhalation of toluene and dioxane on activity of free radical processes in rat ovaries and brain. *Bull Exp Biol Med* 132(3):832-836.
- Burns LA, Bradley SG, White KL, et al. 1994. Immunotoxicity of mono-nitrotoluenes in female B6C3F1 mice: I. Para-nitrotoluene. *Drug Chem Toxicol* 17(3):317-358.
- Burry M, Guizzetti M, Oberdoerster J, et al. 2003. Developmental neurotoxicity of toluene: *In vivo* and *in vitro* effects on astroglial cells. *Dev Neurosci* 25(1):14-19.
- Burstyn I, Kromhout H. 2002. Trends in inhalation exposure to hydrocarbons among commercial painters in The Netherlands. *Scand J Work Environ Health* 28(6):429-438.
- Bushnell PJ. 1997. Concentration-time relationships for the effects of inhaled trichloroethylene on signal detection behavior in rats. *Fundam Appl Toxicol* 36(1):30-38.
- Bushnell PJ, Evans HL, Palmes ED. 1985. Effects of toluene inhalation on carbon dioxide production and locomotor activity in mice. *Fundam Appl Toxicol* 5:971-977.
- *Bushnell PJ, Kelly KL, Crofton KM. 1994. Effects of toluene inhalation on detection of auditory signals in rats. *Neurotoxicol Teratol* 16 (2):149-160.
- Bushnell PJ, Oshiro WM, Samsam TE, et al. 2007. A dosimetric analysis of the acute behavioral effects of inhaled toluene in rats. *Toxicol Sci* 99(1):181-189.
- Byczkowski JZ, Gearhart JM, Fisher JW. 1994. "Occupational" exposure of infants to toxic chemicals via breast milk. *Nutrition* 10(1):43-48.
- Byrne A, Kirby B, Zibin T, et al. 1991. Psychiatric and neurological effects of chronic solvent abuse. *Can J Psychiatry* 36:735-738.
- Caldemeyer KS, Armstrong SW, George KK, et al. 1996. The spectrum of neuroimaging abnormalities in solvent abuse and their clinical correlation. *J Neuroimaging* 6(3):167-173.
- Calderon-Guzman D, Hernandez-Islas JL, Espitia Vazquez IR, et al. 2005. Effect of toluene and cresols on Na⁺,K⁺-ATPase, and serotonin in rat brain. *Regul Toxicol Pharmacol*. 41(1):1-5.
- Callan SP, Hannigan JH, Bowen SE. 2015. Prenatal toluene exposure impairs performance in the Morris water maze in adolescent rats. *Neuroscience* 10.1016/j.neuroscience.2015.08.050.
- Camara-Lemarroy CR, Rodriguez-Gutierrez R, Monreal-Robles R, et al. 2015. Acute toluene intoxication--clinical presentation, management and prognosis: A prospective observational study. *BMC Emerg Med* 15:19. 10.1186/s12873-015-0039-0.
- Campagna D, Stengel B, Mergler D, et al. 2001. Color vision and occupational toluene exposure. *Neurotoxicol Teratol* 23(5):473-480.
- Campo P, Lataye R, Cossec B, et al. 1997. Toluene-induced hearing loss: A mid-frequency location of the cochlear lesions. *Neurotoxicol Teratol* 19(2):129-140.

9. REFERENCES

- Campo P, Lataye R, Cossec B, et al. 1998. Combined effects of simultaneous exposure to toluene and ethanol on auditory function in rats. *Neurotoxicol Teratol* 20(3):321-332.
- Campo P, Loquet G, Blachere V, et al. 1999. Toluene and styrene intoxication route in the rat cochlea. *Neurotoxicol Teratol* 21(4):427-434.
- Campo P, Maguin K, Lataye R. 2007. Effects of aromatic solvents on acoustic reflexes mediated by central auditory pathways. *Toxicol Sci* 99(2):582-590.
- Campo P, Waniusiow D, Cossec B, et al. 2008. Toluene-induced hearing loss in phenobarbital treated rats. *Neurotoxicol Teratol* 30(1):46-54.
- Campos-Candel A, Llobat-Estelles M, Mauri-Aucejo A. 2009. Comparative evaluation of liquid chromatography versus gas chromatography using a β -cyclodextrin stationary phase for the determination of BTEX in occupational environments. *Talanta* 78(4-5):1286-1292.
- Cao G, Jang M. 2008. Secondary organic aerosol formation from toluene photooxidation under various NO_x conditions and particle acidity. *Atmos Chem Phys Disc* 8:14467-14495.
- *Capellini A, Alessio L. 1971. [The urinary excretion of hippuric acid in workers exposed to toluene]. *Med Lav* 62:196-201. (Italian)
- Capron B, Logan BK. 2009. Toluene-impaired drivers: Behavioral observations, impairment assessment, and toxicological findings. *J Forensic Sci* 54(2):486-489.
- Caravati EM, Bjerk PJ. 1997. Acute toluene ingestion toxicity. *Ann Emerg Med* 30(6):838-839.
- Carlsson A. 1982. Exposure to toluene: Uptake, distribution and elimination in man. *Scand J Work Environ Health* 8:43-55.
- Carlsson A, Ljungquist E. 1982. Exposure to toluene: Concentration in subcutaneous adipose tissue. *Scand J Work Environ Health* 8:56-62.
- Carpenter AV, Flanders WD, Frome EL, et al. 1988. Chemical exposures and central nervous system cancers: A case-control study among workers at two nuclear facilities. *Am J Ind Med* 13:351-362.
- Carpenter CP, Smyth HF. 1946. Chemical burns of the rabbit cornea. *Am J Ophthalmol* 29:1363-1372.
- Carpenter CP, Geary DL, Myers RC, et al. 1976. Petroleum hydrocarbon toxicity studies: XIII. Animal and human response to vapors of toluene concentrate. *Toxicol Appl Pharmacol* 36:473-490.
- Carpenter CP, Shaffer CB, Weil CS, et al. 1944. Studies on the inhalation of 1,3-butadiene; with a comparison of its narcotic effect with benzol, toluol, and styrene, and a note on the elimination of styrene by the human. *J Ind Hyg Toxicol* 26(3):69-78.
- Carrer P, Maroni M, Alcini D, et al. 2000. Assessment through environmental and biological measurements of total daily exposure to volatile organic compounds of office workers in Milan, Italy. *Indoor Air* 10(4):258-268.

9. REFERENCES

- Carter JM, Lapham WW, Zorgorski JS. 2008. Occurrence of volatile organic compounds in aquifers of the United States. *J Am Water Works Assoc* 44(2):399-416.
- Caselli M, de Gennaro G, Saracino MR, et al. 2009. Indoor contaminants from newspapers: VOCs emissions in newspaper stands. *Environ Res* 109(2):149-157.
- Castilla-Serna L, Rodriguez-Perez R, Osorio-Cruces F, et al. 1991. Effects of chronic toluene inhalation on avoidance conditioned behavior in rats. *Arch Invest Med* 22:295-301.
- Cattaneo A, Taronna M, Consonni D, et al. 2010. Personal exposure of traffic police officers to particulate matter, carbon monoxide, and benzene in the city of Milan, Italy. *J Occup Environ Hyg* 7(6):342-351.
- Cavalleri A, Gobba F, Nicali E, et al. 2000. Dose-related color vision impairment in toluene-exposed workers. *Arch Environ Health* 55(6):399-404.
- CCME. 2004. Canadian soil quality guidelines for the protection of environmental and human health: Toluene (2004). Winnipeg: Canadian Council of Ministers of the Environment.
- CDC. 2009. Fourth national report on human exposure to environmental chemicals. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- CDC. 2013. Fourth national report on human exposure to environmental chemicals. Updated tables, September 2013. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- CDC. 2015. E-cigarette study sparks national attention around e-cigarettes and nicotine toxicity. Centers for Disease Control and Prevention. https://www.cdc.gov/nceh/hsb/success_stories/ecigarette_study.htm. March 17, 2017.
- CEPA. 1999. Public health goal for toluene in drinking water. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment. <http://oehha.ca.gov/water/phg/pdf/tolu-f.pdf>. August 8, 2014.
- Chaigne B, Lasfargues G, Marie I, et al. 2015. Primary Sjogren's syndrome and occupational risk factors: A case-control study. *J Autoimmun* 60:80-85. 10.1016/j.jaut.2015.04.004.
- Chalansonnet M, Carabin N, Boucard S, et al. 2013. Study of the potential oxidative stress induced by six solvents in the rat brain. *Neurotoxicology* 35:71-83.
- Chambers DM, McElprang DO, Waterhouse MG, et al. 2006. An improved approach for accurate quantitation of benzene, toluene, ethylbenzene, xylene, and styrene in blood. *Anal Chem* 78(15):5375-5383.
- Chambers DM, Ocariz JM, McGuirk MF, et al. 2011. Impact of cigarette smoking on volatile organic compound (VOC) blood levels in the U.S. population: NHANES 2003-2004. *Environ Int* 37(8):1321-1328.
- Chan CC, Ozkaynak H, Spengler JD, et al. 1991a. Driver exposure to volatile organic compounds, CO, ozone, and NO₂ under different driving conditions. *Environ Sci Technol* 25(5):964-972.

9. REFERENCES

- Chan CC, Spengler JD, Ozkaynak H, et al. 1991b. Commuter exposures to VOCs in Boston, Massachusetts. *J Air Waste Manage Assoc* 4:1594-1600.
- Chan MH, Chung SS, Stoker AK, et al. 2012. Sarcosine attenuates toluene-induced motor incoordination, memory impairment, and hypothermia but not brain stimulation reward enhancement in mice. *Toxicol Appl Pharmacol*. 265(2):158-165.
- Chand P, Clausen J. 1982. Effects of toluene on cytochrome P-450 mixed function oxygenase and glutathione-s-transferase activities in rat brain and liver. *Bull Environ Contam Toxicol* 28:542-545.
- Chapman DE, Moore TJ, Michener SR, et al. 1990. Metabolism and covalent binding of [¹⁴C] toluene by human and rat liver microsomal fractions and liver slices. *Drug Metab Dispos* 18(6):929-936.
- Chatham-Stephens K, Law R, Taylor E, et al. 2014. Calls to poison centers for exposures to electronic cigarettes — United States, September 2010–February 2014. *Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report* 63(13):292-293. <https://www.cdc.gov/mmwr/pdf/wk/mm6313.pdf>. March 15, 2017.
- Chen CY, Wu SC. 1998. The influence of relative humidity on the adsorption of toluene by soils - interpretation with the adsorption energy distribution functions. *Chemosphere* 37(8):1437-1444.
- Chen HH, Lin YR, Chan MH. 2011. Toluene exposure during brain growth spurt and adolescence produces differential effects on N-methyl-D-aspartate receptor-mediated currents in rat hippocampus. *Toxicol Lett*. 205(3):336-340.
- Chen HH, Wei CT, Chan MH. 2004. Neonatal toluene exposure alters glutamate-induced calcium signaling in developing cerebellar granule neurons. *Ann N Y Acad Sci*. 1025(Current Status of Drug Dependence/Abuse Studies):556-560.
- Chen HH, Wei CT, Lin YR, et al. 2005. Neonatal toluene exposure alters agonist and antagonist sensitivity and NR2B subunit expression of NMDA receptors in cultured cerebellar granule neurons. *Toxicol Sci* 85(1):666-674.
- Chen ML, Chen SH, Guo BR, et al. 2002. Relationship between environmental exposure to toluene, xylene and ethylbenzene and the expired breath concentrations for gasoline service workers. *J Environ Monit* 4(4):562-566.
- Chouaniere D, Wild P, Fontana JM, et al. 2002. Neurobehavioral disturbances arising from occupational toluene exposure. *Am J Ind Med* 41(2):77-88.
- CHRC. 2007. The medical perspective on environmental sensitivities. Canadian Human Rights Commission. http://www.chrc-ccdp.gc.ca/sites/default/files/envsensitivity_en.pdf. May 2, 2016
- Ciarrocca M, Tomei G, Fiaschetti M, et al. 2012. Assessment of occupational exposure to benzene, toluene and xylenes in urban and rural female workers. *Chemosphere* 87(7):813-819.
- CIIT. 1980. A 24 month inhalation toxicology study in Fischer-344 rat exposed to atmospheric toluene. Executive summary and data tables. Conducted by Industrial Bio-Test Laboratories, Inc., Decatur, IL, and Experimental Pathology Laboratories, Inc., Raleigh, NC for Chemical Industry Institute of Toxicology. Research Triangle Park, NC. October 15, 1980.

9. REFERENCES

- *Cintra A, Andbjør B, Finnman UB, et al. 1996. Subacute toluene exposure increases DA dysfunction in the 6-OH dopamine lesioned nigrostriatal dopaminergic system of the rat. *Neurosci Lett* 217(1):61-65.
- Claus D, Walker N. 1964. The decomposition of toluene by soil bacteria. *J Gen Microbiol* 36:107-122.
- Clewell HJ, Andersen ME. 1985. Risk assessment extrapolations and physiological modeling. *Toxicol Ind Health* 1(4):111-131.
- Cocheo V, Silvestri R, Bombi GG, et al. 1982. Purge and trap analysis of toluene in blood: Comparison with the head space method. *Am Ind Hyg Assoc* 43(12):938-941.
- Cok I, Sardas S, Kadioglu E, et al. 2004. Assessment of DNA damage in glue sniffers by use of the alkaline comet assay. *Mutat Res* 557(2):131-136.
- Connor TH, Theiss JC, Hanna HA, et al. 1985. Genotoxicity of organic chemicals frequently found in the air of mobile homes. *Toxicol Lett* 25:33-40.
- Conti AC, Lowing JL, Susick LL, et al. 2012. Investigation of calcium-stimulated adenylyl cyclases 1 and 8 on toluene and ethanol neurobehavioral actions. *Neurotoxicol Teratol* 34(5):481-488.
- Coskun O, Oter S, Korkmaz A, et al. 2005. The oxidative and morphological effects of high concentration chronic toluene exposure on rat sciatic nerves. *Neurochem Res* 30(1):33-38.
- Costa LG, Aschner M, Vitalone A, et al. 2004. Developmental neuropathology of environmental agents. *Annu Rev Pharmacol Toxicol* 44:87-110.
- Courtney KD, Andrews JE, Springer J, et al. 1986. A perinatal study of toluene in CD-1 mice. *Fundam Appl Toxicol* 6:145-154.
- Cox HHJ, Nguyen TT, Deshusses MA. 2000. Toluene degradation in the recycle liquid of biotricking filters for air pollution control. *Appl Microbiol Biotechnol* 54:133-137.
- CPSC. 2012. Federal Hazardous Substances Act (FHSA) requirements. U.S. Consumer Product Safety Commission. <https://www.cpsc.gov/business--manufacturing/business-education/business-guidance/fhsa-requirements>. March 15, 2017.
- Crabbe JC, Belknap JK, Buck KJ. 1994. Genetic animal models of alcohol and drug abuse. *Science* 264:1715-1723.
- Crabbe JC, Metten P, Cameron AJ, et al. 2005. An analysis of the genetics of alcohol intoxication in inbred mice. *Neurosci Behav Rev* 28:785-802.
- Crist HL, Mitchell WJ. 1986. Field audit results with organic gas standards on volatile organic ambient air samplers equipped with Tenax GC. *Environ Sci Technol* 20(2):1260-1262.
- Crofton KM, Zhao X. 1997. The ototoxicity of trichloroethylene: Extrapolation and relevance of high-concentration, short-duration animal exposure data. *Fundam Appl Toxicol* 38(1):101-106.
- Cruz SL, Balster RL, Woodward JJ. 2000. Effects of volatile solvents on recombinant N-methyl-D-aspartate receptors expressed in *Xenopus oocytes*. *Br J Pharmacol* 131(7):1303-1308.

9. REFERENCES

- Cruz SL, Gauthereau MY, Camacho-Munoz C, et al. 2003. Effects of inhaled toluene and 1,1,1-trichloroethane on seizures and death produced by N-methyl-D-aspartic acid in mice. *Behav Brain Res.* 140(1-2):195-202.
- Cruz SL, Mirshahi T, Thomas B, et al. 1998. Effects of the abused solvent toluene on recombinant N-methyl-D-aspartate and non-N-methyl-D-aspartate receptors expressed in *Xenopus oocytes*. *J Pharmacol Exp Ther* 286(1):334-340.
- Cruz SL, Paez-Martinez N, Pellicer F, et al. 2001. Toluene increases acute thermonociception in mice. *Behav Brain Res* 120(2):213-220.
- Curry KK, Brookman DJ, Whitmyre GK, et al. 1994. Personal exposures to toluene during use of nail lacquers in residences: Description of the results of a preliminary study. *J Expos Anal Environ Epidemiol* 4(4):443-456.
- Dahlan MH, Xing XH, Yoshikawa Y, et al. 1999. Analysis of a simple biodegradation process for the removal of volatile organic chemicals from wastewater based on a gas stripping principle. *J Biosci Bioeng* 87(4):519-524.
- Dalgaard M, Hossaini A, Hougaard KS, et al. 2001. Developmental toxicity of toluene in male rats: Effects on semen quality, testis morphology, and apoptotic neurodegeneration. *Arch Toxicol* 75(2):103-109.
- Dashniani M, Pochkhidze N, Zhvania M, et al. 2014. Age dependent effect of toluene chronic exposure on recognition memory. *Eur Neuropsychopharmacol* 24(Suppl. 2):S677.
- *da-Silva VA, Malheiros LR, Figueiredo LH, et al. 1991. Neurobehavioral development of rats exposed to toluene through maternal milk. *Braz J Med Biol Res* 24:1239-1243.
- da Silva VA, Malheiros LR, Paumgarten FJ, et al. 1990. Developmental toxicity of *in utero* exposure to toluene on malnourished and well-nourished rats. *Toxicology* 64:155-168.
- Das-Munshi J, Rubin GJ, Wessely S. 2006. Multiple chemical sensitivities: A systematic review of provocation studies. *J Allergy Clin Immunol* 118(6):1257-1264. 10.1016/j.jaci.2006.07.046.
- Davis DD, Heaps W, Philen D, et al. 1979. Boundary layer measurements of the OH radical in the vicinity of an isolated power plant plume: SO₂ and NO₂ chemical conversion times. *Atmos Environ* 13:1197-1203.
- Davis RR, Murphy WJ, Snawder JE, et al. 2002. Susceptibility to the ototoxic properties of toluene is species specific. *Hear Res* 166(1-2):24-32.
- Dearth MA, Glerczak CA, Slegl WO. 1992. On-line measurement of benzene and toluene in dilute vehicle exhaust by mass spectrometry. *Environ Sci Technol* 26(8):1573-1580.
- *De Ceaurriz J, Desiles JP, Bonnet P, et al. 1983. Concentration-dependent behavioral changes in mice following short-term inhalation exposure to various industrial solvents. *Toxicol Appl Pharmacol* 67:383-389.
- Dechow M, Sohn H, Steinhanses J. 1997. Concentrations of selected contaminants in cabin airbus aircrafts. *Chemosphere* 35(1-2):21-31.

9. REFERENCES

- DeJongh J, Blaauboer BJ. 1996. Simulation of toluene kinetics in the rat by a physiologically based pharmacokinetic model with application of biotransformation parameters derived independently *in vitro* and *in vivo*. *Fundam Appl Toxicol* 32(2):260-268.
- DeJongh J, Blaauboer BJ. 1997. Evaluation of *in vitro*-based simulations of toluene uptake and metabolism in rats. *Toxicol in Vitro* 11:485-489.
- Deleu D, Hanssens Y. 2000. Cerebellar dysfunction in chronic toluene abuse: Beneficial response to amantadine hydrochloride. *J Toxicol Clin Toxicol* 38(1):37-41.
- Del Re AM, Dopico AM, Woodward JJ. 2006. Effects of the abused inhalant toluene on ethanol-sensitive potassium channels expressed in oocytes. *Brain Res* 1087(1):75-82.
- Del Re AM, Woodward JJ. 2005. Inhibition of gap junction currents by the abused solvent toluene. *Drug Alcohol Depend* 78(2):221-224.
- De Luca C, Scordo G, Cesareo E, et al. 2010. Idiopathic environmental intolerances (IEI): From molecular epidemiology to molecular medicine. *Indian J Exp Biol* 48(7):625-635.
- De Luca C, Raskovic D, Pacifico V, et al. 2011. The search for reliable biomarkers of disease in multiple chemical sensitivity and other environmental intolerances. *Int J Environ Res Public Health* 8(7):2770-2797. 10.3390/ijerph8072770.
- DeMarini DM, Lawrence BK, Brooks HG, et al. 1991. Compatibility of organic solvents with the microscreen prophage-induction assay: Solvent-mutagen interactions. *Mutat Res.* 263:107-113.
- Deole S, Phadke KM, Kumar A. 2004. Benzene, toluene and xylene (BTX) pollution in ambient air: A case study. *J Environ Sci Eng* 46(1):15-20.
- *De Rosa E, Bartolucci GB, Sigon M, et al. 1987. Hippuric acid and ortho-cresol as biological indicators of occupational exposure to toluene. *Am J Ind Med* 11:529-537.
- *De Rosa E, Brugnone F, Bartolucci GB, et al. 1985. The validity of urinary metabolites as indicators of low exposures to toluene. *Int Arch Occup Environ Health* 56:135-145.
- Deschamps D, Geraud C, Dally S. 2001. Cognitive functions in workers exposed to toluene: Evaluation at least 48 hours after removal from exposure. *Int Arch Occup Environ Health* 74(4):285-288.
- Devathasan G, Low D, Teoh PC, et al. 1984. Complications of chronic glue (toluene) abuse in adolescents. *Aust NZ J Med* 14:39-43.
- Dewulf J, Van Langenhove HV. 1997. Chlorinated C1- and C2-hydrocarbons and monocyclic aromatic hydrocarbons in marine waters: An overview on fate processes, sampling, analysis and measurements. *Water Res* 31(8):1825-1838.
- Dick AL, Lawrence AJ, Duncan JR. 2014. Chronic intermittent toluene inhalation initiated during adolescence in rats does not alter voluntary consumption of ethanol in adulthood. *Alcohol* 48(6):561-569. 10.1016/j.alcohol.2014.08.001.

