

Thursday, 6 June 2013

Introductory Remarks

On 13 May 2013, this reviewer downloaded Curtis Brainard's article, "**Sticking with the truth**", which is being reviewed, from http://www.cjr.org/feature/sticking_with_the_truth.php

This author's review of this article follows these introductory remarks and a table-of-contents page.

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This assessment is titled "**Review of "Sticking with the truth"**".

Introductory Remarks

First, each portion of the writer's text is quoted in a grayed "Georgia" font.

Second, the review comments follow in a "Verdana" font and are indented.

Third, when quoting from writer's text, the text is in an *italicized "Times New Roman"* font.

Fourth, when quoting or referencing other sources, the text is in an "Arial Narrow" font.

Finally, should anyone find any significant factual error in this review for which they have independent^[a], scientifically sound, peer-reviewed-published-substantiating documents, please submit that information to this reviewer so that he can improve his understanding of factual reality and, where appropriate, revise his views and this review.

Respectfully,

<S>

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[To whom all responses should be directed]

[a] To qualify as an independent document, the study should be published by researchers who have no direct or indirect conflicts of interest from their ties to either those commercial entities who profit from the sale of vaccines or those entities, academic, commercial or governmental, who directly or indirectly, actively promote vaccines, the development of vaccines, and/or inoculation programs using vaccines.

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"Review of 'Sticking with the truth'"**

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Review of “**Sticking with the truth**”

INTRODUCTORY REMARKS

First, as this article’s title states, this reviewer agrees with the writer of the article that we need to stick with the truth.

However, Brainard’s article does not stick with the truth because many of the statements he makes are not supported by any peer-reviewed, published, scientifically sound and appropriate studies whose raw and ancillary data are available for independent review.

“How ‘balanced’ coverage helped sustain the bogus claim that childhood vaccines can cause autism

By Curtis Brainard” [chb2103@columbia.edu]

Unfortunately, rather than “[S]ticking with the truth”, the writer, Curtis Brainard, starts with unsupported assertions concerning “coverage”, a “claim”, and an assertion “childhood vaccines can cause autism”.

Factually, numerous peer-reviewed studies¹ have suggested that vaccination can be a causal factor in “autism” and other serious neuro-developmental disorders since 1976, when a paper discussing small-pox vaccination suggested, “But vaccination is recognized as having a starter function for the onset of autism”².

MMR VACCINE AND WAKEFIELD ISSUES

“In 1998, *The Lancet*, one of the most respected medical journals, published a study by lead author Andrew Wakefield, a British physician who claimed there might be a link between the vaccine for measles, mumps, and rubella (MMR) and autism, the developmental disorder that afflicts one out of every 88 children in the US.”

First, nowhere in the original 1998 “*The Lancet*” article, “Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children”, which was a small retrospective case study involving 12 children, did the authors assert that “*there might be a link between the vaccine for measles,*

¹ See the applicable references in http://mercury-freedrugs.org/docs/120627_INC4_Traces_UNEP_EnglishVersion_b.pdf for peer-reviewed studies published into early 2012.

² Eggers C. [Autistic syndrome (Kanner) and vaccination against smallpox (author's transl)]. *Klin Padiatr.* 1976 Mar; 188(2): 172-180, emphasis added:
“Abstract
3-4 weeks following an otherwise uncomplicated first vaccination against smallpox a boy, then aged 15 months and last seen at the age of 5 1/2 years, gradually developed a complete Kanner syndrome. The question whether vaccination and early infantile autism might be connected is being discussed. A causal relationship is considered extremely unlikely. But vaccination is recognized as having a starter function for the onset of autism”.

mumps, and rubella (MMR) and autism".

In the abstract³, the authors talk about "behavioral symptoms", not the neurodevelopmental symptoms which define "autism", a recognized neurodevelopmental disorder, when, under "Findings", the text states (emphasis added), "Onset of behavioural symptoms was associated, by the parents, with measles, mumps, and rubella vaccination in eight of the 12 children, with measles infection in one child, and otitis media in another," and the parents of the remaining 2 children apparently reported no onset association or an unspecified one.

Further, the "Abstract" closes with,

"Interpretation

We identified associated gastrointestinal disease and developmental regression in a group of previously normal children, which was generally associated in time with possible environmental triggers".

When other authors attacked the original paper a month later, even they admitted,

"Wakefield and co-workers state 'We did not prove an association between measles, mumps, and rubella vaccines and the syndrome described'"⁴. [**Note:** The article's "syndrome" was "Ileal-lymphoid-nodular hyperplasia"].

Thus, "*a link between the vaccine for measles, mumps, and rubella (MMR) and autism*" was an unsupported inferential extrapolation from what was clearly stated in the paper to associations that were neither claimed by the study's authors nor based on any small case study, claimable.

Because the writer's embedded citations are to non-peer-reviewed news items, not to the original source paper and not to any published peer-reviewed critique thereof, it should be obvious that Brainard, the writer of the article, is apparently not really interested in: **a)** reading published, peer-reviewed source articles or **b)** "*[s]ticking with the truth*".

"The paper coincided with growing concern among parents in the US and UK about a possible connection between the rising number of childhood vaccinations and the rising rate of autism among kids. Although the trends were only coincidental, Wakefield's paper helped spark a debate about the supposed link that has played out in the media over the last 15 years."

Actually, the growing concern in the United States of America (USA) "*about a possible connection between the rising number of childhood vaccinations and the rising rate of autism*" had been triggered by the indicator

³ [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(97\)11096-0/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(97)11096-0/abstract)

⁴ [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(98\)26012-0/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(98)26012-0/fulltext)

reports in the Vaccine Adverse Events Reporting System (VAERS)⁵

For example, for the 1369 serious adverse events (sAEs) found searching the MMR vaccination program for sAEs in children between the ages of 1 and 8 years of age who were vaccinated during the period from the beginning of 1987 through the end of 1997, excluding reports from foreign countries⁶, that VAERS search found 99 case reports (7.2%) that listed a link between the MMR vaccine and/or those mercury-preserved vaccines given with or before the MMR vaccine and a subsequent diagnosis of autism or an autism spectrum disorder (see **Table 1** for a partial listing of 71 “autism” reports [19 Aug. 1988 — 15 Jan. 1997]).

