

Mercury-poisoning The Public: The case against the Thimerosal-preserved vaccines

A. Introduction

On 29 June 2006, this researcher found an article, “**Don’t ban thimerosal**” (text reproduced in **Section J**) published in the online 28 June 2006 version of the Asbury Park Press by a leading vaccine apologist, Dr. Laura H. Kahn, which boils down to advocating the continued mercury poisoning of New Jerseyans by the known, severe poison, autoimmunogen, immunogen, and teratogen, Thimerosal (49.55% mercury by weight) contained in most doses of the *ineffective* killed-virus influenza vaccines.^{1,2,3,4,5,6}

Having reviewed the available data on the effectiveness of the influenza vaccines, this reviewer has found, *along with my fellow researchers*, that the influenza vaccines, *as a group*, are *not* effective in preventing the spread of influenza or in changing the death or hospitalization rates associated with the influenza virus.^{7,8}

Thus, the article’s premise statement, “During an influenza pandemic, the last thing needed would be unnecessary restrictions on the availability of an effective vaccine,” is *false* because the current influenza vaccines have been proven to be *ineffective*.¹⁻⁶

B. Thimerosal Safety?

Moreover, the article’s “Thimerosal has been used as a vaccine preservative for more than 50 years with no documented evidence of inflicting harm on vaccine recipients,” forgets that, *though required by law*⁹ to prove the *safety* of any preservative before using it in a vaccine, neither the vaccine makers nor the federal government have proven that the use of Thimerosal in vaccines at preservative levels (nominally, at 0.003% [30 ppm] to 0.01% [100 ppm]) is such that “the recommended dose of the product will not be toxic to the recipient” (*safe*).

C. Evidence Of Harm!

In addition, the author’s assertion of “no documented evidence of inflicting harm on vaccine recipients” is *not* supported by any recognized toxicological studies and, though, in 1999, the federal government finally scheduled such studies, to date, they have *not* been conducted.¹⁰

Moreover, there are numerous peer-reviewed published reports of harm caused by the Thimerosal-preserved influenza vaccines,¹¹ including, *in 2006*, prenatal abortions apparently linked to the mothers’ being given Thimerosal-preserved influenza vaccines.¹²

Thus, the article’s unsubstantiated claim “Multiple studies have not demonstrated any evidence that vaccines containing thimerosal cause harm ...,” has been shown, *based on the studies cited*, to be, *at best*, a distortion of factual reality.

D. Thimerosal Is Not An Effective Preservative

Further, several published papers have repeatedly pointed out that the use of Thimerosal as a preservative in medicines is problematic.¹³

In addition, the author’s implicit assertion that Thimerosal is an *effective* preservative in medicines is *not* supported by the facts in real-world studies dating back to the 1930s¹⁴ as well as by recent experience in 2004 with viable-bacteria-contaminated vials of influenza vaccines produced Chiron, *now merging with the Swiss-based drug manufacturer*

Novartis, that the UK Medicines and Healthcare products Regulatory Agency (MHRA) stopped from being marketed.¹⁵

Thus, the article's "This legislation would ban thimerosal (ethyl mercury), a preservative that prevents bacterial contamination of the vaccine," is misleading because, at the "preservative" level used in the influenza vaccine, 0.01%, Thimerosal has been proven to *not* be *effective* in preventing bacterial contamination of vaccines, in general, or, *in 2004*, preventing the bacterial contamination of filled vials of the Chiron Thimerosal-containing influenza vaccine, in specific.

E. The Bottom Line About Thimerosal and Influenza Vaccines

Based on the published science:

- **The use of Thimerosal as a preservative in vaccines has *not* been proven to be safe and,**
- **Thimerosal is *not* an effective preservative** at the nominal maximum level allowed in vaccine formulations (0.01%).