9. REFERENCES

- Dick AL, Pooters T, Gibbs S, et al. 2015. NMDA receptor binding is reduced within mesocorticolimbic regions following chronic inhalation of toluene in adolescent rats. *Brain Res* 1624:239-252. 10.1016/j.brainres.2015.07.037.
- Dick RB, Setzer JV, Wait R, et al. 1984. Effects of acute exposure of toluene and methyl ethyl ketone on psychomotor performance. *Int Arch Occup Environ Health* 54:91-109.
- Dickson RP, Luks AM. 2009. Toluene toxicity as a cause of elevated anion gap metabolic acidosis. *Respir Care* 54(8):1115-1117.
- Dilling WL, Bredeweg CJ, Tefertiller NB. 1976. Simulated atmospheric photodecomposition rates of methylene chloride, 1,1,1-trichloroethane, trichloroethylene, tetrachloroethylene and other compounds. *Environ Sci Technol* 10(4):351-356.
- Diot E, Lesire V, Guilmot JL, et al. 2002. Systemic sclerosis and occupational risk factors: A case-control study. *Occup Environ Med* 59(8):545-549.
- Dobaradaran S, Mahvi AH, Nabizadeh R, et al. 2010. Hazardous organic compounds in groundwater near Tehran automobile industry. *Bull Environ Contam Toxicol* 85(5):530-533.
- Dobrokhotov VB, Enikeev MI. 1977. The mutagenic action of benzene, toluene and a mixture of these hydrocarbons in a chronic test. *Gig Sanit* 42:32-34.
- DOE. 2012. Protective action criteria (PAC). Oak Ridge, TN: U.S. Department of Energy and Subcommittee on Consequence Assessment and Protective Actions (SCAPA). <http://orise.orau.gov/emi/scapa/chem-pacs-teels/default.htm>. January 08, 2014.
- Dolfing J, Zeyer J, Binder-Eicher P, et al. 1990. Isolation and characterization of a bacterium that mineralizes toluene in the absence of molecular oxygen. *Arch Microbiol* 154:336-341.
- Donald JM, Hooper K, Hopenhayn-Rich C. 1991. Reproductive and developmental toxicity of toluene: A review. *Environ Health Perspect* 94:237-244.
- Dossing M, Aelum JB, Hansen SH, et al. 1983b. Urinary hippuric acid and orthocresol excretion in man during experimental exposure to toluene. *Br J Ind Med* 40:470-473.
- *Dossing M, Arlien-Soborg P, Petersen LM, et al. 1983a. Liver damage associated with occupational exposure to organic solvents in house painters. *Eur J Clin Invest* 13:151-157.
- Dossing M, Baelum J, Hansen SH, Lundqvist GR. 1984. Effect of ethanol, cimetidine and propranolol on toluene metabolism in man. *Int Arch Occup Environ Health* 54:309-315.
- Dossing M, Baelum J, Lundqvist GR. 1983c. Antipyrine clearance during experimental and occupational exposure to toluene. *Br J Ind Med* 40:466-469.
- Ducos P, Berode M, Francin JM, et al. 2008. Biological monitoring of exposure to solvents using the chemical itself in urine: Application to toluene. *Int Arch Occup Environ Health* 81(3):273-284.
- Duncan JR, Dick AL, Egan G, et al. 2012. Adolescent toluene inhalation in rats affects white matter maturation with the potential for recovery following abstinence. *PLoS ONE* 7(9):e44790.

9. REFERENCES

- Dutkiewicz T, Tyras H. 1968. Skin absorption of toluene, styrene and xylene by man. *Br J Ind Med* 25:243.
- Dyer RS, Bercegeay MS, Mayo LM. 1988. Acute exposures to p-xylene and toluene alter visual information processing. *Neurotoxicol Teratol* 10:147-153.
- Dyne D, Cocker J, Wilson HK. 1997. A novel device for capturing breath samples for solvent analysis. *Sci Total Environ* 199:83-89.
- EC. 2003. European Union risk assessment report. Toluene. European Commission, Institute for Health and Consumer Protection, European Chemicals Bureau.
- Echeverria D, Fine L, Langolf G, et al. 1989. Acute neurobehavioral effects of toluene. *Br J Ind Med* 46:483-495.
- Echeverria D, Fine L, Langolf G, et al. 1991. Acute behavioural comparisons of toluene and ethanol in human subjects. *Br J Ind Med* 48:750-761.
- Edelfors S, Hass U, Hougaard KS. 2002. Changes in markers of oxidative stress and membrane properties in synaptosomes from rats exposed prenatally to toluene. *Pharmacol Toxicol* 90(1):26-31.
- *Edling C, Hellman B, Arvidson B, et al. 1997. Positron emission tomography studies of healthy volunteers- no effects on the dopamine terminals and synthesis after short-term exposure to toluene. *Hum Exp Toxicol* 16:171-176.
- Edwards EA, Wills LE, Reinhard M, et al. 1992. Anaerobic degradation of toluene and xylene by aquifer microorganisms under sulfate-reducing conditions. *Appl Environ Microbiol* 58(3):794-800.
- Einav S, Amitai Y, Reichman J, et al. 1997. Bradycardia in toluene poisoning. *J Toxicol Clin Toxicol* 35(3):295-298.
- Ek CJ, Dziegielewska KM, Habgood MD, et al. 2012. Barriers in the developing brain and neurotoxicology. *Neurotoxicology* 33(3):586-604.
- Eller N, Netterstrom B, Laursen P. 1999. Risk of chronic effects on the central nervous system at low toluene exposure. *Occup Med* 49(6):389-395.
- EMMI. 1997. Environmental monitoring methods index. Version 1.1.PC#4082. Rockville, MD: US Environmental Protection Agency, Government institutes.
- EPA. 1982a. Purgeable aromatics-method 602. Methods for organic chemical analysis of municipal and industrial wastewater. Cincinnati, OH: U.S. Environmental Protection Agency. Environmental Monitoring and Support Laboratory. EPA602-1 -602-9.
- EPA. 1982b. Purgeables-method 624. Methods for organic chemical analysis of municipal and industrial wastewater. Cincinnati, OH: U.S. Environmental Protection Agency. Environmental Monitoring and Support Laboratory. EPA624-1- 624-12.
- EPA. 1983a. List of chemicals produced by affected facilities. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 60, Subpart VV.

9. REFERENCES

- EPA. 1983b. Exposure and risk assessment for toluene. Final draft report. Washington DC: U.S. Environmental Protection Agency, Office of Water Regulations and Standards. PB85221505. EPA440485016.
- EPA. 1984. Method 1624 Revision B - volatile organic compounds by isotope dilution GC/MS. U.S. Environmental Protection Agency. Fed Regist 49:43407.
- EPA. 1985. Drinking water criteria document for toluene. Washington, DC: U.S. Environmental Protection Agency, Office of Drinking Water. ECAO-CIN-408. EPA 600/x-84-188. PB 86-117975.
- EPA. 1988a. Method T01. Method for the determination of volatile organic compounds in ambient air using tenax adsorption and gas chromatography/mass spectrometry (GC/MS). In: Compendium of methods for the determination of toxic organic compounds in ambient air. U.S. Environmental Protection Agency. EPA 600/4-89/017.
- EPA. 1988b. Method T014. Determination of volatile organic compounds (VOCs) in ambient air using summa passivated canister sampling and gas chromatographic analysis. In: Compendium of methods for the determination of toxic organic compounds in ambient air. U.S. Environmental Protection Agency. EPA 600/4-89/017.
- EPA. 1990a. Drinking water criteria document for toluene. Cincinnati, OH: U.S. Environmental Protection Agency, Office of Health and Environmental Assessment, Research and Development, ECAO-CIN-408.
- EPA. 1990b. Interim methods for development of inhalation reference concentrations. Washington, DC: U.S. Environmental Protection Agency, Office of Health and Environmental Assessment, Office of Research and Development, Environmental Criteria and Assessment Office. EPA600890066A.
- EPA. 1991a. Method 502.2. Volatile organic compounds in water by purge and trap capillary column gas chromatography with photo ionization and electrolytic conductivity detectors in series. In: Methods for the determination of organic compounds in drinking water. Cincinnati, OH. U.S. Environmental Protection Agency, Environmental Monitoring Systems Laboratory. EPA 600/4-88/039.
- EPA. 1991b. Method 503.1. Volatile aromatic and unsaturated organic compounds in water by purge and trap gas chromatography, Revision 2.0. In: Methods for the determination of organic compounds in drinking water, EPA-600/4-88/039, 1988. Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Monitoring Systems Laboratory, Office of Research and Development.
- EPA. 1992a. Method 524.2. Measurement of permeable organic compounds in water by capillary column gas chromatography/mass spectrometry. In: Methods for the determination of organic compounds in drinking water: Supplement II. Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Monitoring Systems Laboratory, Office of Research and Development. EPA 600/R-92/129.
- EPA. 1992b. Dermal exposure assessment: Principles and applications. Washington, DC: U.S. Environmental Protection Agency, Office of Health and Environmental Assessment. EPA600891011B.
- EPA. 1994. Locating and estimating air emissions from sources of toluene. Research Triangle Park, NC: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. EPA454R93047.

9. REFERENCES

- EPA. 1995. Designation, reportable quantities, and notification. List of hazardous substance and reportable quantities. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 302.4.
- EPA. 1996a. Method 8021B. Aromatic and halogenated volatiles by gas chromatography using photoionization and/or electrolytic conductivity detectors. U.S. Environmental Protection Agency.
- EPA. 1996b. Method 8260B. Volatile organic compounds by gas chromatography/mass spectrometry (GC/MS). U.S. Environmental Protection Agency.
- EPA. 1996c. Method 4030. Soil screening for petroleum hydrocarbons by immunoassay. U.S. Environmental Protection Agency.
- EPA. 1997a. Identification and listing of hazardous waste. Hazardous constituents. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 261, Appendix VIII.
- EPA. 1997b. Special report on environmental endocrine disruption: An effects assessment and analysis. Washington, DC: U.S. Environmental Protection Agency, Risk Assessment Forum. EPA630R96012.
- EPA. 1998. Notice of availability of draft RCRA waste minimization PBT chemical list. Fed Regist. U.S. Environmental Protection Agency. 63(2):60332-60343.
- EPA. 2005a. Toxicological review of toluene (CAS No. 108-88-3) in support of summary information on the Integrated Risk Information System (IRIS). Washington, DC: U.S. Environmental Protection Agency.
- EPA. 2005b. Toxic chemical release inventory reporting forms and instructions: Revised 2004 version. Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986). U.S. Environmental Protection Agency, Office of Environmental Information. EPA260B05001.
- EPA. 2006. Consolidated list of chemicals subject to the Emergency Planning and Right-To-Know Act (EPCRA) and section 112(r) of the Clean Air Act. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. EPA550B01003.
- EPA. 2009a. Drinking water contaminant candidate list. U.S. Environmental Protection Agency. Fed Regist 74 FR 51850:51850 -51862. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2009b. National primary drinking water regulations. Washington, DC: U.S. Environmental Protection Agency, Office of Ground Water and Drinking Water. EPA816F090004. <http://water.epa.gov/drink/contaminants/>. January 08, 2014.
- EPA. 2012. Drinking water standards and health advisories. Washington, DC: U.S. Environmental Protection Agency, Office of Water. EPA822S12001. <http://water.epa.gov/drink/standards/hascience.cfm>. January 08, 2014.
- EPA. 2013a. 2011. Sector summaries-criteria and hazardous air pollutants by 60 EIS emission sectors. The 2011 National emissions inventory. U.S. Environmental Protection Agency. <http://www.epa.gov/ttnchie1/net/2011inventory.html>. July 16, 2014. .

9. REFERENCES

- EPA. 2013b. Data from Air Quality System (AQS). <http://www.epa.gov/ttn/airs/airsaqs/>. April 23, 2014.
- EPA. 2013c. Acute exposure guideline levels (AEGLs). Washington, DC: U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics. <http://www.epa.gov/oppt/aegl/>. January 08, 2014.
- EPA. 2013d. Designated as hazardous substances in accordance with section 311(b)(2)(a) of the Clean Water Act. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 116.4. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2013e. Identification and listing of hazardous waste. Hazardous constituents. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 261, Appendix VIII. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2013f. Reportable quantities of hazardous substances designated pursuant to section 311 of the Clean Water Act. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 117.3. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2013g. Superfund, emergency planning, and community right-to-know programs. Designation, reportable quantities, and notifications. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 302.4. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2013h. Superfund, emergency planning, and community right-to-know programs. Toxic chemical release reporting. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 372.65. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2013i. Superfund, emergency planning, and community right-to-know programs. Extremely hazardous substances and their threshold planning quantities. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 355, Appendix A. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2013j. Standards for owners and operators of hazardous waste TSD facilities. Groundwater monitoring list. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 264, Appendix IX. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2013k. Toxic Substances Control Act. Chemical lists and reporting periods. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 712.30. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2013l. Toxic Substances Control Act. Health and safety data reporting. U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 716.120. <http://www.gpo.gov/fdsys>. January 08, 2014.
- EPA. 2014a. Hazardous air pollutants. Clean Air Act. U.S. Environmental Protection Agency. United States Code 42 USC 7412. <http://www.epa.gov/ttn/atw/orig189.html>. January 08, 2014.
- EPA. 2014b. Inert ingredients permitted for use in nonfood pesticide products. Washington, DC: U.S. Environmental Protection Agency. <http://iaspub.epa.gov/apex/pesticides/f?p=124:1>. January 08, 2014.

9. REFERENCES

- EPA. 2014c. Master testing list. Washington, DC: U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics. <http://www.epa.gov/opptintr/chemtest/pubs/mtl.html>. January 08, 2014.
- EPA. 2014d. National ambient air quality standards (NAAQS). Washington, DC: U.S. Environmental Protection Agency, Office of Air and Radiation. <http://www.epa.gov/air/criteria.html>. January 08, 2014.
- EPA. 2014e. National recommended water quality criteria. Washington, DC: U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology. <http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm>. January 08, 2014.
- EPA. 2016. AQS data mart. Download data files. U.S. Environmental Protection Agency. http://aqsdrl.epa.gov/aqsweb/aqstmp/airdata/download_files.html. September 28, 2016.
- Erramouspe J, Galvez R, Fischel DR. 1996. Newborn renal tubular acidosis associated with prenatal maternal toluene sniffing. *J Psychoactive Drugs* 28(2):201-204.
- Esteve-Turrillas FA, Ly-Verdu S, Pastor A, et al. 2009. Development of a versatile, easy and rapid atmospheric monitor for benzene, toluene, ethylbenzene and xylenes determination in air. *J Chromatogr A* 1216(48):8549-8556.
- Evans GF, Lumpkin TA, Smith DL, et al. 1992. Measurements of VOCs from the TAMS network. *J Air Waste Manag Assoc* 42:1319-1323.
- Exxon Chemical Co. 1962. Acute eye application - rabbits. Houston, TX: Exxon Chemical Company U.S.A. Submitted to the U.S. Environmental Protection Agency under TSCA Section 8D. OTS0200153.
- Fabri J, Graeser U, Simo TA. 2012. Toluene. In: *Ullmann's encyclopedia of industrial chemistry*. Vol. 37. Weinheim, Germany: Wiley-VCH Verlag, 109-118.
- FDA. 2013. Requirements for specific standardized beverages. U.S. Food and Drug Administration. Code of Federal Regulations 21 CFR 165.110. <http://www.gpo.gov/fdsys>. January 08, 2014.
- FDA. 2014. Everything added to food in the United States (EAFUS). Washington, DC: U.S. Food and Drug Administration. <http://www.accessdata.fda.gov/scripts/fcn/fcnavigation.cfm?rpt=eafuslisting>. January 08, 2014.
- Ferrari M, Negri S, Zadra P, et al. 2008. Saliva as an analytical tool to measure occupational exposure to toluene. *Int Arch Occup Environ Health* 81(8):1021-1028.
- Filley CM, Heaton RK, Rosenberg NL. 1990. White matter dementia in chronic toluene abuse. *Neurology* 40:532-534.
- Fisher J, Mahle D, Bankston L, et al. 1997. Lactational transfer of volatile chemicals in breast milk. *American Ind Hyg Assoc J* 58(6):425-431.
- Fluck ER, Poirier LA, Ruelius HW. 1976. Evaluation of a DNA polymerase-deficient mutant of *E. coli* for rapid detection of carcinogens. *Chem Biol Interact* 15:219-231.
- Fomon SJ. 1966. Body composition of the infant: Part I: The male "reference infant". In: Falkner F, ed. *Human development*. Philadelphia, PA: WB Saunders, 239-246.

9. REFERENCES

- Fomon SJ, Haschke F, Ziegler EE, et al. 1982. Body composition of reference children from birth to age 10 years. *Am J Clin Nutr* 35(Suppl 5):1169-1175.
- Foo SC, Jeyaratnam J, Koh D. 1990. Chronic neurobehavioural effects of toluene. *Br J Ind Med* 47:480-484.
- *Foo SC, Jeyaratnam J, Ong CN, et al. 1991. Biological monitoring for occupational exposure to toluene. *Am Ind Hyg Assoc J* 52(5):212-217.
- Forni A, Pacifico E, Limonta A. 1971. Chromosome studies in workers exposed to benzene or toluene or both. *Arch Environ Health* 22:373-378.
- Franco I, Valdez-Tapia M, Sanchez-Serrano SL, et al. 2014. Chronic toluene exposure induces cell proliferation in the mice SVZ but not migration through the RMS. *Neurosci Lett* 575:101-106. 10.1016/j.neulet.2014.05.043.
- Franke C, Studinger G, Berger G, et al. 1994. The assessment of bioaccumulation. *Chemosphere* 29:1501-1514.
- Franks NP, Lieb WR. 1985. Mapping of general anaesthetic target sites provides a molecular basis for cutoff effects. *Nature* 316:349-351.
- Franks NP, Lieb WR. 1987. Anaesthetics on the mind. *Nature* 328:113-114.
- Fraser MP, Cass GR, Simoneit BRT. 1998. Gas-phase and particle-phase organic compounds emitted from motor vehicle traffic in a Los Angeles roadway tunnel. *Environ Sci Technol* 32:2051-2060.
- Fujimaki H, Win-Shwe TT, Yamamoto S, et al. 2009a. Role of CD4⁺ T cells in the modulation of neurotrophin production in mice exposed to low-level toluene. *Immunopharmacol Immunotoxicol* 31(1):146-149.
- Fujimaki H, Win-Shwe TT, Yamamoto S, et al. 2009b. The expression of nerve growth factor in mice lung following low-level toluene exposure. *Toxicol Lett* 191(2-3):240-245.
- Fujimaki H, Win-Shwe TT, Yamamoto S, et al. 2010. Different sensitivity in expression of transcription factor mRNAs in congenic mice following exposure to low-level toluene. *Inhal Toxicol* 22(11):903-909.
- Fujimaki H, Win-Shwe TT, Yoshida Y, et al. 2011. Dysregulation of immune responses in an allergic mouse model following low-level toluene exposure. *Toxicology* 286(1-3):28-35.
- Fujimaki H, Yamamoto S, Win-Shwe TT, et al. 2007. Effect of long-term exposure to low-level toluene on airway inflammatory response in mice. *Toxicol Lett* 168(2):132-139.
- Fukami T, Katoh M, Yamazaki H, et al. 2008. Human cytochrome P450 2A13 efficiently metabolizes chemicals in air pollutants: Naphthalene, styrene, and toluene. *Chem Res Toxicol* 21:720-725.
- *Fukui K, Utsumi H, Tamada Y, et al. 1996. Selective increase in astrocytic elements in the rat dentate gyrus after chronic toluene exposure studied by GFAP immunocytochemistry and electron microscopy. *Neurosci Lett* 203(2):85-8.

9. REFERENCES

- Funada M, Sato M, Makino Y, et al. 2002. Evaluation of rewarding effect of toluene by the conditioned place preference procedure in mice. *Brain Res Brain Res Protoc* 10(1):47-54.
- Furman GM, Silverman DM, Schatz RA. 1998. Inhibition of rat lung mixed-function oxidase activity following repeated low-level toluene inhalation: Possible role of toluene metabolites. *J Toxicol Environ Health, Part A* 54:633-645.
- Fustinoni S, Buratti M, Giampiccolo R, et al. 1996. Monitoraggio biologico dell'esposizione a solventi: Metodo per la determinazione gascromatografica degli idrocarburi aromatici nel sangue e nell'urina. *Med Lav* 87(1):63-75. (Italian)
- Fuxe K, Andersson K, Nilsen OG, et al. 1982. Toluene and telencephalic dopamine: Selective reduction of amine turnover in discrete DA nerve terminal systems of the anterior caudate nucleus by low concentrations of toluene. *Toxicol Lett* 12:115-123.
- Gagnaire F, Langlais C. 2005. Relative ototoxicity of 21 aromatic solvents. *Arch Toxicol* 79:346-354.
- Galliot E, Laurent L, Hacquemand R, et al. 2012. Fear-like behavioral responses in mice in different odorant environments: Trigeminal versus olfactory mediation under low doses. *Behav Processes* 90(2):161-166.
- Gamberale F, Hultengren M. 1972. Toluene exposure. II. Psychophysiological functions. *Work Environ Health* 9:131-139.
- Gao Y, Zhang Y, Kamijima M, et al. 2014. Quantitative assessments of indoor air pollution and the risk of childhood acute leukemia in Shanghai. *Environ Pollut* 187:81-89. 10.1016/j.envpol.2013.12.029.
- Garcia JP, Beyne-Masclat S, Mouvier G. 1992. Emissions of volatile organic compounds by coal-fired power stations. *Atmos Environ* 26A(9):1589-1597.
- Garland EL, Howard MO, Vaughn MG, et al. 2011. Volatile substance misuse in the United States. *Subst Use Misuse* 46:8-20.
- Gelazonia L, Japaridze N, Maglakelidze G, et al. 2006b. Influence of toluene intoxication on the number of mitral and granular neurons in olfactory bulbs of rats. *Georgian Med News* (133):99-101. <http://www.geomednews.org/shared/issues/med133.pdf>.
- Gelazonia L, Japaridze N, Svanidze I. 2006a. Pyramidal cell loss in hippocampus of young rats exposed to toluene. *Georgian Med News* (135):126-128. <http://www.geomednews.org/shared/issues/med135.pdf>. May 30, 2014.
- *Geller I, Hartmann RJ, Messiha. 1983. Biochemical aspects of toluene exposure in the rat as a function of sex. *Proc West Pharmacol Soc* 26:197-199.
- Genuis SJ. 2010. Sensitivity-related illness: The escalating pandemic of allergy, food intolerance and chemical sensitivity. *Sci Total Environ* 408(24):6047-6061. 10.1016/j.scitotenv.2010.08.047.
- Genuis SJ. 2013. Chemical sensitivity: Pathophysiology or pathopsychology? *Clin Ther* 35(5):572-577. 10.1016/j.clinthera.2013.04.003.