Table 1 VAERS Case Reports In Young Children (1 to 8 years of age) Receiving the MMR Vaccine and Later Being Diagnosed with Autism or a Related Neurodevelopmental Disorder (e.g., ASD or PDD,) from 19 Aug. 1988 through 15 Jan. 1997

Listing No.	VAERS ID:	Date of Vaccination	Age (yrs)	Sex (M/F)	Diagnosis (Autism, ASD, PDD, PDD-NOS, Asperger's or ...)	Attributed To (MMR, mercury, MMR & mercury, or ...) [Relative time of initial diagnosis]
01	85519	1988-08-19	1.5	M	Autism (<u>severe autism</u>)	MMR & DPT [2 months later]; AE posted 1996-04-30
02	263574	1989-01-28	1.3	M	Autism, (and PDD & ADHD)	MMR [246 days later] ; AE posted 2006-09-22
03	132226	1989-01-29	1.7	M	Autism (atypical autism)	MMR [5 months later] ; AE posted 1999-11-30
04	257950	1989-10-19	1.4	M	Autism (high fever, brain damage)	MMR [started 1 day later] ; AE: 2006-05-31
05	181845	1990-02-02	1.3	M	Autism (regression into autism)	MMR [onset 88 days later] ; AE: 2002-02-24
06	102477	1990-10-18	1.3	M	Autism (fever, regress'n to autism)	MMR & Hib [started day 0]; AE : 1997-08-12
07	291065	1991-01-11	1.3	F	Autism (severely autistic)	MMR & Hib [\geq 1 yr; date NR]; AE: 2007-09-17
08	162694	1991-05-10	1.3	M	Autism/PDD (high fever, word loss, stopped walking)	MMR & Hib [ca. 5 yrs later]; AE: 2000-11-10 – “ Dx'd as PDD/Autism about 4 years ago ” [1996]
09	348162	1991-08-19	4.0	M	Autism (possible autistic enterocolitis)	MMR & DPT+IPV, Hib+HepB, OPV [onset 32 days after shots; 3 months later regression obvious & ongoing; (and > 18 years later)]; AE: 2009-05-29.
1 Jan '87 — 27 Jan '92 [300 sAEs/5.1 yrs or – 59 sAEs/yr]		3 autism reports per 100 sAEs [sAEs are “serious Adverse Events”]		Male/Female ratio = 8/1	[REDACTED]	
10	77566	1992-02-28	1.4	F	Autism (Noninfectious encephalopathy, Hostility/aggression)	MMR & DTaP, Hib, OPV [diagnosis date not reported nor alluded to in the write up]; AE entered on: 1995-09-18 – no onset of submission dates
11	80851	1992-02-28	1.4	F	Autism (“pt recvd vax; became autistic”)	MMR & DTP, Hib, OPV [diagnosis date not reported nor alluded to in the write up]; AE: 1996-01-11
12	301172	1992-03-27	1.3	M	Autism (& “severe gastrointestinal problems (constipation) and severe behavior issues.”)	MMR & Hib [diagnosis date not reported but narrative indicates probably – 1+ yr later]; AE: 2007-12-29
13	161423	1992-05-05	1.0	M	Autism (“2 year old male experienced autism, autistic spectrum disorder, ...”)	MMR [diagnosis date not reported but narrative indicates probably – 1 yr later; confirmed about age 3.25 yrs] ; AE: 2001-07-09
14	263709	1992-05-22	1.4	M	Autism (and <u>mercury toxicity</u> from Thimerosal & nearby power plant)	MMR [onset 90 days after vax; initial diagnosis implicated mercury exposures from previous vaccines/other exposures; autism “formally diagnosed” in 1999] ; AE: 2006-09-25
15	116253	1992-05-28	1.1	M	Autism (“pt devel severe & chronic gastrointestinal problems... & finally devel autistic like sx”)	MMR [onset 4 days after vax; formal diagnosis date not reported] ; AE: 1998-09-16
16	127553	1992-06-18	4.5	M	Autism & Adverse Drug Reaction (prev. AE to DPT & OPV at 2+ mo)	MMR & DTP, Hib, OPV [onset 1 day after vax.; formal diagnosis date not reported]; AE: 1999-08-18
17	263571	1992-08-27	4.0	M	Autism (and other issues)	MMR [diagnosis date not reported; AE was submitted on 2006-09-21]

⁵ VAERS was commissioned in 1990 because it was an integral of the National Vaccine Injury Compensation Program (NVICP) legislation in the National Vaccine Injury Compensation Act enacted late in 1986.

⁶ Visit <http://www.medalerts.org/vaersdb/index.php>, make the appropriate search parameter entries and perform the search

Table 1 [Continued]

