

9. REFERENCES

+*Abdel-Rahman MS, Couri D, Bull RJ. 1982. Metabolism and pharmacokinetics of alternate drinking water disinfectants. *Environ Health Perspect* 46:19-23.

+*Abdel-Rahman MS, Sub DH, Bull RJ. 1984. Pharmacodynamics and toxicity of chlorine in drinking water in the rat. *J Appl Toxicol* 4(2):82-86.

*Abdel-Rahman MS, Waldron DM, Bull RJ. 1983. A comparative kinetics study of monochloramine and hypochlorous acid in the rat. *J Appl Toxicol* 3:175-179.

Abhyankar A, Bhambure N, Kamath NN, et al. 1989. Six month follow-up of fourteen victims with short-term exposure to chlorine gas. *J Soc Occup Med* 39(4):131-132.

ACGIH. 2001. Chlorine. Documentation of the threshold limit values for chemical substances. Cincinnati, OH: American Conference of Governmental Industrial Hygienist.

*ACGIH. 2006. Chlorine. Threshold limit values for chemical substances and physical agents and biological exposure indices. Cincinnati, OH: American Conference of Governmental Industrial Hygienists.

*Adelson L, Kaufman J. 1971. Fatal chlorine poisoning: Report of two cases with clinicopathologic correlation. *Am J Clin Pathol* 56(4):430-442.

*Adinolfi M. 1985. The development of the human blood-CSF-brain barrier. *Dev Med Child Neurol* 27(4):532-537.

*Adlercreutz H. 1995. Phytoestrogens: Epidemiology and a possible role in cancer protection. *Environ Health Perspect Suppl* 103(7):103-112.

*Agabiti N, Ancona C, Forastiere F, et al. 2001. Short term respiratory effects of acute exposure to chlorine due to a swimming pool accident. *Occup Environ Med* 58(6):399-404.

*Agency for Toxic Substances and Disease Registry. 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.

*Agency for Toxic Substances and Disease Registry. 1990a. Biomarkers of organ damage or dysfunction for the renal, hepatobiliary, and immune systems. Subcommittee on Biomarkers of Organ Damage and Dysfunction. Atlanta, GA: Agency for Toxic Substances and Disease Registry.

Agency for Toxic Substances and Disease Registry. 1990b. Health assessment for standard chlorine of Delaware; Delaware City, Delaware. CERCLIS No. DED041212473. Atlanta, GA: Agency for Toxic Substances and Disease Registry. PB90144379.

* Cited in text

+ Cited in supplemental document

9. REFERENCES

- *Agency for Toxic Substances and Disease Registry. 1998. Alberton chlorine spill; Alberton, Montana. Phase 1 study report. Atlanta, GA: Agency for Toxic Substances and Disease Registry. PB99115883.
- *Agency for Toxic Substances and Disease Registry. 2005. Notice of the revised priority list of hazardous substances that will be the subject of toxicological profiles. Fed Regist 70:72840-72842.
- AIChE. 1987. Chlorine. Cl2. Physical and thermodynamic properties of pure chemicals. American Institute of Chemical Engineers, Design Institute for Physical Property Data. Philadelphia, PA: Taylor and Francis.
- *AIHA. 2004. Chlorine. Emergency Response Planning Guidelines (ERPG). Fairfax, VA: American Industrial Hygiene Association.
- *Alarie Y. 1973. Sensory irritation by airborne chemicals. CRC Crit Rev Toxicol 2:299-363.
- +*Alarie Y. 1981. Toxicological evaluation of airborne chemical irritants and allergens using respiratory reflex reactions. In: Leong BKJ, ed. Proceedings of the inhalation toxicology and technology symposium. Ann Arbor, MI: Ann Arbor Science Publishers, Inc., 207-231.
- Alioglu Z, Soylu C, Kalyoncu N, et al. 1998. Electroencephalographic and neurological findings after the inhalation of sodium hypochlorite and hydrochloric acid. Clin Electroencephalogr 29(1):VI.
- Allan PF, Abouchahine S, Harvis L, et al. 2006. Progressive vocal cord dysfunction subsequent to a chlorine gas exposure. J Voice 20(2):291-296.
- Alouini Z, Seux R. 1987. Kinetics and mechanisms of hypochlorite oxidation of alpha-amino acids at the time of water disinfection. Water Res 21(3):335-343.
- *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.
- Amer MMB. 2006. Mathematical model of chloride concentration in human blood. J Med Eng Technol 30(1):25-30.
- *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.
- Andiran F, Tanyel FC, Ayhan A, et al. 1999. Systematic harmful affects of ingestion of household bleaches. Drug Chem Toxicol 22(3):545-553.
- +*Anglen DA. 1981. Sensory response of human subjects to chlorine in air. Ann Arbor, MI: University of Michigan.
- *APHA. 1998a. Method 4500-Cl. Chlorine (residual). Standard methods for the examination of waste and wastewater. 20th ed. Washington, DC: American Public Health Association, 4-53 to 4-66.

9. REFERENCES

- *APHA. 1998b. Method 4500 Cl⁻. Chloride. Standard methods for the examination of waste and wastewater. 20th ed. Washington, DC: American Public Health Association, 4-66 to 4-73.
- Aslan S, Kandis H, Akgun M, et al. 2006. The effect of nebulized NaHCO₃ treatment on "RADS" due to chlorine gas inhalation. *Inhal Toxicol* 18(11):895-900.
- Auerbach V, Hodnett C. 1990. Neuropsychological follow-up in a case of severe chlorine gas poisoning. *Neuropsychology* 4:105-112.
- Austin AK. 2005. Preventing chlorine gas accidents. *Occup Health Saf* 74(5):48, 50, 52.
<http://www.stevenspublishing.com/stevens/ohspub.nsf/d3d5b4f938b22b6e8625670c006dbc58/83f3fa628600e1c886256ff200440b63?OpenDocument>. March 20, 2007.
- Baader EW. 1952. [Anhydrous chlorine poisoning; catastrophe of Walsum]. *Med Deporte Trab* 17(117):5252-5259. (Spanish)
- Baconnier PF, Marey C, Menaouar A. 1997. Simulation of pulmonary damages induced by inhaled Cl₂ on the bronchial tree. *Acta Biotheor* 45(3-4):237-250.
- *Barbone F, Delzell E, Austin H, et al. 1992. A case-control study of lung cancer at a dye and resin manufacturing plant. *Am J Ind Med* 22(6):835-849.
- *Barnes DG, Dourson M. 1988. Reference dose (RfD): Description and use in health risk assessments. *Regul Toxicol Pharmacol* 8(4):471-486.
- *Barregård L, Sallsten G, Jarvholm B. 1990. Mortality and cancer incidence in chloralkali workers exposed to inorganic mercury. *Br J Ind Med* 47(2):99-104.
- Barrow CS, Dodd DE. 1979. Ammonia production in inhalation chambers and its relevance to chlorine inhalation studies. *Toxicol Appl Pharmacol* 49(1):89-95.
- +*Barrow CS, Steinhagen WH. 1982. Sensory irritation tolerance development to chlorine in F-344 rats following repeated inhalation. *Toxicol Appl Pharmacol* 65(3):383-389.
- +*Barrow CS, Alarie Y, Warrick JC, et al. 1977. Comparison of the sensory irritation response in mice to chlorine and hydrogen chloride. *Arch Environ Health* 32(2):68-76.
- Barrow CS, Kociba RJ, Rampy LW. 1978. A thirty-day inhalation toxicity study of chlorine in Fischer 344 rats. *Toxicol Appl Pharmacol* 45(1):290.
- +*Barrow CS, Kociba RJ, Rampy LW, et al. 1979. An inhalation toxicity study of chlorine in Fischer 344 rats following 30 days of exposure. *Toxicol Appl Pharmacol* 49:77-88.
- +*Barrow RE, Smith RG. 1975. Chlorine-induced pulmonary function changes in rabbits. *Am Ind Hyg Assoc J* 36(5):398-403.
- *Baxter PJ, Davies PC, Murray V. 1989. Medical planning for toxic releases into the community: The example of chlorine gas. (Comment in: *Br J Ind Med* 46(10):752). *Br J Ind Med* 46(4):277-285.
- *Beach FX, Jones ES, Scarrow GD. 1969. Respiratory effects of chlorine gas. *Br J Ind Med* 26(3):231-236.