9. REFERENCES

- Gerasimov MR, Collier L, Ferrieri A, et al. 2003. Toluene inhalation produces a conditioned place preference in rats. *Eur J Pharmacol* 477(1):45-52.
- Gerasimov MR, Ferrieri RA, Schiffer WK, et al. 2002a. Study of brain uptake and biodistribution of [¹⁴C]toluene in non-human primates and mice. *Life Sci*. 70(23):2811-2828.
- Gerasimov MR, Logan J, Ferrieri RA, et al. 2002b. Effect of vehicle on brain uptake of [¹⁴C]toluene. *Nucl Med Biol*. 29(5):607-612.
- Gerasimov MR, Schiffer WK, Marsteller D, et al. 2002c. Toluene inhalation produces regionally specific changes in extracellular dopamine. *Drug Alcohol Depend*. 65(3):243-251.
- Gericke C, Hanke B, Beckmann G, et al. 2001. Multicenter field trial on possible health effects of toluene. III. Evaluation of effects after long-term exposure. *Toxicology* 168(2):185-209.
- *Gerin M, Siemiatycki J, Desy M, et al. 1998. Associations between several sites of cancer and occupational exposure to benzene, toluene, xylene, and styrene: Results of a case-control study in Montreal. *Am J Ind Med* 34:144-156.
- Gerkin RD, LoVecchio F. 1998. Rapid reversal of life-threatening toluene-induced hypokalemia with hemodialysis. *J Emerg Med* 16(5):723-725.
- Gerner-Smidt P, Friedrich U. 1978. The mutagenic effect of benzene, toluene and xylene studied by the SCE technique. *Mutat Res* 55:313-316.
- Ghantous H, Danielsson BRG. 1986. Placental transfer and distribution of toluene, xylene and benzene and their metabolites during gestation in mice. *Biol Res Pregnancy Perinatol* 7(3):98-105.
- Ghosh TK, Copeland RL, Gear JC, et al. 1989. Effects of toluene exposure on the spontaneous cortical activity in rats. *Pharmacol Biochem Behav* 32:987-992.
- Ghosh TK, Copeland RL, Pradhan SN. 1990. Sensitivity of EEG in young rats to toluene exposure. *Pharmacol Biochem Behav* 36:779-785.
- *Gibson JE, Hardisty JF. 1983. Chronic toxicity and oncogenicity bioassay of inhaled toluene in Fischer-344 rats. *Fundam Appl Toxicol* 3(4):315-319.
- Giwerzman A, Carlsen E, Keiding N, et al. 1993. Evidence for increasing incidence of abnormalities of the human testis: A review. *Environ Health Perspect Suppl* 101(2):65-71.
- Gmaz JM, Yang L, Ahrari A, et al. 2012. Binge inhalation of toluene vapor produces dissociable motor and cognitive dysfunction in water maze tasks. *Behav Pharmacol*. 23(7):669-677.
- *Goldbloom D, Chouinard G. 1985. Schizophreniform psychosis associated with chronic industrial toluene exposure: Case report. *J Clin Psychiatry* 46:350-351.
- Gonzalez-Yebra AL, Kornhauser C, Barbosa-Sabanero G, et al. 2009. Exposure to organic solvents and cytogenetic damage in exfoliated cells of the buccal mucosa from shoe workers. *Int Arch Occup Environ Health* 82(3):373-380.

9. REFERENCES

- Gonzalez-Yebra AL, Kornhauser C, Wrobel K, et al. 2006. Occupational exposure to toluene and its possible causative role in renal damage development in shoe workers. *Int Arch Occup Environ Health* 79(3):259-264.
- Goodwin TM. 1988. Toluene abuse and renal tubular acidosis in pregnancy. *Obstet Gynecol* 71(5):715-718.
- Gopal KV. 2008. Audiological findings in individuals exposed to organic solvents: Case studies. *Noise Health* 10(40):74-82.
- Gordon CJ, Gottipolu RR, Kenyon EM, et al. 2010. Aging and susceptibility to toluene in rats: A pharmacokinetic, biomarker, and physiological approach. *J Toxicol Environ Health A* 73(4):301-318.
- Gordon CJ, Samsam TE, Oshiro WM, et al. 2007. Cardiovascular effects of oral toluene exposure in the rat monitored by radiotelemetry. *Neurotoxicol Teratol* 29(2):228-235.
- Gorlo D, Zygmunt B, Dudek M, et al. 1999. Application of solid-phase microextraction to monitoring indoor air quality. *Fresenius' J Anal Chem* 363(7):696-699.
- *Gospe SM Jr, Al-Bayati MAS. 1994. Comparison of oral and inhalation exposures to toluene. *J Am Coll Toxicol* 13(1):21-32.
- *Gospe SM, Calaban MJ. 1988. Central nervous system distribution of inhaled toluene. *Fundam Appl Toxicol* 11:540-545.
- Gospe SM Jr, Zhou SS. 1998. Toluene abuse embryopathy: Longitudinal neurodevelopmental effects of prenatal exposure to toluene in rats. *Reprod Toxicol* 12(2):119-126.
- Gospe SM Jr, Zhou SS. 2000. Prenatal exposure to toluene results in abnormal neurogenesis and migration in rat somatosensory cortex. *Pediatr Res* 47(3):362-368.
- Gospe SM Jr, Saeed DB, Zhou SS, et al. 1994. The effects of high-dose toluene on embryonic development in the rat. *Pediatr Res* 36(6):811-815.
- Gospe SM Jr, Zhou SS, Saeed DB et al. 1996. Development of a rat model of toluene-abuse embryopathy. *Pediatr Res* 40(1):82-87.
- Gotohda T, Kuwada A, Morita K, et al. 2000b. Elevation of steroid 5 α -reductase mRNA levels in rat cerebellum by toluene inhalation: Possible relation to GFAP expression. *J Toxicol Sci* 25(3):223-231.
- Gotohda T, Nishimura A, Morita K. 2009. Immunohistochemical studies on early stage of hepatic damage induced by subacute inhalation of toluene vapor in rats. *J Appl Toxicol* 29(6):505-509.
- Gotohda T, Tokunaga I, Kitamura O, et al. 2007. Toluene inhalation induced neuronal damage in the spinal cord and changes of neurotrophic factors in rat. *Leg Med* 9(3):123-127.
- Gotohda T, Tokunaga I, Kubo S, et al. 2000a. Effect of toluene inhalation on astrocytes and neurotrophic factor in rat brain. *Forensic Sci Int* 113(1-3):233-238.

9. REFERENCES

- Gotohda T, Tokunaga I, Kubo S, et al. 2002. Toluene inhalation induces glial cell line-derived neurotrophic factor, transforming growth factor and tumor necrosis factor in rat cerebellum. *Leg Med* 4(1):21-28.
- Gotohda T, Tokunaga I, Kubo S. 2005. Toluene inhalation-induced adrenocortical hypertrophy and endocrinological changes in rat. *Life Sci* 76(17):1929-1937.
- Graham. 1990. Solvent abuse. In: Haddad LM, Winchester JF eds. *Clinical management of poisoning and drug overdose*. 2nd ed. Philadelphia, PA: W.B. Saunders Company, 1256-1260.
- Greenburg L, Mayers MR, Heimann H, et al. 1942. The effects of exposure to toluene in industry. *JAMA* 118:573-578.
- Grob K. 1965. Gas chromatography of cigarette smoke. Part III. Separation of the overlap region of gas and particulate phase by capillary columns. *J Gas Chromatogr* February:52-56.
- Gross SA, Avens HJ, Banducci AM, et al. 2013. Analysis of BTEX groundwater concentrations from surface spills associated with hydraulic fracturing operations. *J Air Waste Manag Assoc* 63(4):424-432.
- Guldborg PH. 1992. Gasoline and vapor exposures in service station and leaking underground storage tank scenarios. *J Expo Anal Environ Epidemiol* 2(1):97-107.
- Gummin DD. 2015. Hydrocarbons. In: Hoffman RS, Lewin NA, Goldfrank LR, et al., eds. *Goldfrank's toxicologic emergencies*. 7th ed. New York, NY: McGraw-Hill Education, 1334-1345.
- Gupta SR, Palmer CA, Cure JK, et al. 2011. Toluene optic neurotoxicity: Magnetic resonance imaging and pathologic features. *Hum Pathol* 42(2):295-298.
- Guzelian PS, Henry CJ, Olin SS, eds. 1992. *Similarities and differences between children and adults: Implications for risk assessment*. Washington, DC: International Life Sciences Institute Press.
- Guzelian P, Mills S, Fallon HJ. 1988. Liver structure and function in print workers exposed to toluene. *J Occup Med* 30(10):791-796.
- Haddad S, Tardif R, Viau C, et al. 1999. A modeling approach to account for toxicokinetic interactions in the calculation of biological hazard index for chemical mixtures. *Toxicol Lett*. 108(2-3):303-308.
- Haglund U, Lundberg I, Zech L. 1980. Chromosome aberrations and sister chromatid exchanges in Swedish paint industry workers. *Scand J Environ Health* 6:291-298.
- Hakkola M, Saarinen L. 1996. Exposure of tanker drivers to gasoline and some of its components. *Ann Occup Hyg* 40:1-10.
- Halifeoglu I, Canatan H, Ustundag B, et al. 2000. Effect of thinner inhalation on lipid peroxidation and some antioxidant enzymes of people working with paint thinner. *Cell Biochem Funct* 18(4):263-267.
- Hamidin N, Yu J, Phung DT, et al. 2013. Volatile aromatic hydrocarbons (VAHs) in residential indoor air in Brisbane, Australia. *Chemosphere* 92(11):1430-1435.
- Hammer KD. 2002. Metabolite ratio of toluene-exposed rotogravure printing plant workers reflects individual mutagenic risk by sister chromatid exchanges. *Mutat Res* 519(1-2):171-177.

9. REFERENCES

- Hammer KD, Mayer N, Pfeiffer EH. 1998. Sister chromatid exchanges in rotogravure printing plant workers. *Int Arch Occup Environ Health* 71:138-142.
- Hanioka N, Yamamoto M, Tanaka-Kagawa T, et al. 2010. Functional characterization of human cytochrome P450 2E1 allelic variants: *In vitro* metabolism of benzene and toluene by recombinant enzymes expressed in yeast cells. *Arch Toxicol* 84(5):363-371.
- Hannigan JH, Bowen SE. 2010. Reproductive toxicology and teratology of abused toluene. *Syst Biol Reprod Med* 56(2):184-200.
- *Hanninen H, Antti-Pocka, Savolainen P. 1987. Psychological performance, toluene exposure and alcohol consumption in rotogravure printers. *Int Arch Occup Environ Health* 89:475-483.
- Hanninen H, Eskelinen L, Husman K, et al. 1976. Behavioral effects of long-term exposure to a mixture of organic solvents. *Scand J Work Environ Health* 2:240-255.
- *Hansson T, Pettersson B-M, Eneroth P, et al. 1985. Neonatal exposure to toluene: Effects on the development of liver microsomal cytochrome P-450 and serum hormone levels in the rat. *Toxicology* 37:39-50.
- Harabuchi I, Kishi R, Ikeda T, et al. 1993. Circadian variations of acute toxicity and blood and brain concentrations of inhaled toluene in rats. *Br J Ind Med* 50:280-286.
- Haro-Garcia LC, Juarez-Perez CA, Aguilar-Madrid G, et al. 2012. Production of IL-10, TNF and IL-12 by peripheral blood mononuclear cells in Mexican workers exposed to a mixture of benzene-toluene-xylene. *Arch Med Res* 43(1):51-57.
- Hass U, Lund S, Hougaard K, et al. 1999. Developmental neurotoxicity after toluene inhalation exposure in rats. *Neurotoxicol Teratol* 21(4):349-357.
- Haynes WM, Lide DR, Bruno TJ. 2013. Toluene. In: *CRC handbook of chemistry and physics*. Boca Raton, FL: CRC Press, 3-514-3-515.
- Heck JE, Park AS, Qui J, et al. 2013. An exploratory study of ambient air toxics exposure in pregnancy and the risk of neuroblastoma in offspring. *Environ Res* 127:1-6. 10.1016/j.envres.2013.09.002.
- Heck JE, Park AS, Qiu J, et al. 2014. Risk of leukemia in relation to exposure to ambient air toxics in pregnancy and early childhood. *Int J Hyg Environ Health* 217(6):662-668. 10.1016/j.ijheh.2013.12.003
- Heck JE, Park AS, Qiu J, et al. 2015. Retinoblastoma and ambient exposure to air toxics in the perinatal period. *J Expo Sci Environ Epidemiol* 25(2):182-186. 10.1038/jes.2013.84.
- Heikes, DL, Jensen, SR, Fleming-Jones, ME. 1995. Purge and trap extraction with GC-MS determination of volatile organic compounds in table-ready foods. *J Agric Food Chem* 43(11):2869-2875.
- Hellquist H, Irander K, Edling C, et al. 1983. Nasal symptoms and histopathology in a group of spray-painters. *Acta Otolaryngol* 96:495-500.

9. REFERENCES

- Hersh JH. 1988. Toluene embryopathy: Two new cases. *J Med Genet* 26:333-337.
- Hersh JH, Podruch PE, Rogers G, et al. 1985. Toluene embryopathy. *J Pediatr* 106:922-927.
- Hester SD, Johnstone AF, Boyes WK, et al. 2011. Acute toluene exposure alters expression of genes in the central nervous system associated with synaptic structure and function. *Neurotoxicol Teratol* 33(5):521-529.
- Hester SD, Johnstone AF, Boyes WK, et al. 2012. Transcriptional responses in rat brain associated with sub-chronic toluene inhalation are not predicted by effects of acute toluene inhalation. *Neurotoxicol Teratol* 34(5):530-533.
- Hetherington L, Battershill J. 2013. Review of evidence for a toxicological mechanism of idiopathic environmental intolerance. *Hum Exp Toxicol* 32(1):3-17. 10.1177/0960327112457189.
- Heuser VD, de Andrade VM, da Silva J, et al. 2005. Comparison of genetic damage in Brazilian footwear-workers exposed to solvent-based or water-based adhesive. *Mutat Res* 583(1):85-94.
- Heuser VD, Erdtmann B, Kvitko K, et al. 2007. Evaluation of genetic damage in Brazilian footwear-workers: Biomarkers of exposure, effect, and susceptibility. *Toxicology* 232(3):235-247.
- Hiipakka D, Samimi B. 1987. Exposure of acrylic fingernail sculptors to organic vapors and methacrylate dusts. *Am Ind Hyg Assoc J* 48(3):230-237.
- Hillefors-Berglund M, Liu Y, von Euler G. 1995. Persistent, specific and dose-dependent effects of toluene exposure on dopamine D2 agonist binding in the rat caudate-putamen. *Toxicology* 100:185-194.
- Hinman D. 1987. Biphasic dose-response relationship for effects of toluene inhalation on locomotor activity. *Pharmacol Biochem Behav* 26:65-69.
- Hjelm EW, Naslund PH, Wallen M. 1988. Influence of cigarette smoking on the toxicokinetics of toluene in humans. *J Toxicol Environ Health* 25:155-163.
- Hobara T, Kobayashi H, Higashihara E, et al. 1984a. Acute effects of 1,1,1-trichloroethane, trichloroethylene, and toluene on the hematologic parameters in dogs. *Arch Environ Contam Toxicol* 13:589-593.
- Hobara T, Kobayashi H, Higashihara E, et al. 1984b. Experimental study on the pulmonary absorption and excretion of toluene. *Int Arch Occup Environ Health* 53:337-344.
- Hobara T, Okuda M, Gotoh M, et al. 2000a. Estimation of the lethal toluene concentration from the accidental death of painting workers. *Ind Health*. 38(2):228-231.
- Hobara T, Okuda M, Gotoh M, et al. 2000b. Three cases of thinner-sniffing and estimating the fatal concentration of toluene by toxicokinetics. *Z Zagadnien Nauk Sadowych*. 43:105-111.
- Hodgson AT, Daisey JM, Grot RA. 1991. Sources and source strengths of volatile organic compounds in a new office building. *J Air Waste Manag Assoc* 41:1461-1468.

9. REFERENCES

- Hodgson AT, Garbesi K, Sextro RG, et al. 1988. Transport of volatile organic compounds from soil into a residential basement. Lawrence Berkeley Laboratory. University of California. Berkeley, CA. Presented at the 81st APCA Annual Meeting, June 19-24, Dallas, TX.
- Hoel DG, Davis DL, Miller AB, et al. 1992. Trends in cancer mortality in 15 industrialized countries, 1969-1986. *J Natl Cancer Inst* 84(5):313-320.
- Hogie M, Guerbet M, Reber A. 2009. The toxic effects of toluene on the optokinetic nystagmus in pigmented rats. *Ecotoxicol Environ Saf* 72(3):872-878.
- Holmberg PC. 1979. Central- nervous- system defects in children born to mothers exposed to organic solvents during pregnancy. *Lancet* 2:177-179.
- Hong JJ, Lin JL, Wu MS, et al. 1996. A chronic glue sniffer with hyperchloraemia metabolic acidosis, rhabdomyolysis, irreversible quadriplegia, central pontine myelinolysis, and hypothyroidism. *Nephrol Dial Transplant* 11(9):1848-1849.
- Honma T, Suda M. 2004. Brain microdialysis study of the effects of hazardous chemicals on the central nervous system 2. Toluene exposure and cerebral acetylcholine. *Ind Health* 42(3):336-347.
- *Honma T, Miyagawa M, Sato M, et al. 1982. Increase in glutamine content of rat midbrain induced by short-term exposure to toluene and hexane. *Ind Health* 20:109-115.
- Hori K, Yamashita S, Ishii S, et al. 2001. Isolation, characterization and application to off-gas treatment of toluene-degrading bacteria. *J Chem Eng Jpn* 34(9):1120-1126.
- Horiguchi S, Inoue K. 1977. Effects of toluene on the wheel-turning activity and peripheral blood findings in mice-an approach to the maximum allowable concentration of toluene. *J Toxicol Sci* 2(4):363-372.
- Hormes JT, Filley CM, Rosenberg NL. 1986. Neurologic sequelae of chronic solvent vapor abuse. *Neurology* 36:698-702.
- Hoshino M, Akimoto H, Okuda M. 1978. Photochemical oxidation of benzene, toluene and ethylbenzene initiated by OH radicals in the gas phase. *Bull Chem Soc Japan* 51(3):718-724.
- Hougaard KS, Hansen AM, Hass U, et al. 2003. Toluene depresses plasma corticosterone in pregnant rats. *Pharmacol Toxicol* 92(3):148-152.
- Howard C, Corsi RL. 1996. Volatization of chemicals from drinking water to indoor air: Role of the kitchen sink. *J Air Waste Manage Assoc* 46:830-837.
- Howard C, Corsi RL. 1998. Volatization of chemicals from drinking water to indoor air: The role of residential washing machines. *Air Waste Manage Assoc* 48:907-914.
- Howard MO, Bowen SE, Garland EL, et al. 2011. Inhalant use and inhalant use disorders in the United States. *Addict Sci Clin Pract* 6(1):18-31.
- Howard PH, Boethling RS, Jarvis WF, et al., eds. 1991. Handbook of environmental degradation rates. Chelsea, MI: Lewis Publishers, Inc, 410-411.

9. REFERENCES

- Howard-Reed C, Corsi RL, Moya J. 1999. Mass transfer of volatile organic compounds from drinking water to indoor air: The role of residential dishwashers. *Environ Sci Technol* 33:2266-2272.
- Howell SR, Christian JE, Isom GE. 1986. The hepatotoxic potential of combined toluene-chronic ethanol exposure. *Arch Toxicol* 59:45-50.
- HSDB. 2010. Toluene. Hazardous Substances Data Bank, National Library of Medicine. <http://toxnet.nlm.nih.gov>. April 24, 2014.
- Hsieh GC, Parker RD, Sharma RP, et al. 1990a. Subclinical effects of groundwater contaminants. III. Effects of repeated oral exposure to combinations of benzene and toluene on immunologic responses in mice. *Arch Toxicol* 64:320-328.
- Hsieh GC, Sharma RP, Parker RD. 1989. Immunotoxicological evaluation of toluene exposure via drinking water in mice. *Environ Res* 49:93-103.
- Hsieh GC, Sharma RP, Parker RD, et al. 1990b. Evaluation of toluene exposure via drinking water on levels of regional brain biogenic monoamines and their metabolites in CD-1 mice. *Ecotoxicol Environ Saf* 20:175-184.
- Hsieh GC, Sharma RP, Parker RD. 1991. Hypothalamic-pituitary-adrenocortical axis activity and immune function after oral exposure to benzene and toluene. *Immunopharmacol* 21:23-31.
- *Huang J, Asaeda N, Takeuchi Y, et al. 1992. Dose dependent effects of chronic exposure to toluene on neuronal and glial cell marker proteins in the central nervous system of rats. *Br J Ind Med* 49:282-286.
- Hubert C, Shen Y, Voordouw G. 1999. Composition of toluene-degrading microbial communities from soil at different concentrations of toluene. *Appl Environ Microbiol* 65(7):3064-3070.
- Hudak A, Ungvary G. 1978. Embryotoxic effects of benzene and its methyl derivatives: Toluene, xylene. *Toxicology* 11:55-63.
- Huerta-Rivas A, Lopez-Rubalcava C, Sanchez-Serrano SL, et al. 2012. Toluene impairs learning and memory, has antinociceptive effects, and modifies histone acetylation in the dentate gyrus of adolescent and adult rats. *Pharmacol Biochem Behav* 102(1):48-57.
- Huff J. 2003. Absence of carcinogenic activity in Fischer rats and B6C3F1 mice following 103-week inhalation exposures to toluene. *Int J Occup Environ Health* 9(2):138-146.
- Hunnewell J, Miller NR. 1998. Bilateral internuclear ophthalmoplegia related to chronic toluene abuse. *J Neuroophthalmol* 18(4):277-280.
- *Hussain TF, Heidenreich PA, Benowitz N. 1996. Recurrent non-Q-wave myocardial infarction associated with toluene abuse. *Am Heart J* 131(3):615-616.
- Hutchins SR. 1991. Optimizing GTEX biodegradation under denitrifying conditions. *Exp Toxicol Chem* 10:1437-1448.
- Iannuzzi TJ, Huntley SL, Schmidt CW, et al. 1997. Combined sewer overflows (CSOs) as sources of sediment contamination in the lower Passaic River, New Jersey. 1. Priority pollutants and inorganic chemicals. *Chemosphere* 34(2):213-231.

9. REFERENCES

- IARC. 1998. Some organic solvents, resin, monomers and related compounds, pigments and occupational exposures in paint manufacture and painting: Summary of data reported and evaluations. In: IARC monographs on the evaluation of carcinogenic risks to humans. Volume 47. <http://193.51.164.11/htdocs/Indexes/Vol47/Index.html>. May 24, 2000.
- IARC. 1999. IARC monographs on the evaluation of carcinogenic risks to humans: Re-evaluation of some organic chemicals, hydrazine and hydrogen peroxide. Volume 71. Part 2. Lyon, France: World Health Organization, International Agency for Research on Cancer, 829-864.
- IARC. 2013. Agents classified by the IARC monographs. Volumes 1–109. Lyon, France: International Agency for Research on Cancer. <http://monographs.iarc.fr/ENG/Classification/index.php>. January 08, 2014.
- *Iizumi H, Fukui K, Utsumi H, et al. 1995. Effect of chronic toluene exposure on tyrosine hydroxylase-positive nerve elements in the rat forebrain: An immunohistochemical study combined with semiquantitative morphometric analysis. *Neuroreport* 7(1):81-84.
- Ikeda M, Ohtsuji H. 1971. Phenobarbital-induced protection against toxicity of toluene and benzene in the rat. *Toxicol Appl Pharmacol* 20:30-43.
- Ikeda M, Tsukagoshi H. 1990. Encephalopathy due to toluene sniffing: Report of a case with magnetic resonance imaging. *Eur Neurol* 30:347-349.
- Ikeda M, Koizumi A, Kasahara M, et al. 1986. Combined effects of n-hexane and toluene on norepinephrine and dopamine levels in rat brain tissues after long-term exposure. *Bull Environ Contam Toxicol* 36:510-517.
- Ikeda M, Ukai H, Kawai T, et al. 2008. Changes in correlation coefficients of exposure markers as a function of intensity of occupational exposure to toluene. *Toxicol Lett* 179(3):148-154.
- Ikeda N, Takahashi H, Umetsu K, et al. 1990. The course of respiration and circulation in toluene-sniffing. *Forensic Sci Intern* 44:151-158.
- *Ikeda T, Miyake H. 1978. Decreased learning in rats following repeated exposure to toluene: Preliminary report. *Toxicol Lett*. 1:235-239.
- Ikematsu K, Tsuda R, Tsuruya S, et al. 2007. Toluene inhalation induced changes of gene expression in rat brain: Fluorescence differential display PCR analysis. *Leg Med* 9(5):265-269.
- Imbriani M, Ghittori S. 1997. Effects of ethanol on toluene metabolism in man. *G Ital Med Lav* 19(4):177-181.
- Inoue O, Kanno E, Kasai K, et al. 2004. Benzylmercapturic acid is superior to hippuric acid and *o*-cresol as a urinary marker of occupational exposure to toluene. *Toxicol Lett* 147(2):177-186.
- Inoue O, Kanno E, Yusa T, et al. 2002. Urinary benzylmercapturic acid as a marker of occupational exposure to toluene. *Int Arch Occup Environ Health* 75(5):341-347.
- Inoue O, Kawai T, Ukai H, et al. 2008. Limited validity of *o*-cresol and benzylmercapturic acid in urine as biomarkers of occupational exposure to toluene at low levels. *Ind Health* 46(4):318-325.