Listing No.	VAERS ID:	Date of Vaccination	Age (yrs)	Sex (M/F)	Diagnosis (Autism, ASD, PDD, PDD-NOS, Asperger's or ...)	Attributed To (MMR, mercury, MMR & mercury, or ...) [Relative time of initial diagnosis]
18	127315	1992-09-09	1.5	M	Autism (& "Hostility, Hyperkinesia, Personally disorder, Speech disorder"	MMR & DTP, Hib, OPV [diagnosis date not reported; AE was submitted on 1999-06-28]
19	75900	1992-11-18	1.3	M	Autism ("pt recv vax 18NOV92 & the same day exp allergies, learning difficulties & stopped talking; ..."	MMR [autism onset 1 yr after vax – AE was reported on 1995-07-11 – 3 yrs after vax.]
20	234687	1993-01-06	1.5	M	Autism (start: *1/6/93 through first week of February 1993, 60 Day follow up: severe autism. ...")	MMR & DTaP, Hib, OPV [diagnosis date not reported; AE was submitted on 2005-03-07]
21	172313	1993-01-27	1.3	M	Autism ("pt was evaluated ... on 10/5/94, for behavior problems and speech delay ...")	MMR & Hib 10 days earlier [diagnosis date not reported; probably diagnosed in 1995 ; AE was submitted on 2001-06-15]
22	162379	1993-02-03	1.3	M	Autism ("the pt lost all skills he had developed. Stopped using words, ... using the potty. He ... was dx with autism")	MMR % Hib [onset 14 days later; diagnosis date not reported; AE was submitted on 2000-11-13]
23	118197	1993-03-10	1.3	M	Autism ("& was hosp for a long complicated illness; pt is now autistic & has uncontrolled sz ...")	MMR [onset 7 days later; diagnosis date not reported; AE was posted in VAERS on 1999-01-19 – submission date?; (Premature birth at 33 wks.)
24	151084	1993-04-09	1.4	M	Autism ("became less responsive, lost speech, lost eye contact. ... diagnosed with autistic spectrum disorder ")	MMR & DTaP, Hib [onset 22 days later; diagnosis date not reported; AE was submitted on 2000-04-01.]
25	109765	1993-04-15	1.3	M	Autism ("... unable to console or pick-up-banging head on floor, screaming, autism, ...")	MMR & Hib [onset same day; diagnosis date not reported; AE was submitted on 1998-04-14.]
27 Jan '92 – 21 Oct '93 [300 sAEs/1.7 yrs or – 176 sAEs/yr]		5.333 autism reports per 100 sAEs		Male/Female ratio = 8/1		
26	86243	1994-01-26	1.3	M	Autism ("... 911 called took pt to hosp dx autism; behavior changed, (sz disorder), loss eye contact")	MMR & DTaP, Hib, OPV [onset 10 days later; diagnosis date not reported; AE was submitted on 1996-05-07.]
27	168017	1994-04-07	1.2	M	Autism ("... He has had dx and evaluations by ... specialists. ... has a lot of mercury in his body ... Doc 212155... autistic ..., nearly as severe as ever...")	MMR & Hib [onset 10 days later; diagnosis date not reported; AE was submitted on 1996-05-07. Evidence of mercury toxicity from other/previous vaccinations]
28	168928	1994-07-21	2.0	M	Autism ("Autism... "medically important. Follow-up ... pt also developed gastrointestinal problems. ...")	MMR & DTaP, OPV Hib [onset 370 days post vax; reportedly diagnosed with autism at 3 yrs; AE was submitted on 2001-04-18.]
29	88924	1994-08-01	1.0	F	Autism ("win 6 wk of vax pt was observed as losing prev gained language & social skills; dx autistic")	MMR & Hep B, OPV [onset 2 days post vax; no diagnosis date reported; AE submission date missing – entered in VAERS on 2001-01-08]
30	164479	1994-08-08	2.0	M	Autism ("pt experienced ... after being vaccinated, autistic enterocolitis, ..., and autism")	MMR & DTPHib [onset on day of vax; no diagnosis date reported; AE was submitted on 1996-08-05.]
31	66998	1994-09-01	4.5	M	Autism ("pt recvd vax & was dx w/ autism ")	MMR [onset date not reported; no diagnosis date reported; AE was submitted on 1994-09-29 (28 da post vx.)
32	191073	1994-09-02	1.5	M	Autism ("... pt developed autism. ... By ... eighteen months the pt was not even saying any monosyllables and had lost the speech he ... {had} gained. ... started screaming constantly. ...")	MMR [onset 1 day later; diagnosis date not reported; AE was submitted on 2002-10-01.]
33	259732	1994-09-20	1.3	M	Autism ("My child is now autistic. He had language, eye contact he was social and was walking. He regressed after his seizure ...")	MMR & DTaP, Hib [onset on day of vax; diagnosis date not reported; AE was submitted on 2006-07-13.]
34	94657	1994-10-11	1.3	M	Autism ("... high fever for 3-4 days then rash for 5 days; then high fever for 2 days; blotchy rash-hands peeled :pt ...; devel autistic traits")	MMR & DTPHib, OPV [onset on day of vax; diagnosis date not reported; AE was submitted on 1997-01-30.]
35	90090	1994-11-30	2.9	M	Autism ("loss of words, loss of eye contact, inc toe walking, hand flapping; inappropriate laughing, temper tantrums biting of clothing, repelition of words-no meaning...dx autism ...")	MMR & Hib, OPV [onset 1 day later; diagnosis date not reported; AE was submitted on 1996-09-17.]
36	158204	1995-01-03	1.5	M	Autism ("Autism, developmental delay beginning after the vaccine. The annual follow-up states autism; developmental delay")	MMR & DTPHib [onset 88 days later; diagnosis date not reported; AE was submitted on 2000-07-25.]
37	264049	1995-01-27	1.0	F	Autism ("at an unspecified time after vaccination with hepatitis B vaccine, the subject experienced ... neurological injuries which was attributed to toxic mercury exposure .")	MMR & DTaP, Hep B, Hib [onset 705 days later; diagnosis date not reported; AE was submitted on 2006-10-05. From onset date, it seems that autism diagnosis occurred after child was 3 yrs of age {1997}]
38	161828	1995-01-30	1.3	M	Autism ("Post vax, the child arched back when picked-up. Stopped talking, no eye contact. Seemed depressed. Stopped playing and imitating. Became very finicky eater. Dx with autism")	MMR & Hib [onset 1 day later; diagnosis date not reported; AE was submitted on 2000-11-07.]
39	101800	1995-02-23	1.3	M	Autism ("mom reported child devel autism p/vax; pt stopped all devel & lost little bit of speech ha(d)")	MMR [onset 10 days later; diagnosis date not reported; AE was submitted on 1997-08-18. From submission date, autism dx at < 4 yrs of age]