9. REFERENCES

- Benjamin E, Pickles J. 1997. Chlorine-induced anosmia. A case presentation. *J Laryngol Otol* 111(11):1075-1076.
- *Berger GS, ed. 1994. Epidemiology of endometriosis. In: *Endometriosis: Advanced management and surgical techniques*. New York, NY: Springer-Verlag, 3-7.
- *Berghoff RS. 1919. The more common gases; their effect on the respiratory tract. *Arch Intern Med* 24:678-684.
- *Bhérier L, Cushman R, Courteau JP, et al. 1994. Survey of construction workers repeatedly exposed to chlorine over a three to six month period in a pulp mill: II. Follow-up of affected workers by questionnaire, spirometry, and assessment of bronchial responsiveness 18 to 24 months after exposure ended. *Occup Environ Med* 51(4):225-228.
- Bingham E, Cohn B, Powell CH, eds. 2001. *Patty's toxicology*. Vol. 3. New York, NY: John Wiley & Sons, Inc., 765, 768-775, 820-825.
- Bjorkman E, Stromberg B. 1997. Release of chlorine from biomass at gasification conditions. Stockholm: Swedish National Board for Industrial and Technical Development. DE97769025.
- Blanc PD, Galbo M, Hiatt P, et al. 1993. Symptoms, lung function, and airway responsiveness following irritant inhalation. *Chest* 103(6):1699-1705.
- *Bommaraju TV, Luke B, O'Brien TF, et al. 2004. Chlorine. In: *Kirk-Othmer encyclopedia of chemical technology*. Volume 6. John Wiley & Sons, Inc. <http://www.mrw.interscience.wiley.com/emrw/9780471238966/kirk/article/chlocurl.a01/current/pdf>. March 29, 2007.
- *Bond GG, Cook RR, Wight PC, et al. 1983. A case-control study of brain tumor mortality at a Texas chemical plant. *J Occup Med* 25:377-386.
- *Bond GG, Flores GH, Shellenberger RJ, et al. 1986. Nested case-control study of lung cancer among chemical workers. *Am J Epidemiol* 124(1):53-66.
- *Bond GG, Shellenberger RJ, Flores GH, et al. 1985. A case-control study of renal cancer mortality at a Texas chemical plant. *Am J Ind Med* 7:123-139.
- *Bonetto G, Corradi M, Carraro S, et al. 2006. Longitudinal monitoring of lung injury in children after acute chlorine exposure in a swimming pool. *Am J Respir Crit Care Med* 174(5):545-549.
- *Bosse GM. 1994. Nebulized sodium bicarbonate in the treatment of chlorine gas inhalation. *J Toxicol Clin Toxicol* 32(3):233-241.
- Brockhoff L, Petersen HJS, Haastrup P. 1992. A consequence model for chlorine and ammonia based on a fatality index approach. *J Hazard Mater* 29:405-425.
- *Brooks SM, Weiss MA, Bernstein IL. 1985. Reactive airways dysfunction syndrome. Case reports of persistent airways hyperactivity following high-level irritant exposures. *J Occup Med* 27(7):473-476.

9. REFERENCES

- +*Buckley LA, Jiang XZ, James RA, et al. 1984. Respiratory tract lesions induced by sensory irritants at the RD₅₀ concentration. *Toxicol Appl Pharmacol* 74:417-429.
- Bush ML, Zhang W, Ben-Jebria A, et al. 2001. Longitudinal distribution of ozone and chlorine in the human respiratory tract: Simulation of nasal and oral breathing with the single-path diffusion model. *Toxicol Appl Pharmacol* 173(3):137-145.
- *California Environmental Protection Agency. 2002. Chlorine emissions from activated sea-salt aerosols and their potential impact on ozone. Sacramento, CA: California Environmental Protection Agency. PB2003100841. <http://www.arb.ca.gov/research/apr/past/00324.pdf>. May 17, 2007.
- Callaway JJ, Yeoman MA, Jenkins DE, et al. 1974. Chlorine gas inhalation discriminative function testing. *Am Rev Respir Dis* 109(6):721-722.
- Callender TJ, Mitran E. 2000. Neurotoxic syndrome following accidental chlorine exposure. *Neurotoxicology* 21(5):885.
- Cap AP. 1996. The chlorine controversy. *Int Arch Occup Environ Health* 68(6):455-458.
- Capodaglio E, Pezzagno G, Bobbio GC, et al. 1970. [Respiratory function test in workers employed in electrolytic production of chlorine and sodium.] *Med Lav* 60(3):192-202. (Spanish)
- +*Carlton BD, Bartlett P, Basaran A, et al. 1986. Reproductive effects of alternative disinfectants. *Environ Health Perspect* 69:237-241.
- *CDC. 1991. Chlorine gas toxicity from mixture of bleach with other cleaning products — California (Erratum in: *MMWR Morb Mortal Wkly Rep* 40(47):819). *MMWR Morb Mortal Wkly Rep* 40(36):619-629.
- *CDC. 2005. Public health consequences from hazardous substances acutely released during rail transit—South Carolina, 2005; selected states, 1999-2004. *MMWR Morb Mortal Wkly Rep* 54(3):64-67.
- Centerwall BS, Armstrong CW, Funkhouser LS, et al. 1986. Erosion of dental enamel among competitive swimmers at a gas-chlorinated swimming pool. *Am J Epidemiol* 123(4):641-647.
- *Chang CT, Liu TH, Jeng FT. 2004. Atmospheric concentrations of the Cl atom, ClO radical, and HO radical in the coastal marine boundary layer. *Environ Res* 94(1):67-74.
- *Chang JCF, Barrow CS. 1984. Sensory irritation tolerance and cross-tolerance in F-344 rats exposed to chlorine or formaldehyde gas. *Toxicol Appl Pharmacol* 76(2):319-327.
- +Chang JH, Vogt CR, Sun AY. 1981. Effects of acute administration of chlorinated water on liver lipids. *Lipids* 16(5):336-340.
- Charan NB, Lakshminarayan S, Myers GC, et al. 1985. Effects of accidental chlorine inhalation on pulmonary function. *West J Med* 143(3):333-336.
- *Chasis H, Zapp JA, Bannon JH, et al. 1947. Chlorine accident in Brooklyn. *Occup Med (Lond)* 4:152-170.

9. REFERENCES

*Chester EH, Gillespie DG, Krause FD. 1969. The prevalence of chronic obstructive pulmonary disease in chlorine gas workers. *Am Rev Respir Dis* 99:365-373.

*Chester EH, Kaimal J, Payne CB, et al. 1977. Pulmonary injury following exposure to chlorine gas. Possible beneficial effects of steroid treatment. *Chest* 72(2):247-250.

Clark RM, Smalley G, Goodrich JA, et al. 1994. Managing water quality in distribution systems: Simulating TTHM and chlorine residual propagation. *Aqua* 43(4):182-191. EPA600J94429. PB95122636.

*Clewell HJ, Andersen ME. 1985. Risk assessment extrapolations and physiological modeling. *Toxicol Ind Health* 1(4):111-131.

*CMR. 1977. Chemical profile: Chlorine. *Chem Market Rep*. June 27, 1977.

*CMR. 1980. Chemical profile: Chlorine. *Chem Market Rep*. April 14, 1980.

*CMR. 1989. Chemical profile: Chlorine. *Chem Market Rep*. June 12, 1989.

*CMR. 1992. Chemical profile: Chlorine. *Chem Market Rep*. June 01, 1992.

*CMR. 1995. Chemical profile: Chemical. *Chem Market Rep*. June 12, 1995.

*CMR. 2000. Chemical profile: Chlorine. *Chem Market Rep*. September 04, 2000.

*CMR. 2003. Chemical profile: Chlorine. *Chem Market Rep*. June 16, 2003.

*CMR. 2006. Chemical profile: Chlorine. *Chem Market Rep*. May 21, 2006.

Cobaugh D. 2002. Management of chlorine gas inhalation. *Pharm Pract News* 29:44.

Cohen GM. 1977. The influence of cations on chlorine toxicity. *Bull Environ Contam Toxicol* 18(2):131-137.

Colardyn F, Van Der Straeten M, Tasson J, et al. 1976. Acute chlorine gas intoxication. *Acta Clin Belg* 31(2):70-77.

Collins JF, Alexeeff GV, Lewis DC, et al. 2004. Development of acute inhalation reference exposure levels (RELs) to protect the public from predictable excursions of airborne toxicants. *J Appl Toxicol* 24:155-166.

*Compton JAF. 1987. Chlorine. In: *Military chemical and biological agents. Chemical and toxicological properties*. Caldwell, NJ: Telford Press, 113-118.

Cordasco EM, Gregory R, Popovici M, et al. 1977. The health effects of halogens in air pollution. *Occup Health Saf* 46(1):36-38.

*Costero C, Falcón Escobedo R. 1983. [Gas pneumopathy. Chlorine poisoning and the participation of oxygen in the pathological changes.] *Salud Publica Mex* 25(3):265-272. (Spanish)

9. REFERENCES

- *Cotton FA, Wilkinson G, Murillo CA, et al., eds. 1999. Advanced inorganic chemistry. New York, NY: John Wiley & Sons, Inc., 550, 564, 565.
- *Courteau JP, Cushman R, Bouchard F, et al. 1994. Survey of construction workers repeatedly exposed to chlorine over a three to six month period in a pulpmill. I. Exposure and symptomatology. *Occup Environ Med* 51(4):219-224.
- Cralley LV. 1942. The effect of irritant gases upon the rate of ciliary activity. *J Ind Hyg Toxicol* 24:193-198.
- +*Cunningham HM. 1980. Effect of sodium hypochlorite on the growth of rats and guinea pigs. *Am J Vet Res* 41(2):295-297.
- *Curlin LC, Bommaraju TV, Hansson CB. 1991. Alkali and chlorine products. In: Kroschwitz JI, Howe-Grant M, eds. *Kirk-Othmer encyclopedia of chemical technology*. Vol. 1. New York, NY: John Wiley & Sons, Inc., 938-1025.
- +*D'Alessandro A, Kuschner W, Wong H, et al. 1996. Exaggerated responses to chlorine inhalation among persons with nonspecific airway hyperreactivity. *Chest* 109(2):331-337.
- +*Daniel FB, Condie LW, Robinson M, et al. 1990. Comparative subchronic toxicity studies of three disinfectants. *J Am Water Works Assoc* 82:61-69.
- +*Daniel FB, Ringhand HP, Robinson M, et al. 1991. Comparative subchronic toxicity of chlorine and monochloramine in the B6C3F1 mouse. *J Am Water Works Assoc* 83(11):68-75.
- *Das TK. 2002. Disinfection. In: *Kirk-Othmer encyclopedia of chemical toxicology*. Vol. 8. New York, NY: John Wiley & Sons, Inc., 605-672.
<http://www.mrw.interscience.wiley.com/emrw/9780471238966/kirk/article/disibloc.a01/current/pdf>.
March 28, 2007.
- *Decker WJ, Koch HF. 1978. Chlorine poisoning at the swimming pool. An overlooked hazard. *Clin Toxicol* 13(3):377-381.
- Demeter SL, Cordasco EW. 1992. Reactive airway disease after chlorine gas exposure. (Comment on: *Chest* 100(3):855-856). *Chest* 102(3):984.
- Demnati R, Fraser R, Ghezzi H, et al. 1998a. Time-course of functional and pathological changes after a single high acute inhalation of chlorine in rats. *Eur Respir J* 11(4):922-928.
- Demnati R, Fraser R, Martin JG, et al. 1998b. Effects of dexamethasone on functional and pathological changes in rat bronchi caused by high acute exposure to chlorine. *Toxicol Sci* 45(2):242-246.
- +*Demnati R, Fraser R, Plaa G, et al. 1995. Histopathological effects of acute exposure to chlorine gas on Sprague-Dawley rat lungs. *J Environ Pathol Toxicol Oncol* 14(1):15-19.
- Deschamps D, Soler P, Rosenberg N, et al. 1994. Persistent asthma after inhalation of a mixture of sodium hypochlorite and hydrochloric acid. *Chest* 105(6):1895-1896.
- *Deutsch ZG. 1947. Alkali and chlorine industries. In: Kirk RE, Othmer DF, eds. *Encyclopedia of chemical technology*. Vol. 1. New York, NY: The Interscience Encyclopedia, Inc., 358-430.