9. REFERENCES

- Inoue O, Seiji K, Ishihara N, et al. 1984. Increased *o*- and *p*-cresol/hippuric acid ratios in the urine of four strains of rat exposed to toluene at thousands-ppm levels. *Toxicol Lett* 23:249-257.
- Inoue O, Seiji K, Watanabe T, et al. 1988. Mutual metabolic suppression between benzene and toluene in man. *Int Arch Occup Environ Health* 60:15-20.
- Inoue O, Seiji K, Watanabe T, et al. 1986. Possible ethnic difference in toluene metabolism: A comparative study among Chinese, Turkish and Japanese solvent workers. *Toxicol Lett* 34:167-174.
- Iovino P, Polverino R, Salvestrini S, et al. 2009. Temporal and spatial distribution of BTEX pollutants in the atmosphere of metropolitan areas and neighbouring towns. *Environ Monit Assess* 150(1-4):437-444.
- Iregren A. 1986. Subjective and objective signs of organic solvent toxicity among occupationally exposed workers. *Scand J Work Environ Health* 12:469-475.
- IRIS. 2007. Toluene (CASRN 108-88-3). Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency. <http://www.epa.gov/iris/>. January 08, 2014.
- Ishigami A, Tokunaga I, Kubo S, et al. 2005. Immunohistochemical study of rat spermatogenesis after toluene-inhalation. *Leg Med* 7(1):42-46.
- Iwata M, Taceuchi Y, Hisanaga N, et al. 1983. Changes of *n*-hexane metabolites in urine of rats exposed to various concentrations of *n*-hexane and to its mixture with toluene or MEK. *Int Arch Occup Environ Health* 53:1-8.
- Jacquot L, Pourie G, Buron G, et al. 2006. Effects of toluene inhalation exposure on olfactory functioning: Behavioral and histological assessment. *Toxicol Lett* 165(1):57-65.
- Jain S, Rachamalla M, Kulkarni A, et al. 2013. Pulmonary fibrotic response to inhalation of ZnO nanoparticles and toluene co-exposure through directed flow nose only exposure chamber. *Inhal Toxicol* 25(13):703-713. 10.3109/08958378.2013.839765.
- Janasik B, Jakubowski M, Jalowicki P. 2008. Excretion of unchanged volatile organic compounds (toluene, ethylbenzene, xylene and mesitylene) in urine as result of experimental human volunteer exposure. *Int Arch Occup Environ Health* 81(4):443-449.
- Janasik B, Jakubowski M, Wesolowski W, et al. 2010. Unmetabolized VOCs in urine as biomarkers of low level occupational exposure. *Int J Occup Med Environ Health* 23(1):21-26.
- Jarosz PA, Fata E, Bowen SE, et al. 2008. Effects of abuse pattern of gestational toluene exposure on metabolism, feeding and body composition. *Physiol Behav* 93(4-5):984-993.
- Jermann E, Hajimiragha H, Borckhaus A, et al. 1989. Exposure to benzene, toluene, lead and carbon monoxide of children living in a central urban area with high traffic density. *Zentralbl Hyg Umweltmed* 189(1):50-61.
- Jimenez-Garza O, Baccarelli AA, Byun HM, et al. 2015. CYP2E1 epigenetic regulation in chronic, low-level toluene exposure: Relationship with oxidative stress and smoking habit. *Toxicol Appl Pharmacol* 286(3):207-215. 10.1016/j.taap.2015.04.016.

9. REFERENCES

- Johnson AC. 1992. Auditory sensitivity in rats exposed to toluene and/or acetyl salicylic acid. *NeuroReport* 3:1141-1144.
- Johnson AC, Canlon B. 1994. Progressive hair cell loss induced by toluene exposure. *Hear Res* 75:201-208.
- Johnson AC, Juntunen L, Nysten P, et al. 1988. Effect of interaction between noise and toluene on auditory function in the rat. *Acta Otolaryngol* 101:56-63.
- Johnsrud EK, Koukouritaki SB, Divakaran K, et al. 2003. Human hepatic CYP2E1 expression during development. *J Pharmacol Exp Ther* 307(1):402-407.
- Jonai H, Sato M. 1988. Exposure indices for painters exposed to toluene and xylene at low concentrations. *Ind Health* 26:197-202.
- Jone CM, Wu AHB. 1988. An unusual case of toluene-induced metabolic acidosis. *Clin Chem* 34(12):2596-2599.
- Jones HE, Balster RL. 1997. Neurobehavioral consequences of intermittent prenatal exposure to high concentrations of toluene. *Neurotoxicol Teratol* 19(4):305-313.
- Jones HE, Balster RL. 1998. Inhalant abuse in pregnancy. *Obstet Gynecol Clin North Am* 25(1):153-167.
- Jonsson F, Johanson G. 2001. Bayesian estimation of variability in adipose tissue blood flow in man by physiologically based pharmacokinetic modeling of inhalation exposure to toluene. *Toxicology* 157(3):177-193.
- Jovanovic JM, Jovanovic MM, Spasic MJ, et al. 2004. Peripheral nerve conduction study in workers exposed to a mixture of organic solvents in paint and lacquer industry. *Croat Med J* 45(6):769-774.
- Juárez-Pérez CA, Torres-Valenzuela A, Haro-García LC, et al. 2014. Ototoxicity effects of low exposure to solvent mixture among paint manufacturing workers. *Int J Audiol* 53:370-376.
- Jung KH, Artigas F, Shin JY. 2011. Personal, indoor, and outdoor exposure to VOCs in the immediate vicinity of a local airport. *Environ Monit Assess* 173(1-4):555-567.
- Jury WA, Russo D, Streile G, et al. 1990. Evaluation of volatilization by organic chemicals residing below the soil surface. *Water Resour Res* 26(1):13-20.
- Kamel MAE, Shehata M. 2008. Effect of toluene exposure on the antioxidant status and apoptotic pathway in organs of the rat. *Br J Biomed Sci* 65(2):75-79.
- Kamijima M, Nakazawa Y, Yamakawa M, et al. 1994. Metabolic acidosis and renal tubular injury due to pure toluene inhalation. *Arch Environ Health* 49(5):410-413.
- Kamijo Y, Soma K, Hasegawa I, et al. 1998. Fatal bilateral adrenal hemorrhage following acute toluene poisoning: A case report. *J Toxicol Clin Toxicol* 36(4):365-368.
- Kamran S, Bakshi R. 1998. MRI in chronic toluene abuse: Low signal in the cerebral cortex on T2-weighted images. *Neuroradiology* 40:519-521.

9. REFERENCES

- Kaneko T, Koizumi T, Takezaki T, et al. 1992. Urinary calculi associated with solvent abuse. *J Urol* 147:1365-1366.
- Kang SK, Rohlman DS, Lee MY, et al. 2005. Neurobehavioral performance in workers exposed to toluene. *Environ Toxicol Pharmacol* 19(3):645-650.
- Kanter M. 2008a. *Nigella sativa* and derived thymoquinone prevents hippocampal neurodegeneration after chronic toluene exposure in rats. *Neurochem Res* 33(3):579-588.
- Kanter M. 2008b. Protective effects of *Nigella sativa* on the neuronal injury in frontal cortex and brain stem after chronic toluene exposure. *Neurochem Res* 33(11):241-249.
- Kanter M. 2011a. Thymoquinone attenuates lung injury induced by chronic toluene exposure in rats. *Toxicol Ind Health* 27(5):387-395.
- Kanter M. 2011b. Thymoquinone reestablishes spermatogenesis after testicular injury caused by chronic toluene exposure in rats. *Toxicol Ind Health* 27(2):155-166.
- Kanter M. 2011c. Protective effects of thymoquinone on the neuronal injury in frontal cortex after chronic toluene exposure. *J Mol Histol* 42(1):39-46.
- Kanter M. 2012. Protective effect of quercetin on liver damage induced by chronic toluene exposure in rats. *Toxicol Ind Health* 28(6):483-491.
- Kanter M. 2013. Protective effects of quercetine on the neuronal injury in frontal cortex after chronic toluene exposure. *Toxicol Ind Health* 29(7):643-651.
- Karmakar GC, Roxburgh R. 2008. Rhabdomyolysis in a glue sniffer. *N Z Med J* 121(1271):70-71.
- Kawai T, Miyama Y, Horiguchi S, et al. 2000. Possible metabolic interaction between hexane and other solvents co-exposed at sub-occupational exposure limit levels. *Int Arch Occup Environ Health* 73(7):449-456.
- Kawai T, Mizunuma K, Okada Y et al. 1996. Toluene itself as the best urinary marker of toluene exposure. *Int Arch Occup Environ Health* 68(5):289-297.
- Kawai T, Ukai H, Inoue O, et al. 2008. Evaluation of biomarkers of occupational exposure to toluene at low levels. *Int Arch Occup Environ Health* 81(3):253-262.
- Kawai T, Yamauchi T, Miyama Y, et al. 2007. Benzyl alcohol as a marker of occupational exposure to toluene. *Ind Health* 45(1):143-150.
- Kawai T, Yasugi T, Mizunuma K, et al. 1992a. Comparative evaluation of urinalysis and blood analysis as means of detecting exposure to organic solvents at low concentrations. *Int Arch Occup Environ Health* 64:223-234.
- Kawai T, Yasugi T, Mizunuma K, et al. 1992b. Monitoring of workers exposed to a mixture of toluene, styrene and methanol vapours by means of diffusive air sampling, blood analysis and urinalysis. *Int Arch Occup Environ Health* 63:429-435.

9. REFERENCES

- Kawai T, Yasugi T, Mizunuma K, et al. 1993. Comparative evaluation of blood and urine analysis as a tool for biological monitoring of *n*-hexane and toluene. *Int Arch Occup Environ Health* 65(1 Suppl):123-126.
- Kawamoto T, Koga M, Murata K, et al. 1995. Effects of ALDH2, CYPLAL, and CYP2E1 genetic polymorphisms and smoking and drinking habits on toluene metabolism in humans. *Toxicol Appl Pharmacol* 133(2):295-304.
- Kawamoto T, Koga M, Oyama T, et al. 1996. Habitual and genetic factors that affect urinary background levels of biomarkers for organic solvent exposure. *Arch Environ Contam Toxicol* 30(1):114-120.
- *Keane JR. 1978. Toluene optic neuropathy. *Ann Neurol* 4:390.
- Kearns GL, Abdel-Rahman SM, Alander SW, et al. 2003. Developmental pharmacology--drug disposition, action, and therapy in infants and children. *N Engl J Med* 349(12):1157-1167.
- Kelly TJ, Callahan PJ, Plell J, et al. 1993. Method development and field measurements for polar volatile organic compounds in ambient air. *Environ Sci Technol* 27(6):1146-1153.
- Kenley RA, Davenport JE, Hendry DJ. 1973. Hydroxyl radical reactions in the gas phase. Products and pathways for the reaction of OH with toluene. *J Phys Chem* 82(9):1095-1096.
- Kenyon EM, Benignus V, Eklund C, et al. 2008. Modeling the toxicokinetics of inhaled toluene in rats: Influence of physical activity and feeding status. *J Toxicol Environ Health A* 71(4):249-265.
- Keymeulen R, De Bruyn G, Van Langenhove H. 1997. Headspace gas chromatographic determination of the plant cuticle-air partition coefficients for monocyclic aromatic hydrocarbons as environmental compartment. *J Chromatogr A* 774:213-221.
- Khalil MA, Rasmussen RA. 1992. Forest hydrocarbon emissions: Relationships between fluxes and ambient concentrations. *J Air Waste Manage Assoc* 42(6):810-813.
- Kim DB, Lee JK, Jung KJ, et al. 1998. Effects of toluene inhalation on the concentrations of the brain monoamines and metabolites. *J Toxicol Pub Health* 14(4):495-500.
- Kim H, Wang RS, Elovaara E, et al. 1997. Cytochrome P450 isozymes responsible for the metabolism of toluene and styrene in human liver microsomes. *Xenobiotica* 27(7):657-665.
- Kim JH, Moon JY, Park EY, et al. 2011. Changes in oxidative stress biomarker and gene expression levels in workers exposed to volatile organic compounds. *Ind Health*. 49(1):8-14.
- Kim KW, Won YL, Ko KS. 2015. Ethnic differences in the metabolism of toluene: Comparisons between Korean and foreign workers exposed to toluene. *Toxicol Res* 31(1):25-32. 10.5487/tr.2015.31.1.025.
- Kim SR, Halden RU, Buckley TJ. 2007. Volatile organic compounds in human milk: Methods and measurements. *Environ Sci Technol* 41(5):1662-1667.
- Kimura ET, Ebert DM, Dodge PW. 1971. Acute toxicity and limits of solvent residue for sixteen organic solvents. *Toxicol Appl Pharmacol* 19:699-704.

9. REFERENCES

- King MD, Day RE, Oliver JS, et al. 1981. Solvent encephalopathy. *Br Med J* 283:663-665.
- Kishi R, Harabuchi I, Ikeda T, et al. 1988. Neurobehavioral effects and pharmacokinetics of toluene in rats and their relevance to man. *Br J Ind Med* 45:396-408.
- Kiyokawa M, Mizota A, Takasoh M, et al. 1999. Pattern visual evoked cortical potentials in patients with toxic optic neuropathy caused by toluene abuse. *Jpn J Ophthalmol* 43(5):438-442.
- Kjellstrand P, Bjerkemo M, Adler-Maihofer M, et al. 1985. Effects of solvent exposure on testosterone levels and butyrylcholinesterase activity in mice. *Acta Pharmacol Toxicol* 57:242-249.
- Klimisch HJ, Hellwig J, Hofmann A. 1992. Studies on the prenatal toxicity of toluene in rabbits following inhalation exposure and proposal of a pregnancy guidance value. *Arch Toxicol* 66:373-381.
- *Knox JW, Nelson JR. 1966. Permanent encephalopathy from toluene inhalation. *New Eng J Med* 275:1494-1496.
- Kobald SO, Wascher E, Blaszkewicz M, et al. 2015. Neurobehavioral and neurophysiological effects after acute exposure to a single peak of 200 ppm toluene in healthy volunteers. *Neurotoxicology* 48:50-59. 10.1016/j.neuro.2015.03.005.
- Kobayashi M. 2014. Marked asymmetry of white matter lesions caused by chronic toluene exposure. *Neurol Sci* 35(3):495-497. 10.1007/s10072-013-1581-8.
- Kodavanti PR, Royland JE, Moore-Smith DA, et al. 2015. Acute and subchronic toxicity of inhaled toluene in male Long-Evans rats: Oxidative stress markers in brain. *Neurotoxicology* 51:10-19. 10.1016/j.neuro.2015.09.001.
- Kodavanti PR, Royland JE, Richards JE, et al. 2011. Toluene effects on oxidative stress in brain regions of young-adult, middle-age, and senescent Brown Norway rats. *Toxicol Appl Pharmacol* 256(3):386-398.
- Koga Y, Higashi S, Kawahara H, et al. 2007. Toluene inhalation increases extracellular noradrenaline and dopamine in the medial prefrontal cortex and nucleus accumbens in freely-moving rats. *Kyushu Shika Gakkai Zasshi* 61(1):39-54.
- Komori M, Nishio K, Kitada M, et al. 1990. Fetus-specific expression of a form of cytochrome P-450 in human livers. *Biochemistry* 29(18):4430-4433.
- *Kondo H, Huang J, Ichihara G, et al. 1995. Toluene induces behavioral activation without affecting striatal dopamine metabolism in the rat: Behavioral and microdialysis studies. *Pharmacol Biochem Behav* 51(1):97-101.
- *Konietzko H, Keilbach J, Drysch K. 1980. Cumulative effects of daily toluene exposure. *Int Arch Occup Environ Health* 46:53-58.
- Kono K, Yoshida Y, Yamagata H, et al. 1985. Urinary excretion of cresol as an indicator for occupational toluene exposure. *Ind Health* 23:37-45.
- Korbo L, Ladefoged O, Lam HR, et al. 1996. Neuronal loss in hippocampus in rats exposed to toluene. *Neurotoxicology* 17(2):359-366.

9. REFERENCES

- Korpela M, Tahti H. 1984. Follow-up of the antihemolytic effect of toluene inhalation in rats. *Toxicol Lett* 21:15-19.
- Korpela M, Tahti H. 1988. The effect of *in vitro* and *in vivo* toluene exposure on rat erythrocyte and synaptosome membrane integral enzymes. *Pharmacol Toxicol* 63:30-32.
- Korpela M, Vapaatalo H, Tahti H. 1983. Effect of toluene on the hemolytic resistance of rat erythrocytes. *Toxicol Lett* 17:253-257.
- Kostas J, Hotchin J. 1981. Behavioral effects of low-level perinatal exposure to toluene in mice. *Neurobehav Toxicol Teratol* 3:467-469.
- Krishnan K, Andersen ME. 1994. Physiologically based pharmacokinetic modeling in toxicology. In: Hayes AW, ed. *Principles and methods of toxicology*. 3rd ed. New York, NY: Raven Press, Ltd., 149-188.
- Krishnan K, Andersen ME, Clewell HJ, et al. 1994. Physiologically based pharmacokinetic modeling of chemical mixtures. In: Yang RSH, ed. *Toxicology of chemical mixtures: Case studies, mechanisms, and novel approaches*. San Diego, CA: Academic Press, 399-437.
- Kronevi T, Wahlberg J, Holmberg B. 1979. Histopathology of skin, liver, and kidney after epicutaneous administration of five industrial solvents to guinea pigs. *Environ Res* 19:56-69.
- Kucuk NO, Kilic EO, Ibis E, et al. 2000. Brain SPECT findings in long-term inhalant abuse. *Nucl Med Commun* 21(8):769-773.
- Kwon B, Kim S, Lee DK, et al. 2011. ¹H NMR spectroscopic identification of a glue sniffing biomarker. *Forensic Sci Int* 209(1-3):120-125.
- Kyrklund T, Kjellstrand P, Haglid K. 1987. Brain lipid changes in rats exposed to xylene and toluene. *Toxicology* 5:123-133.
- *Kyvik KR, Brattebo G, Tysnes OB, et al. 1992. Activation of blood platelets in workers exposed to organic solvents. *J Med* 34:687-692.
- Ladefoged O, Hougaard KS, Hass U, et al. 2004. Effects of combined prenatal stress and toluene exposure on apoptotic neurodegeneration in cerebellum and hippocampus of rats. *Basic Clin Pharmacol Toxicol* 94(4):169-176.
- Lam CW, Galen TJ, Boyd JF, et al. 1990. Mechanism of transport and distribution of organic solvents in blood. *Toxicol Appl Pharmacol* 104:117-129.
- Lammers JHCM, Meuling WJA, Muijser H, et al. 2005a. Neurobehavioural evaluation and kinetics of inhalation of constant or fluctuating toluene concentrations in human volunteers. *Environ Toxicol Pharmacol* 20(3):431-442.
- Lammers JHCM, van Asperen J, de Groot D, et al. 2005b. Behavioural effects and kinetics in brain in response to inhalation of constant or fluctuating toluene concentrations in the rat. *Environ Toxicol Pharmacol*. 19(3):625-634.

9. REFERENCES

- Lange A, Smolik R, Zatonski W, et al. 1973. Leukocyte agglutinins in workers exposed to benzene toluene and xylene. *Int Arch Arbeits Med* 31:45-50.
- Langenhoff AAM, Zehnder AJB, Schraa G. 1996. Behaviour of toluene, benzene and naphthalene under anaerobic conditions in sediment columns. *Biodegradation* 7(3):267-274.
- Lapare S, Tardif R, Brodeur J. 1993. Effect of various exposure scenarios on the biological monitoring of organic solvents in alveolar air: I. Toluene and *m*-xylene. *Int Arch Occup Environ Health* 64(8):569-580.
- Lapertot ME, Pulgarin C. 2006. Biodegradability assessment of several priority hazardous substances: Choice, application and relevance regarding toxicity and bacterial activity. *Chemosphere* 65(4):682-690.
- Larsby B, Tham R, Eriksson B, et al. 1986. The effect of toluene on the vestibulo- and opto-oculomotor system in rats: A computerized nystagmographic study. *Acta Otolaryngol* 101:422-428.
- Larsen T, Kjeldsen P, Christensen TH. 1992. Sorption of hydrophobic hydrocarbons on three aquifer materials in a flow through system. *Chemosphere* 24(4):439-451.
- Lataye R, Campo P. 1997. Combined effects of a simultaneous exposure to noise and toluene on hearing function. *Neurotoxicol Teratol* 19(5):373-382.
- Lataye R, Campo P, Loquet G. 1999. Toluene ototoxicity in rats: Assessment of the frequency of hearing deficit by electrocochleography. *Neurotoxicol Teratol* 21(3):267-276.
- Lataye R, Maguin K, Campo P. 2007. Increase in cochlear microphonic potential after toluene administration. *Hear Res* 230(1-2):34-42.
- Lawryk NJ, Weisel CP. 1996. Concentrations of volatile organic compounds in the passenger compartments of automobiles. *Environ Sci Technol* 30:810-816.
- LeBel CP, Schatz RA. 1988. Toluene-induced alterations in rat synaptosomal membrane composition and function. *J Biochem Toxicol* 3:279-293.
- LeBel CP, Schatz RA. 1989. Effect of toluene on rat synaptosomal phospholipid methylation and membrane fluidity. *Biochem Pharmacol* 38(22):4005-4011.
- LeBel CP, Schatz RA. 1990. Altered synaptosomal phospholipid metabolism after toluene: Possible relationship with membrane fluidity, Na⁺, K⁺-adenosine triphosphatase and phospholipid methylation. *J Pharmacol Exp Ther* 253(3):1189-1197.
- *Lee BK, Lee SH, Lee KM, et al. 1988. Dose-dependent increase in subjective symptom prevalence among toluene-exposed workers. *Ind Health* 26:11-23.
- Lee DE, Gerasimov MR, Schiffer WK, et al. 2006. Concentration-dependent conditioned place preference to inhaled toluene vapors in rats. *Drug Alcohol Depend* 85(1):87-90.
- Lee DH, Park IG, Kim JH, et al. 1998a. Neurobehavioral changes in shoe manufacturing workers. *Neurotoxicol Teratol* 20(3):259-263.