Table 1 [Continued]

Listing No.	VAERS ID:	Date of Vaccination	Age (yrs)	Sex (M/F)	Diagnosis (Autism, ASD, PDD, PDD-NOS, Asperger's or ...)	Attributed To (MMR, mercury, MMR & mercury, or ...) [Relative time of initial diagnosis]
40	166845	1995-03-29	1.0	M	Autism ("Dx'd with autism by 5/29/96. 60 day follow up ... pt has autism, <u>heavy metal toxicity</u> , autoimmunity, candidiasis, apraxia.")	MMR & Hep B [onset on day of vax; diagnosis date not reported; AE was submitted on 1999-12-26. From write-up, pt diagnosed with autism at about 2 yrs of age.]
41	123014	1995-04-22	1.3	M	Autism ("fever immediately p/vax-diarrhea, ulcers on diaper area; chronic digestive problems, loss of speech; ...; low IGA; high IGE; antibodies to myelin basic protein-autism, sz disorder")	MMR & Hib [onset on day of vax; diagnosis date not reported; AE was submitted on 1999-12-26. From write-up, pt diagnosed with autism at about 2 yrs of age.]
<p>23 Oct '93 — 15 May '95 [300 sAEs/0.564 year or ~ 532 sAEs/yr]</p> <p>5,333 autism reports per 100 sAEs</p> <p>Male/Female ratio = 16/1</p>						
42	196189	1995-06-23	1.2	M	Autism ("...and eventually was diagnosed PPD-NOS then <u>autistic with OCD</u> , Anxiety disorder, malabsorption, dysbiosis and <u>heavy metal toxicity</u> ")	MMR & DTP, DTP/Hib, Hib [onset on day of vax; diagnosis dates: "5/20/97 PPD – NOS" and "1/12/01 Autism and Anxiety Disorder"; AE was submitted on 2003-01-08.
43	118073	1995-08-09	1.3	F	Autism ("severe diarrhea w/in days of shot; noticeable regression shortly p/ dx w/autism @ 3 1/2; ...")	MMR & Hib [onset on day of vax; diagnosis date not reported; AE was submitted on 1999-01-01. From write-up, pt diagnosed with autism at 3.5 yr.]
44	114421	1995-10-23	1.0	M	Autism ("stopped talking 5 days p/vax; slowly devel signs of classic autism over the ensuing 3 to 4 wk ...")	MMR & Hep B [onset 7 days later; diagnosis date not reported; AE was submitted on 1998-07-07. From submission date, autism dx at < 3 yrs of age]
45	103158	1995-11-14	1.3	M	Autism ("p/15 mo shot <u>pt became autistic</u> ; 1 starring spell noted a few days p/vax; pt seemed deaf & in own world...")	MMR [onset 4 days later; diagnosis date not reported; AE was submitted on 1997-10-04. From posting date, autism dx at ~ 3 yrs of age]
46	166174	1995-12-11	6.0	M	Autism "... Within months, we learned he had autism. He was officially dx'd as autistic in 10/ 98.")	MMR & VARCEL [onset 14 days later; diagnosis date not reported; AE was submitted on 2001-01-29. From write-up narrative, autism dx at < 9 yrs of age]
47	159921	1995-12-20	1.3	F	Autism ("Fever ... began 7 days post vax. Physical exam revealed an ulcerated esophagus and gastroenterocolitis. Diagnostic Lab Data DSM-IV ... <u>severe autism</u> ")	MMR [onset 7 days later; diagnosis date not reported; AE was submitted on 2000-07-14. From submission date, autism dx at < 6 yrs of age]
48	183184	1996-01-18	1.3	M	Autism ("He now has autism ... He is dx'd with <u>mercury poisoning</u> he still has autism and <u>high mercury levels</u> in his system.")	MMR & Hib [onset 32 days later; diagnosis date not reported; AE was submitted on 2002-03-31. From submission date, autism dx at < 8 yrs of age]
49	167378	1996-01-19	1.5	M	Autism ("The pt was <u>diagnosed with autism on 9/26/96</u> and on <u>10/97 with celiac disease</u> .")	MMR & DTaP, Hib [onset 14 days later; diagnosis date not reported; AE was submitted on 2001-03-19. From write-up narrative, autism dx at ~2.3 yrs of age; celiac dx at ~ 3.4 yrs of age]
50	189060	1996-01-29	1.3	M	Autism ("Dx'd with <u>autism 7/98</u> . Started treatment for GI tract problems in 8/99. 60 day follow-up ... still has measurable levels of mercury ... with symptoms of <u>mercury poisoning</u> ")	MMR & DTaP, Hib [onset on day of vax; diagnosis date not reported; AE was submitted on 2002-08-02. From write-up, pt diagnosed with autism at ~1.8 yr. of age.]
51	177303	1996-02-29	1.3	M	Autism ("Pt stopped talking, ... and stopped responding ... patient has never developed ... language communication. undergoing treatment to rid his body of <u>mercury</u> ... *... report on 3/21/03: <u>Autistic dx's</u> ,")	MMR & Hib [onset date was not reported; no diagnosis date reported; AE was submitted on 2001-10-07. Autism dx from narrative is before 7.3 yrs of age.
52	190925	1996-03-13	2.0	M	Autism ("developmental regression occurred @ age of 24 months. I have evaluated the patient on 8/1/98 and 9/26/98, and he fits criteria for autistic disorder, with moderate impairment")	MMR & DTaP [onset 2 days after vax; diagnosis date not reported; AE was submitted on 2002-08-31. From write-up, pt diagnosed with autism at <5 yrs of age.]
53	217273	1996-04-01	1.8	M	Autism ("Following ... MMR and DTP vaccinations, he lost speech, social skills and eventually <u>developed autism</u> ")	MMR & DTP MMR & DTaP [onset 3 days after vax; diagnosis date not reported; AE was submitted on 2004-02-27. From date of submission to VAERS, pt diagnosed with autism at < 9.5 yrs of age.]
54	218199	1996-04-01	1.5	M	Autism ("After 18 month vaccination patient developed GI problems. He stopped talking, lost eye contact and social skills. He was <u>diagnosed with autism at age 3</u> ")	MMR & DTP [onset 3 days after vax; diagnosis date not reported; AE was submitted on 2004-02-27. From narrative, pt diagnosed with autism at 3 yrs of age.]
55	102670	1996-05-09	4.5	M	Autism ("pt recv vax ... & same day pt devel high fever, noc sweats, dehydration, large swelling of all lymph glands, strange behavior & was talking to himself; ...: <u>dx autism</u> ")	MMR & DT adsorbed on Al-based adjuvant, OPV [onset on day of vax; diagnosis date not reported; AE was submitted on 1997-09-23. From narrative, pt diagnosed with autism at <6 yrs of age.]
56	150001	1996-05-10	1.3	M	Autism/PDD ("pt experienced a fever, ..., loss of skills, language, comprehension etc ..." now 3.75 yrs old with "Autism Spectrum Disorder/ Pervasive Developmental Disorder")	MMR [onset on day of vax; diagnosis date not reported; AE was submitted on 2000-03-10. From write-up, pt diagnosed with autism at ≤ 3.75 yrs of age (late 1998) .]