9. REFERENCES

- *Deutsch ZG. 1963. Alkali and chlorine industries. In: Standen A, ed. Kirk-Othmer encyclopedia of chemical technology. Vol. 1. New York, NY: Interscience Publishers, 668-758.
- Deutsch ZG, Brumbaugh CC, Rockwell FH. 1963. Alkali and chlorine industries. In: Kirk-Othmer encyclopedia of chemical technology. Vol. 1. John Wiley & Sons, Inc., 668-758.
- Dewhirst F. 1981. Voluntary chlorine inhalation. *Br Med J* 282(6263):565-566.
- Diack C, Bois FY. 2005. Pharmacokinetic-pharmacodynamic models for categorical toxicity data. *Regul Toxicol Pharmacol* 41(1):55-65.
- Dilks LS, Matzenbacher DL. 2003. Residual neuropsychological sequelae of chlorine gas exposure. [Abstract]. *Neurobehav Toxicol Teratol* 25(3):391.
- *DOA. 1933. Chlorine. The residual effects of warfare gases. Washington, DC: U.S. Department of Army, 1-41.
- +*Dodd DE, Bus JS, Barrow CS. 1980. Lung sulfhydryl changes in rats following chlorine inhalation. *Toxicol Appl Pharmacol* 52(2):199-208.
- *DOE. 2005. The Savannah River National Laboratory's response to the Graniteville, SC train accident. Washington, DC: U.S. Department of Energy. WSRC-MS-2005-00612. DE2006881477.
- Domalski ES, Churney KL, Ledford AE, et al. 1986. Monitoring the fate of chlorine from MSW (municipal solid waste) sampling through combustion. Part 1. Analysis of the waste stream for chlorine. *Chemosphere* 15(9-12):1339-1354.
- *Donnelly SC, FitzGerald MX. 1990. Reactive airways dysfunction syndrome (RADS) due to chlorine gas exposure. *Isr J Med Sci* 159(9-12):276-277.
- Doub HP. 1933. Pulmonary changes from inhalation of noxious gases. *Radiology* 21(2):105-113.
- *Doudar SM. 1997. Nebulized sodium bicarbonate in acute chlorine inhalation. *Pediatr Emerg Care* 13(6):406-407.
- Drobnic F, Freixa A, Casan P, et al. 1996. Assessment of chlorine exposure in swimmers during training. *Med Sci Sports Exerc* 28(2):271-274.
- Duclos P, Binder S. 1990. Public health consequences of acute chemical releases, Louisiana, 1986. *J Hazard Mater* 23:109-112.
- Edwards IR, Temple WA, Dobbins TL. 1983. Acute chlorine poisoning from a high school experiment. *N Z Med J* 96(740):720-721.
- *Eiserich JP, Cross CE, Jones AD, et al. 1996. Formation of nitrating and chlorinating species by reaction of nitrite with hypochlorous acid. A novel mechanism for nitric oxide-mediated protein modification. *J Biol Chem* 271(32):19199-19208.
- Ejarque P, Jimenez-Vargas J. 1953. [Intestinal absorption of chlorine.] *Rev Esp Fisiol* 9(4):243-256. (Spanish)

9. REFERENCES

- *Ellenhorn MJ, Barceloux DG. 1988. Chlorine. In: Medical toxicology. Diagnosis and treatment of human poisoning. New York, NY: Elsevier, 878-879.
- *Enarson DA, Maclean L, Dybuncio A, et al. 1984. Respiratory health at a pulpmill in British Columbia. Arch Environ Health 39(5):325-330.
- EPA. 1979. Letter from Hooker Chemicals & Plastics Corporation submitting additional information on chlorine gas as requested in USEPA letter dated February 1, 1979 with attachment. Submitted to the U.S. Environmental Protection Agency under TSCA Section 8e. OTS0200444.
- EPA. 1987. EPA chemical profiles. Chlorine. U.S. Environmental Protection Agency. http://yosemite.epa.gov/oswer/ceppoehs.nsf/EHS_Profile?openform. March 19, 2007.
- *EPA. 1988. Recommendations for and documentation of biological values for use in risk assessment. Cincinnati, OH: U.S. Environmental Protection Agency, Environmental Criteria and Assessment Office. EPA600687008.
- *EPA. 1990. 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. 1992a. Reregistration eligibility document (RED). Sodium and calcium hypochlorites. Washington, DC: U.S. Environmental Protection Agency, Pesticides and Toxic Substances. PB92180116. EPA540RS92193.
- EPA. 1992b. R.E.D. facts. Sodium and calcium hypochlorite salts. Washington, DC: U.S. Environmental Protection Agency, Pesticides and Toxic Substances. PB92171958. EPA540FS92189.
- *EPA. 1993. A literature review of atmospheric transformation products of Clean Air Act Title III hazardous air pollutants. Research Triangle Park, NC: U.S. Environmental Protection Agency. EPA600R94088.
- *EPA. 1994a. Methods for Derivation of Inhalation Reference Concentrations and Application of Inhalation Dosimetry. Washington, DC: U.S. Environmental Protection Agency, Office of Research and Development. EPA600890066F.
- *EPA. 1994b. Final draft for the drinking water criteria document on chlorine dioxide, chlorite and chlorate. Cincinnati, OH: U.S. Environmental Protection Agency. EPA68C20139. PB94179884.
- EPA. 1995. Superfund Record of Decision: Standard Chlorine of Delaware. Washington, DC: U.S. Environmental Protection Agency. EPARODR0395193. PB95963904.
- *EPA. 1997. Special report on environmental endocrine disruption: An effects assessment and analysis. Washington, DC: U.S. Environmental Protection Agency, Risk Assessment Forum. EPA630R96012.
- *EPA. 1999. Reregistration eligibility decision (RED). Chlorine gas. U.S. Environmental Protection Agency. EPA738R99001. <http://www.epa.gov/oppsrrd1/REDs/4022red.pdf>. March 14, 2007.
- *EPA. 2000. Method 26. Hydrogen chloride, halides, halogens. Emission Measurement Center. U.S. Environmental Protection Agency. <http://www.epa.gov/ttn/emc/promgate/m-26.pdf>. April 12, 2007.

9. REFERENCES

- *EPA. 2003. National primary drinking water regulations. Washington, DC: U.S. Environmental Protection Agency, Office of Ground Water and Drinking Water. EPA816F03016. <http://www.epa.gov/safewater/mcl.html>. March 07, 2006.
- *EPA. 2005. Toxic chemical release inventory reporting forms and instructions: Revised 2004 version. Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986). U.S. Environmental Protection Agency. Office of Environmental Information. EPA260B05001.
- *EPA. 2006a. 2006 edition of drinking water standards and health advisories. Washington, DC: U.S. Environmental Protection Agency. EPA822R04005. <http://epa.gov/waterscience/criteria/drinking/>. April 11, 2007.
- *EPA. 2006b. Determining active oxidant species reacting with organophosphate pesticides in chlorinated drinking water. Washington, DC: U.S. Environmental Protection Agency, Office of Research and Development. EPA600R06103.
- *EPA. 2007a. Acute exposure guideline levels (AEGLs). Washington, DC: U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics. <http://www.epa.gov/oppt/aegl/pubs/compiled.pdf>. May 11, 2007.
- *EPA. 2007i. Designated as hazardous substances in accordance with Section 311(b)(2)(A) of the Clean Water Act. Code of Federal Regulations. 40 CFR 116.4. Washington, DC: U.S. Environmental Protection Agency. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- *EPA. 2007b. 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>. April 11, 2007.
- *EPA. 2007c. Master testing list. Washington, DC: Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency. <http://www.epa.gov/opptintr/chemtest/pubs/mtl.htm>. May 10, 2007.
- *EPA. 2007d. Regulated toxic substances and threshold quantities for accidental release prevention. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 68.130. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- *EPA. 2007j. 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.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- *EPA. 2007e. 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.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- *EPA. 2007f. 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.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.

