## DOCUMENTS ON THE ADVERSE EFFECTS OF THIMEROSAL (MERCURY, MERTHIOLATE, ETHYL MERCURY), DOCUMENTS SHOWING GASTROINTESTINAL ABNORMALITIES and DOCUMENTS SHOWING IMMUNE SYSTEM IRREGULARITIES IN AUTISTIC CHILREN

... many more studies and documents exist.

1) Bradstreet J, Geier DA, Kartzinel, JJ, Adams JB, Geier MR. A case control study of mercury burden in children with autistic spectrum disorders. J Am Phys Surg 2003; 8:76-9.

2) The National Toxicology Program (NTP) within US Dept. of Health and Human Services, an interagency program headquartered at the National Institutes of Health's National Institute of Environmental Health Sciences (NIEHS) on Thimerosal. They report: "Poison by ingestion, subcutaneous, intravenous and possibly other routes."

3) Lowell JA, Burgess S, Shenoy S, Peters M, Howard TK. Mercury poisoning associated with hepatitis-B immunoglobulin. Lancet 1996; 347:480.

4) Baskin DS, Ngo H, Didenko VV. Thimerosal induces DNA breaks, caspase-3 activation, membrane damage, and cell death in cultured human neurons and fibroblasts. Toxicol Sci 2003; 74:361-8.

5) Heyworth MF, Truelove SC. Problems associated with the use of merthiolate as a preservative in anti-lymphocytic globulin. Toxicology 1979; 12:325-33.

6) Forstrom L, Hannuksela M, Kousa M, et al. Merthiolate hypersensitivity and vaccination. Contact Dermatitis 1980; 6:241-5.

7) Rohyans J, Walson PD, Wood GA, MacDonald WA. Mercury toxicity following merthiolate ear irrigations. J Pediatr 1984; 104:311-13.

8) Kravchenko AT, Dzagurov SG, Chervonskaia GP. Evaluation of the toxic action of prophylactic and therapeutic preparations on cells cultures. Communication III. Revealing the toxic properties of medical biological preparations from the degree of cell damage in continuous cell line L132. Zh Mikrobiol Epidemiol Immunobiol 1983; 3:87-92.

9) Cox NH, Forsyth A. Thimerosal allergy and vaccination reactions. Contact Dermatitis 1988; 18:229-33.

10) Uchida T, Naito S, Kato H, Hatano I, Harashima A, Terada Y, Ohkawa T, Chino F, Eto K. Thimerosal induces toxic reaction in non-sensitized animals. Int Arch Allergy Immunol. 1994 Jul; 104(3): 296-301.

11) Seal D, Ficker L, Wright P, Andrews V. The case against thimerosal. Lancet 1991; 338:315-6. 12) The Material Safety Data Sheets (MSDS) for thimerosal indicate, "TOXICOLOGY: Poison. Experimental neoplastigen and teratogen. Harmful by inhalation and ingestion. May cause reproductive damage. May be harmful through skin contact."

13) Kiffe M, Christen P, Arni P.

Characterization of cytotoxic and genotoxic effects of different compounds in CHO K5 cells with the comet assay (single-cell gel electrophoresis assay). Mutat Res. 2003 June 6; 537(2):151-68.

14) Fagan DG, Pritchard JS, Clarkson TW, Greenwood MR. Organ mercury levels in infants with omphaloceles treated with organic mercurial antiseptic. Arch Dis Child. 1977 Dec; 52(12):962-4.

15) Cinca I, Dumitrescu I, Onaca P, Serbanescu A, Nestorescu B. Accidental ethylmercury poisoning with nervous system, skeletal muscle, and myocardium injury. J Neurol Neurosurg Psychiatry 1980; 43:143-9.

16) Bernard S, Enayati A, Redwood L, Roger H, Binstock T. Autism: A novel form of mercury poisoning. Med Hypotheses. 2001 Apr; 56(4):462-71.