Table 1 [Continued]

Listing No.	VAERS ID:	Date of Vaccination	Age (yrs)	Sex (M/F)	Diagnosis (Autism, ASD, PDD, PDD-NOS, Asperger's or ...)	Attributed To (MMR, mercury, MMR & mercury, or ...) [Relative time of initial diagnosis]
57	<u>173768</u>	1996-05-23	1.0	M	Autism/Asperger's ("Post vax of 2nd Pertussis vaccine, Pt stopped talking ... and went into an <u>Autistic state and regressed development</u> . One doctor says he feels adverse reaction due to Pertussis vaccine. pt was developmentally advanced before the shots but after ... he <u>went into autistic state</u> . The annual follow-up ... "Asperger's syndrome (autism), low immune system, ADHD, Doctors have verified vaccine as cause of above")	MMR & DTP, Hib [onset on day of vax; diagnosis date not reported; AE was submitted on 2001-07-18. From write-up, pt diagnosed with autism at ≤ 3.75 yrs of age.]
58	<u>185544</u>	1996-06-14	1.3	F	Autism/PDD ("Follow up reports states pt has " <u>PDD-Autism</u> ".")	MMR & DTP/Hib, Hep B, OPV [no onset date; diagnosis date not reported. AE reported to VAERS on 2002-05-20. From AE date, diagnosed at < 7 yrs of age. Write-up narrative is no help]
59	<u>199309</u>	1996-07-03	1.0	M	Autism ("Autism. A 60-day follow up report states: Does not verbalize. No coherent speech sounds. Has been <u>diagnosed with Autism. Severe neurological damage leading to autism</u> ")	MMR & TTX, VARCEL [onset 99 days later; diagnosis date not reported; AE was submitted on 2003-03-01. From submission date, autism dx at < 8 yrs of age]
60	<u>171548</u>	1996-08-06	1.3	M	Autism ("pt experienced diarrhea, <u>autism</u> and <u>leaky gut syndrome</u> . The 60 day follow-up states <u>autism and diarrhea</u> ")	MMR & Hib [onset 791 days later; diagnosis date not reported; AE was submitted on 2001-05-05. From submission date, autism dx at ≤ 7 yrs of age]
61	<u>183441</u>	1996-08-14	1.2	M	Autism ("10 days after receiving the MMR, the pt ran a high fever of He had a rash on his body and face swelled ..., screaming and we could not comfort him. Called MD Was told to take him to the ER. <u>Diagnosed with Autistic Spectrum Disorder</u> .")	MMR & Hep B [onset "10" (narrative) or "11" days (entry field) later; diagnosis date not reported; AE was submitted on 2002-03-11. From submission date, autism dx at ≤ 7 yrs of age – from the tenor of the narrative, probably diagnosed closer to 2 yrs of age]
62	<u>359480</u>	1996-10-15	1.1	M	Autism [& OCD in 2007] ("...Hyperthermia 105*. Encephalopathy continued for 2 weeks. 10/16/2009 MD records for visits spanning a period from 4/1999 to 6/21/2009. dx'd with Autism 2007 with OCD")	MMR & DTaP, VARCEL [onset on day vaccinated; diagnosis date not reported; AE was submitted on 2009-10-05. From write-up, pt probably diagnosed with autism at < 5 yrs of age.]
63	<u>181671</u>	1996-10-30	1.1	M	Autism [Initial diagnostic terms used, " <u>Antisocial behaviour</u> , Aphasia, <u>Drug toxicity</u> , Pyrexia, Rash, Vomiting"] (From the write-up narrative, "Fever, vomiting, rash from 11/3/96 through and beyond 11/10/96. Diagnosed with autistic spectrum disorder with generalized anxiety disorder. <u>Full blown autism</u> .")	MMR & VARCEL [onset 4 days after vax; diagnosis date not reported; AE was submitted on 2002-02-17. From AE reporting date, pt diagnosed with autism at < 6.5 yrs of age & possible as early as 1.5 yrs.]
64	<u>282221</u>	1996-11-06	1.1	F	Autism/PDD ("Autism. I requested these forms, but was told the vaccine did not cause the autism. Patient is a 4-year 10-month old female who has been diagnosed with Pervasive Developmental Disorder" [PDD])	MMR [no onset date reported; diagnosis date was not reported. AE reported to VAERS on 2007-06-13. The write-up narrative indicates pt diagnosed before 4 yrs 10 months with PDD]
65	<u>181355</u>	1996-11-21	1.3	M	Autism ("Child developed <u>symptoms of autism</u> but we did not realize it was autism until speech teacher recommended he be tested. <u>He was diagnosis at hospital. "F/U report on 3/7/03: Autism"</u> ")	MMR & DTaPH [onset 100 days later; diagnosis date not reported; AE was submitted on 2001-05-05. From AE submission date, autism dx at ≤ 6 yrs of age.]
66	<u>129509</u>	1996-12-12	1.3	M	Autism ["Symptoms" stated, "Agitation, <u>Autism</u> , Crying, <u>Personality disorder</u> , <u>Speech disorder</u> , Stupor"] (The write-up states, "... pt had high pitched screaming late at noc-every noc, loss of eye contact; stopped speaking; refused to wear clothing; very upset all day; began running head-first into walls, would stare into space for hours")	MMR & DTP, OPV [onset 12 days later; diagnosis date not reported; AE was submitted on 1999-10-05. From AE submission date, autism dx at ≤ 4 yrs of age.]
67	<u>200305</u>	1996-12-20	1.3	M	Autism ("AFTER MMR VACCINATION, <u>SYMP. OF AUTISM DEVELOPED</u> ")	MMR & DTP, Hib MMR [no onset date reported; diagnosis date not reported. AE reported to VAERS on 2003-03-25. The write-up narrative indicates pt diagnosed before 4 yrs 10 months with PDD]
68	<u>128732</u>	1996-12-23	1.0	M	Autism ("p/vax pt devel high fever; was totally motionless; & was almost in a coma for wk; laid limp few days; lost his language & became distant; did not respond to voices/his name; eating/sleeping habits changed; sought MD attention; <u>Dx:autism</u> ")	MMR [onset 7 days after vx; diagnosis date not reported; AE was submitted on 1999-09-24. From AE submission date, autism dx at ≤ 3.75 yrs of age – from narrative, could have been before 2 yrs of age.]
69	<u>310096</u>	1996-12-30	1.2	M	Autism ("Record dated 12/1996 reveals patient w/fever, not sleeping, runny nose, irritable, left ear drainage. Dx w/chronic left OM. Received vaccinations 12/30/1996 as well as antibiotics. Returned 1/1997 for f/u visit & was well. Parent called MD later that month for green nasal discharge & abdominal discomfort. 8/8/08 Reviewed medical records of 2002-2006. FINAL DX: ADHD; Asperger's.")	MMR [onset 2 days after vx; diagnosis date not reported; AE was submitted on 2008-04-18. From the narrative, could have been before 8 yrs of age.]