9. REFERENCES

- Lee XP, Kumazawa T, Sato K, et al. 1998b. Determination of solvent thinner components in human body fluids by capillary gas chromatography with trapping at low oven temperature for headspace samples. *Analyst* 123(1):147-150.
- Leeder JS, Kearns GL. 1997. Pharmacogenetics in pediatrics: Implications for practice. *Pediatr Clin North Am* 44(1):55-77.
- Lehman EJ, Hein MJ. 2006. Mortality of workers employed in shoe manufacturing: An update. *Am J Ind Med* 49(7):535-546.
- Leikin JB, Pauloucek FP. 2008. In: Leikin JB, Pauloucek FP, eds. 4th ed. Boca Raton, FL: CRC Press, Taylor & Francis Group, 1195-1196.
- Lemke LD, Lamerato LE, Xu X, et al. 2014. Geospatial relationships of air pollution and acute asthma events across the Detroit-Windsor international border: Study design and preliminary results. *J Expo Sci Environ Epidemiol* 24(4):346-357. 10.1038/jes.2013.78.
- Lesage S, McBride RA, Cureton PM, et al. 1993. Fate of organic solvents in landfill leachates under simulated field conditions and in aerobic microcosms. *Waste Manage Res* 11:215-226.
- Leung HW. 1993. Physiologically-based pharmacokinetic modelling. In: Ballantyne B, Marrs T, Turner P, eds. *General and applied toxicology*. Vol. 1. New York, NY: Stockton Press, 153-164.
- Leung HW, Paustenbach DJ. 1988. Application of pharmacokinetics to derive biological exposure indexes from threshold limit values. *Am Ind Hyg Assoc J* 49(9):445-450.
- Li HS, Johnson AC, Borg E, et al. 1992. Auditory degeneration after exposure to toluene in two genotypes of mice. *Arch Toxicol* 66:382-386.
- Liang JC, Hsu TC, Henry JE. 1983. Cytogenetic assays for mitotic poisons: The grasshopper embryo system for volatile liquids. *Mutat Res* 113:467-479.
- Lin HJ, Shaffer KM, Chang YH, et al. 2002. Acute exposure of toluene transiently potentiates p42/44 mitogen-activated protein kinase (MAPK) activity in cultured rat cortical astrocytes. *Neurosci Lett* 332(2):103-106.
- Lindbohm ML, Taskinen H, Kyyronen P, et al. 1992. Effects of parental occupational exposure to solvents and lead on spontaneous abortion. *Scand J Work Environ Health* 18:37-39.
- Lindemann R. 1991. Case report: Congenital renal tubular dysfunction associated with maternal sniffing of organic solvents. *Acta Pediatr Scand* 80:882-884.
- *Ling KH, Hanzlik RP. 1989. Deuterium isotope effects on toluene metabolism. Product release as a rate-limiting step in cytochrome P-450 catalyzed reactions. *Biochem Biophys Res Commun* 160(2):844-849.
- Little AR, Gong Z, Singh U, et al. 1998. Decreases in brain glial fibrillary acidic protein (GFAP) are associated with increased serum corticosterone following inhalation exposure to toluene. *Neurotoxicology* 19(4-5):739-748.
- Little CH, Georgiou GM, Shelton MJ, et al. 1999. Clinical and immunological responses in subjects sensitive to solvents. *Arch Environ Health* 54(1):6-14.

9. REFERENCES

- Liu J, Yoshida Y, Kunugita N, et al. 2010. Thymocytes are activated by toluene inhalation through the transcription factors NF- κ B, STAT5 and NF-AT. *J Appl Toxicol.* 30(7):656-660.
- Livingston AL. 1978. Forage plant estrogens. *J Toxicol Environ Health* 4(2-3):301-324.
- Lo PS, Wu CY, Sue HZ, et al. 2009. Acute neurobehavioral effects of toluene: Involvement of dopamine and NMDA receptors. *Toxicology* 265(1-2):34-40.
- Lof A, Hjelm EW, Colmsjo A, et al. 1993. Toxicokinetics of toluene and urinary excretion of hippuric acid after human exposure to $^2\text{H}_8$ -toluene. *Br J Ind Med* 50:55-59.
- Lof A, Wallen M, Hjelm EW. 1990. Influence of paracetamol and acetylsalicylic acid on the toxicokinetics of toluene. *Pharmacol Toxicol* 66:138-141.
- Lopez-Rubalcava C, Hen R, Cruz SL. 2000. Anxiolytic-like actions of toluene in the burying behavior and plus-maze tests: Differences in sensitivity between 5-HT $_{1B}$ knockout and wild-type mice. *Behav Brain Res* 115(1):85-94.
- Lorenzana-Jimenez M, Salas M. 1990. Behavioral effects on chronic toluene exposure in the developing rat. *Neurotoxicol Teratol* 12:353-357.
- Lovley DR. 1997. Potential for anaerobic bioremediation of BTEX in petroleum-contaminated aquifers. *J Ind Microbiol Biotechnol* 18:75-81.
- Lovreglio P, Barbieri A, Carrieri M, et al. 2010. Validity of new biomarkers of internal dose for use in the biological monitoring of occupational and environmental exposure to low concentrations of benzene and toluene. *Int Arch Occup Environ Health* 83(3):341-356.
- Luderer U, Morgan MS, Brodtkin CA, et al. 1999. Reproductive endocrine effects of acute exposure to toluene in men and women. *Occup Environ Med* 56(10):657-666.
- Lund SP, Kristiansen GB. 2008. Hazards to hearing from combined exposure to toluene and noise in rats. *Int J Occup Med Environ Health* 21(1):47-57.
- Lundberg I, Hakansson M. 1985. Normal serum activities of liver enzymes in Swedish paint industry workers with heavy exposure to organic solvents. *Br J Ind Med* 42:596-600.
- Lundberg I, Milatou-Smith R. 1998. Mortality and cancer incidence among Swedish paint industry workers with long-term exposure to organic solvents. *Scand J Work Environ Health* 24(4):270-275.
- Luster MI, Portier C, Pait DG, et al. 1992. Risk assessment in immunotoxicology. I. Sensitivity and predictability of immune tests. *Fundam Appl Toxicol* 18(2):200-210.
- Maas EF, Ashe J, Spiegel P, et al. 1991. Acquired pendular nystagmus in toluene addiction. *Neurology* 41:282-285.
- MacPhail RC, Farmer JD, Jarema KA. 2012. Toluene effects on the motor activity of adolescent, young-adult, middle-age and senescent male Brown Norway rats. *Neurotoxicology* 33(1):111-118.

9. REFERENCES

- Maestri L, Ghittori S, Imbriani M. 1997. Determination of specific mercapturic acids as an index of exposure to environmental benzene, toluene, and styrene. *Ind Health* 35:489-501.
- Magos GA, Lorenzana-Jimenez M, Vidrio H. 1990. Toluene and benzene inhalation influences on ventricular arrhythmias in the rat. *Neurotoxicol Teratol* 12:119-124.
- Maguin K, Campo P, Parietti-Winkler C. 2009. Toluene can perturb the neuronal voltage-dependent Ca^{2+} channels involved in the middle-ear reflex. *Toxicol Sci* 107(2):473-481.
- Maki-Paakkanen J, Husgafvel-Pursiainen K, Kalliomaki PL, et al. 1980. Toluene-exposed workers and chromosome aberrations. *J Toxicol Environ Health* 6:775-781.
- Malingre MM, Hendrix EA, Schellens JH, et al. 2002. Acute poisoning after oral intake of a toluene-containing paint thinner. *Eur J Pediatr* 161(6):354-355.
- Maltoni C, Ciliberti A, Pinto C et al. 1997. Results of long-term experimental carcinogenicity studies of the effects of gasoline, correlated fuels, and major gasoline aromatics on rats. *Ann N Y Acad Sci* 837:15-52.
- Mandiracioglu A, Akgur S, Kocabiyik N, et al. 2011. Evaluation of neuropsychological symptoms and exposure to benzene, toluene and xylene among two different furniture worker groups in Izmir. *Toxicol Ind Health* 27(9):802-809.
- Männistö T, Mendola P, Laughon Grantz K, et al. 2015. Acute and recent air pollution exposure and cardiovascular events at labour and delivery. *Heart* 101(18) 10.1136/heartjnl-2014-307366.
- Marchand A, Aranda-Rodriguez R, Tardif R, et al. 2015. Human inhalation exposures to toluene, ethylbenzene, and m-xylene and physiologically based pharmacokinetic modeling of exposure biomarkers in exhaled air, blood, and urine. *Toxicol Sci* 144(2):414-424. 10.1093/toxsci/kfv009.
- Marie I, Gehanno JF, Bubenheim M, et al. 2014. Prospective study to evaluate the association between systemic sclerosis and occupational exposure and review of the literature. *Autoimmun Rev* 13(2):151-156. 10.1016/j.autrev.2013.10.002.
- Martinez-Alfaro M, Carabez-Trejo A, Gallegos-Corona MA, et al. 2010. Thinner inhalation effects on oxidative stress and DNA repair in a rat model of abuse. *J Appl Toxicol* 30(3):226-232.
- Maruff P, Burns CB, Tyler P, et al. 1998. Neurological and cognitive abnormalities associated with chronic petrol sniffing. *Brain* 121:1903-1917.
- Massolo L, Rehwagen M, Porta A, et al. 2010. Indoor-outdoor distribution and risk assessment of volatile organic compounds in the atmosphere of industrial and urban areas. *Environ Toxicol* 25:339-349.
- Matiella JE, Hsieh T. 1991. Volatile compounds in scrambled eggs. *J Food Sci* 56(2):387-390.
- Matsuoka M, Matsumura H, Igisu H, et al. 1997. Effects of single exposure to toluene vapor on the expression of immediate early genes and GFAP gene in the mouse brain. *Arch Toxicol* 71:722-723.
- Matsushita T, Arimatsu Y, Ueda A, et al. 1975. Hematological and neuromuscular response of workers exposed to low concentration of toluene vapor. *Ind Health* 13:115-121.

9. REFERENCES

- Mattsson JL, Gorzinski SJ, Albee RR, et al. 1990. Evoked potential changes from 13 weeks of simulated toluene abuse in rats. *Pharmacol Biochem Behavior* 36:683-689.
- Mayr U, Butsch A, Schneider S. 1992. Validation of two *in vitro* test systems for estrogenic activities with zearalenone, phytoestrogens and cereal extracts. *Toxicology* 74(2-3):135-149.
- McCann MF. 1992. Occupational and environmental hazards in art. *Environ Res* 59:139-144.
- McDermott C, Allshire A, van Pelt F, et al. 2008. *In vitro* exposure of Jurkat T-cells to industrially important organic solvents in binary combination: Interaction analysis. *Toxicol Sci* 101(2):263-274.
- McDermott C, Allshire A, van Pelt FN, et al. 2007. Sub-chronic toxicity of low concentrations of industrial volatile organic pollutants *in vitro*. *Toxicol Appl Pharmacol* 219(1):85-94.
- McDiarmid MA, PSJ Lees, J Agnew et al. 1991. Reproductive hazards of fire fighting. II. Chemical hazards. *Am J Ind Med* 19(4):447-472.
- McWilliams ML, Chen GD, Fechter LD. 2000. Low-level toluene disrupts auditory function in guinea pigs. *Toxicol Appl Pharmacol* 167(1):18-29.
- Mehta C S, Sun P N, Zikarge A et al. 1998. Acute toxicity of toluene in male and female rats: A single oral dose exposure 2-week study. *Toxic Subst Mech* 17:43-55.
- Meney KM Davidson CM, Littlejohn D. 1998. Use of solid-phase extraction in the determination of benzene, toluene, ethylbenzene, xylene and cumene in spiked soil and investigation of soil spiking methods. *Analyst* 123(2):195-200.
- *Mergler D, Beauvais B. 1992. Olfactory threshold shift following controlled 7-hour exposure to toluene and/or xylene. *Neurotoxicology* 13:211-216.
- *Metrick SA, Brenner RP. 1982. Abnormal brainstem auditory evoked potentials in chronic paint sniffers. *Am Neurol* 12:553-556.
- Meulenbelt J, de Groot G, Savelkoul TJ. 1990. Two cases of acute toluene intoxication. *Br J Ind Med* 47:417-420.
- Meyer-Baron M. 2005. A meta-analytical approach to neurobehavioural effects of occupational toluene exposure. *Environ Toxicol Pharmacol* 19(3):651-657.
- Michael LC, Erickson MD, Parks SP, et al. 1980. Volatile environmental pollutants in biological matrices with a head space purge technique. *Anal Chem* 52:1836-1841.
- Michael LC, Pellizzari ED, Norwood DL. 1991. Application of the master analytical scheme to the determination of volatile organics in wastewater influents and effluents. *Environ Sci Technol* 25(1):150-155.
- Michael LC, Pellizzari ED, Perritt RL, et al. 1990. Comparison of indoor, backyard, and centralized air monitoring strategies for assessing personal exposure to volatile organic compounds. *Environ Sci Technol* 24(7):996-1003.

9. REFERENCES

- Michael LC, Pellizzari ED, Wiseman RW. 1988. Development and evaluation of a procedure for determining volatile organics in water. *Environ Sci Technol* 22(5):565-570.
- Midford R, Rose J, Fleming DT, et al. 1993. Glue: What's really in it for sniffers. *Med J Aust* 159(9):634-635.
- Miyagawa M, Honma T, Sato M. 1995. Effects of subchronic exposure to toluene on working and reference memory in rats. *Neurotoxicol Teratol* 17(6):657-664.
- Miyagawa M, Ohtani K, Suda M, et al. 1998. Effects of acute exposure to toluene on mixed schedule-controlled behavior as a memory measure in rats. *J Toxicol Sci* 23(Suppl. 2):352.
- Miyagi Y, Shima F, Ishido K, et al. 1999. Tremor induced by toluene misuse successfully treated by a Vim thalamotomy. *J Neurosurg Psychiatry* 66:794-796.
- Mobil Oil Corp. 1975. Report on primary dermal irritation in rabbits. Mobil Oil Corporation. Submitted to U.S. Environmental Protection Agency under TSCA Section 8D. Project number MB750-956. OTS0206119.
- Monster AC, Kezic S, van de Gevel I et al. 1993. Evaluation of biological monitoring parameters for occupational exposure to toluene. *Int Arch Occup Environ Health* 65(Suppl):159-162.
- Montgomery DD, Kalman DA. 1989. Indoor/outdoor air quality: Reference pollutant concentrations in complaint-free residences. *Appl Ind Hyg* 4(1):17-20.
- Morata TC, Fiorini AC, Fischer FM, et al. 1997. Toluene-induced hearing loss among rotogravure printing workers. *Scand J Work Environ Health* 23(4):289-298.
- Morgan DL, Cooper SW, Carlock DL, et al. 1991. Dermal absorption of neat and aqueous volatile organic chemicals in the Fischer 344 rat. *Environ Res* 55:51-63.
- Morioka I, Kuroda M, Miyashita K, et al. 1999. Evaluation of organic solvent ototoxicity by the upper limit of hearing. *Arch Environ Health* 54(5):341-346.
- Mork AK, Jonsson F, Johanson G. 2014. Adjustment factors for toluene, styrene and methyl chloride by population modeling of toxicokinetic variability. *Regul Toxicol Pharmacol* 69(1):78-90. 10.1016/j.yrtph.2014.02.015.
- Moro AM, Brucker N, Charao M, et al. 2012. Evaluation of genotoxicity and oxidative damage in painters exposed to low levels of toluene. *Mutat Res* 746(1):42-48.
- Morselli PL, Franco-Morselli R, Bossi L. 1980. Clinical pharmacokinetics in newborns and infants: Age-related differences and therapeutic implications. *Clin Pharmacokin* 5(6):485-527.
- Moszczyński P, Lisiewicz J. 1984. Occupational exposure to benzene, toluene and xylene and the T lymphocyte functions. *Haematologia* 17(4):449-453.
- Moya J, Howard-Reed C, Corsi RL. 1999. Volatilization of chemicals from tap water to indoor air from contaminated water used for showering. *Environ Sci Technol* 33:2321-2327.

9. REFERENCES

- Muijser H, Geuskens RBM, Hooisma J et al. 1996. Behavioral effects of exposure to organic solvents in carpet layers. *Neurotoxicol Teratol* 1(4)8:455-462.
- Mukerjee S, Ellenson WD, Lewis RG, et al. 1997. An environmental scoping study in the lower Rio Grande Valley of Texas- III. Residential microenvironmental monitoring for air, house dust, and soil. *Environ Int* 23:657-673.
- Mullin LS, Krivanek ND. 1982. Comparison of unconditioned reflex and conditioned avoidance tests in rats exposed by inhalation to carbon monoxide, 1,1,1-trichloroethane, toluene or ethanol. *Neurotoxicology* 3:126-137.
- Murata K, Araki S, Yokoyama K, et al. 1993. Cardiac autonomic dysfunction in rotogravure printers exposed to toluene in relation to peripheral nerve conduction. *Ind Health* 31(3):79-90.
- Museridze DP, Tsaishvili TS, Svanidze IK, et al. 2010. Effect of toluene intoxication on spatial behavior and learning of rats within early stages of postnatal development. *Neurophysiology* 42(2):118-123.
- Muttray A, Spelmeyer U, Hommel G, et al. 2005. Acute exposure to 50 ppm toluene does not increase sleepiness. *Environ Toxicol Pharmacol* 19(3):665-669.
- Muttray A, Wolff U, Jung D, et al. 1997. Blue-yellow deficiency in workers exposed to low concentrations of organic solvents. *Int Arch Occup Environ Health* 70:407-412.
- Muttray A, Wolters V, Jung D, et al. 1999. Effects of high doses of toluene on color vision. *Neurotoxicol Teratol* 21(1):41-45.
- Muttray A, Wolters V, Mayer-Popken O, et al. 1995. Effect of subacute occupational exposure to toluene on color vision. *Int J Occup Med Environ Health* 8(4):339-345.
- *Naalsund LU. 1986. Chemically induced damage to the hippocampal formation. Forswæretts Forskningsinstitutt. Norwegian Defense Research Establishment. NDRE/PUBL-86/1002.
- Nadeau V, Truchon G, Brochu M, et al. 2006. Effect of physical exertion on the biological monitoring of exposure of various solvents following exposure by inhalation in human volunteers: I. Toluene. *J Occup Environ Hyg* 3(9):481-489.
- Nakai N, Murata M, Nagahama M, et al. 2003. Oxidative DNA damage induced by toluene is involved in its male reproductive toxicity. *Free Radic Res* 37(1):69-76.
- Nakajima T, Sato A. 1979. Enhanced activity of liver drug-metabolizing enzymes for aromatic and chlorinated hydrocarbons following food deprivation. *Toxicol Appl Pharmacol* 50:549-556.
- Nakajima T, Wang RS. 1994. Induction of cytochrome P450 by toluene. *Int J Biochem* 26(12):1333-1340.
- Nakajima D, Win-Shwe TT, Kakeyama M, et al. 2006. Determination of toluene in brain of freely moving mice using solid-phase microextraction technique. *Neurotoxicology* 27(4):615-618.
- Nakajima T, Wang RS, Elovaara E, et al. 1991. Monoclonal antibody-directed characterization of cytochrome P-450 isozymes responsible for toluene metabolism in rat liver. *Biochem Pharmacol* 41(3):395-404.

9. REFERENCES

- Nakajima T, Wang RS, Elovaara E, et al. 1992a. A comparative study on the contribution of cytochrome P450 isozymes to metabolism of benzene, toluene and trichloroethylene in rat liver. *Biochem Pharmacol* 43:251-257.
- Nakajima T, Wang RS, Elovaara E, et al. 1993. Cytochrome P450-related differences between rats and mice in the metabolism of benzene, toluene and trichloroethylene in liver microsomes. *Biochem Pharmacol* 45(5):1079-1085.
- Nakajima T, Wang RS, Elovaara E, et al. 1997. Toluene metabolism by cDNA-expressed human hepatic cytochrome P-450. *Biochem Pharmacol* 53(3):271-277.
- Nakajima T, Wang RS, Katakura Y, et al. 1992b. Sex-, age- and pregnancy-induced changes in the metabolism of toluene and trichloroethylene in rat liver in relation to the regulation of cytochrome P450IIE1 and P450IIC11 content. *J Pharmacol Exp Ther* 261(3):869-874.
- Nakamura S, Oda Y, Shimada T, et al. 1987. SOS-inducing activity of chemical carcinogens and mutagens in *Salmonella typhimurium* TA1535/pSK1002: Examination with 151 chemicals. *Mutat Res* 192:239-246.
- Nakatsuka H, Watanabe T, Takeuchi Y, et al. 1992. Absence of blue-yellow color vision loss among workers exposed to toluene or tetrachloroethylene, mostly at levels below occupational exposure limits. *Int Arch Occup Environ Health* 64:113-117.
- NAS/NRC. 1989. Report of the oversight committee. In: *Biologic markers in reproductive toxicology*. Washington, DC: National Academy of Sciences, National Research Council, National Academy Press, 15-35.
- NCI. 1985. Monograph on human exposure to chemicals in the workplace: Toluene. Bethesda, MD: National Cancer Institute, Division of Cancer Etiology. PB86144698.
- Nestmann ER, Lee E, Matula TI, et al. 1980. Mutagenicity of constituents identified in pulp and paper mill effluents using the salmonella/mammalian-microsome assay. *Mutat Res* 79:203-212.
- Neubert D, Bochert G, Gericke C, et al. 2001. Multicenter field trial on possible health effects of toluene. I. Toluene body burdens in workers of the rotogravure industry. *Toxicology* 168(2):139-157.
- NFPA. 1994. Fire protection guide to hazardous materials. 11th ed. Quincy, MA: National Fire Protection Association.
- Ng TP, Foo SC, Yoong T. 1992a. Menstrual function in workers exposed to toluene. *Br J Ind Med* 49:799-803.
- Ng TP, Foo SC, Yoong T. 1992b. Risk of spontaneous abortion in workers exposed to toluene. *Br J Ind Med* 49:804-808.
- Ng TP, Ong SG, Lam WK, et al. 1990. Urinary levels of proteins and metabolites in workers exposed to toluene. *Int Arch Occup Environ Health* 62:43-46.
- NICNAS. 2010. A scientific review of multiple chemical sensitivity: Identifying key research needs. National Industrial Chemicals Notification and Assessment Scheme (NICNAS) and the Office of

9. REFERENCES

- Chemical Safety and Environmental Health (OCSEH).
https://www.nicnas.gov.au/__data/assets/word_doc/0015/17223/MCS-Final-Report-for-publication-November-2010-hardcopy-version.docx. May 2, 2016.
- Nicoara S, Tonidandel L, Traldi P, et al. 2009. Determining the levels of volatile organic pollutants in urban air using a gas chromatography-mass spectrometry method. *J Environ Public Health* 2009:148527.
- NIDA. 2012. Inhalants. Research Report Series. National Institute on Drug Abuse.
<https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/inhalantsrrs.pdf>. March 14, 2017.
- Nielsen HK, Krusell L, Baelum J, et al. 1985. Renal effects of acute exposure to toluene. *Acta Med Scand* 218:317-321.
- Niklasson M, Arlinger S, Ledin T, et al. 1998. Audiological disturbances caused by long-term exposure to industrial solvents. Relation to the diagnosis of toxic encephalopathy. *Scand Audiol* 27:131-136.
- NIOSH. 1983. Determination of the reproductive effects in mice of nine selected chemicals. Cincinnati, OH: National Institute for Occupational Safety and Health. Prepared by Bioassay Systems Corporation. NIOSH Contract No. 210-81-6011. BSC Project No. 10867. PB84183540.
- NIOSH. 1984a. Hippuric acid in urine, method 8300. NIOSH manual of analytical methods. 3rd ed. Volume 1. Cincinnati, OH: National Institute for Occupational Safety and Health. 8300-1-8300-3.
- NIOSH. 1984b. Hippuric and methyl hippuric acids in urine, method 8301. NIOSH manual of analytical methods. 3rd ed. Volume 1. NIOSH. Cincinnati, OH: National Institute for Occupational Safety and Health.
- NIOSH. 1994. NIOSH manual of analytical methods 4th edition. U.S. Department of Health and Human Services, Public Health Service, Center for Disease Control and Prevention, National Institute for Occupational Safety and Health.
- NIOSH. 2011. Toluene (CASRN 108-88-3). NIOSH pocket guide to chemical hazards. Atlanta, GA: National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. <http://www.cdc.gov/niosh/npg/>. January 08, 2014.
- Nise G, Attewell R, Skerfving S, et al. 1989. Elimination of toluene from venous blood and adipose tissue after occupational exposure. *Br J Ind Med* 46:407-411.
- Nise G, Hogstedt B, Bratt I, et al. 1991. Cytogenetic effects in rotogravure printers exposed to toluene (and benzene). *Mutat Res* 261:217-223.
- Nomura T, Yaguchi H, Mito Y, et al. 2016. MR images in a patient with chronic toluene poisoning. *Intern Med* 55(7):851-852. 10.2169/internalmedicine.55.6086.
- Nong A, McCarver DG, Hines RN, et al. 2006. Modeling interchild differences in pharmacokinetics on the basis of subject-specific data on physiology and hepatic CYP2E1 levels: A case study with toluene. *Toxicol Appl Pharmacol* 214(1):78-87.
- Nordling Nilson L, Karlson B, Nise G, et al. 2010. Delayed manifestations of CNS effects in formerly exposed printers--a 20-year follow-up. *Neurotoxicol Teratol* 32(6):620-626.