9. REFERENCES

- *EPA. 2007g. 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.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. April 11, 2007.
- *EPA. 2007h. Tolerances and exemptions from tolerances for pesticide chemicals in food. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 180.1095. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. May 11, 2007.
- *EPA. 2007k. Tolerances and exemptions from tolerances for pesticide chemicals in food. U.S. Environmental Protection Agency. Code of Federal Regulations. 40 CFR 180.1235. <http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm>. June 28, 2007.
- Evans EE. 1940. An x-ray study of the effects of industrial gases upon the human lung. *Radiology* 34:411-424.
- *Evans RB. 2004. Chlorine: State of the art. *Lung* 183(3):151-167.
- +*Exon JH, Koller LD, O'Reilly CA, et al. 1987. Immunotoxicologic evaluation of chlorine-based drinking water disinfectants, sodium hypochlorite and monochloramine. *Toxicology* 44:257-269.
- *Farr JP, Smith WL, Steichen DS. 2003. Bleaching agents. In: Kirk-Othmer encyclopedia of chemical toxicology. Vol 4. John Wiley & Sons, Inc., 43-81. <http://www.mrw.interscience.wiley.com/emrw/9780471238966/kirk/article/survfarr.a01/current/pdf>. March 28, 2007.
- Faure J, Arsac P, Bouissou X, et al. 1983. Chlorine gas exposure: Early and late sequelae. *Toxicol Eur Res* 5(5):207-210.
- *FDA. 2006. Indirect food additives: Adhesives and components of coatings. U.S. Food and Drug Administration. Code of Federal Regulations. 21 CFR 175. <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm>. May 10, 2007.
- *FDA. 2007a. Everything added to food in the United States (EAFUS). Washington, DC: U.S. Food and Drug Administration. <http://vm.cfsan.fda.gov/~dms/eafus.html>. April 11, 2007.
- *FDA. 2007b. Food additives permitted for direct addition to food for human. U.S. Food and Drug Administration. Code of Federal Regulations. 21 CFR 172. <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm>. May 15, 2007.
- *Ferris BG, Burgess WA, Worcester J. 1967. Prevalence of chronic respiratory disease in a pulp mill and a paper mill in the United States. *Br J Ind Med* 24:26-37.
- *Ferris BG, Puleo S, Chen HY. 1979. Mortality and morbidity in a pulp and a paper mill in the United States: A ten-year follow-up. *Br J Ind Med* 36:127-134.
- *Fleta J, Calvo C, Zuniga J, et al. 1986. Intoxication of 76 children by chlorine gas. *Hum Toxicol* 5(2):99-100.
- *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.
- Forrester MB. 2006. Investigation of Texas poison center calls regarding a chlorine gas release: Implications for terrorist attack toxicosurveillance. *Tex Med* 102(5):52-57.
- *Foulks CJ. 1981. Myasthenia gravis presenting as laryngeal stridor after exposure to chlorine gas. *South Med J* 74(11):1423-1424.
- Fowles JR, Alexeeff GV, Dodge D. 1999. The use of benchmark dose methodology with acute inhalation lethality data. *Regul Toxicol Pharmacol* 29(3):262-278.
- *Fukayama MY, Tan H, Wheeler WB, et al. 1986. Reactions of aqueous chlorine and chlorine dioxide with model food compounds. *Environ Health Perspect* 69:267-274.
- *Furukawa F, Kurata Y, Kokubo T, et al. 1980. [Oral acute and subchronic toxicity studies for sodium hypochlorite in F-344 rats.] *Eisei Shikensho Hokoku* 98:62-69. (Japanese)
- +*Gagnaire F, Azim S, Bonnet P, et al. 1994. Comparison of the sensory irritation response in mice to chlorine and nitrogen trichloride. *J Appl Toxicol* 14(6):405-409.
- *Gapany-Gapanavicius M, Yellin A, Almog S, et al. 1982. Pneumomediastinum: A complication of chlorine exposure from mixing household cleaning agents. *J Am Med Assoc* 248(3):349-350.
- *Gautrin D, Leroyer C, Infante-Rivard C, et al. 1999. Longitudinal assessment of airway caliber and responsiveness in workers exposed to chlorine. *Am J Respir Crit Care Med* 160:1232-1237.
- *Gautrin D, Leroyer C, L'Archeveque J, et al. 1995. Cross-sectional assessment of workers with repeated exposure to chlorine over a three year period. *Eur Respir J* 8(12):2046-2054.
- Gilbert NL, Gerin M, Malo JL, et al. 2001. A 5-year follow-up of airway function and bronchial responsiveness in workers acutely exposed to chlorine in a metal production plant. *Am J Epidemiol* 153(11 Suppl):S124.
- Givan DC, Eigen H, Tepper RS. 1989. Longitudinal evaluation of pulmonary function in an infant following chlorine gas exposure. *Pediatr Pulmonol* 6(3):191-194.
- *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.
- Glindmeyer HW, Lefante JJ, Freyder LM, et al. 2003. Relationship of asthma to irritant gas exposures in pulp and paper mills. *Respir Med* 97(5):541-548.
- Godnic-Cvar J, Plavec D, Somogyi-Zalud E, et al. 1999. Non-specific nasal and bronchial reactivity are not correlated in non-asthmatic subjects occupationally exposed to irritants and in healthy subjects. *Am J Ind Med* 35(4):426-431.
- +Goffin V, Pierard GE, Henry F, et al. 1997. Sodium hypochlorite, bleaching agents, and the stratum corneum. *Ecotoxicol Environ Saf* 37:199-202.

9. REFERENCES

- *Goldfrank LR, Flomenbaum NE, Lewin NA, et al. 2002. Chlorine. In: Goldfrank's toxicologic emergencies. 7th ed. New York, NY: McGraw-Hill, 1458-1459.
- *Graedel TE. 1978. Chemical compounds in the atmosphere. Orlando, FL: Academic Press, Inc., 30, 31, 34, 35.
- *Graedel TE, Hawkins DT, Claxton LD. 1986. Atmospheric chemical compounds: Sources, occurrence, and bioassay. Orlando, FL: Academic Press, Inc., 70-71, 93.
- Green TC. 1997. Out of the blue and into the pink. A new litmus test for chlorine gas exposure. *Med J Aust* 167(11-12):651-654.
- Greenwood NN, Earnshaw A. 1997. Chemistry of the elements. Oxford: Reed Educational and Professional Publishing Ltd., 789-809.
- +Griffith JF, Nixon GA, Bruce RD, et al. 1980. Dose-response studies with chemical irritants in the albino rabbit eye as a basis for selecting optimum testing conditions for predicting hazard to the human eye. *Toxicol Appl Pharmacol* 55:501-513.
- *Gross EA, Morgan KT. 1991. Architecture of nasal passages and larynx. In: Comparative biology of the normal lung. Boca Raton, FL: CRC Press, 7-25.
- *Güloğlu C, Kaara IH, Erten PG. 2002. Acute accidental exposure to chlorine gas in the Southeast of Turkey. A study of 106 cases. *Environ Res* 88(2):89-93.
- +*Gunnarsson M, Walther SM, Seidal T, et al. 1998. Exposure to chlorine gas: Effects on pulmonary function and morphology in anaesthetised and mechanically ventilated pigs. *J Appl Toxicol* 18(4):249-255.
- Gunnarsson M, Walther SM, Seidal T, et al. 2000. Effects of inhalation of corticosteroids immediately after experimental chlorine gas lung injury. *J Trauma* 48(1):101-107.
- *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.
- +Habets JMW, Geursen-Reitsma AM, Stole E, et al. 1986. Sensitization to sodium hypochlorite causing hand dermatitis. *Contact Dermatitis* 15:140-142.
- *Hagiwara M, Watanabe E, Barrett JC, et al. 2006. Assessment of genotoxicity of 14 chemical agents used in dental practice. Ability to induce chromosome aberrations in Syrian hamster embryo cells. *Mutat Res* 603(2):111-120.
- Harkema JR. 1988. Comparative pathology of the nasal mucosa in laboratory animals exposed to inhaled irritants. *Environ Health Perspect* 85:231-238.
- *Hasan FM, Gehshan A, Fuleihan FJ. 1983. Resolution of pulmonary dysfunction following acute chlorine exposure. *Arch Environ Health* 38(2):76-80.
- +*Hasegawa R, Takahashi M, Kokubo T, et al. 1986. Carcinogenicity study of sodium hypochlorite in F344 rats. *Food Chem Toxicol* 24(12):1295-1302.

9. REFERENCES

- *Hayashi M, Kishi M, Sofuni T, et al. 1988. Micronucleus tests in mice on 39 additives and eight miscellaneous chemicals. *Food Chem Toxicol* 26(6):487-500.
- *HazDat. 2007. Chlorine. HazDat Database: ATSDR's Hazardous Substance Release and Health Effects Database. Atlanta, GA: Agency for Toxic Substances and Disease Registry. <http://www.atsdr.cdc.gov/hazdat.html>. May 17, 2007.
- Hedges JR, Morrissey WL. 1979. Acute chlorine gas exposure. *JACEP* 8(2):59-63.
- *Heldaas SS, Langard S, Andersen A. 1998. Incidence of cancer in a cohort of magnesium production workers. *Br J Ind Med* 46:617-623.
- Henneberger PK, Ferris BG, Sheehe PR. 1993. Accidental gassing incidents and the pulmonary function of pulpmill workers. *Am Rev Respir Dis* 148(1):63-67.
- *Henneberger PK, Lax MB, Ferris BG Jr. 1996. Decrements in spirometry values associated with chlorine gassing events and pulpmill work. *Am J Respir Crit Care Med* 153(1):225-231.
- +Hess JA, Molinari JA, Gleason MJ, et al. 1991. Epidermal toxicity of disinfectants. *Am J Dent* 41(1):51-56.
- Hirsch AR. 1995. Chronic neurotoxicity of acute chlorine gas exposure. *Neurotoxicology* 16(4):760.
- *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.
- *Hook CT, Lowry LD. 1974. Effect of chlorine bleach on the esophagus. *Ann Otol Rhinol Laryngol* 83:709-713.
- *Horton DK, Berkowitz Z, Kaye WE. 2002. The public health consequences from acute chlorine releases, 1993-2000. *J Occup Environ Med* 44(10):906-913.
- +Hostynek JJ, Patrick E, Younger B, et al. 1989. Hypochlorite sensitivity in man. *Contact Dermatitis* 20:32-37.
- +*Hostynek JJ, Wilhelm KP, Cua AB, et al. 1990. Irritation factors of sodium hypochlorite solutions in human skin. *Contact Dermatitis* 23(5):316-324.
- *Hov O. 1985. The effect of chlorine on the formation of photochemical oxidants in southern Telemark, Norway. *Atmos Environ* 19(3):417-485.
- *HSDB. 2007. Chlorine. Hazardous Substances Data Bank. National Library of Medicine. <http://toxnet.nlm.nih.gov>. March 26, 2007.
- Humerfelt S, Gulsvik A, Skjoerven R, et al. 1993. Decline in FEV1 and airflow limitation related to occupational exposure in men of an urban community. *Eur Respir J* 6(8):1095-1103.
- *Hyback B. 1999. A long-term study of pulmonary function at low exposures to chlorine. *Int Arch Occup Environ Health* 72:M24-M28.