Table 1 [Continued]

Listing No.	VAERS ID:	Date of Vaccination	Age (yrs)	Sex (M/F)	Diagnosis (Autism, ASD, PDD, PDD-NOS, Asperger's or ...)	Attributed To (MMR, mercury, MMR & mercury, or ...) [Relative time of initial diagnosis]
70	<u>175564</u>	1997-01-06	1.2	M	Autism ("Pt developed fever and excessive screaming and crying for a few hours, post vax, on 1/6/97. The annual follow-up states "autism.")	MMR & DTap, Hib [onset on day of vx; diagnosis date not reported. AE reported to VAERS on 2001-09-12 – indicating an autism diagnosis before 5 years of age. From the write-up narrative, "autism" may have been diagnosed after patient's second birthday.]
71	<u>183315</u>	1997-01-15	1.3	M	Autism ("Severe language delay and hearing sensitivity after vaccines with MMR and Hep-B. Child is now <u>Autistic</u> . Received, ABA, Speech and Occupational therapy. Leaky Gut Syndrome. On annual report ... mother states, "he is <u>autistic</u> - <u>he has high levels of mercury and lead in his gut. ...</u> ")	MMR & Hep B [onset 626 days after vx; diagnosis date not reported; AE was submitted on 2002-04-05. From AE submission date, autism dx at ≤ 4.6 yrs of age]
16 May '95 – 17 Jan '97 [300 sAEs/ 1.8 yr or 167 sAes/yr]	10.0 autism reports per 100 sAEs [sAEs (serious Adverse Events)]			Male/Female ratio = 6.5/1		

Examining **Table 1**, before the “Wakefield” paper was published in *The Lancet* in February 1998, there are more than 15 instances (underlined entries in the last column of **Table 1**) where the reported and/or entered sAE for vaccinations with an MMR vaccine or an MMR vaccine and one or more other vaccines contained an “Autism” diagnosis or the narrative indicated a diagnosis of autism.

Most of the rest of the 71 VAERS entries associating MMR vaccination and autism were reported to the FDA and/or the CDC before 1998 although some were not entered into VAERS until later.

Thus, the writer’s apparent position that none associated the MMR vaccine with the subsequent development of autism until after the “Wakefield” paper is refuted by the numerous pre-1998 VAERS database⁷ entries that were submitted before February of 1998 and show that a possible MMR—“Autism” association was recognized as a scientifically sound possibility from at least the mid-1990s onwards.

However, to put the risk of being diagnosed with an Autism Spectrum Disorder (ASD) as a result of being given an MMR vaccine into perspective vis-à-vis cases caused by Thimerosal-preserved vaccines, this reviewer recommends using the Danish incidence/prevalence rates (see footnote “28”) labeled as Pervasive Developmental Disorder [PDD] diagnoses in Denmark) as a basis for estimating the incidence of ASD/PDD diagnoses related to MMR vaccination because Denmark had actually removed Thimerosal-preserved vaccines from all of its routinely recommended vaccines for children by 1992.