17) Holmes AS, Blaxill MF, Haley BE. Reduced levels of mercury in first baby haircuts of autistic children. Int J Toxic 2003; 22:277-85.

18) Geier MR, Geier DA.Neurodevelopmental disorders following thimerosal-containing childhood vaccines.Exp Biol Med 2003; 228:660-4

19) Godfrey ME, Wojcik D, Krone CA. Apolipoprotein E genotyping as a potential biomarker for mercury neurotoxicity. J Alzheimers Dis 2003; 5:189-196.

20) Leong CWC, Syed NI, Lorscheider FL. Retrograde degeneration of neurite membrane structural integrity of nerve growth cones following in vitro exposure to mercury. NeuroReport. 2001; 12:733-737.

- 21) S. Makani, Sastry Gollapudi, Leman Yel, Shubpa Chiplunkar and Sudhir Gupta, "Biochemical and molecular basis of thimerosal-induced apoptosis in T Cells: a major mole of mitochondrial pathway," Genes and Immunity, 3(5), pages 270-278 (2002). [Thimerosal Effects at Parts per Billion]
- 22) Mostafa Waly, Horatiu Olteanu, Ruma Banerjee, Sang-Woon Choi, Joel B. Mason, Belinda S. Parker, Saraswati Sukumar, S. Shim, Alok Sharma, Jorge M. Benzecry, V.-A. Power-Charnitsky and Richard C. Deth, IMMEDIATE COMMUNICATION, "Activation of methionine synthase by insulin-like growth factor-1 and dopamine: a target for neurodevelopmental toxins and thimerosal," Molecular Psychiatry, pages 1-13 (January 27, 2004). [Confirmation of Thimerosal Effects at Parts per Billion]
- 23) Christopher C. W Leong, Naweed I. Syed and Fritz L. Lorscheider, "Retrograde degeneration of neurite membrane structural integrity of nerve growth cones following in vitro exposure to mercury," NeuroReport, 12(4) pages 733-737 (2001). [Ionic Mercury Effects at Parts per Trillion]
- 24) Antonio R. Gasset, Motokazu Itoi, Yasuo Ishii and Richard M. Ramer, "Teratogenicities of Ophthalmic Drugs. II. Teratogenicities and Tissue Accumulation of Thimerosal," Archives of Ophthalmology, 93, pages 52-55 (1975)

- 25) Lyn Redwood, Sallie Bernard, and David Brown, "Predicted Mercury Concentrations in Hair From Infant Immunizations: Cause for Concern," NeuroToxicology, 22, pages 691-697 (2001).
- 26) William Slikker, Jr., "Developmental Neurotoxicology Of Therapeutics: Survey Of Novel Recent Findings," NeuroToxicology, 21, page 250 (2000).
- 27) Gregory V. Stajich, Gaylord P. Lopez, Sokei W. Harry and William R. Sexson, "Iatrogenic exposure to mercury after hepatitis B vaccination in preterm infants," The Journal of Pediatrics, 136(5), pages 679-681 (2000).
- 28) Polly R. Sager (Corrected Slides), "Comparative Toxicokinetics of Methylmercury and Thimerosal in Infant Macca fascicularis," Institute of Medicine, National Academy of Sciences, Washington, DC, February 9, 2004.
- 29) "Mercury: Medical and Public Health Issues," a symposium that was held at the Tampa Marriott Waterside Hotel and Marina, Tampa, Florida, on April 28-30, 2004 and sponsored by the United States Department of Health and Human Services and the United States Environmental Protection Agency.
- 30) Subcommittee on Human Rights and Wellness, Committee on Government Reform of the House of Representatives, "Mercury in Medicine Report," Washington, DC, as published in the Congressional Record, pgs. E1011-E1030, May 21, 2003.
- 31) U.S. Office of Special Counsel, 1730 M Street, N.W., Suite 218, Washington, D.C. 20036-4505, "OSC Forwards Public Health Concerns on Vaccines to Congress, ..." For more information please visit our web site at <u>www.osc.gov</u> or call 1-800-872-9855.
- 32) Special Counsel Scott Bloch's letter to Congress addressed to: "The Honorable Judd Gregg, United States Senate, Chairman, Committee on Health, Education, Labor and Pensions, 428 Dirksen Senate Office Building, Washington, D.C. 20510-6300 and The Honorable Joe Barton, U.S. House of Representatives, Chairman, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515" [OSC File Nos.: DI-04-1399, et al.]
- 33) Thomas Verstraeten, Robert Davis and Frank DeStefano, "Thimerosal VSD study, Phase I, Update, 02/29/00," obtained by SafeMinds under FOIA in 2001. [Note: This draft ends with 5 pages, having a footer notation of "LKLK03/28/00 ... Response.doc," and starting with a page heading of "Thimerosal VSD study- Follow-up on conference call 03/02/2000," that indicate the overall document dates to the end of March 2000.]
- 34) Thomas Verstraeten, Robert Davis, Frank DeStefano and the VSD team, "Risk of neurologic and renal impairment associated with thimerosal-containing vaccines," obtained by SafeMinds under FOIA in 2001.