9. REFERENCES

NRC. 1993. National Research Council. Pesticides in the diets of infants and children. Washington, DC: National Academy Press.

NTP. 1990. National Toxicology Program technical report series toxicology and carcinogenesis studies of toluene (CAS No. 108-88-3) in F344/N rats and 86C3F mice (inhalation studies). Research Triangle Park, NC: U.S. Environmental Protection Agency, Department of Health and Human Services. No. 371. PB90256371.

NTP. 2016. Report on carcinogens. Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program. <http://ntp-server.niehs.nih.gov/ntp/roc/twelfth/roc12.pdf>. March 15, 2017.

Ogata M. 1984. Estimation of solvent concentrations in ambient air from urinary metabolite levels of workers exposed to solvents. *Ind Health* 22:319-324.

*Oh SJ, Kim JM. 1976. Giant axonal swelling in "Huffer's" neuropathy. *Arch Neurol* 33:583-586.

O'Leary-Moore SK, Galloway MP, McMechan AP, et al. 2007. Region-dependent alterations in glutamate and GABA measured by high-resolution magnetic resonance spectroscopy following acute binge inhalation of toluene in juvenile rats. *Neurotoxicol Teratol* 29(4):466-475.

O'Leary-Moore SK, Galloway MP, McMechan AP, et al. 2009. Neurochemical changes after acute binge toluene inhalation in adolescent and adult rats: A high-resolution magnetic resonance spectroscopy study. *Neurotoxicol Teratol* 31(6):382-389.

Olsen RH, Mikesell MD, Kukor JJ, et al. 1995. Physiological attributes of microbial BTEX degradation in oxygen-limited environments. *Environ Health Perspect Suppl* 103(5):49-51.

Olson BA, Gamberale F, Iregren A. 1985. Coexposure to toluene and *p*-xylene in man: Central nervous functions. *Br J Ind Med* 42:117-122.

Olsson H, Brandt L. 1980. Occupational exposure to organic solvents and Hodgkin's disease in men. *Scand J Work Environ Health* 6:302-305.

Ono A, Kawashima K, Sekita K, et al. 1999. Toluene inhalation induced epididymal sperm dysfunction in rats. *Toxicology* 139(3):193-205.

Ono A, Sekita K, Ogawa Y, et al. 1996. Reproductive and developmental toxicity studies of toluene: II. Effects of inhalation exposure on fertility in rats. *J Environ Pathol Toxicol Oncol* 15(1):9-20.

Ono A, Sekita K, Ohno K, et al. 1995. Reproductive and developmental toxicity studies of toluene: I. Teratogenicity study of inhalation exposure in pregnant rats. *J Toxicol Sci* 20(2):109-134.

Orbaek P, Nise G. 1989. Neurasthenic complaints and psychometric function of toluene-exposed rotogravure printers. *Am J Ind Med* 16:67-77.

Orbaek P, Osterberg K, Akesson B, et al. 1998. Suprathreshold intensity and annoyance reactions in experimental challenge to toluene and n-butyl acetate among subjects with long-term solvent exposure. *Scand J Work Environ Health* 24(5):432-438.

9. REFERENCES

- OSHA. 2013a. List of highly hazardous chemicals, toxics, and reactives. Occupational safety and health standards. Occupational Safety and Health Administration. Code of Federal Regulations 29 CFR 1910.119, Appendix A. <http://www.osha.gov/law-regs.html>. January 08, 2014.
- OSHA. 2013b. Toxic and hazardous substances. Occupational safety and health standards. Occupational Safety and Health Administration. Code of Federal Regulations 29 CFR 1910.1000, Table Z-2. <http://www.osha.gov/law-regs.html>. January 08, 2014.
- Oshiro WM, Kenyon EM, Gordon CJ, et al. 2011. Extrapolating the acute behavioral effects of toluene from 1- to 24-hour exposures in rats: Roles of dose metric and metabolic and behavioral tolerance. *Toxicol Sci* 123(1):180-192.
- Oshiro WM, Krantz QT, Bushnell PJ. 2007. Repeated inhalation of toluene by rats performing a signal detection task leads to behavioral tolerance on some performance measures. *Neurotoxicol Teratol* 29(2):247-254.
- Osterberg K, Orbaek P, Karlson B, et al. 2000. Psychological test performance during experimental challenge to toluene and n-butyl acetate in cases of solvent-induced toxic encephalopathy. *Scand J Work Environ Health* 26(3):219-226.
- Osterberg K, Orbaek P, Karlson B, et al. 2003. Annoyance and performance during the experimental chemical challenge of subjects with multiple chemical sensitivity. *Scand J Work Environ Health* 29(1):40-50.
- Ovrum P, Hultengren M, Lindqvist T. 1978. Exposure to toluene in a photogravure printing plant. *Scand J Work Environ Health* 4:237-245.
- Owen GM, Brozek J. 1966. Influence of age, sex and nutrition on body composition during childhood and adolescence. In: Falkner F, ed. *Human development*. Philadelphia, PA: WB Saunders, 222-238.
- Ozokwelu ED. 2006. Toluene. In: *Kirk-Othmer encyclopedia of chemical technology*. Vol. 25. John Wiley & Sons, 158-188.
- Paez-Martinez N, Ambrosio E, Garcia-Lecumberri C, et al. 2008. Toluene and TCE decrease binding to mu-opioid receptors, but not to benzodiazepine and NMDA receptors in mouse brain. *Ann N Y Acad Sci* 1139:390-401.
- Paez-Martinez N, Cruz SL, Lopez-Rubalcava C. 2003. Comparative study of the effects of toluene, benzene, 1,1,1-trichloroethane, diethyl ether, and flurothyl on anxiety and nociception in mice. *Toxicol Appl Pharmacol* 193(1):9-16.
- Paez-Martinez N, Flores-Serrano Z, Ortiz-Lopez L, et al. 2013. Environmental enrichment increases doublecortin-associated new neurons and decreases neuronal death without modifying anxiety-like behavior in mice chronically exposed to toluene. *Behav Brain Res* 256:432-440. 10.1016/j.bbr.2013.09.007.
- Page BD, Conacher HB, Salminen J et al. 1993. Survey of bottled drinking water sold in Canada: Part 2. Selected volatile organic compounds. *JAOAC Int* 76(1):26-31.

9. REFERENCES

- Pankow JF, Luo W, Bender DA, et al. 2003. Concentrations and co-occurrence correlations of 88 volatile organic compounds (VOCs) in the ambient air of 13 semi-rural to urban locations in the United States. *Atmos Environ* 37:5023-5046.
- Papageorgiou SG, Karantoni E, Pandis D, et al. 2009. Severe dopaminergic pathways damage in a case of chronic toluene abuse. *Clin Neurol Neurosurg* 111(10):864-867.
- Paraf F, Lewis J, Jothy S. 1993. Acute fatty liver of pregnancy after exposure to toluene. A case report. *J Clin Gastroenterol* 17(2):163-165.
- Pascual R, Bustamante C. 2010. Melatonin promotes distal dendritic ramifications in layer II/III cortical pyramidal cells of rats exposed to toluene vapors. *Brain Res* 1355:214-220.
- Patel R, Benjamin J. 1986. Renal disease associated with toluene inhalation. *Clin Toxicol* 24(3):213-223.
- Paterson SC, Sarvesvaran R. 1983. Plastic bag death: A toluene fatality. *Med Sci Law* 23(1):64-66.
- Paulson L, Kilens G. 1996. Solvent and noise exposure at a wood furniture manufacturing facility. *Appl Occup Environ Hyg* 11(8):1045-1047.
- Pavlostathis SG, Mathavan GN. 1992. Desorption kinetics of selected volatile organic compounds from field contaminated soils. *Environ Sci Technol* 26(3):532-538.
- Pearson MA, Hoyme HE, Seaver LH, et al. 1994. Toluene embryopathy: Delineation of the phenotype and comparison with fetal alcohol syndrome. *Pediatrics* 93(2):211-215.
- Pelclova D, Cerna M, Pastorkova A, et al. 2000. Study of the genotoxicity of toluene. *Arch Environ Health* 55(4):268-273.
- Pelclova D, Rossner P, Pickova J. 1990. Chromosome aberrations in rotogravure printing plant workers. *Mutat Res* 245:299-303.
- Pellizzari ED, Hartwell TD, Haris BSH, et al. 1982. Purgeable organic compounds in mother's milk. *Bull Environ Contam Toxicol* 28:322-328.
- Pellizzari ED, Wallace LA, Gordon SM. 1992. Elimination kinetics of volatile organics in humans using breath measurements. *J Expo Anal Environ Epidemiol* 2(3):341-355.
- Peralta DP, Chang AY. 2012. Toluene inducing acute respiratory failure in a spray paint sniffer. *Am J Case Rep* 13:92-95.
- Perbellini L, Leone R, Fracasso ME, Brugnone F, et al. 1982. Metabolic interaction between *n*-hexane and toluene *in vivo* and *in vitro*. *Int Arch Occup Environ Health* 50:351-358.
- Periago JF, Zambudio A, Prado C. 1997. Evaluation of environmental levels of aromatic hydrocarbons in gasoline service stations by gas chromatography. *J Chromatogr A* 778(1-2):263-268.
- Perit KE, Gmaz JM, Caleb Browne JD, et al. 2012. Distribution of c-Fos immunoreactivity in the rat brain following abuse-like toluene vapor inhalation. *Neurotoxicol Teratol* 34(1):37-46.

9. REFERENCES

- Pierce CH, Chen Y, Dills RL, et al. 2002. Toluene metabolites as biological indicators of exposure. *Toxicol Lett* 129(1-2):65-76.
- Pierce CH, Dills RL, Morgan MS, et al. 1996. Interindividual differences in $^2\text{H}_8$ -toluene toxicokinetics assessed by semi-empirical physiologically based model. *Toxicol Appl Pharmacol* 139(1):49-61.
- Pierce CH, Dills RL, Morgan MS, et al. 1998. Biological monitoring of controlled toluene exposure. *Int Arch Occup Environ Health* 71:433-444.
- Pierce CH, Lewandowski TA, Dills RL, et al. 1999. A comparison of $^1\text{H}_8$ - and $^2\text{H}_8$ -toluene toxicokinetics in men. *Xenobiotica* 29(1):93-108.
- Pitarque M, Vaglenov A, Nosko M, et al. 1999. Evaluation of DNA damage by the comet assay in shoe workers exposed to toluene and other organic solvents. *Mutat Res* 441:115-127.
- Pitarque M, Vaglenov A, Nosko M, et al. 2002. Sister chromatid exchanges and micronuclei in peripheral lymphocytes of shoe factory workers exposed to solvents. *Environ Health Perspect* 110(4):399-404.
- Plappert U, Barthel E, Seidel HJ. 1994. Reduction of benzene toxicity by toluene. *Environ Mol Mutagen* 24:283-292.
- Plenge-Böenig A, Karmaus W. 1999. Exposure to toluene in the printing industry is associated with subfecundity in women but not in men. *Occup Environ Med* 56(7):443-448.
- Poblano A, Lope-Huerta M, Martinez JM, et al. 1996. Pattern-visual evoked potentials in thinner abusers. *Arch Med Res* 27(4):531-533.
- Poirier A, Dodds L, Dummer T, et al. 2015. Maternal exposure to air pollution and adverse birth outcomes in Halifax, Nova Scotia. *J Occup Environ Med* 57(12):1291-1298. 10.1097/JOM.0000000000000604.
- Poon R, Chu I, Bjarnason S, et al. 1994. Inhalation toxicity study of methanol, toluene, and methanol/toluene mixtures in rats: Effects of 28-day exposure. *Toxicol Ind Health* 10(3):231-245.
- Priya K, Yadav A, Kumar N, et al. 2015. Association of polymorphisms of phase I metabolizing genes with sister chromatid exchanges in occupational workers exposed to toluene used in paint thinners. *Genet Res Int* 2015:630296. 10.1155/2015/630296.
- Pryor GT. 1991. A toluene-induced motor syndrome in rats resembling that seen in some human solvent abusers. *Neurotoxicol Teratol* 13:387-400.
- Pryor GT, Rebert CS. 1992. Interactive effects of toluene and hexane on behavior and neurophysiologic responses in Fischer-344 rats. *Neurotoxicology* 13:225-234.
- Pryor GT, Dickinson J, Feeney E, et al. 1984a. Hearing loss in rats first exposed to toluene as weanlings or as young adults. *Neurobehav Toxicol Teratol* 6:111-119.
- Pryor GT, Rebert CS, Dickinson J, et al. 1984b. Factors affecting toluene-induced ototoxicity in rats. *Neurobehav Toxicol Teratol* 6:223-238.

9. REFERENCES

- Pryor G, Rebert C, Kassay K, et al. 1991. The hearing loss associated with exposure to toluene is not caused by a metabolite. *Brain Res Bull* 27:109-113.
- Purcell KJ, Cason GH, Gargas ML, et al. 1990. *In vivo* metabolic interactions of benzene and toluene. *Toxicol Lett* 52:141-152.
- Pyykko K. 1983. Time-course of effects of toluene on microsomal enzymes in rat liver, kidney and lung during and after inhalation exposure. *Chem Biol Interact* 44:299-310.
- Pyykko K, Paavilainen S, Metsa-Ketela T, et al. 1987. The increasing and decreasing effects of aromatic hydrocarbon solvents on pulmonary and hepatic cytochrome P-450 in the rat. *Pharmacol Toxicol* 60:288-293.
- Pyykko K, Tahti H, Vapaatalo H. 1977. Toluene concentrations in various tissues of rats after inhalation and oral administration. *Arch Toxicol* 38:169-176.
- Raaschou-Nielsen O, Lohse C, Thomsen BL et al. 1997. Ambient air levels and the exposure of children to benzene, toluene, and xylenes in Denmark. *Environ Res* 75(2):149-159.
- Rabinowitz PM, Galusha D, Slade MD, et al. 2008. Organic solvent exposure and hearing loss in a cohort of aluminium workers. *Occup Environ Med* 65(4):230-235.
- Rahill AA, Weiss B, Morrow PE, et al. 1996. Human performance during exposure to toluene. *Aviat Space Environ Med* 67(7):640-647.
- Ramsey JC, Andersen ME. 1984. A physiologically based description of the inhalation pharmacokinetics of styrene in rats and humans. *Toxicol Appl Pharmacol* 73:159-175.
- *Rana SV, Kumar S. 1995. Antioxidative enzyme in the liver of rats after exposure to xylene, toluene and methyl alcohol separately and in combination. *Physiol Chem Phys Med NMR* 27(1):25-29.
- Rea TM, Nash JF, Zabik JE, et al. 1984. Effects of toluene inhalation on brain biogenic amines in the rat. *Toxicology* 31:143-150.
- Rebert CS, Matteucci MJ, Pryor GT. 1989a. Acute electrophysiologic effects of inhaled toluene on adult male Long-Evans rats. *Pharmacol Biochem Behav* 33:157-165.
- Rebert CS, Matteucci MJ, Pryor GT. 1989b. Multimodal effects of acute exposure to toluene evidenced by sensory-evoked potentials from Fischer-344 rats. *Pharmacol Biochem Behavior* 32:757-768.
- Rees DC, Wood RW, McCormick JP, et al. 1985. Toxicokinetics of toluene in the rat. *Scand J Work Environ Health* 11:301-306.
- *Reisin E, Teicher A, Jaffe R, et al. 1975. Myoglobinuria and renal failure in toluene poisoning. *Br J Ind Med* 32:163-168.
- RePORTER. 2014. Toluene. National Institutes of Health, Research Portfolio Online Reporting Tools. <http://projectreporter.nih.gov/reporter.cfm>. April 17, 2014.
- RePORTER. 2016. Toluene. National Institutes of Health, Research Portfolio Online Reporting Tools. <http://projectreporter.nih.gov/reporter.cfm>. August 22, 2016.

9. REFERENCES

- Reutman SR, Kawas LeMasters G, Knecht EA, et al. 2002. Evidence of reproductive endocrine effects in women with occupational fuel and solvent exposures. *Environ Health Perspect* 110(8):805-811.
- Richer CL, Chakrabarti S, Senecal-Quevillon M et al. 1993. Cytogenetic effects of low-level exposure to toluene, xylene, and their mixture on human blood lymphocytes. *Int Arch Occup Environ Health* 64(8):581-585.
- Riedel K, Ruppert T, Conze C, et al. 1996. Determination of benzene and alkylated benzenes in ambient and exhaled air by microwave desorption coupled with gas chromatography-mass spectrometry. *J Chromatogr A* 719:383-389.
- Riegel AC, French ED. 1999. Acute toluene induces biphasic changes in rat spontaneous locomotor activity which are blocked by remoxipride. *Pharmacol Biochem Behav* 62(3):399-402.
- Riegel AC, French ED. 2002. Abused inhalants and central reward pathways: Electrophysiological and behavioral studies in the rat. *Ann N Y Acad Sci* 965:281-291.
- Riegel AC, Ali SF, French ED. 2003. Toluene-induced locomotor activity is blocked by 6-hydroxydopamine lesions of the nucleus accumbens and the mGluR2/3 agonist LY379268. *Neuropsychopharmacology* 28(8):1440-1447.
- Riegel AC, Ali SF, Torinese S, et al. 2004. Repeated exposure to the abused inhalant toluene alters levels of neurotransmitters and generates peroxynitrite in nigrostriatal and mesolimbic nuclei in rat. *Ann N Y Acad Sci* 1025:543-551.
- Riegel AC, Zapata A, Shippenberg TS, et al. 2007. The abused inhalant toluene increases dopamine release in the nucleus accumbens by directly stimulating ventral tegmental area neurons. *Neuropsychopharmacology* 32(7):1558-1569.
- Roberts LG, Bevans AC, Schreiner CA. 2003. Developmental and reproductive toxicity evaluation of toluene vapor in the rat. I. Reproductive toxicity. *Reprod Toxicol* 17(6):649-658.
- Roberts LG, Nicolich MJ, Schreiner CA. 2007. Developmental and reproductive toxicity evaluation of toluene vapor in the rat. II. Developmental toxicity. *Reprod Toxicol* 23(4):521-531.
- Robinson KG, Farmer WS, Novak JT. 1990. Availability of sorbed toluene in soils for biodegradation by acclimated bacteria. *Water Res* 24(3):345-350.
- Roch F, Alexander M. 1997. Inability of bacteria to degrade low concentrations of toluene in water. *Environ Toxicol Chem* 16(7):1377-1383.
- Rogers WR, Miller CS, Bunegin L. 1999. A rat model of neurobehavioral sensitization to toluene. *Toxicol Ind Health* 15(3-4):356-369.
- Romer K, Federsel R, Freundt K. 1986. Rise of inhaled toluene, ethyl benzene, xylene, mesitylene in rat blood after treatment with ethanol. *Bull Environ Contam Toxicol* 37:874-876.
- Rosenberg NL, Grigsby J, Dreisbach J, et al. 2002. Neuropsychologic impairment and MRI abnormalities associated with chronic solvent abuse. *J Toxicol Clin Toxicol* 40(1):21-34.

9. REFERENCES

- Rosenberg NL, Kleinschmidt-Demasters BK, Davis KA, et al. 1988a. Toluene abuse causes diffuse central nervous system white matter changes. *Ann Neurol* 23(6):611-614.
- Rosenberg NL, Spitz MC, Filley CM, et al. 1988b. Central nervous system effects of chronic toluene abuse—clinical, brainstem evoked response and magnetic resonance imaging studies. *Neurotoxicol Teratol* 10:489-495.
- Royland JE, Kodavanti PR, Schmid JE, et al. 2012. Toluene effects on gene expression in the hippocampus of young adult, middle-age, and senescent Brown Norway Rats. *Toxicol Sci* 126(1):193-212.
- RTECS. 2014. Toluene. Registry of Toxic Effects of Chemical Substances. National Institute for Occupational Safety and Health. MDL Information Systems, Inc. April 24, 2014.
- Ryu YH, Lee JD, Yoon PH, et al. 1998. Cerebral perfusion impairment in a patient with toluene abuse. *J Nucl Med* 34(4):632-633.
- Saarinen L, Hakkola M, Pekari K, et al. 1998. Exposure of gasoline road-tanker drivers to methyl tert-butyl ether and methyl tert-amyl ether. *Int Arch Occup Environ Health* 71:143-147.
- *Saavedra H, De Marinis A, Palestini M. 1996. Neuronal changes induced by chronic toluene exposure in the cat. *Arch Ital Biol* 134(3):217-225.
- Sack TM, Steele DH, Hammerstrom K, et al. 1992. A survey of household products for volatile organic compounds. *Atmos Environ* 26A(6):1063-1070.
- Saillenfait AM, Gallissot F, Sabate JP, et al. 2007. Developmental toxic effects of ethylbenzene or toluene alone and in combination with butyl acetate in rats after inhalation exposure. *J Appl Toxicol* 27(1):32-42.
- Saito A, Tanaka H, Usuda H, et al. 2011. Characterization of skin inflammation induced by repeated exposure of toluene, xylene, and formaldehyde in mice. *Environ Toxicol* 26(3):224-232.
- Sallmen M, Lindbohm ML, Anttila A, et al. 1998. Time to pregnancy among the wives of men exposed to organic solvents. *Occup Environ Med* 55:24-30.
- Samuel-Herter SR, Slaght SL, McKay BE. 2013. Age-dependent time courses of recovery for motor functions following acute toluene intoxication in rats. *Dev Psychobiol* 56(4):657-673.
- Sanchez-Serrano SL, Cruz SL, Lamas M. 2011. Repeated toluene exposure modifies the acetylation pattern of histones H3 and H4 in the rat brain. *Neurosci Lett*. 489(3):142-147.
- Sari-Minodier I, Truchon G, Charest-Tardif G, et al. 2009. The effect of workload on biological monitoring of occupational exposure to toluene and n-hexane: Contribution of physiologically based toxicokinetic modeling. *J Occup Environ Hyg*. 6(7):415-432.
- Sarma SN, Kim YJ, Song M, et al. 2011. Induction of apoptosis in human leukemia cells through the production of reactive oxygen species and activation of HMOX1 and Noxa by benzene, toluene, and o-xylene. *Toxicology* 280(3):109-117.