In addition,

- **Published studies have clearly established that the influenza vaccines are *not* effective in preventing influenza outbreaks and spread,** and
- **Published data has clearly established influenza vaccines are *not* effective in preventing either influenza deaths or influenza hospitalizations.**

F. Review of the Article's Other Statements and Assertions

Factually, the author's "Vaccines without this preservative can be produced only in small, single-dose vials, is another *false* statement because there are *other* preservatives, *besides* Thimerosal, that have been, and are currently being, used as preservatives in vaccines."¹⁶

With respect to the article's unsubstantiated statements, "What does cause considerable harm is influenza. Approximately 200,000 people are hospitalized each year from influenza. About 30,000 people die each year from influenza, including 75 to 150 children. This is during a regular influenza season — not a pandemic," this reviewer finds that the published data (**Tables 1 and 2**) do *not* support any of the author's claims.

*For the years in the period from 1979 through 2000, where there is reported data, the average number of people hospitalized for influenza is about 26,000 per year (with a range of 13,000 to 44,000 cases) based on reported hospital discharges where influenza was the "First-Listed" reason for the discharge in **Table 1.***

Thus, the author appears to have inflated the hospitalizations by, *on average*, more than a factor of 7 (or 4.5 to 15+, depending upon the year).

Similarly, the reported data (**see Table 1**) shows that only about 600 to 3,000 people died from influenza each year with an average of less than 1,300.

Thus, the author appears to have inflated the "flu deaths" by, *on average*, a factor of about 24 (or 9.9+ to 49+, depending upon the year).

When it comes to children, the reported data shown in **Table 2** indicate that, for children 14 years of age and under, only 15 to 42 died each year and, *given the intervals*, the death rate declines as the children exceed 4 years of age.

Based on the preceding numbers for those 14 and under and presuming that the average annual death rate for children 15 to 17 years of age is slightly lower than for those 5 to 14 years of age (or an average number of deaths of 3), the average number of deaths for

children in the years reported would be about 31 deaths, the author seems to have overstated the deaths of children by more than a factor of “2.”

If the author has any other published data on “influenza deaths” and *not* “influenza plus pneumonia deaths” or “influenza-related pneumonia deaths,” then, this reviewer would request that the author share it with this reviewer and the editors who published this article.

In the absence of any published peer-reviewed or independently verifiable data that contradicts the published studies that this reviewer has cited, this reviewer respectfully requests that they author publish a clarification of her statements here because, *based on the published data cited*, human influenza in the US, *after the advent of antibiotics to fight the secondary infections that occur after the influenza infection and antiviral drugs that can shorten the influenza disease*, does *not* cause “considerable harm.”

G. Concluding Remarks

Finally, with respect to the author’s “We have a tenuous influenza vaccine supply during regular flu seasons. We don't need to make the situation far worse than it already is. Passing this legislation is bad public health policy. Please urge your Assembly members to vote no on A-1324,” the body of scientifically sound evidence cited clearly shows:

- ❖ **The current human influenza vaccines are *not* effective.**
- ❖ **There is *no proof* that *Thimerosal is safe*.**
- ❖ **There is considerable evidence that**
 - ***Thimerosal-preserved influenza vaccine doses injected into pregnant women have caused fetal death and abortion.***
 - ***All Thimerosal-preserved vaccines have caused considerable harm in some injected with them, and***
 - ***Thimerosal-free vaccines have been shown to have fewer and less-severe adverse reactions than their Thimerosal-preserved counterparts.***
- ❖ **There is clear evidence (proof) that 0.01% Thimerosal is *not* an effective preservative in vaccines.**

Based on the preceding, this reviewer, a researcher who has thoroughly studied the science behind the issues concerning the use of Thimerosal as a preservative in vaccines, recommends that every New Jerseyan should demand their:

- ❖ **Assembly members vote YES on A-1324, a bill that, in general, would eliminate the use of vaccines containing mercury (including Thimerosal) over three years, and**
- ❖ **Senators vote YES on the corresponding Senate bill, S618.**

[**Note:** When the article being reviewed is quoted, a **Times New Roman** font is used. Quotes of federal laws and statutes are in a **Lydian** font and outside materials are quoted in an **Arial** font. The reviewer’s remarks are in a **News Gothic MT** font. The reviewer is Paul G. King, PhD, Founder of **F.A.M.E. Systems**, 33 A Hoffman Avenue, Lake Hiawatha, NJ 07034 Tel.: 973-331-0131 email: drking@gti.net. Dr. King’s credentials and other information can be found on his web site: <http://www.dr-king.com>.]