9. REFERENCES

- *IARC. 1991. IARC monographs on the evaluation of carcinogenic risks to humans. Volume 52. Lyon, France: World Health Organization. International Agency for Research on Cancer, 45-71.
- *IARC. 2006. Agents reviewed by the IARC monographs. Volumes 1-96. Lyon, France: International Agency for Research on Cancer. <http://monographs.iarc.fr/ENG/Classification/index.php>. April 11, 2007.
- *Ibanes JD, LeinigerJR, Jarabek AM, et al. 1996. Reexamination of respiratory tract response in rats, mice and rhesus monkeys chronically exposed to inhaled chlorine. *Inhal Toxicol* 8:859-876.
- *IPCS. 2006. Chlorine. Poisons information monograph 947. International Programme on Chemical Safety. PIM 947. <http://www.inchem.org/documents/pims/chemical/pim947.htm>. March 27, 2007.
- *IRIS. 2007. Chlorine. Integrated Risk Information System. Washington, DC: U.S. Environmental Protection Agency. <http://www.epa.gov/iris/subst/index.html>. May 11, 2007.
- *Ishidate M, Sofuni T, Yoshikawa K, et al. 1984. Primary mutagenicity screening of food additives currently used in Japan. *Food Chem Toxicol* 22(8):623-636.
- *ITA. 2007. 2801100000--Chlorine: U.S. Trade quick-reference tables. International Trade Administration, U.S. Department of Commerce. <http://ita.doc.gov/td/industry/otea/trade-detail/index.html>. April 2, 2007.
- Jackson JR. 1989. Medical planning for toxic releases into the community: The example of chlorine gas. (Comment on: *Br J Ind Med* 46(4):277-285). *Br J Ind Med* 46(10):752.
- *Jappinen P, Hakulinen T, Pukkala E, et al. 1987. Cancer incidence of workers in the Finnish pulp and paper industry. *Scand J Work Environ Health* 13:197-202.
- *Jarabek AM, Schroeter JD, Andersen ME, et al. 2007. A hybrid CFD-PBPK model of chlorine gas uptake and tissue dosimetry in the upper respiratory tract (URT) of F344 rats. *Toxicologist* 96(1):83.
- +*Jiang XZ, Buckley LA, Morgan KT. 1983. Pathology of toxic responses to the RD50 concentration of chlorine gas in the nasal passages of rats and mice. *Toxicol Appl Pharmacol* 71(2):225-236.
- *Johanson CE. 1980. Permeability and vascularity of the developing brain: Cerebellum vs. cerebral cortex. *Brain Res* 190(1):3-16.
- *Jones RN, Hughes JM, Glindmeyer H, et al. 1986. Lung function after acute chlorine exposure. *Am Rev Respir Dis* 134(6):1190-1195.
- *Joy RJT. 1997. Historical aspects of medical defense against chemical warfare. In: Office of the Surgeon General, Department of the Army, eds. *Textbook of military medicine: Medical aspects of chemical and biological warfare*. Washington, DC: U.S. Government Printing Office, 87-109.
- *Joyner RE, Durel EG. 1962. Accidental liquid chlorine spill in a rural community. *J Occup Med* 4:152-154.
- Kanne JP, Thoongsuwan N, Parimon T, et al. 2006. Trauma cases from Harborview Medical Center. Airway injury after acute chlorine exposure. *AJR Am J Roentgenol* 186(1):232-233.

9. REFERENCES

- Karol MH. 1995. Toxicologic principles do not support the banning of chlorine. A Society of Toxicology position paper. *Fundam Appl Toxicol* 24(1):1-2.
- *Kaufman J, Burkons D. 1971. Clinical, roentgenologic, and physiologic effects of acute chlorine exposure. *Arch Environ Health* 23(1):29-34.
- Kelly TJ, Muklund R, Spicer CW, et al. 1994. Concentrations and transformations of hazardous air pollutants. *Environ Sci Technol* 28:378-387.
- *Kennedy SM, Enarson DA, Janssen RG, et al. 1991. Lung health consequences of reported accidental chlorine gas exposure among pulp mill workers. *Am Rev Respir Dis* 143(1):74-79.
- Khadartsev AA, Puganov VA. 1982. [Clinico-laboratory symptomatology of acute chlorine inhalation lesions]. *Ter Arkh* 54(4):102-104. (Russian)
- *Kilburn KH. 1995. Evidence that inhaled chlorine is neurotoxic and causes airways obstruction. *Int J Occup Med Toxicol* 4(2):267-276.
- *Kilburn KH. 2000. Chlorine-induced damage documented by neurophysiological, neuropsychological, and pulmonary testing. *Arch Environ Health* 55(1):31-37.
- Kilburn KH. 2003a. Brain but not lung functions impaired after a chlorine incident. *Ind Health* 41:299-305.
- *Kilburn KH. 2003b. Effects of chlorine and its cresylate byproducts on brain and lung performance. *Arch Environ Health* 58(12):746-755.
- +*Klonne DR, Ulrich CE, Riley MG, et al. 1987. One-year inhalation toxicity study of chlorine in Rhesus monkeys (*Macaca mulatta*). *Fundam Appl Toxicol* 9(3):557-572.
- *Knipping EM, Dabdub D. 2003. Impact of chlorine emissions from sea-salt aerosol on coastal urban ozone. *Environ Sci Technol* 37(2):275-284.
- *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.
- Kootz AR. 1925. When do lungs return to normal following exposure to war gases? *Arch Intern Med* 36:204-219.
- Kotiaho T, Wood JM, Wick PL, et al. 1992. Time persistence of monochloramine in human saliva and stomach fluid. *Environ Sci Technol* 26:302-306.
- Kotula AW, Emswiler-Rose BS, Cramer DV. 1987. Subacute study of rats fed ground beef treated with aqueous chlorine: Hematologic and clinical pathology. *J Toxicol Environ Health* 20(4):401-409.
- *Kowitz TA, Reba RC, Parker RT, et al. 1967. Effects of chlorine gas upon respiratory function. *Arch Environ Health* 14(4):545-558.
- Kramer CG. 1967. Chlorine. *J Occup Med* 9(4):193-196.
- Krenzelok E, Mrvos R. 1995. Chlorine/chloramine. *J Toxicol Clin Toxicol* 33(4):355-357.

9. REFERENCES

- *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.
- +Kurokawa Y, Takayama S, Konishi Y, et al. 1986. Long-term *in vivo* carcinogenicity tests of potassium bromate, sodium hypochlorite, and sodium chlorite conducted in Japan. *Environ Health Perspect* 69:221-235.
- +*Kutzman RS. 1983. A study of Fischer-344 rats subchronically exposed to 0, 0.5, 1.5, or 5.0 ppm chlorine. Upton, NY: Brookhaven National Laboratory. BNL 32710.
- *Landau GD, Saunders WH. 1964. The effect of chlorine bleach on the esophagus. *Arch Otolaryngol* 80:174-176.
- *Lawson JJ. 1981. Chlorine exposure: A challenge to the physician. *Am Fam Physician* 23(1):135-138.
- *Le Curieux F, Marzin D, Erb F. 1993. Comparison of three short-term assays: Results on seven chemicals. Potential contribution to the control of water genotoxicity. *Mutat Res* 319(3):223-236.
- *Leeder JS, Kearns GL. 1997. Pharmacogenetics in pediatrics: Implications for practice. *Pediatr Clin North Am* 44(1):55-77.
- *Lemière C, Malo JL, Boutet M. 1997. Reactive airways dysfunction syndrome due to chlorine: Sequential bronchial biopsies and functional assessment. *Eur Respir J* 10(1):241-244.
- Lemière C, Malo JL, Gautrin D. 1996. Nonsensitizing causes of occupational asthma. *Med Clin North Am* 80(4):749-774.
- *Leonardos G, Kendall D, Barnard NJ. 1968. Odor threshold determination of 53 odorant chemicals In: 61st annual meeting of the Air Pollution Control Association, St. Paul, MN, June 23-27, 1968. Pittsburgh, PA: Air Pollution Control Association. Abstract 68-13.
- *Leroyer C, Malo JL, Girard D, et al. 1999. Chronic rhinitis in workers at risk of reactive airways dysfunction syndrome due to exposure to chlorine. *Occup Environ Med* 56(5):334-338.
- *Leroyer C, Malo JL, Infante-Rivard C, et al. 1998. Changes in airway function and bronchial responsiveness after acute occupational exposure to chlorine leading to treatment in a first aid unit. *Occup Environ Med* 55(5):356-359.
- Les EP. 1968. Effect of acidified-chlorinated water on reproduction in C3H/HeJ and C57BL/6J mice. *Lab Anim Care* 18:210-213.
- *Leube G, Kreiter H. 1971. Akute chlogasvergiftung. *Med Klin [Klin]* 66(10):354-357. (German)
- *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.