Thus, the relative impact of the MMR vaccinations can be estimated using the Danish incidence of ASD as being related to MMR vaccinations [see footnote “9”].

⁷ The VAERS database is jointly supported by the federal Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) of the United States of America

Since a recent report supports a Danish incidence for ASD diagnoses of 1 in 1272 (0.079%) [see footnote “28”] and the U.S. survey estimate for ASD diagnoses is about 1 in 50 (2.0%), the MMR vaccine’s effect on the incidence rate for ASD diagnoses in the USA is a real but minor percentage of the ASD cases (using these percentages, { [0.079% divided by 2.0%] times 100% } = 3.95% or roughly 4%)⁸.

AUTISM/CHRONIC CHILDHOOD DISEASE ISSUES

“Among scientists, however, there really was never much of a debate; only a small group of researchers ever even entertained the theory about autism. The coverage rarely emphasized this, if it noted it at all, and instead propagated misunderstanding about vaccines and autism and gave credence to what was largely a manufactured controversy.”

Here, the writer fails to cite any peer-reviewed, published scientific articles to support his “*never much of a debate*” views.

Factually, this reviewer has already referenced a document listing more than 100 peer-reviewed, published scientific articles from 2000 through 2011, authored by researchers from around the world (see footnote “1”) and cited an article that support some link between:

- A vaccine (e.g., smallpox and the MMR vaccine) and/or a component used in one or more vaccines (e.g., Thimerosal) and
- The subsequent onset of neurodevelopmental injury in human infants, other infant primates, other developing animals, fertilized eggs, as well as published studies using tissue and/or cell cultures from them.

For the “MMR—Autism” connection, a 2004 paper by Goldman and Yazbak⁹ clearly supports this connection (emphasis added),

“Longitudinal trends in prevalence data suggest a temporal association between the introduction of MMR vaccine in Denmark and the rise in autism. This contradicts an earlier report.

Health authorities should develop safer vaccination strategies and support further investigation of the hypothesized link between the MMR vaccine and autism” (from the paper’s “Abstract”).

Moreover, in science, it is not the number of researchers that sup-

⁸ Based on this reviewer’s study, it would appear that the effects from the Thimerosal-preserved and Thimerosal-containing vaccine doses administered in the USA still account for more than 90% of all ASD diagnoses or, for the current 1-in-50 (2%) survey estimates for ASD diagnoses in the USA, about 1 child in every 55.5 children.

⁹ Goldman GS, Yazbak FE. An Investigation of an Association Between MMR Vaccination and Autism in Denmark. J Am Phys Surg. 2004 Fall; 9(3): 70-75. [See, <http://www.jpands.org/vol9no3/goldman.pdf> (or <http://www.drjeffhealthcenter.com/ihpages/pages/autism%20in%20denmark.pdf>).

port a theory but the scientific soundness of that theory that should determine the level of discussion for that theory.

Factually, Dr. Albert Einstein's theories of relativity were initially only supported by Dr. Einstein and opposed by the majority of the "scientific community".

Yet, his theories of relativity in physics have been shown to be more scientifically sound than Sir Isaac Newton's physics theory.

Second, it should be the quality of a published article that supports the validity of its assertions, where the article's quality rests on the availability of all of the raw data and ancillary information to independent scientists to confirm (or not) the article's published findings and ensure that the article's statements are scientifically sound and appropriate.

This second requirement is especially critical for prospective and retrospective statistics-based population studies.

Thus, all peer-reviewed published studies:

- Whose raw data and/or ancillary information has been "lost", or
- Where independent access to the raw data and/or ancillary information has been blocked, and/or
- Whose authors and/or journals have inherent undisclosed conflicts of interest

should be retracted whenever:

- The raw data and/or ancillary information have been "lost" before the paper's findings could be independently verified, or
- Post-publication access to the raw data and/or ancillary information has been denied, and/or
- Serious errors or undisclosed conflicts of interest are discovered.

Third, because vaccines are drugs and are regulated as drugs (finished pharmaceutical biological drug products), in the USA all vaccines whose safety has not been established to all of the applicable safety standards by the vaccines' manufacturers should be removed from the market because, *notwithstanding the FDA's approval and the CDC's recommendations*, all such non-complying vaccines are deemed to be adulterated drugs¹⁰ because they have not been properly proven

¹⁰ 21 U.S.C. § 351(a)(2)(B)
Sec. 351. Adulterated drugs and devices.

to be safe^{11,12}.

Besides, no statistics-based population study can prove, or has proven, the safety of a drug.

Only the requisite scientifically sound and appropriate toxicological studies can prove the safety of a vaccine or, when inherently toxic, the safety of a toxic component used in a vaccine.

Since, for the FDA-approved vaccines, the vaccines' package inserts clearly state (explicitly or by omission) that some of the requisite preclinical vaccine safety tests have not been conducted, clearly these vaccines are not safe (see footnote "12").

Finally, because

- At least one of the key epidemiological studies *upon which vaccine apologists like Brainard and the Institute of Medicine (IOM) rely* is apparently fraudulent¹³,
- The raw datasets were "lost" for the key U.S. Vaccine Safety Datalink (VSD) study before any independent review could assess the validity of the CDC's findings in the published 2003 *Pediatrics* article and access to the datasets for the other studies used by the 2004 IOM to reject any link between autism and a vaccine or vaccine component has been denied¹⁴, and
- An independent assessment of the CDC's paper based on the VSD found significant flaws in the 2003 study published in *Pediatrics* and asked for the paper to be retracted¹⁵,

the prudent reader should suspect not only the remainder of the unverified and unverifiable pro-vaccination statistics-based studies but also all of the vaccination information published by federal agencies,

A drug or device shall be deemed to be adulterated -

(a) Poisonous, insanitary, etc., ingredients; adequate controls in manufacture

(1) ...; or

(2) ... (B) if it is a drug and the methods used in, or the facilities or controls used for, its manufacture, processing, packing, or holding do not conform to or are not operated or administered in conformity with current good manufacturing practice to assure that such drug meets the requirements of this chapter as to safety and has the identity and strength, and meets the quality and purity characteristics, which it purports or is represented to possess; ...