Respectfully submitted,



Paul G. King, PhD, MS
Founder, **F.A.M.E. Systems**

H. Tables

“Table 1. Relevant Information Bearing on Influenza Incidence, Hospitalizations and Attributed Deaths

Year	Estimated United States Population¹	Total Net Number of Influenza Vaccine Doses Distributed²	Influenza Vaccine Percent Population Coverage [IVPPC]	Influenza Death Rate³ (per 100,000 people) [Total Number]	Influenza Case Percentages³ (cases per 100 people) [Total Number]	Influenza First-Listed Hospital Discharge Rate³ (per 10,000 people) [Total Number]
1979⁴	225,055,487	18,270,794	8.1	0.3 [604]	-	-
1980	227,224,681	12,425,890	5.5	-	-	-
1981	229,465,714	19,829,170	8.6	1.3 [3,006]	-	-
1982	231,664,458	16,959,690	7.3	-	33 [74,925,000]	-
1983	233,791,994	17,877,970	7.6	0.6 [1,431]	38 [87,299,000]	-
1984	235,824,902	19,179,060	8.1	-	45 [103,440,000]	-
1985	237,923,795	20,700,761	8.7	0.9 [2,054]	40 [94,409,000]	-
1990	249,464,396	27,076,206	11	-	43 [106,807,000]	1.8 [44,000]
1991	252,153,092	32,809,662	13	0.4 [1,137]	52 [129,583,000]	1.0 [26,000]
1992	255,029,699	40,352,367	16	-	43 [107,309,000]	0.5 [13,000]
1993	257,782,608	42,980,814	17	0.4 [1,044]	52 [132,633,000]	1 [25,000]
1994	260,327,021	60,084,728	23	-	35 [90,447,000]	1.2 [31,000]
1995	262,803,276	36,512,538	14	0.2 [606]	41 [108,009,000]	0.7 [19,000]
1996	265,228,572	38,915,520	15	0.3 [745]	36 [95,049,000]	0.8 [21,000]
1997	267,783,607	40,996,883	15	0.3 [720]	-	0.7 [19,000]
1998	270,248,003	48,080,122	18	0.6 [1,724]	-	1.3 [34,000]
1999⁵	272,690,813	60,468,427	22	0.6 [1,665]	-	1.4 [37,000]
2000	281,421,906	65,582,650	23	0.6 [1,765]	-	1.4 [39,000]

¹ Data obtained from the United States' Census Bureau

² Data obtained from the Biologic Surveillance Summaries of the Centers for Disease Control and Prevention

³ Data obtained from the National Center for Health Statistics

⁴ Estimates for 1979 through 1998 use International Classification of Diseases, 9th Revision (ICD-9) coding

⁵ Estimates for 1999 through 2000 use International Classification of Disease, 10th Revision (ICD-10) coding”

“Table 2. Number of influenza deaths¹ per year in children

Year	<1 year-old	1-4 years-old	5-14 years-old	Total
1979	9	8	8	25
1981	13	8	12	33
1983	6	8	3	17
1985	7	6	7	20
1987	8	6	1	15
1989	12	8	14	34
1991	16	15	11	42
1993	10	14	13	37
1995	7	7	7	21
1996	15	3	8	26
1997	12	10	13	35
1998	6	3	14	23
1999	13	12	11	36
2000	9	10	11	30
2001	7	6	12	25
Mean ± Std	10.0 ± 3.2	8.3 ± 3.5	9.7 ± 3.7	27.9 ± 8.0
Median	9.0	8.0	11.0	26

¹ Data obtained from the National Center for Health Statistics ”

J. Text Of The Article That Was Reviewed

“Don't ban thimerosal

Posted by the Asbury Park Press on 06/28/06

During an influenza pandemic, the last thing needed would be unnecessary restrictions on the availability of an effective vaccine.