9. REFERENCES

- *Levy JM, Hessel SJ, Nykamp PW, et al. 1986. Detection of the cerebral lesions of chlorine intoxication by magnetic resonance imaging. *Magn Reson Imaging* 4(1):51-52.
- *Lewis RJ. 2000. *Sax's dangerous properties of industrial materials*. New York, NY: John Wiley & Sons, Inc., 776-777.
- *Lewis RJ. 2001. *Hawley's condensed chemical dictionary*. New York, NY: John Wiley & Sons, Inc., 246, 247.
- *Lide DR, ed. 2005. Chlorine. In: *CRC handbook of chemistry and physics*. Boca Raton: Taylor & Francis Group, 4-10, 4-57.
- *Livingston AL. 1978. Forage plant estrogens. *J Toxicol Environ Health* 4(2-3):301-324.
- Lombi E, Zhao FJ, Fuhrmann M, et al. 2002. Arsenic distribution and speciation in the fronds of the hyperaccumulator *Pteris vittata*. *New Phytol* 156:195-203.
- LoVecchio F, Blackwell S, Stevens D. 2005. Outcomes of chlorine exposure: A 5-year poison center experience in 598 patients. *Eur J Emerg Med* 12(3):109-110.
- +*Lubbers JR, Chauan S, Bianchine JR. 1982. Controlled clinical evaluations of chlorine dioxide, chlorite and chlorate in man. *Environ Health Perspect* 46:57-62.
- Malo JL, Cartier A, Boulet LP, et al. 1994. Bronchial hyperresponsiveness can improve while spirometry plateaus two to three years after repeated exposure to chlorine causing respiratory symptoms. *Am J Respir Crit Care Med* 150(4):1142-1145.
- Marshall VC. 1989. The predictions of human mortality from chemical accidents with especial reference to the lethal toxicity of chlorine. *J Hazard Mater* 22:13-56.
- +*Martin JG, Campbell HR, Iijima H, et al. 2003. Chlorine-induced injury to the airways in mice. *Am J Respir Crit Care Med* 168(5):568-574.
- Martinez TT, Long C. 1995. Explosion risk from swimming pool chlorinators and review of chlorine toxicity. *Clin Toxicol* 33(4):349-354.
- *Matsuoka A, Hayashi M, Ishidate N. 1979. Chromosomal aberration tests on 29 chemicals combined with S9 mix *in vitro*. *Mutat Res* 66:277-290.
- *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.
- McCord CP. 1926. Industrial poisoning from low concentrations of chlorine gas. *J Am Med Assoc* 86:1687-1688.
- +*McNulty MJ, Chang JCF, Barrow CS. 1983. Sulfhydryl oxidation in rat nasal mucosal tissues after chlorine inhalation. *Toxicol Lett* 17:241-246.
- *Meakins JC, Priestley JG. 1919. The after-effects of chlorine gas poisoning. *Can Med Assoc J* 9:968-974.

9. REFERENCES

- Medina-Ramon M, Zock JP, Kogevinas M, et al. 2007. Asthma, chronic bronchitis, and exposure to irritant agents in occupational domestic cleaning: A nested case-control study. *Occup Environ Med* 62(9):598-606.
- +*Meier JR, Bull RJ, Stober JA, et al. 1985. Evaluation of chemicals used for drinking water disinfection for production of chromosomal damage and sperm-head abnormalities in mice. *Environ Mutagen* 7:201-211.
- Menaouar A, Anglade D, Baussand P, et al. 1997. Chlorine gas induced acute lung injury in isolated rabbit lung. *Eur Respir J* 10(5):1100-1107.
- *Miyachi T, Tsutsui T. 2005. Ability of 13 chemical agents used in dental practice to induce sister-chromatid exchanges in Syrian hamster embryo cells. *Odontology* 93(1):24-29.
- Moore BB, Sherman M. 1991. Chronic reactive airway disease following acute chlorine gas exposure in an asymptomatic atopic patient. (Comment in: *Chest* 102(3):984). *Chest* 100(3):855-856.
- +*Morris JB, Wilkie WS, Shusterman DJ. 2005. Acute respiratory responses of the mouse to chlorine. *Toxicol Sci* 83:380-387.
- *Morris JC. 1946. The mechanism of the hydrolysis of chlorine. *J Am Chem Soc* 68(9):1692-1694.
- *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.
- *Moulick ND, Banavali S, Abhyankar AD, et al. 1992. Acute accidental exposure to chlorine fumes. A study of 82 cases. *Indian J Chest Dis Allied Sci* 34(2):85-89.
- *Mrvos R, Dean BS, Krenzelok EP. 1993. Home exposures to chlorine/chloramine gas: Review of 216 cases. *South Med J* 86(6):654-657.
- Mustchin CP, Pickering CA. 1979. "Coughing water": Bronchial hyperreactivity induced by swimming in a chlorinated pool. *Thorax* 34(5):682-683.
- *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.
- *NIOSH. 1976. Criteria for a recommended standard. Occupational exposure to chlorine. Cincinnati, OH: National Institute for Occupational Safety and Health.
- NIOSH. 1983. Fatality assessment and control evaluation report: Explosion of a chlorine vessel. National Institute for Occupational Safety and Health. Face-83-004. PB97147037. <http://www.cdc.gov/niosh/face/In-house/full8304.html>. March 19, 2007.
- +NIOSH. 1991. Immune responsiveness in chlorine exposed rats. Cincinnati, OH: National Institute for Occupational Safety and Health. NIOSH-R03OH02425. PB92124478.
- *NIOSH. 1994. Method 6011. NIOSH manual of analytical methods. Atlanta, GA: National Institute for Occupational Safety and Health. <http://www.cdc.gov/niosh/nman/methods-c/html>. August 09, 2007.

9. REFERENCES

- *NIOSH. 1995. Health hazard evaluation report. International association of fire fighters, Henderson, Nevada. National Institute for Occupational Safety and Health. HETA-91-0230-2543. <http://www.cdc.gov/niosh/hhe/reports/pdfs/1991-0230-2543.pdf>. March 19, 2007.
- NIOSH. 1996. Health hazard evaluation report. Western Zirconium, Ogden, Utah. National Institute for Occupational Safety and Health. HETA-93-0501-2580. <http://www.cdc.gov/niosh/hhe/reports/pdfs/1993-0501-2580.pdf>. March 19, 2007.
- NIOSH. 2002. Health hazard evaluation report. Puerto Rico aqueduct and sewer authority Sergio Ceuvas Bustamante filtration plant, Frujillo Alto, Puerto Rico. Cincinnati, OH: National Institute for Occupational Safety and Health. HETA-98-0217-2772. PB2002108283.
- *NIOSH. 2005. Chlorine. 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/>. May 11, 2007.
- +Nixon GA, Tyson CA, Wertz WC. 1975. Interspecies comparisons of skin irritancy. *Toxicol Appl Pharmacol* 31:481-490.
- *Nodelman V, Ultman JS. 1999a. Longitudinal distribution of chlorine absorption in human airways: A comparison to ozone absorption. *J Appl Physiol* 87(6):2073-2080.
- *Nodelman V, Ultman JS. 1999b. Longitudinal distribution of chlorine absorption in human airways: Comparison of nasal and oral quiet breathing. *J Appl Physiol* 86(6):1984-1993.
- *NRC. 1993. Pesticides in the diets of infants and children. National Research Council. Washington, DC: National Academy Press.
- +*NTP. 1992. Toxicology and carcinogenesis studies of chlorinated water (CAS Nos. 7782-50-5 and 7681-52-9) and chloraminated water (CAS No. 10599-90-3) (deionized and charcoal-filtered) in F344/N rats and B6C3F1 mice (drinking water studies). Research Triangle Park, NC: National Toxicology Program. NTP TR-392. NIH Publication No. 92-2847.
- *NTP. 2005. Introduction. Report on carcinogens. 11th ed. Research Triangle Park, NC: National Toxicology Program, U.S. Department of Health and Human Services, Public Health Service. <http://ntp-server.niehs.nih.gov/ntp/roc/toc11.html>. March 08, 2006.
- *NTSB. 1998. Railroad accident brief report. LAX 96 FR 010. Derailment and hazardous materials release with fatality. Montano Rail Lin, Alberton, Montana. April 11, 1996. Washington, DC: National Transportation Safety Board. RAB98-07.
- *NTSB. 2002. Hazardous materials accident report. Hazardous materials release from railroad tank car with subsequent fire at Riverview, Michigan, July 14, 2001. Washington, DC: National Transportation Safety Board. PB02917002.
- *NTSB. 2005. Collision of Norfolk Southern Freight Train 152 with standing Norfolk Southern Local Train P22 with subsequent hazardous materials release at Graniteville, South Carolina, January 06, 2005. Washington, DC: National Transportation Safety Board. PB05916304.

