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. 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.

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.

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 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.

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

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.

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 1930s 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.\textsuperscript{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.\textsuperscript{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
## Table 1. Relevant Information Bearing on Influenza Incidence, Hospitalizations and Attributed Deaths

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated United States Population</th>
<th>Total Net Number of Influenza Vaccine Doses Distributed</th>
<th>Influenza Vaccine Percent Population Coverage [IVPPC]</th>
<th>Influenza Death Rate (^3) (per 100,000 people) [Total Number]</th>
<th>Influenza Case Percentages (^3) (cases per 100 people) [Total Number]</th>
<th>Influenza First-Listed Hospital Discharge Rate (^3) (per 10,000 people) [Total Number]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>225,055,487</td>
<td>18,270,794</td>
<td>8.1</td>
<td>0.3 [604]</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1980</td>
<td>227,224,681</td>
<td>12,425,890</td>
<td>5.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1981</td>
<td>229,465,714</td>
<td>19,829,170</td>
<td>8.6</td>
<td>1.3 [3,006]</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1982</td>
<td>231,664,458</td>
<td>16,959,690</td>
<td>7.3</td>
<td>-</td>
<td>33 [74,925,000]</td>
<td>-</td>
</tr>
<tr>
<td>1983</td>
<td>233,791,994</td>
<td>17,877,970</td>
<td>7.6</td>
<td>0.6 [1,431]</td>
<td>38 [87,299,000]</td>
<td>-</td>
</tr>
<tr>
<td>1984</td>
<td>235,824,902</td>
<td>19,179,060</td>
<td>8.1</td>
<td>-</td>
<td>45 [103,440,000]</td>
<td>-</td>
</tr>
<tr>
<td>1985</td>
<td>237,923,795</td>
<td>20,700,761</td>
<td>8.7</td>
<td>0.9 [2,054]</td>
<td>40 [94,409,000]</td>
<td>-</td>
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<tr>
<td>1990</td>
<td>249,464,396</td>
<td>27,076,206</td>
<td>11</td>
<td>-</td>
<td>43 [106,807,000]</td>
<td>1.8 [44,000]</td>
</tr>
<tr>
<td>1991</td>
<td>252,153,092</td>
<td>32,809,662</td>
<td>13</td>
<td>0.4 [1,137]</td>
<td>52 [129,583,000]</td>
<td>1.0 [26,000]</td>
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<tr>
<td>1992</td>
<td>255,029,699</td>
<td>40,352,367</td>
<td>16</td>
<td>-</td>
<td>43 [107,309,000]</td>
<td>0.5 [13,000]</td>
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<tr>
<td>1993</td>
<td>257,782,608</td>
<td>42,980,814</td>
<td>17</td>
<td>0.4 [1,044]</td>
<td>52 [132,633,000]</td>
<td>1 [25,000]</td>
</tr>
<tr>
<td>1994</td>
<td>260,327,021</td>
<td>60,084,728</td>
<td>23</td>
<td>-</td>
<td>35 [90,447,000]</td>
<td>1.2 [31,000]</td>
</tr>
<tr>
<td>1995</td>
<td>262,803,276</td>
<td>36,512,538</td>
<td>14</td>
<td>0.2 [606]</td>
<td>41 [108,009,000]</td>
<td>0.7 [19,000]</td>
</tr>
<tr>
<td>1996</td>
<td>265,228,572</td>
<td>38,915,520</td>
<td>15</td>
<td>0.3 [745]</td>
<td>36 [95,049,000]</td>
<td>0.8 [21,000]</td>
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<tr>
<td>1997</td>
<td>267,783,607</td>
<td>40,996,883</td>
<td>15</td>
<td>0.3 [720]</td>
<td>-</td>
<td>0.7 [19,000]</td>
</tr>
<tr>
<td>1998</td>
<td>270,248,003</td>
<td>48,080,122</td>
<td>18</td>
<td>0.6 [1,724]</td>
<td>-</td>
<td>1.3 [34,000]</td>
</tr>
<tr>
<td>1999</td>
<td>272,690,813</td>
<td>60,468,427</td>
<td>22</td>
<td>0.6 [1,665]</td>
<td>-</td>
<td>1.4 [37,000]</td>
</tr>
<tr>
<td>2000</td>
<td>281,421,906</td>
<td>65,582,650</td>
<td>23</td>
<td>0.6 [1,765]</td>
<td>-</td>
<td>1.4 [39,000]</td>
</tr>
</tbody>
</table>

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, 9\textsuperscript{th} Revision (ICD-9) coding
5. Estimates for 1999 through 2000 use International Classification of Disease, 10\textsuperscript{th} Revision (ICD-10) coding"
Table 2. Number of influenza deaths\(^1\) per year in children

<table>
<thead>
<tr>
<th>Year</th>
<th>&lt;1 year-old</th>
<th>1-4 years-old</th>
<th>5-14 years-old</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>1981</td>
<td>13</td>
<td>8</td>
<td>12</td>
<td>33</td>
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<tr>
<td>1983</td>
<td>6</td>
<td>8</td>
<td>3</td>
<td>17</td>
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<tr>
<td>1985</td>
<td>7</td>
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<td>7</td>
<td>20</td>
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<tr>
<td>1987</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td>15</td>
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<tr>
<td>1989</td>
<td>12</td>
<td>8</td>
<td>14</td>
<td>34</td>
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<tr>
<td>1991</td>
<td>16</td>
<td>15</td>
<td>11</td>
<td>42</td>
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<tr>
<td>1993</td>
<td>10</td>
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<td>1995</td>
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<td>1996</td>
<td>15</td>
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<td>8</td>
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<td>1997</td>
<td>12</td>
<td>10</td>
<td>13</td>
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<tr>
<td>1998</td>
<td>6</td>
<td>3</td>
<td>14</td>
<td>23</td>
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<tr>
<td>1999</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>36</td>
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<tr>
<td>2000</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>2001</td>
<td>7</td>
<td>6</td>
<td>12</td>
<td>25</td>
</tr>
</tbody>
</table>

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"
Endnotes


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.


r. Ellis FA: The sensitizing factor in Merthiolate. J. Allergy (1948) 18:212-213.


http://www.fda.gov/cber/vaccine/thimerosal.htm, “Table 2: Preservatives Used in U.S. Licensed Vaccines

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

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