9. REFERENCES

- Sato A, Nakajima T. 1978. Differences following skin or inhalation exposure in the absorption and excretion kinetics of trichlorethylene and toluene. *Br J Ind Med* 35:43-49.
- Sato A, Nakajima T, Fujiwara Y, et al. 1974. Pharmacokinetics of benzene and toluene. *Int Arch Arbeitsmed* 33:169-182.
- Saunders NR, Ek CJ, Habgood MD, et al. 2008. Barriers in the brain: A renaissance? *Trends Neurosci* 31(6):279-286.
- Saunders NR, Liddelow SA, Dziegielewska KM. 2012. Barrier mechanisms in the developing brain. *Front Pharmacol* 3(10.3389/fphar.2012.00046):Article 46.
- Schaeffer VH, Bhooshan B, Chen S-B, et al. 1996. Characterization of volatile organic chemical emissions from carpet cushions. *J Air Waste Manage Assoc* 46:813-820.
- Schaper M, Demes P, Kiesswetter E, et al. 2004. Colour vision and occupational toluene exposure: Results of repeated examinations. *Toxicol Lett* 151(1):193-202.
- Schaper M, Demes P, Zupanic M, et al. 2003. Occupational toluene exposure and auditory function: Results from a follow-up study. *Ann Occup Hyg* 47(6):493-502.
- Schaper M, Seeber A, van Thriel C. 2008. The effects of toluene plus noise on hearing thresholds: An evaluation based on repeated measurements in the German printing industry. *Int J Occup Med Environ Health* 21(3):191-200.
- Schauer JJ, Kleeman MJ, Cass GR, et al. 1999. Measurement of emissions from air pollution sources. 1. C₁ through C₂₉ organic compounds from meat charbroiling. *Environ Sci Technol* 33:1566-1577.
- Scheuplein R, Charnley G, Dourson M. 2002. Differential sensitivity of children and adults to chemical toxicity. I. Biological basis. *Regul Toxicol Pharmacol* 35(3):429-447.
- Schiffer WK, Lee DE, Alexoff DL, et al. 2006. Metabolic correlates of toluene abuse: Decline and recovery of function in adolescent animals. *Psychopharmacology (Berl)*. 186(2):159-167.
- Schmid E, Bauchinger M, Hauf R. 1985. Chromosome changes with time in lymphocytes after occupational exposure to toluene. *Mutat Res* 142:37-39.
- Schuberth J. 1994. Joint use of retention index and mass spectrum in post-mortem tests for volatile organics by headspace capillary gas chromatography with ion-trap detection. *J Chromatogr A* 674:63-71.
- Scott KD, Scott AA. 2012. An examination of information-processing skills among inhalant-using adolescents. *Child Care Health Dev* 38(3):412-410.
- Scott KD, Scott AA. 2014. Adolescent inhalant use and executive cognitive functioning. *Child Care Health Dev* 40(1):20-28.
- Seeber A, Demes P, Kiesswetter E, et al. 2005. Changes of neurobehavioral and sensory functions due to toluene exposure below 50 ppm? *Environ Toxicol Pharmacol* 19(3):635-643.

9. REFERENCES

Seeber A, Schaper M, Zupanic M, et al. 2004. Toluene exposure below 50 ppm and cognitive function: A follow-up study with four repeated measurements in rotogravure printing plants. *Int Arch Occup Environ Health* 77(1):1-9.

Seidenberg JM, Anderson DG, Becker RA. 1986. Validation of an *in vivo* developmental toxicity screen in the mouse. *Teratog Carcinog Mutagen* 6:361-374.

Seiji K, Inoue O, Nakatsuka H, et al. 1987. No biologically significant changes in liver function after occupational exposure to toluene at over-OEL levels. *Ind Health* 25:163-168.

Seo HS, Yang M, Song MS, et al. 2010. Toluene inhibits hippocampal neurogenesis in adult mice. *Pharmacol Biochem Behav* 94(4):588-594. 10.1016/j.pbb.2009.11.015.

*Seppalainen AM, Antti-Poika M. 1983. Time course of electrophysiological findings for patients with solvent poisoning. *Scand J Work Environ Health* 9:15-24.

Seto Y. 1994. Review: Determination of volatile substances in biological samples by headspace gas chromatography. *J Chromatogr A* 674:25-62.

Shafer TJ, Bushnell PJ, Benignus VA, et al. 2005. Perturbation of voltage-sensitive Ca²⁺ channel function by volatile organic solvents. *J Pharmacol Exp Ther* 315(3):1109-1118.

Shannon MW, Borron SW, Burns MJ. 2007. In: Shannon MW, Borron SW, Burns MJ, eds. *Haddad and Winchester's clinical management of poisoning and drug overdose*. 4th ed. Philadelphia, PA: WB Saunders, 1370-1374.

Shibata K, Yoshita Y, Matsumoto H. 1994. Extensive chemical burns from toluene. *Am J Emerg Med* 12(3):353-355.

Shields HC, Weschler CJ. 1992. Volatile organic compounds measured at a telephone switching center from 5/30/85-12/6/88: A detailed case study. *J Air Waste Manage Assoc* 42:792-804.

Shields HC, Fleischer DM, Weschler CJ. 1996. Comparisons among VOCs measured in three types of U.S. commercial buildings with different occupant densities. *Indoor Air* 6:2-17.

Shiomi S, Kuroki T, Kuroda T, et al. 1993. Absence of hepatic uptake of Tc-99m phytate in a man with chronic toluene hepatotoxicity. *Clin Nucl Med* 18(8):655-656.

Sim S, Moon J, Kim Y, et al. 2010. Emission rates of selected volatile organic compounds and formaldehyde in newly constructed apartment. *Toxicol Environ Health Sci* 2(4):263-267.

Sinha SN, Kulkarni PK, Shah SH, et al. 2006. Environmental monitoring of benzene and toluene produced in indoor air due to combustion of solid biomass fuels. *Sci Total Environ* 357(1-3):280-287.

Skender L, Brcic I, Karacic V. 2004. Urine analysis for the evaluation of environmental exposures to aromatic hydrocarbons. *Arch Environ Health* 59(5):237-244.

Sliwinska-Kowalska M, Zamyslowska-Szmytko E, Szymczak W, et al. 2005. Exacerbation of noise-induced hearing loss by co-exposure to workplace chemicals. *Environ Toxicol Pharmacol* 19:547-553.

9. REFERENCES

- Slomianka L, Edelfors S, Ravn-Jonsen A, et al. 1990. The effect of low-level toluene exposure on the developing hippocampal region of the rat: Histological evidence and volumetric findings. *Toxicology* 62:189-202.
- Slomianka L, Rungby J, Edelfors S, et al. 1992. Late postnatal growth in the dentate area of the rat hippocampus compensates for volumetric changes caused by early postnatal toluene exposure. *Toxicology* 74:203-208.
- *Smargiassi A, Mutti A, Bergamaschi E, et al. 1996. Pilot study of peripheral markers of catecholaminergic systems among workers occupationally exposed to toluene. *Neurotoxicology* 17(3-4):769-776.
- Smith LB, Bhattacharya A, Lemasters G, et al. 1997. Effect of chronic low-level exposure to jet fuel on postural balance of US Air Force personnel. *J Occup Environ Med* 39(7):623-632.
- Smyth HF, Weil CS, West JS, et al. 1969. An exploration of joint toxic action: Twenty-seven industrial chemicals intubated in rats in all possible pairs. *Toxicol Appl Pharmacol* 14:340-347.
- Snodgrass WR. 1992. Physiological and biochemical differences between children and adults as determinants of toxic response to environmental pollutants. In: Guzelian PS, Henry CJ, Olin SS, eds. *Similarities and differences between children and adults: Implications for risk assessment*. Washington, DC: International Life Sciences, 35-42.
- Soares AA, Pinho MT, Albergaria JT, et al. 2013. Biocomplementation of SVE to achieve clean-up goals in soils contaminated with toluene and xylene. *Environ Monit Assess* 185(10):8429-8438.
- Soulage C, Perrin D, Berenguer P, et al. 2004. Sub-chronic exposure to toluene at 40 ppm alters the monoamine biosynthesis rate in discrete brain areas. *Toxicology* 196(1-2):21-30.
- Spencer TR, Schur PM. 2008. The challenge of multiple chemical sensitivity. *J Environ Health* 70(10):24-27.
- SRI. 2010. Toluene. In: 2010 Directory of chemical producers United States. SRI Consulting, 908-909.
- Staples, CA, Werner AF, Hoogheem TJ. 1985. Assessment of priority pollutant concentrations in the United States using STORET database. *Environ Toxicol Chem* 4:131-142.
- State of California. 2005. Hazardous wastes from non-specific sources. Chapter 11, Article 4. State of California. <http://www.oal.ca.gov/ccr.htm>. April 24, 2014.
- Stengel B, Cenee S, Limasset JC, et al. 1998. Immunological and renal markers among photogravure printers exposed to toluene. *Scand J Work Environ Health* 24(4):276-284.
- *Strapkova A, Nosal'Ova G, Hanacek J. 1996. Effects of irritants on airways reactivity. *Cent Eur J Public Health* 4(Suppl):54-55.
- Stuart BJ, Bowlen GF, Kosson DS. 1991. Competitive sorption of benzene, toluene and the xylenes onto soil. *Environmental Progress* 10(2):104-109.

9. REFERENCES

- *Stumph MJ, Weir FW, Noall MW. 1985. Comparison of blood and brain toluene concentrations and circulating triglyceride levels resulting from acute and repeated exposures in rats. *Am Ind Hyg Assoc J* 46:244-250.
- Suitheimer C, Bost R, Sunshine I, eds. 1982. Volatiles by headspace chromatography. In: *Methodology for analytical technology. Volume II.* Boca Raton, FL: CRC Press, Inc., 1-9.
- Sulkowski WJ, Kowalska S, Matyja W, et al. 2002. Effects of occupational exposure to a mixture of solvents on the inner ear: A field study. *Int J Occup Med Environ Health* 15(3):247-256.
- Sullivan MJ, Conolly RB. 1988. Comparison of blood toluene levels after inhalation and oral administration. *Environ Res* 45:64-70.
- Suzuki T, Kashimura S, Umetsu K. 1983. Thinner abuse and aspermia. *Med Sci Law* 23(3):199-202.
- Svensson BG, Nise G, Englander V, et al. 1990. Deaths and tumours among rotogravure printers exposed to toluene. *Br J Ind Med* 47:372-379.
- Svensson BG, Nise G, Erfurth EM, et al. 1992a. Hormone status in occupational toluene exposure. *Am J Ind Med* 22:99-107.
- Svensson BG, Nise G, Erfurth EM, et al. 1992b. Neuroendocrine effects in printing workers exposed to toluene. *Br J Ind Med* 49:402-408.
- Svirbely JL, Dunn RC, von Oettingen WF. 1943. The acute toxicity of vapors of certain solvents containing appreciable amounts of benzene and toluene. *J Ind Hyg Toxicol* 25:366-373.
- Tahti H, Aaran RK, Vapaatalo H. 1983. An inhalation method for testing the toxicity of volatile compounds in small laboratory animals. A study on short-term and long-term toluene inhalation in rats. *Methods Find Exp Clin Pharmacol* 5(10):667-671.
- Tahti H, Karkkainen S, Pyykko K, et al. 1981. Chronic occupational exposure to toluene. *Int Arch Occup Environ Health* 48:61-69.
- *Takahashi S, Tanabe K, Maseda C, et al. 1988. Increased plasma free fatty acid and triglyceride levels after single administration of toluene in rabbits. *J Toxicol Environ Health* 1:87-95.
- Takeda S, Yamaai T, Kaneda Y, et al. 2013. Toluene exposure leads to a change in expression patterns of β defensins in the mouse tracheal epithelium. *J Toxicol Pathol* 26(1):35-40.
- Takeichi S, Yamada T, Shikata I. 1986. Acute toluene poisoning during painting. *Forensic Sci Int* 32:109-115.
- Takeuchi A, Kawai T, Zhang ZW, et al. 2002. Toluene, xylenes and xylene isomers in urine as biological indicators of low-level exposure to each solvent; a comparative study. *Int Arch Occup Environ Health* 75(6):387-393.
- Takeuchi Y, Hisanaga N. 1977. The neurotoxicity of toluene: EEG changes in rats exposed to various concentrations. *Br J Ind Med* 34:314-324.

9. REFERENCES

- *Takeuchi Y, Suzuki H. 1975. Change of convulsion threshold in the rat exposed to toluene. *Ind Health* 13:109-115.
- Takeuchi Y, Ono Y, Hisanaga N. 1981. An experimental study on the combined effects of *n*-hexane and toluene on the peripheral nerve of the rat. *Br J Ind Med* 38:14-19.
- Tan WP, Seow E. 1997. Case reports on acute toluene poisoning during parquet flooring. *Ann Acad Med Singapore* 26(1):138-140.
- Tanaka K, Maeda T, Kobayashi T, et al. 2003. A survey of urinary hippuric acid and subjective symptoms among occupational low toluene exposed workers. *Fukushima J Med Sci* 49(2):129-139. http://ir.fmu.ac.jp/dspace/bitstream/123456789/144/1/FksmJMedSci_49_p129.pdf. April 25, 2014.
- Tang HL, Chu KH, Cheuk A, et al. 2005. Renal tubular acidosis and severe hypophosphataemia due to toluene inhalation. *Hong Kong Med J* 11(1):50-53.
- Tap O, Solmaz S, Polat S, et al. 1996. The effect of toluene on the rat ovary: An ultrastructural study. *J Submicrosc Cytol Pathol* 28(4):553-558.
- Tardif R, Brodeur J, Plaa GL. 1989. Simultaneous high-performance liquid chromatographic analysis of hippuric acid and *ortho*-, *meta*-, and *para*-methylhippuric acids in urine. *J Anal Toxicol* 13:313-316.
- Tardif R, Droz PO, Charest-Tardif G, et al. 2002. Impact of human variability on the biological monitoring of exposure to toluene: I. Physiologically based toxicokinetic modelling. *Toxicol Lett* 134(1-3):155-163.
- Tardif R, Lapar S, Charest-Tardif G, et al. 1995. Physiologically-based pharmacokinetic modeling of a mixture of toluene and xylene in humans. *Risk Anal* 15(3):335-342.
- Tardif R, Lapare S, Krishnan K, et al. 1993. Physiologically based modeling of the toxicokinetic interaction between toluene and *m*-xylene in the rat. *Toxicol Appl Pharmacol* 120:266-273.
- Tardif R, Lapare S, Plaa GL, et al. 1991. Effect of simultaneous exposure to toluene and xylene on their respective biological exposure indices in humans. *Int Arch Occup Environ Health* 63:279-284.
- Tardif R, Plaa GL, Brodeur J. 1992. Influence of various mixtures of inhaled toluene and xylene on the biological monitoring of exposure to these solvents in rats. *Can J Physiol Pharmacol* 70:385-395.
- Tardif R, Truchon G, Brodeur J. 1998. Comparison of hippuric acid and *o*-cresol in urine and unchanged toluene in alveolar air for the biological monitoring of exposure to toluene in human volunteers. *Appl Occup Environ Hyg* 13(2):127-132.
- Tas U, Ekici F, Koc F, et al. 2013b. Acute cardiotoxic effects of high dose toluene: An experimental study. *Anadolu Kardiyol Derg* 13(1):3-8.
- Tas U, Ogeturk M, Kuloglu T, et al. 2013a. HSP70 immune reactivity and TUNEL positivity in the liver of toluene-inhaled and melatonin-treated rats. *Toxicol Ind Health* 29(6):514-522.
- Tas U, Ogeturk M, Meydan S, et al. 2011. Hepatotoxic activity of toluene inhalation and protective role of melatonin. *Toxicol Ind Health* 27(5):465-473.

9. REFERENCES

- Taskinen H, Anttila A, Lindbohm ML, et al. 1989. Spontaneous abortions and congenital malformations among the wives of men occupationally exposed to organic solvents. *Scand J Work Environ Health* 15:345-352.
- Tassaneeyakul W, Birkett DJ, Edwards JW, et al. 1996. Human cytochrome P450 isoform specificity in the regioselective metabolism of toluene and *o*-, *m*- and *p*-xylene. *J Pharmacol Exp Ther* 276(1):101-108.
- Taverner D, Harrison DJ, Bell GM. 1988. Acute renal failure due to interstitial nephritis induced by 'glue sniffing' with subsequent recovery. *Scott Med J* 33:246-247.
- Taylor JD, Evans HL. 1985. Effects of toluene inhalation on behavior and expired carbon dioxide in Macaque monkeys. *Toxicol Appl Pharmacol* 80:487-495.
- ten Berge WF, Zwart A, Appelman LM. 1986. Concentration-time mortality response relationship of irritant and systemically acting vapours and gases. *J Hazard Mater* 13(3):301-309.
- Tham R, Larsby B, Eriksson B, et al. 1982. Electronystagmographic findings in rats exposed to styrene or toluene. *Acta Otolaryngol* 93:107-112.
- *Tham R, Larsby B, Eriksson B, et al. 1990. The effect of toluene on the vestibulo- and opto-oculomotor system in rats, pretreated with GABAergic drugs. *Neurotoxicol Teratol* 12:307-311.
- Thetkathuek A, Jaidee W, Saowakhontha S, et al. 2015. Neuropsychological symptoms among workers exposed to toluene and xylene in two paint manufacturing factories in eastern Thailand. *Adv Prev Med* 2015:183728. 10.1155/2015/183728.
- Thibodeaux LJ, Hwang ST. 1982. Landfarming of petroleum wastes- modeling the air emission problem. *Environ Prog* 1(1):42-46.
- Thiel R, Chahoud I. 1997. Postnatal development and behaviour of Wistar rats after prenatal toluene exposure. *Arch Toxicol* 71(4):258-265.
- Thomas K, Colborn T. 1992. Organochlorine endocrine disruptors in human tissue. In: Colborn T, Clement C, eds. *Chemically induced alterations in sexual and functional development: The wildlife/human connection*. Princeton, NJ: Princeton Scientific Publishing, 365-394.
- Thomas KW, Pellizzari ED, Cooper SD. 1991. A canister-based method of collection and GC/MS analysis of volatile organic compounds in human breath. *J Anal Toxicol* 15:54-59.
- Thomas KW, Pellizzari ED, Raymer JH, et al. 1992. Kinetics of low-level volatile organic compounds in breath - I: Experimental design and data quality. *J Expo Anal Environ Epidemiol* 2(Suppl 2):45-66.
- Thrall KD, Woodstock AD. 2002. Evaluation of the dermal absorption of aqueous toluene in F344 rats using real-time breath analysis and physiologically based pharmacokinetic modeling. *J Toxicol Environ Health A* 65(24):2087-2100.
- Thrall KD, Gies RA, Muniz J, et al. 2002b. Route-of-entry and brain tissue partition coefficients for common superfund contaminants. *Journal Toxicol Environ Health Part A* 65(24):2075-2086.

9. REFERENCES

- Thrall KD, Weitz KK, Woodstock AD. 2002a. Use of real-time breath analysis and physiologically based pharmacokinetic modeling to evaluate dermal absorption of aqueous toluene in human volunteers. *Toxicol Sci* 68(2):280-287.
- Thummel KE, Kharasch ED, Podoll T, et al. 1993. Human liver microsomal enflurane defluorination catalyzed by cytochrome P-450 2E1. *Drug Metab Dispos* 21(2):350-357.
- Tillar R, Shafer TJ, Woodward JJ. 2002. Toluene inhibits voltage-sensitive calcium channels expressed in pheochromocytoma cells. *Neurochem Int* 41(6):391-397.
- *Toftgard R, Nilsen OG, Gustafsson JA. 1982. Dose dependent induction of rat liver microsomal cytochrome P-450 and microsomal enzymatic activities after inhalation of toluene and dichloromethane. *Acta Pharmacol Toxicol* 51:108-114.
- Tokunaga I, Gotohda T, Ishigami A, et al. 2003. Toluene inhalation induced 8-hydroxy-2'-deoxyguanosine formation as the peroxidative degeneration in rat organs. *Leg Med* 5(1):34-41.
- Tomaszycki ML, Aulerich KE, Bowen SE. 2013. Repeated toluene exposure increases c-Fos in catecholaminergic cells of the nucleus accumbens shell. *Neurotoxicol Teratol* 40:28-34.
- TRI15. 2016. TRI explorer: Providing access to EPA's Toxics Release Inventory data. Washington, DC: Office of Information Analysis and Access. Office of Environmental Information. U.S. Environmental Protection Agency. Toxics Release Inventory. <http://www.epa.gov/triexplorer/>. September 19, 2016.
- Truchon G, Tardif R, Brodeur J. 1999. *o*-Cresol: A good indicator of exposure to low levels of toluene. *Appl Occup Environ Hyg* 14(10):677-681.
- Tsai SY, Chen J-D, Chao WY, et al. 1997. Neurobehavioral effects of occupational exposure to low-level organic solvents among Taiwanese workers in paint factories. *Environ Res* 73:146-155.
- Tsao JH, Hu YH, How CK, et al. 2011. Atrioventricular conduction abnormality and hyperchloremic metabolic acidosis in toluene sniffing. *J Formos Med Assoc* 110(10):652-654.
- Tsuga H, Honma T. 2000. Effects of short-term toluene exposure on ligand binding to muscarinic acetylcholine receptors in the rat frontal cortex and hippocampus. *Neurotoxicol Teratol* 22(4):603-606.
- Tsuga H, Wang RS, Honma T. 1999. Effects of toluene on regulation of adenylyl cyclase by stimulation of G-protein-coupled receptors expressed in CHO cells. *Jpn J Pharmacol* 81(3):305-308.
- Tsukahara S, Nakajima D, Kuroda Y, et al. 2009. Effects of maternal toluene exposure on testosterone levels in fetal rats. *Toxicol Lett* 185(2):79-84.
- Tsuruta H. 1989. Skin absorption of organic solvent vapors in nude mice *in vivo*. *Ind Health* 27:37-47.
- Tsuruta H. 1996. Skin absorption of solvent mixtures: Effect of vehicles on skin absorption of toluene. *Ind Health* 34:369-378.
- Turkall RM, Skowronski GA, Abdel-Rahman MS. 1991. Differences in kinetics of pure and soil-adsorbed toluene in orally exposed male rats. *Arch Environ Contam Toxicol* 20:155-160.