Unfortunately, this is what could happen if anti-immunization legislation (A-1324) is passed in the Assembly. This legislation would ban thimerosal (ethyl mercury), a preservative that prevents bacterial contamination of the vaccine.

Thimerosal has been used as a vaccine preservative for more than 50 years with no documented evidence of inflicting harm on vaccine recipients. Vaccines without this preservative can be produced only in small, single-dose vials, which would make mass administration extremely difficult and costs significantly higher.

Multiple studies have not demonstrated any evidence that vaccines containing thimerosal cause harm such as autism or other neurological disorders. What does cause considerable harm is influenza. Approximately 200,000 people are hospitalized each year from influenza. About 30,000 people die each year from influenza, including 75 to 150 children. This is during a regular influenza season — not a pandemic.

We have a tenuous influenza vaccine supply during regular flu seasons. We don't need to make the situation far worse than it already is. Passing this legislation is bad public health policy. Please urge your Assembly members to vote no on A-1324.

Dr. Laura H. Kahn

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Endnotes

- ¹ Simonsen L, Reichert TA, Viboud C, Blackwelder WC, Taylor RJ, Miller MA. Impact of influenza vaccination on seasonal mortality in the US elderly population. *Arch Intern Med* 2005;165:265-272.
- ² Cohen J. Study questions the benefits of vaccinating the elderly. *Science* 2005;307:1026.
- ³ Maeda T, Shintani Y, Nakano K, Terashima K, Yamada Y. Failure of inactivated influenza A vaccine to protect healthy children aged 6-24 months. *Pediatr Int* 2004;46:122-125.
- ⁴ Jefferson T, Smith S, Demicheli V, Harnden A, Rivetti A, Di Pietrantonj C. Assessment of the efficacy and effectiveness of influenza vaccines in healthy children: systematic review. *Lancet* 2005;365:773-80.
- ⁵ Centers for Disease Control and Prevention. Assessment of the effectiveness of the 2003-04 influenza vaccine among children and adults-Colorado, 2003. *MMWR* 2004;53:707-710 (2004).
- ⁶ Demicheli V, Rivetti D, Deeks JJ, Jefferson TO. Vaccines for preventing influenza in healthy adults. *Cochrane Database Syst Rev* 2004;3:CD001269.
- ⁷ Geier DA, King PG, Geier MR. A Review of the Effectiveness of Influenza Vaccine Administration in the United States and Considerations Regarding Influenza Vaccine Policy. 2006. [In revision.]
- ⁸ Factually, the MedImmune FluMist live-virus flu vaccine actually spreads the three “cold-adapted” strains of influenza that it contains and risks, through viral exchange, risks increasing the transmission of more virulent mutated vaccine-related flu strains. According to the manufacturer, the reported risk of transmission to non-inoculated individuals, in the pediatric study, is in the order of 2.4% (see <http://www.flumist.com/pdf/prescribinginfo.pdf>, page 8 above the “INDICATIONS AND USAGE, “With documented transmission of one Type B in one placebo subject and possible transmission of Type A viruses in four placebo subjects, the probability of acquiring a transmitted vaccine virus was estimated to be 2.4% (95% CI: 0.13, 4.6), using the Reed Frost model. *The duration of FluMist vaccine virus replication and the potential for transmission of vaccine viruses by recipients 5-49 years of age have not been established*”) and experiential reports have noted up to 100% infection of close contacts from inoculated adults who did *not* self-quarantine for the 21-day period recommended.
- ⁹ Title 21 of the Code of Federal Regulations (**21 CFR**) at **Section 610.15(a)** (with italicization added for emphasis): “(a) **Ingredients, preservatives, diluents, adjuvants. All ingredients used in a licensed product, and any diluent provided as an aid in the administration of the product, shall meet generally accepted standards of purity and quality... Any preservative used shall be sufficiently nontoxic so that the amount present in the recommended dose of the product will not be toxic to the recipient, ...**”
- ¹⁰ According to the web page <http://cerhr.niehs.nih.gov/CERHRchems/index.html>, of mid-September 2005, containing Thimerosal, CAS 54-64-8, was not nominated by the FDA to have its toxicity appropriately studied until “11/99.” However, that proposed study’s status was changed to “Nomination Deferred” in “7/00” because there were “Chemicals with higher priorities” for, given the studies that were allowed to proceed, no scientifically sound reason. In June 2006, this item appears to have been removed/relocated by the NIEH. [**Note:** Attempts to find it by searching the NIEH online database (<http://www.niehs.nih.gov/external/search.htm>) were *unsuccessful* – all that was found that was remotely applicable was the 2005 paper by Burbacher *et al.*, “Blood and Brain Mercury Content in Infant Monkeys after Exposure to Methylmercury or Thimerosal,” which does *not per se* address any aspect of the toxicology of Thimerosal – the article only addresses Thimerosal’s apparent accumulation and disposition.
- ¹¹
 - a. Haber P, DeStefano F, Angulo FJ, et al. Guillain-Barre syndrome following influenza vaccination. *JAMA* 2004;292:2478-2481.
 - b. Geier MR, Geier DA, Zahalsky AC. Influenza vaccination and Guillain Barre syndrome. *Clin Immunol* 2003;107:116-121.
 - c. Lasky T, Terracciano GJ, Magder L, et al. The Guillain-Barre syndrome and the 1992-1993 and 1993-1994 influenza vaccines. *N Engl J Med* 1998;339:1797-1802.
 - d. Schonberger LB, Bregman DJ, Sullivan-Bolyai JZ, et al. Guillain-Barre syndrome following vaccination in the National Influenza Immunization Program, United States, 1976-1977. *Am J Epidemiol* 1979;110:105-123.