35) A copy of the printed Simpsonwood-meeting record (with an appended copy of the "Thimerosal VSD study, Phase I, Update, 02/29/00" document that is missing page 5, can be found on the Safe Minds website at <u>http://www.safeminds.org/legislation/foia/simpsonwood.html</u>..

36) Mark Blaxill, Director, Safe Minds Analysis of Madsen et al., "Danish Thimerosal-Autism Study in Pediatrics: Misleading and Uninformative on Autism-Mercury Link" (September 1, 2003), whose observations were determined by Dr Mark R. Geier and Mr. David A. Geier to apply to all of the studies cited.

37) Mark R. Geier and David A. Geier, "Neurodevelopmental Disorders after Thimerosal-Containing Vaccines: A BriefCommunication," Society for Experimental Biology and Medicine, pages 660-664 (2003).

38)MarkR.GeierandDavidA.Geier, "ThimerosalinChildhoodVaccines, Neurodevelopmental Disorders, and Heart Disease in the United States," Journal of American Physicians and Surgeons, 8(1), pages

6-11 (2003).

- 39) David A. Geier and Mark R. Geier, "A comparative evaluation of the effects of MMR immunization and mercury doses from thimerosal-containing childhood vaccines on the population prevalence of autism," Medical Science Monitor, 10(3), pages P133-P139 (2004).
- 40) E. A. Nelson and R. Y. Gottshall, "Enhanced Toxicity for Mice of Pertussis Vaccines When Preserved with Merthiolate," Applied Microbiology, 15(3), pages 590-593 (1967).

41) Martin F. Heyworth and Sidney C. Truelove, "Problems Associated With The Use Of Merthiolate As A Preservative In Anti-Lymphocytic Globulin," Toxicology, 12, pages 325-333 (1979).

42) Lars Forstrom, M. Hannuksela, Merja Kousa and E. Lehmuskallio, "Merthiolate hypersensitivity and vaccination," Contact Dermatitis, 6, pages 241-245 (1980).

43) K. A. Winship, "Organic mercury compounds and their toxicity," Adverse Drug Reaction Acute Poisoning Review, 3, pages 141-180 (1986).

44) Neil H. Cox and Angela Forsyth, "Thiomersal allergy and vaccination reactions," Contact Dermatitis, 18, pages 229-233 (1988).

45) Albert-Jan van't Veen, "Vaccines Without Thiomersal Why So Necessary, Why So Long Coming?," Drugs, 61(5), pages 565-572 (2001).

46) Leander Tryphonas and N. O. Nielsen, "Pathology of Chronic Alkylmercurial Poisoning in Swine, "American Journal of Veterinary Research, 34(3), pages 379-392 (1973).