9. REFERENCES

- *NTSB. 2006. National Transportation Safety Board railroad accident report: Collision of Union Pacific Railroad Train MHOTU-23 with BNSF Railway Company Train MEAP-TUL-126-D with subsequent derailment and hazardous materials release in Macdona, Texas, June 28, 2004. <http://www.ntis.gov/search/product.asp?ABBR=PB2006916303&starDB=GRAHIST>. July 05, 2007.
- *O'Neil MJ, Smith A, Heckelman PE, eds. 2001. Chlorine. In: The Merck index. Whitehouse Station, NJ: Merck & Co. Inc., 361-363.
- *OSHA. 2006a. Air contaminants. Occupational safety and health standards for shipyard employment. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1915.1000. <http://www.osha.gov/comp-links.html>. April 11, 2007.
- *OSHA. 2006b. Gases, vapors, fumes, dusts, and mists. Safety and health regulations for construction. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1926.55, Appendix A. <http://www.osha.gov/comp-links.html>. April 11, 2007.
- *OSHA. 2006c. Limits for air contaminants. Occupational safety and health standards. Occupational Safety and Health Administration. Code of Federal Regulations. 29 CFR 1910.1000. <http://www.osha.gov/comp-links.html>. April 11, 2007.
- *OSHA. 2006d. 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. <http://www.osha.gov/comp-links.html>. April 11, 2007.
- *OSHA. 2007a. Chlorine and chlorine dioxide in workplace atmospheres. Occupational Safety and Health Administration. <http://www.osha.gov/dts/sltc/methods/inorganic/t-id126sgx-pv-01-0112-m/t-id126sgx-pv-0.html>. July 05, 2007.
- *OSHA. 2007b. Chlorine in workplace atmospheres. Occupational Safety and Health Administration. <http://www.osha.gov/dts/sltc/methods/inorganic/id101.html>. July 05, 2007.
- Osterberg RE, Bierbower GW, Seabaugh VM, et al. 1977. Potential biological hazards of commercially available cleansers for dentures. *J Toxicol Environ Health* 3:969-977.
- *OTA. 1990. Neurotoxicity: Identifying and controlling poisons of the nervous system. Washington, DC: Office of Technology Assessment. OTABA438.
- *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.
- Palmer J, Schidlow DV, Foley CM. 1978. Respiratory evaluation of children in a chlorine gas disaster identification of risk factors. *Pediatr Res* 12:567.
- Parimon T, Kanne JP, Pierson DJ. 2004. Acute inhalation injury with evidence of diffuse bronchiolitis following chlorine gas exposure at a swimming pool. *Respir Care* 49(3):291-294.
- *Patil LR, Smith RG, Vorwald AJ, et al. 1970. The health of diaphragm cell workers exposed to chlorine. *Am Ind Hyg Assoc J* 31(6):678-686.
- *Pike DG, Peabody JW, Davis EW, et al. 1963. A re-evaluation of the dangers of Clorox ingestion. *J Pediatr* 63(2):303-305.

9. REFERENCES

- Pino F, Puerta H, D'Apollò R, et al. 1993. Effectiveness of morphine in non-cardiogenic pulmonary edema due to chlorine gas inhalation. *Vet Hum Toxicol* 35(1):36.
- *Ploysongsang Y, Beach BC, DiLisio RE. 1982. Pulmonary function changes after acute inhalation of chlorine gas. *South Med J* 75(1):23-26.
- *Prater JF. 1990. Inhalation injury after exposure to chlorine gas leak. *J Emerg Nurs* 16(4):243-244.
- Racioppi F, Daskaleros PA, Besbelli N, et al. 1994. Household bleaches based on sodium hypochlorite: Review of acute toxicology and poison control center experience. *Food Chem Toxicol* 32(9):845-861.
- Rafferty P. 1980. Voluntary chlorine inhalation: A new form of self-abuse? *Br Med J* 281(6249):1178-1179.
- *Ramachandran KA, Chawla IS, Khokhar P. 1990. Acute chlorine poisoning: A study of 84 cases. *J Assoc Physicians India* 38(7):489-490.
- *Roberts KC, Moss OR, Sochaski MA, et al. 2007. Uptake and internal dosimetry of chlorine in the upper respiratory tract (URT) of F344 rats. *Toxicologist* 96(1):166.
- *Robertson AS. 1978. Alkali and chlorine products. In: Grayson M, Eckroth D, eds. *Kirk-Othmer encyclopedia of chemical technology*. Vol. 1. New York, NY: John Wiley & Sons, Inc., 799-883.
- *Rosenkranz HS. 1973. Sodium hypochlorite and sodium perborate: Preferential inhibitors of DNA polymerase-deficient bacteria. *Mutat Res* 21:171-174.
- *Ross MP, Spiller HA. 1999. Fatal ingestion of sodium hypochlorite bleach with associated hypernatremia and hyperchloremic metabolic acidosis. *Vet Hum Toxicol* 41(2):82-86.
- Rothery SP. 1991. Hazards of chlorine to asthmatic patients [Letter]. *Br J Gen Pract* 41(342):39.
- +*Rotman HH, Fliegelman MJ, Moore T, et al. 1983. Effects of low concentrations of chlorine on pulmonary function in humans. *J Appl Physiol* 54(4):1120-1124.
- *RTECS. 2007. Chlorine. Registry of Toxic Effects on Chemical Substances. National Institute of Occupational Safety and Health. MDL Information Systems, Inc. May 15, 2007.
- *Rupp H, Henschler D. 1967. [Effect of low chlorine and bromine concentrations on man.] *Int Arch Gewerbepathol Gewerbehyg* 23(1):79-90. (German)
- Rusch GM, Garrett R, Tobin P, et al. 2002. The development of acute exposure guideline levels for hazardous substances. *Drug Chem Toxicol* 25(4):339-348.
- *Ryazanov VA. 1962. Sensory physiology as basis for air quality standards. The approach used in the Soviet Union. *Arch Environ Health* 5:480-494.
- *Salisbury DA, Enarson DA, Chan-Yeung M, et al. 1991. First-aid reports of acute chlorine gassing among pulp mill workers as predictors of lung health consequences. *Am J Ind Med* 20:71-81.
- *Sandall TE. 1922. The later effects of gas poisoning. *Lancet* 2:857-859.

9. REFERENCES

- *Sasaki M, Sugimura K, Mitsuaki AY, et al. 1980. Cytogenetic effects of 60 chemicals on cultured human and Chinese hamster cells. *La Kromosom* II 20:574-584.
- +*Schins RP, Emmen H, Hoogendijk L, et al. 2000. Nasal inflammatory and respiratory parameters in human volunteers during and after repeated exposure to chlorine. (Comment in: *Eur Respir J* 19(2):381-382). *Eur Respir J* 16(4):626-632.
- *Schmittinger P, Florkiewicz T, Curlin LC, et al. 2006. Chlorine. In: *Ullmann's encyclopedia of industrial chemistry*. Wiley-VCH Verlag GmbH & Co. http://www.mrw.interscience.wiley.com/emrw/9783527306732/ueic/article/a06_399/current/pdf. March 28, 2007.
- Schönhofer B, Voshaar T, Kohler D. 1996. Long-term lung sequelae following accidental chlorine gas exposure. *Respiration* 63:155-159.
- *Schreuder MDJ, Brewer CA. 2001. Effects of short-term exposure to chlorine gas on morphology and physiology of *Pinus ponderosa* and *Pseudotsuga menziesii*. *Ann Bot* 88:187-195.
- *Schulte EE. 1999. Soil land applied chlorine. <http://learningstore.uvex.edu/pdf%5CA3556.pdf>. May 16, 2007.
- *Schwartz DA, Smith DD, Lakshiminarayan S. 1990. The pulmonary sequelae associated with accidental inhalation of chlorine gas. *Chest* 97(4):820-825.
- Scully FE, Mazina K, Sonenshine D, et al. 1986. Quantitation and identification of organic *N*-chloramines formed in stomach fluid on ingestion of aqueous hypochlorite. *Environ Health Perspect* 69:259-265.
- *Setchell BP, Waites GMH. 1975. The blood-testis barrier. In: Creep RO, Astwood EB, Geiger SR, eds. *Handbook of physiology: Endocrinology V*. Washington, DC: American Physiological Society, 143-172.
- *Sexton JD, Pronchik DJ. 1998. Chlorine inhalation: The big picture. *J Toxicol Clin Toxicol* 36(1-2):87-93.
- Shroff CP, Khade MV, Srinivasan M. 1988. Respiratory cytopathology in chlorine gas toxicity: A study in 28 subjects. *Diagn Cytopathol* 4(1):28-32.
- Shusterman D. 2003. Toxicology of nasal irritants. *Curr Allergy Asthma Rep* 3(3):258-265.
- Shusterman D, Balmes J, Avila PC, et al. 2003a. Chlorine inhalation produced nasal congestion in allergic rhinitis without mast cell degranulation. *Eur Respir J* 21:652-657.
- *Shusterman D, Murphy MA, Balmes J. 1998. Subjects with seasonal allergic rhinitis and nonrhinitic subjects react differentially to nasal provocation with chlorine gas. *J Allergy Clin Immunol* 101(6 Pt 1):732-740.
- +*Shusterman D, Murphy MA, Balmes J. 2003b. Influence of age, gender, and allergy status on nasal reactivity to inhaled chlorine. *Inhal Toxicol* 15(12):1179-1189.