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- e. Mutsch M, Zhou W, Rhodes P, et al. Use of the inactivated intranasal influenza vaccine and the risk of Bell's palsy in Switzerland. *N Engl J Med* 2004;350:896-903.
 - f. Zhou W, Pool V, DeStefano F, Iskander JK, Haber P, Chen RT, and VAERS Working Group. A potential signal of Bell's palsy after parenteral inactivated influenza vaccines: reports to the Vaccine Adverse Event Reporting System (VAERS)--United States, 1991-2001. *Pharmacoepidemiol Drug Saf* 2004;13:505-510.
 - g. Mader R, Narendran A, Lewtas J, et al. Systemic vasculitis following influenza vaccination—report of 3 cases and literature review. *J Rheumatol* 1993;20:1429-1431.
 - h. Blumberg S, Bienfang D, Kantrowitz FG. A possible association between influenza vaccination and small-vessel vasculitis. *Arch Intern Med* 1980;140:847-848.
 - i. Yanai-Berar N, Ben-Itzhak O, Gree J, Nakhoul F. Influenza vaccination induced leukocytoclastic vasculitis and pauci-immune crescentic glomerulonephritis. *Clin Nephrol* 2002;58:220-223.
 - j. Geier MR, Geier DA. A case-series of adverse events, positive re-challenge of symptoms, and events in identical twins following hepatitis B vaccination: analysis of the Vaccine Adverse Event Reporting System (VAERS) database and literature review. *Clin Exp Rheumatol* 2004;22:749-755.
 - k. Schattner A. Consequence or coincidence? The occurrence, pathogenesis and significance of autoimmune manifestations after viral vaccines. *Vaccine* 2005;23:3876-3886.
 - 12 Ayoub DM, F. Yazbak FE. Influenza Vaccination During Pregnancy: A Critical Assessment of the Recommendations of the Advisory Committee on Immunization Practices (ACIP). *J Am Phys and Surg.* Summer 2006; 11(2): 41-47.
 - 13 a. Schattner A. Consequence or coincidence? The occurrence, pathogenesis and significance of autoimmune manifestations after viral vaccines. *Vaccine* 2005;23:3876-3886.
 - b. Seal D, Ficker L, Wright P, Andrews V. The case against Thimerosal. *Lancet* 1991;338:315-316.
 - c. van't Veen AJ. Vaccines without Thiomersal: why so necessary, why so long coming? *Drugs* 2001; 61:565-572.
 - d. Heyworth MF, Truelove SC. Problems associated with the use of Merthiolate as a preservative in anti-lymphocytic globulin. *Toxicol* 1979;12:325-333.
 - e. van Ken WG: Thiomersal in gammaglobulins for pregnant travelers may not be safe for the fetus. *Ned Tijdschr Geneeskde* 1999;143:1934-1935.
 - f. Geier DA, Geier MR. A two-phased population epidemiological study of the safety of Thimerosal-containing vaccines: a follow-up analysis. *Med Sci Monit* 2005;11(4):CR160-CR170.
 - g. Halsey NA. Limiting infant exposure to Thimerosal in vaccines and other sources of mercury. *JAMA* 1999;282:1763-1766.
 - 14 a. Powell HM, Jamieson WA: Merthiolate as a germicide. *Am. J. Hyg.* (1931) **13**:296-310.
 - b. Salle AJ, Lazarus AS: A comparison of the resistance of bacteria and embryonic tissue to germicidal substances. *Proc. Soc. Exp. Biol. Med.* (1935) **32**:665-667.
 - c. Welch H: Mechanism of the toxic action of germicides on whole blood measured by the loss of phagocytic activity of leucocytes. *J. Immunol.* (1939) **37**:525-533.
 - d. Welch H, Hunter AC: Method for determining the effect of chemical antiseptics on phagocytosis. *Am. J. Public Health* (1940) **30**:129-137.
 - e. Ellis FA: Possible danger in use of Merthiolate Ophthalmic ointment. *Arch. Ophthalmol.* (1943) **30**:265-266.
 - f. Ellis FA: The sensitizing factor in Merthiolate. *J. Allergy* (1948) **18**:212-213.
 - g. Cogswell HD, Shown A: Reaction following the use of tincture of Merthiolate. *Ariz. Med.* (1948) **5**:42-43.
 - h. Morton HE, North LL, Engley FB: The bacteriostatic and bactericidal actions of some mercurial compounds on hemolytic streptococci: in vivo and in vitro studies. *J. Am. Med. Assoc.* (1948) **136**: 37-41.
 - i. Engley FB: Evaluation of mercurial compounds as antiseptics. *Ann. N.Y. Acad. Sci.* (1950) **53**: 197-206.