47) Laszlo Magos, A. W. Brown, S. Sparrow, E. Bailey, R. T. Snowden and W. R. Skipp, "The comparative toxicology of ethyl- and methylmercury." Archives of Toxicology, 57, pages 260-267 (1985).

48) The California OEHHA in a February 2004 document titled, "RESPONSE TO THE PETITION OF BAYER CORPORATION FOR CLARIFICATION OF THE PROPOSITION 65 LISTING OF "MERCURY AND MERCURY COMPOUNDS" AS CHEMICALS KNOWN TO CAUSE REPRODUCTIVE TOXICITY."

49) Mady Hornig, David Chian, and W. Ian Lipkin, IMMEDIATE COMMUNICATION, "Neurotoxic effects of postnatal thimerosal are mouse strain dependent," Molecular Psychiatry, pages 1-13, (Jun 8, 2004).

50) Said Havarinasab, Lars Lambertsson, J. Qvarnstrom and Per Hultman, "Dose-response study of thimerosal-induced murine systemic autoimmunity," Toxicology and Applied Pharmacology, 194, pages 169-179 (2004).

51) Woody R. McGinnis, "Mercury and Autistic Gut Disease," Environmental Health Perspectives, 109(7), pages A303-A304 (July 2001).

52) "Biochemical Treatment Of Mental Illness And Behavior Disorders," William J. Walsh, Health Research Institute, Presentation at Minnesota Brain Bio Association, November 1997.

53) Director of Biological Sevices, Pittman-Moore Company, letter to Dr. Jamieson of Eli Lilly Company dated 1935. U.S. Congressional Record, May 21, 2003, E1018, page 9.

54) Ueha-Ishibashi, et al. Effect of thimerosal, a preservative in vaccines, on intracellular Ca2+ concentration of rat mcerebellar neurons. Toxicology. 2004 Jan 15; 195(1): 77-84

55) James SJ et al, Thimerosal neurotoxicity is associated with glutathione depletion: protection with glutathione precursors. Neurotoxicology. 2005 Jan; 26(1):1-8.

56) Kramer L, Bauer E, Jansen, M, Reiter D, Derfler K, Schaffer A Mercury exposure in protein A immunoadsorption Nephro Dial Transplant 2004; 19:451-456

57) Clarkson T, Magos L, Myers G The Toxicology of Mercury-Current Exposures and Clinical Manifestations New England Journal of Medicine, October 2003

58)Burbacher T, Shen D, Liberato N, Grant K, Cernichiari E, Clarkson T Comparison of Blood and Brain Mercury Levels in Infant Monkeys Exposed to Methylmercury or Vaccines Containing Thimerosal Envirn Health Perspect: doi:10.1289/ehp.7908 [online 20 April 2005]

59) Torrente F, Anthony A, Heuschkel R, Thomsan M, Ashwood P, Murch S Focal-Enhanced Gastritis in Regressive Autism with Features Distinct from Crohn's and Helibacter Pylori Gastritis American Journal of Gastroenterology 2004

60)Ashwood P, Murch S, Anthony A, Pellicer A, Torrente F, Thomsan M, Walker-Smith J, Wakefield A

Intestinal Lymphocyte Populations in Children with Regressive Autism: Evidence for Extensive Mucosal Immunopathology

Journal of Clinical Immunology; Vol 23, No.6, November 2003

61)Torrente F, Ashwood P, Day R, Machado N, Furiano RI, Anthony A, Davis SE, Wakefield AJ, Thomson MA, Walker-Smith JA, Murch SH Small Intestinal enteropathy with epithelial IgG and complement deposition in children with regressive autism

62) Wakefield AJ, Anthony A, Murch SH, Thomson M, Montgomery SM, Davis S, et al. Enterocolitis in children with developmental disorders Am J Gastroenterol. 2000; 95:2285-2285