9. REFERENCES

- Uaki H, Kawai T, Mizunuma K, et al. 1995. Dose-dependent suppression of toluene metabolism by isopropyl alcohol and methyl ethyl ketone after experimental exposure of rats. *Toxicol Lett* 81(2-3):229-234.
- Uchino A, Kato A, Yuzuriha T, et al. 2002. Comparison between patient characteristics and cranial MR findings in chronic thinner intoxication. *Eur Radiol* 12(6):1338-1341.
- Ukai H, Kawai T, Inoue O, et al. 2007. Comparative evaluation of biomarkers of occupational exposure to toluene. *Int Arch Occup Environ Health* 81(1):81-93.
- Ukai H, Watanabe T, Nakatsuka H, et al. 1993. Dose-dependent increase in subjective symptoms among toluene-exposed workers. *Environ Res* 60(2):274-289.
- *Ungvary G. 1985. The possible contribution of industrial chemicals (organic solvents) to the incidence of congenital defects caused by teratogenic drugs and consumer goods- an experimental study. In: Marois, M, ed. *Prevention of physical and mental congenital defects: Part B Epidemiology, early detection and therapy, and environmental factors*. New York, NY: Alan R. Liss, Inc., 295-300.
- Ungvary G, Tatrai E. 1985. On the embryotoxic effects of benzene and its alkyl derivatives in mice, rats and rabbits. *Arch Toxicol (Suppl)*8:425-430.
- Ungvary G, Tatrai E, Lorincz M, et al. 1983. Combined embryotoxic action of toluene, a widely used industrial chemical, and acetylsalicylic acid (aspirin). *Teratology* 27:261-269.
- Ungvary G, Tatrai E, Szeberenyi S, et al. 1982. Effect of toluene exposure on the liver under different experimental conditions. *Exp Mol Pathol* 36:347-360.
- U.S. DOE. 1991. Identification of certain RCRA wastes- the F-spent solvent, P, and U listings. U.S. Department of Energy, Office of Environmental Guidance. <http://homer.ornl.gov/sesa/environment/guidance/rcra/spent.pdf>. April 24, 2014.
- USGS. 2000. Occurrence of the gasoline oxygenate MTBE and BTEX compounds in urban stormwater in the United States, 1991-95. In: USGS water-resources investigations report 96-4145. United States Geological Survey.
- USGS. 2003. A national survey of methyl *tert*-butyl ether and other volatile organic compounds in drinking-water sources: Results of the random survey. U.S. Geological Survey, U.S. Department of the Interior, National Water-Quality Assessment Program.
- USGS. 2006. Volatile organic compounds in the nation's ground water and drinking-water supply wells. U.S. Geological Survey, U.S. Department of the Interior, National Water-Quality Assessment Program.
- USITC. 2013a. HTS-290230: Toluene (Methylbenzene). U.S. domestic exports. U.S. International Trade Commission. <http://dataweb.usitc.gov/scripts/REPORT.asp>. January 14, 2014.
- USITC. 2013b. HTS-2902300: Toluene. U.S. General imports. U.S. International Trade Commission. <http://dataweb.usitc.gov/scripts/REPORT.asp>. January 14, 2014.
- van Asperen J, Rijcken WR, Lammers JH. 2003. Application of physiologically based toxicokinetic modelling to study the impact of the exposure scenario on the toxicokinetics and the behavioural effects of toluene in rats. *Toxicol Lett* 138(1-2):51-62.

9. REFERENCES

- van Doorn R, Bos RP, Brouns RME, et al. 1980. Effect of toluene and xylenes on liver glutathione and their urinary excretion as mercapturic acids in the rat. *Arch Toxicol* 43:293-304.
- Venet T, Rumeau C, Campo P, et al. 2011. Neuronal circuits involved in the middle-ear acoustic reflex. *Toxicol Sci* 119(1):146-155.
- Verschueren K, ed. 1977. Handbook of environmental data on organic chemicals. 1st ed. New York, NY: Van Nostrand Reinhold Company, 592-596
- Vidrio H, Magos GA, Lorenzana-Jimenez M. 1986. Electrocardiographic effects of toluene in the anesthetized rat. *Arch Int Pharmacodyn* 279:121-129.
- Vieira I, Sonnier M, Cresteil T. 1996. Developmental expression of CYP2E1 in the human liver: Hypermethylation control of gene expression during the neonatal period. *Eur J Biochem* 238(2):476-483.
- Vincent R, Poirot P, Subra I et al. 1994. Occupational exposure to organic solvents during paint stripping and painting operations in the aeronautical industry. *Int Arch Occup Environ Health* 65(6):377-380.
- *Voigts A, Kaufman CE. 1983. Acidosis and other metabolic abnormalities associated with paint sniffing. *South Med J* 76:443-452.
- von Euler G, Fuxe K, Hansson T, et al. 1988b. Effects of chronic toluene exposure on central monoamine and peptide receptors and their interactions in the adult male rat. *Toxicology* 52:103-126.
- von Euler G, Fuxe K, Hansson T, et al. 1989. Persistent effects of neonatal toluene exposure on regional brain catecholamine levels and turnover in the adult male rat. *Toxicology* 54:1-16.
- von Euler G, Ogren SO, Eneroth P, et al. 1994. Persistent effects of 80 ppm toluene on dopamine-regulated locomotor activity and prolactin secretion in the male rat. *Neurotoxicology* 15(3):621-624.
- *von Euler G, Ogren SO, Fuxe K, et al. 1992. Ganglioside GM₁ counteracts the enhancing effects of subacute toluene exposure on apomorphine-induced locomotor activity. *Toxicol Lett* 63:165-169.
- von Euler G, Ogren SO, Li XM, et al. 1993. Persistent effects of subchronic toluene exposure on spatial learning and memory, dopamine-mediated locomotor activity and dopamine D₂ agonist binding in the rat. *Toxicology* 77:223-232.
- von Euler M, Pham TM, Hillefors M, et al. 2000. Inhalation of low concentrations of toluene induces persistent effects on a learning retention task, beam-walk performance, and cerebrocortical size in the rat. *Exp Neurol* 163(1):1-8.
- von Oettingen WF, Neal PA, Donahue DD, et al. 1942. The toxicity and potential dangers of toluene with special reference to its maximal permissible concentration. U.S. Public Health Service Publication Health Bull No. 279:50.
- Vrca A, Bozicevic D, Bozikov V, et al. 1997a. Brain stem evoked potentials and visual evoked potentials in relation to the length of occupational exposure to low levels of toluene. *Acta Medica Croatica* 51:215-219.

9. REFERENCES

- Vrca A, Bozicevic D, Karacic V, et al. 1995. Visual evoked potentials in individuals exposed to long-term low concentrations of toluene. *Arch Toxicol* 69(5):337-340.
- Vrca A, Karacic V, Bozicevic D, et al. 1997b. Cognitive evoked potentials VEP P300 in persons occupationally exposed to low concentrations of toluene. *Arh Hig Rada Toksikol* 48:277-285.
- Vrca A, Karacic V, Bozicevic D, et al. 1996. Brainstem auditory evoked potentials in individuals exposed to long-term low concentrations of toluene. *Am J Ind Med* 30:62-66.
- Vural M, Ogel K. 2006. Dilated cardiomyopathy associated with toluene abuse. *Cardiology* 105(3):158-161.
- *Wada H. 1997. Toluene and temporal discrimination behavior in the rat. *Neurotoxicol Teratol* 19(5):399-403.
- Walker BL, Cooper CD. 1992. Air pollution emission for medical waste incinerators. *J Air Waste Manage Assoc* 42:784-791.
- Walker JT, Bloom TF, Stern FB, et al. 1993. Mortality of workers employed in shoe manufacturing. *Scand J Work Environ Health* 19:89-95.
- *Wallen M, Holm S, Nordqvist MB. 1985. Coexposure to toluene and *p*-xylene in man: Uptake and elimination. *Br J Ind Med* 42:111-116.
- Wallen M, Naslund PH, Nordqvist MB. 1984. The effects of ethanol on the kinetics of toluene in man. *Toxicol Appl Pharmacol* 76:414-419.
- Walters SM. 1986. Cleanup of samples. In: Zweig G, Sherma J, eds. *Analytical methods for pesticides and plant growth regulators*. Volume 15. Chapter 3. New York, NY: Academic Press, 67-110.
- Wan C, Harrington PD, Davis DM. 1998. Trace analysis of BTEX compounds in water with a membrane interfaced ion mobility spectrometer. *Talanta* 46(5):1169-1179.
- *Wang DH, Ishii K, Seno E, et al. 1998. Reduced serum levels of ALT and GGT and high carbohydrate intake among workers exposed to toluene below the threshold limit values. *Ind Health* 36:14-19.
- Wang RS, Nakajima T. 1992. Effects of ethanol and phenobarbital treatments on the pharmacokinetics of toluene in rats. *Br J Ind Med* 49:104-112.
- Wang RS, Nakajima T, Park SS, et al. 1993. Monoclonal antibody-directed assessment of toluene induction of rat hepatic cytochrome P450 isozymes. *Biochem Pharmacol* 46(3):413-419.
- Wang RS, Nakajima T, Tsuruta H, et al. 1996. Effect of exposure to four organic solvents on hepatic cytochrome P450 isozymes in rat. *Chem Biol Interact* 99:239-252.
- Waniusiow D, Campo P, Cossec B, et al. 2008. Toluene-induced hearing loss in acivicin-treated rats. *Neurotoxicol Teratol* 30(3):154-160.
- Waniusiow D, Campo P, Venet T, et al. 2009. Toluene-induced hearing loss in the guinea pig. *Toxicol Sci* 111(2):362-371.

9. REFERENCES

- Warner R, Ritchie HE, Woodman P, et al. 2008. The effect of prenatal exposure to a repeat high dose of toluene in the fetal rat. *Reprod Toxicol* 26(3-4):267-272.
- Wei KS, Adelman AH. 1969. The photooxidation of toluene: The role of an excited charge transfer complex. *Tetrahedron Letters* 38:3297-3300.
- Weisel CP, Lawryk NJ, Lioy PJ. 1992. Exposure to emissions from gasoline within automobile cabins. *J Expos Anal Environ Epidemiol* 2(1):79-96.
- Weiss HS, O'Connell JF, Hakaim AG, et al. 1986. Inhibitory effect of toluene on tumor promotion in mouse skin. *Proc Soc Exp Biol Med* 181:199-204.
- Wen CP, Tsai SP, Weiss NS, et al. 1985. Long-term mortality study of oil refinery workers. IV. Exposure to the lubricating-dewaxing process. *J Natl Cancer Inst* 74(1):11-18.
- Weschler CJ, Nazaroff WW. 2014. Dermal uptake of organic vapors commonly found in indoor air. *Environ Sci Technol* 48(2):1230-1237. 10.1021/es405490a.
- West JR, Smith HW, Chasis H. 1948. Glomerular filtration rate, effective renal blood flow, and maximal tubular excretory capacity in infancy. *J Pediatr* 32:10-18.
- Wetmore BA, Struve MF, Gao P, et al. 2008. Genotoxicity of intermittent co-exposure to benzene and toluene in male CD-1 mice. *Chem Biol Interact* 173(3):166-178.
- Wheeler CW, Wrighton SA, Guenther TM. 1992. Detection of human lung cytochromes P450 that are immunochemically related to cytochrome P450IIE1 and cytochrome P450IIIA. *Biochem Pharmacol* 44(1):183-186.
- White KM, Sabatino JA, He M, et al. 2016. Toluene disruption of the functions of L1 cell adhesion molecule at concentrations associated with occupational exposures. *Pediatr Res* 10.1038/pr.2016.40.
- WHO. 2004. Toluene in drinking water. Background document for development of WHO guidelines for drinking-water quality. Geneva, Switzerland: World Health Organization.
- WHO. 2010. Guidelines for indoor air quality: Selected pollutants. Geneva, Switzerland: World Health Organization. http://www.euro.who.int/__data/assets/pdf_file/0009/128169/e94535.pdf. January 08, 2014.
- WHO. 2011. Guidelines for drinking-water quality. 4th ed. Geneva, Switzerland: World Health Organization. http://www.who.int/water_sanitation_health/publications/2011/dwq_guidelines/en/index.html. January 08, 2014.
- Wiaderna D, Tomas T. 2002. Assessment of long-term effects of exposure to toluene based on the analysis of selected behavioral responses with particular reference to the ability to trigger behavioral hypersensitivity in rats. *Int J Occup Med Environ Health* 15(3):239-245.
- Widdowson EM, Dickerson JWT. 1964. Chemical composition of the body. In: Comar CL, Bronner F, eds. *Mineral metabolism: An advanced treatise. Volume II: The elements Part A.* New York, NY: Academic Press, 1-247.

9. REFERENCES

- Wiebelt H, Becker N. 1999. Mortality in a cohort of toluene exposed employees (rotogravure printing plant workers). *J Occup Environ Med* 41(12):1134-1139.
- Wilcosky TC, Checkoway H, Marshall EG, et al. 1984. Cancer mortality and solvent exposures in the rubber industry. *Am Ind Hyg Assoc J* 45(12):809-811.
- Wiley JL, Bale AS, Balster RL. 2003. Evaluation of toluene dependence and cross-sensitization to diazepam. *Life Sci* 72(26):3023-3033.
- Wilkins-Haug L, Gabow P. 1991a. Chronic glue and paint sniffing during pregnancy: A population at risk for fetal and maternal morbidity [abstract]. *Am J Obstet Gynecol* 164(1):283.
- *Wilkins-Haug L, Gabow PA. 1991b. Toluene abuse during pregnancy: Obstetric complications and perinatal outcomes. *Obstet Gynecol* 77(4):504-509.
- Williams JM, Stafford D, Steketee JD. 2005. Effects of repeated inhalation of toluene on ionotropic GABA A and glutamate receptor subunit levels in rat brain. *Neurochem Int* 46(1):1-10.
- Wilson, JT, Enfield CG, Dunlap WJ, et al. 1981. Transport and fate of selected organic pollutants in a sandy soil. *J Environ Quality* 10(4):501-506.
- Wilson RH. 1943. Toluene poisoning. *JAMA* 123:1106-1108.
- Winchester RV, Madjar VM. 1986. Solvent effects on workers in the paint, adhesive and printing industries. *Ann Occup Hyg* 30(3):307-317.
- Winderl C, Schaefer S, Lueders T. 2007. Detection of anaerobic toluene and hydrocarbon degraders in contaminated aquifers using benzylsuccinate synthase (bssA) genes as a functional marker. *Environ Microbiol* 9(4):1035-1046.
- Win-Shwe TT, Fujimaki H. 2012. Acute administration of toluene affects memory retention in novel object recognition test and memory function-related gene expression in mice. *J Appl Toxicol* 32(4):300-304.
- Win-Shwe TT, Kageyama S, Tsukahara S, et al. 2010c. Effect of D-cycloserine on spatial learning performance and memory function-related gene expression in mice following toluene exposure. *J UOEH* 32(2):127-140.
- Win-Shwe TT, Kunugita N, Nakajima D, et al. 2012a. Developmental stage-specific changes in immunological biomarkers in male C3H/HeN mice after early life toluene exposure. *Toxicol Lett* 208(2):133-141.
- Win-Shwe TT, Kunugita N, Yoshida Y, et al. 2011. Role of hippocampal TLR4 in neurotoxicity in mice following toluene exposure. *Neurotoxicol Teratol* 33(5):598-602.
- Win-Shwe TT, Kunugita N, Yoshida Y, et al. 2012b. Differential mRNA expression of neuroimmune markers in the hippocampus of infant mice following toluene exposure during brain developmental period. *J Appl Toxicol* 32(2):126-134.
- Win-Shwe TT, Mitsushima D, Nakajima D, et al. 2007b. Toluene induces rapid and reversible rise of hippocampal glutamate and taurine neurotransmitter levels in mice. *Toxicol Lett* 168(1):75-82.

9. REFERENCES

- Win-Shwe TT, Nakajima D, Fujimaki H. 2010d. Can T-cell deficiency affect spatial learning ability following toluene exposure? *Neuroimmunomodulation* 17(2):132-134.
- Win-Shwe TT, Tsukahara S, Yamamoto S, et al. 2010a. Up-regulation of neurotrophin-related gene expression in mouse hippocampus following low-level toluene exposure. *Neurotoxicology* 31(1):85-93.
- Win-Shwe TT, Yamamoto S, Nakajima D, et al. 2007a. Modulation of neurological related allergic reaction in mice exposed to low-level toluene. *Toxicol Appl Pharmacol* 222(1):17-24.
- Win-Shwe TT, Yoshida Y, Kunugita N, et al. 2010b. Does early life toluene exposure alter the expression of NMDA receptor subunits and signal transduction pathway in infant mouse hippocampus? *Neurotoxicology* 31(6):647-653.
- Withey RJ, Hall JW. 1975. The joint toxic action of perchloroethylene with benzene or toluene in rats. *Toxicology* 4:5-15.
- *Woiwode W, Drysch K. 1981. Experimental exposure to toluene: Further consideration of cresol formation in man. *Br J Ind Med* 38:194-197.
- Wolf MA, Rowe VK, McCollister DD, et al. 1956. Toxicological studies of certain alkylated benzenes and benzene. *Arch Ind Health* 14:387-398.
- Won YL, Ko Y, Heo KH, et al. 2011. The effects of long-term, low-level exposure to monocyclic aromatic hydrocarbons on worker's insulin resistance. *Saf Health Work* 2(4):365-374.
- Wood RW, Colotla VA. 1990. Biphasic changes in mouse motor activity during exposure to toluene. *Fundam Appl Toxicol* 14:6-14.
- Wood RW, Cox C. 1995. A repeated measures approach to the detection of the acute behavioral effects of toluene at low concentrations. *Fundam Appl Toxicol* 25(2):293-301.
- Wood RW, Rees DC, Laties VG. 1983. Behavioral effects of toluene are modulated by stimulus control. *Toxicol Appl Pharmacol* 68:462-472.
- Wu M, Shaffer KM, Pancrazio JJ, et al. 2002. Toluene inhibits muscarinic receptor-mediated cytosolic Ca²⁺ responses in neural precursor cells. *Neurotoxicology* 23(1):61-68.
- Yadav JS, Reddy CA. 1993. Degradation of benzene, toluene, ethylbenzene, and xylenes (BTEX) by the lignin-degrading basidiomycete *Phanerochaete chrysosporium*. *Appl Environ Microbiol* 59(3):756-762.
- Yamaguchi H, Kidachi Y, Ryoyama K. 2002. Toluene at environmentally relevant low levels disrupts differentiation of astrocyte precursor cells. *Arch Environ Health* 57(3):232-238.
- Yamamoto S, Win-Shwe TT, Yoshida Y, et al. 2009. Suppression of Th1- and Th2-type immune responses in infant mouse spleen after prenatal and postnatal exposure to low-level toluene and peptidoglycan. *Inhal Toxicol* 21(9):793-802.
- *Yamamoto S, Yoshimura N, Mori H, et al. 1992. Neurogenic bladder caused by toluene abuse. *Acta Urol Jpn* 38:459-462.

9. REFERENCES

- Yamanouchi N, Okada S, Kodama K, et al. 1995. White matter changes caused by chronic solvent abuse. *Am J Neuroradiol* 16:1643-1649.
- Yang M, Kim S-H, Kim J-C, et al. 2010. Toluene induces depression-like behaviors in adult mice. *Toxicol Res* 26(4):315-320.
- *Yelian FD, Dukelow WR. 1992. Cellular toxicity of toluene on mouse gamete cells and preimplantation embryos. *Arch Toxicol* 66:443-445.
- Yilmaz B, Canpolat S, Sandal S, et al. 2006. Paint thinner exposure inhibits testosterone synthesis and secretion in a reversible manner in the rat. *Reprod Toxicol* 22(4):791-796.
- Yin S, Li G, Hu Y, et al. 1987. Symptoms and signs of workers exposed to benzene, toluene or the combination. *Ind Health* 25:113-130.
- You Y, Shim J, Cho CH, et al. 2013. Biodegradation of BTEX mixture by *Pseudomonas putida* YNS1 isolated from oil-contaminated soil. *J Basic Microbiol* 53(5):469-475.
- Young T.J. 1987. Inhalant use among American Indian youth. *Child Psychiatry Hum Dev* 18(1):36-46.
- Yu ITS, Lee NL, Zhang XH, et al. 2004. Occupational exposure to mixtures of organic solvents increases the risk of neurological symptoms among printing workers in Hong Kong. *J Occup Environ Med* 46(4):323-330.
- Yu X, Johanson G, Ichihara G, et al. 1998. Physiologically based pharmacokinetic modeling of metabolic interactions between *n*-hexane and toluene in humans. *J Occup Health* 40:293-301.
- Yucesoy B, Yucel A, Erdem O, et al. 1999. Effects of occupational chronic co-exposure to *n*-hexane, toluene, and methyl ethyl ketone on NK cell activity and some immunoregulatory cytokine levels in shoe workers. *Hum Exp Toxicol* 18(9):541-546.
- Zahlsen K, Eide I, Nilsen AM, et al. 1992. Inhalation kinetics of C6 to C10 aliphatic, aromatic, and naphthenic hydrocarbons in rat after repeated exposures. *Pharmacol Toxicol* 71:144-149.
- Zamyslowska-Szmytko E, Politanski P, Sliwinska-Kowalska M. 2011. Balance system assessment in workers exposed to organic solvent mixture. *J Occup Environ Med* 53(4):441-447.
- Zarani F, Papazafiri P, Kappas A. 1999. Induction of micronuclei in human lymphocytes by organic solvents *in vitro*. *J Environ Pathol Toxicol Oncol* 18(1):21-28.
- Zavalic M, Mandic Z, Turk R, et al. 1998a. Quantitative assessment of color vision impairment in workers exposed to toluene. *Am J Ind Med* 33(3):297-304.
- Zavalic M, Mandic Z, Turk R, et al. 1998b. Assessment of colour vision impairment in male workers exposed to toluene generally above occupational exposure limits. *Occup Med* 48(3):175-180.
- Zavalic M, Mandic Z, Turk R, et al. 1998c. Qualitative color vision impairment in toluene-exposed workers. *Int Arch Occup Environ Health* 71:194-200.
- Zhvania MG, Chilachava LR, Japaridze NJ, et al. 2012. Immediate and persisting effect of toluene chronic exposure on hippocampal cell loss in adolescent and adult rats. *Brain Res Bull* 87(2-3):187-192.

9. REFERENCES

Ziegler EE, Edwards BB, Jensen RL, et al. 1978. Absorption and retention of lead by infants. *Pediatr Res* 12(1):29-34.

Zupanic M, Demes P, Seeber A. 2002. Psychomotor performance and subjective symptoms at low level toluene exposure. *Occup Environ Med* 59(4):263-268.