- j. Engley FB: Mercurials as disinfectants: evaluation of mercurial antimicrobial action and comparative toxicity for skin tissue cells. 42nd Mid-Year Meeting of the Chemical Specialties Manufacturer's Association, Chicago, Illinois (1956) 199-205, 223-225.
- 15 <http://www.fda.gov/ola/2005/influenza0210.html>, last visited 25 June 2006. "As you know, on October 5, 2004, the British Medicines and Healthcare products Regulatory Agency (MHRA) suspended Chiron's license to manufacture influenza vaccine due to sterility failures in filled vials of the vaccine."
- 16 <http://www.fda.gov/cber/vaccine/thimerosal.htm>, "Table 2: Preservatives Used in U.S. Licensed Vaccines

Preservative	Vaccine Examples (Tradename; Manufacturer*)
Thimerosal	DT, Td (several), TT (several), JE-VAX, Influenza (several)
2-phenoxyethanol and formaldehyde	IPV (IPOL; AP), DTaP (Daptacel; AP)
Phenol	Typhoid Vi Polysaccharide (Typhim Vi; AP), Pneumococcal Polysaccharide (Pneumovax 23; M)
Benzethonium chloride (Phemerol)	Anthrax (B)
2-phenoxyethanol	DTaP (Infanrix; GSK), Hepatitis A (Havrix; GSK), Hepatitis A/ Hepatitis B (Twinrix; GSK)

* Manufacturer abbreviations: GSK = GlaxoSmithKline; WL = Wyeth Lederle; AP = Aventis Pasteur, now part of sanofi aventis; M = Merck; B=Bioport.