9. REFERENCES

- Shusterman D, Solomon C, Balmes J, et al. 2002. Chlorine exposure and the upper respiratory tract. (Comment on: *Eur Respir J* 16(4):626-632). *Eur Respir J* 19(2):381-382.
- Siebels M, Andrassy K, Ritz E. 1993. Provocation of pulmonary haemorrhage in Goodpasture syndrome by chlorine gas. *Nephrol Dial Transplant* 8(2):189.
- *Skljanskaja RM, Rappoport TL. 1935. [Experimental studies on chronic poisoning and the development of the offspring of chlorine-poisoned rabbits.] *Naunyn Schmiedebergs Arch Exp Pathol Pharmacol* 177:276-285. (German)
- *Snoeyink VL, Jenkins D. 1980. *Water chemistry*. New York, NY: John Wiley & Sons, Inc., 386-404.
- Soffritti M, Belpoggi F, Lenzi A, et al. 1997. Results of long-term carcinogenicity studies of chlorine in rats. *Ann NY Acad Sci* 837:187-208.
- Spencer MG. 1988. Chlorine and the eustachian tube. *J Laryngol Otol* 102(1):55-56.
- Squadrito GL, Williams SR, Abraham E, et al. 2006. Acute chlorine exposure causes severe but short-term hypoxemia and depletion of lung antioxidants. *Free Radic Biol Med* 41(Suppl 1):S96.
- *SRI. 2006. Chlorine. 2006 Directory of chemical producers. United States. Menlo Park, CA: SRI Consulting, 520-521.
- Starek A, Moszczyński P, Kiec EF. 1979. Activity of N-acetyl-beta-glucosaminidase in lymphocytes of rats exposed to mixture of nitrogen oxides and chlorine. *Arch Toxicol* 43(2):147-152.
- *Staudinger J, Roberts PV. 1996. A critical review of Henry's law constants for environmental applications. *Crit Rev Environ Sci* 26:205-297.
- *Strange DC, Finneran JC, Shumacker HB, et al. 1951. Corrosive injury of the stomach. *AMA Arch Surg* 254(21):350-357.
- *Suh DH, Abdel-Rahman MS. 1983. Kinetics study of chlorine dioxide in rat. *J Toxicol Environ Health* 12:467-473.
- *Suzuki S, Sakamoto S, Maniwa K, et al. 2001. Fatal pulmonary arterial thrombosis associated with chlorine gas poisoning. *Clin Appl Thromb Hemost* 7(4):356-358.
- Szerlip HM, Singer I. 1984. Hyperchloremic metabolic acidosis after chlorine inhalation. *Am J Med* 77(3):581-582.
- Szinicz L. 2005. History of chemical and biological warfare agents. *Toxicology* 214(3):167-181.
- *Tanaka PL, Riemer DD, Chang S, et al. 2003. Direct evidence for chlorine-enhanced urban ozone formation in Houston, TX. *Atmos Environ* 37:1393-1400.
- *Tchobanoglous G, Schroeder ED. 1985. *Water quality. Characteristics, modeling, modification*. Reading, MA: Addison-Wesley Publishing Co., 559-570.

9. REFERENCES

- *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.
- Traub SJ, Hoffman RS, Nelson LS. 2002. Case report and literature review of chlorine gas toxicity. *Vet Hum Toxicol* 44(4):235-239.
- *TRI05. 2007. 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/>. March 14, 2007.
- *Underhill FP. 1920. Alterations in blood concentration. The lethal war gases. New Haven: Yale University Press, 40-83.
- *U.S. Chemical Safety and Hazard Investigation Board. 2003. Investigation report, chlorine release. Washington, DC: U.S. Chemical Safety and Hazard Investigation Board. 2002-04-I-MO. PB2003103273.
- +*Vernot EH, MacEwen JD, Haun CC, et al. 1977. Acute toxicity and skin corrosion data for some organic and inorganic compounds and aqueous solutions. *Toxicol Appl Pharmacol* 42:417-423.
- *Vetrano KM. 2001. Molecular chlorine: Health and environmental effects. *Rev Environ Contam Toxicol* 170:75-140.
- *Viccellio P, Bania T, Brent J, et al. 1998. Chlorine gas. In: Emergency toxicology. 2nd ed. Philadelphia, PA: Lippincott-Raven Press, 444-445.
- *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.
- *Vohra R, Clark RF. 2006. Chlorine-related inhalation injury from a swimming pool disinfectant in a 9-year-old girl. *Pediatr Emerg Care* 22(4):254-257.
- Wang J, Abu-Zidan FM, Walther SM. 2002a. Effects of prone and supine posture on cardiopulmonary function after experimental chlorine gas lung injury. *Acta Anaesthesiol Scand* 46(9):1094-1102.
- Wang J, Oldner A, Winskog C, et al. 2006. Effects of endothelin receptor antagonism on acute lung injury induced by chlorine gas. *Crit Care Med* 34(6):1731-1737.
- Wang J, Winskog C, Edston E, et al. 2005. Inhaled and intravenous corticosteroids both attenuate chlorine gas-induced lung injury in pigs. *Acta Anaesthesiol Scand* 49(2):183-190.
- Wang J, Zhang L, Walther SM. 2002b. Inhaled budesonide in experimental chlorine gas lung injury: Influence of time interval between injury and treatment. *Intensive Care Med* 28(3):352-357.
- Wang J, Zhang L, Walther SM. 2004. Administration of aerosolized terbutaline and budesonide reduces chlorine gas-induced acute lung injury. *J Trauma* 56(4):850-862.
- *Wang TZ, Margerum DW. 1994. Kinetics of reversible chlorine hydrolysis: Temperature dependence and general-acid/base-assisted mechanisms. *Inorg Chem* 33:1050-1055.

9. REFERENCES

- +*Weedon FR, Hartzell A, Setterstrom C. 1940. Toxicity of ammonia, chlorine, hydrogen cyanide, hydrogen sulphide, and sulphur dioxide gasses. V. Animals. Contrib Boyce Thompson Inst 11:365-385.
- *Ward MJ, Routledge PA. 1988. Hypernatraemia and hyperchloraemic acidosis after bleach ingestion. Hum Toxicol 7:37-38.
- Wegman DH, Eisen EA. 1990. Acute irritants: More than a nuisance. Chest 97(4):773-775.
- *Weill H, George R, Schwarz M, et al. 1969. Late evaluation of pulmonary function after acute exposure to chlorine gas. Am Rev Respir Dis 99:374-379.
- *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.
- *WHO. 1982. Chlorine and hydrogen chloride. Environmental Health Criteria 21. Geneva, Switzerland: World Health Organization.
- *WHO. 2000. Air quality guidelines. 2nd ed. Geneva, Switzerland: World Health Organization. <http://www.euro.who.int/Document/AIQ/AirQualRepMtg.pdf>. March 08, 2006.
- *WHO. 2004. Guidelines for drinking-water quality. Volume 1. Recommendations. 3rd ed. Geneva, Switzerland: World Health Organization. http://www.who.int/water_sanitation_health/dwq/gdwq3/en/. March 08, 2006.
- *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: Academic Press, 1-247.
- Williams JG. 1997. Inhalation of chlorine gas. Postgrad Med J 73(865):697-700.
- *Winder C. 2001. The toxicology of chlorine. Environ Res 85(2):105-114.
- Withers RMJ, Lees FP. 1985a. The assessment of major hazards: The lethal toxicity of chlorine. Part 1. Review of information on toxicity. J Hazard Mater 12:231-282.
- *Withers RMJ, Lees FP. 1985b. The assessment of major hazards: The lethal toxicity of chlorine. Part 2. Model of toxicity to man. J Hazard Mater 12:283-302.
- Withers RMJ, Lees FP. 1987. The assessment of major hazards: The lethal toxicity of chlorine. Part 3. Crosschecks from gas warfare. J Hazard Mater 15:301-342.
- *Wlodkowski TJ, Rosenkranz HS. 1975. Mutagenicity of sodium hypochlorite for *Salmonella typhimurium*. Mutat Res 31:39-42.
- +*Wolf DC, Morgan KT, Gross EA, et al. 1995. Two-year inhalation exposure of female and male B6C3F1 mice and F344 rats to chlorine gas induces lesions confined to the nose. Fundam Appl Toxicol 24(1):111-131.
- +*Wones RG, Deck CC, Stadler B, et al. 1993. Lack of effect of drinking water chlorine on lipid and thyroid metabolism in health humans. Environ Health Perspect 99:375-381.

9. REFERENCES

- Wood BR, Colombo JL, Benson BE. 1987. Chlorine inhalation toxicity from vapors generated by swimming pool chlorinator tablets. *Pediatrics* 79(3):427-430.
- Wu JS, Wang MI. 1982. The clinical and physiological effects of an acute chlorine exposure in Toufen Industrial District, Mio-Li, Taiwan. In: See LC, Fook LW, Peng LH, et al., eds. *Proceedings of the tenth Asian conference on occupational health: 5th-10th September 1982, Singapore*. Vol. 2. Singapore: Asian Association of Occupational Health, 770-774.
- *Yarrington CT. 1970. The experimental causticity of sodium hypochlorite in the esophagus. *Ann Otol Rhinol Laryngol* 79:895-899.
- Yaws CL, Hopper JR, Wang X, et al. 1999. Calculating solubility and Henry's law constants for gases in water. *Chem Eng (N Y)* 106(6):102-105.
- +*Yildirim C, Kocoglu H, Goksu S, et al. 2004. Long-term pulmonary histopathologic changes in rats following acute experimental exposure to chlorine gas. *Inhal Toxicol* 16(14):911-915.
- Yoshimura H, Kiyohara T, Yoshizawa T, et al. 1986. [Chlorine damage to cornea and conjunctiva scanning electron microscopic observation. Report II: Surface changes at low concentrations of chlorine and therapeutic effects of neutralizing agents.] *Fol Ophthalmol* 37(7):1141-1148. (Japanese)
- Zhang X, Minear RA. 2002. Characterization of high molecular weight disinfection byproducts resulting from chlorination of aquatic humic substances. *Environ Sci Technol* 36:4033-4038.
- *Ziegler EE, Edwards BB, Jensen RL, et al. 1978. Absorption and retention of lead by infants. *Pediatr Res* 12(1):29-34.
- +*Zwart A, Woutersen RA. 1988. Acute inhalation toxicity of chlorine in rats and mice: Time-concentration-mortality relationships and effects on respiration. *J Hazard Mater* 19(2):195-208.