63) Horvath K, Papadimitriou J, Rabsztyn A, Drachenberg C, Tildon JT Gastrointestinal abnormalities in children with autistic disorder J Ped. 1999;135:559-563

64) Furlano R, Anthony A, Day R, Brown A, McGarvey L, Thomson M, Davies S, Berelowitz M, Forbes A, Wakefield A, Walker-Smith JA, Murch S Colonic CD8 and Gamma Delta T-cell infiltration with epithelial damage in children with autism

65) Ashwood, P, Anthony A, Torrente F, Wakefiel A Spontaneous Mucosal Lymphocyte Cytokine Profiles in Children with Autism and Gastrointestinal Symptoms: Mucosal Immune Activation and Reduced Counter Regulatory Interleukin-10 J clinical Immunology November 2004

66) Singh, VK, Lin SX, Yang VC Serological association of measles virus and human herpesvirus-6 with brain autoantibodies in autism Clin Immunol Immunopathol. 1998;89:105-8

67) Singh VK, Jensen RL Elevated levels of measles antibodies in children with autism Pediatric Neurology, 2003; 28:292-294

68) Uhlmann V, Martin CM, Sheils O, Pilkington L, Silva I, Killalea A, Murch SB, Walker-Smith J, Thomson M, Wakefield AJ, O'Leary JJ Potential viral pathogenic mechanism for a new variant inflammatory bowel disease Mol Pathol. 2002 Apr; 55(2):84-90 69) Welch M, Welch-Horan T, Anwar M, Anwar N, Ludwig R, Ruggiero D Brain Effects of Chronic IBD in Areas Abnormal in Autism and Treatment by Single Neuropeptides Secretin and Oxytocin

Journal of Molecular Neuroscience 2005. Vol 25 Number3

70) Sabra A, Bellanti J, Hartmann D, Zeligs B, MacDowell-Carneiro AL, Menendez F, Colon A, Guo Wu A, Sabra LF, Romero M, Sabra S, Ebecken R, Madi K

The GUT-CNS Connection: a new Domain for the Clinician. Gastrointestinal and Behavioral Dysfunction in Children with Non-IgE-mediated Food Allergy, Ileal-Nodular-Hyperplasia and Low Th1 Function: a New Clinical-Immunologic Constellation Annals of Allergy

71) Humphrey HI, Cole Mp, Pendergrass JC, Kiningham KK Mitochondrial Mediated Thimerosal-Induced Apoptosis in Human Neuroblastoma Cell Line Dept. of Pharmacology, Joan C. Edwards School of Medicine, Marshall University, 1542 Spring Valley Drive, Huntington, WV 25704

72) Wakefield AJ, Murch SH, Anthony A, Linell J, Casson DM, Malik M, Berelowitz M, Dhillon AP, Thomson MA, Harvey P, Valentine A, Davies SE, Walker-Smith JA Ileal lymphoid nodular hyperplasia, non-specific colitis and pervasive developmental disorder in children

Lancet 1998; 351:637-641

73) Singh, VK, Lin SX, Yang VC Serological association of measles virus and human herpesvirus-6 with brain autoantibodies in autism Clin Immunol Immunopathol. 1998;89:105-8

74) Amaral DG, Corbett BA, Kantor AB, Becker C, Kakkanaiah V, Deng J, Bacalman S, Schulman H Immunophenotyping and Proteomic and Metabolic Profiling of Children with Autism M.I.N.D. Institute: abstract presented at IMFAR; May 2005

75) Vargas DL, Nascimbene C, Krishnan C, Zimmerman A, Pardo C Neuroglial Activation and Neuroinflammation in the Brain of Patients with Autism Annals of Neurology 2005:57

76) Jyonouchi H, Geng L, Ruby A, Zimmerman-Bier B Dysregulated Innate Immune Response in Young Children with Autism Spectrum Disorders: Their Relationship to Gastrointestinal Symptoms and Dietary Intervention Neuropsychobiology 2005;51:77-85