[emphasis added].

¹¹ 42 U.S.C. § 262(a)(1)(C)(i)(I), emphasis added, "... (C) The Secretary shall approve a biologics license application - (i) on the basis of a demonstration that - (I) the biological product that is the subject of the application is safe, pure, and potent; and ..."

¹² http://dr-king.com/docs/20130501_Vaccines_The_Safest_of_Medicines_or_the_Biggest_Liequstn_e_b.pdf.

¹³ http://dr-king.com/docs/20120331_FalsusInUnoFalsusInOmnibusAThimerosalpreservedVaccineConundrum_b.pdf.

¹⁴ <http://www.whale.to/vaccine/vaccinemyth.pdf>. King PG, Goldman GS. Key realities about autism, vaccines, vaccine-injury compensation, Thimerosal, and autism-related research. *Med Veritas* 2008; 5: 1610-1644. Concealment and "loss" of data was addressed starting in the bottom of the second column on page 1614,

"Vaccine myth #6: The findings in the epidemiological studies relied upon by the 2004 IOM have been proven to be scientifically sound.

Reality: Attempts by independent researchers to obtain the underlying data sets from the original authors in the epidemiological studies touted by the CDC and other vaccine apologists (except the 2004 Ip et al. study) as supporting the claims of "no link" have been repeatedly rebuffed. ..."

¹⁵ <http://mercury-freedrugs.org/docs/StudyMissesLinkBetweenThimerosalNeurodevelopmentalDisorders.pdf>.

vaccine manufacturers, medical societies, medical academies, medical consultancies and medical institutes who indirectly or directly profit from vaccines as well as those that these entities directly and/or indirectly pay, subsidize, or otherwise reward.

Given the preceding realities, at a minimum, the mainstream and alternative media should be encouraging an open dialogue about the safety and effectiveness of every vaccine as well as the overall safety and cost effectiveness of each other vaccination program (e.g., the chickenpox vaccination program¹⁶).

Finally, the media should not be suppressing the inconvenient reality that the MMR vaccine can cause some to experience serious brain and gut damage that can lead to autism and serious gut disease as well as other neurodevelopmental, developmental, and behavioral disorders, syndromes and conditions.

“As Ben Goldacre, a British doctor and media critic, wrote in his 2008 bestseller, *Bad Science*: ‘[Y]ou will see news reporters, including the BBC, saying stupid things like ‘The research has since been debunked.’ Wrong. The research never justified the media’s ludicrous over-interpretation. If they had paid attention, the scare would never have even started.’”

While this reviewer accepts that the preceding statement reflects Dr. Goldacre’s views, this reviewer is compelled to reject them because Goldacre’s views are obviously based on the flawed studies, slogans and mantras that permeate the vaccine/vaccination issues and the mainstream media’s reports.

In general, the statements are overly broad inanities because the statements fail to clearly define the specific “*research*” that is the subject of Goldacre’s comments or to cite the independently verified, peer-reviewed, published studies that “*debunked*” the unspecified “*research*”.

Moreover, *instead of worrying about paying attention or not*, in the case of the 1998 “Wakefield” paper in *The Lancet*, the media failed to check to see:

- a. If, prior to the 1998, there were any serious adverse-event (SAE) reports had been filed in the United Kingdom (UK) or the USA linking MMR vaccination to diagnosed “Autism”

¹⁶ Goldman GS, King PG. Review of the United States universal varicella vaccination program: Herpes zoster incidence rates, cost effectiveness, and vaccine efficacy based primarily on the Antelope Valley Varicella Active Surveillance Project data. *Vaccine* 2013 March 25; 31(13): 1680-1684. [open access: <http://www.sciencedirect.com/science/journal/0264410X/31/13>, article 6.]

instances, and

- b. Was there a biologically plausible mechanism for the MMR vaccination to cause brain damage that could cause the child's development to regress into autism.

Had the media actually investigated the facts, it would have found both numerous sAEs where MMR vaccination reportedly led a regression into autism (including "autism", "autistic disorder", "autism spectrum disorder (ASD)", "pervasive developmental disorder (PDD)", "PDD – not otherwise specified (PDD – NOS)" and other developmental and behavioral problems)¹⁷.

Factually, MMR vaccines are known to cause high (> 105 °F [> 40.5 °C]) prolonged fevers, aseptic meningitis, and serious brain inflammation (encephalopathy) in some children.

Because these medical conditions can cause serious brain damage¹⁸, it is biologically plausible that an MMR vaccination may cause a child's mental development to regress into "autism", a neurodevelopmental disorder characterized by deficits in brain development.

In addition, an Italian court also recently ruled that a MMR vaccination did cause "autism" in one instance¹⁹.

Since the MMR–autism linkage was reported in VAERS since the early 1990s and there is a biologically plausible mechanism supporting that linkage, rather than attacking Dr. Wakefield and the 1998 paper for which he was the lead author in *The Lancet*, the media should have focused on the prior sAEs linking each MMR vaccine that was ever approved for use in the UK and "autism" as well as the single measles, mumps or rubella sAE reports, *if any*, linking measles vaccination to a subsequent diagnosis of "autism".

Then, the UK healthcare establishment and the media could have informed the public about the relative risks of an "autism" diagnosis associated with each MMR vaccine and with of the single measles, mumps or rubella vaccines, which would have probably supported Wakefield's recommendation to use the single measles and rubella vaccines and avoid the MMR vaccines until the missing safety studies could be completed for the MMR vaccines, including Merck's M-M-R® II

¹⁷ See this review's **Table 1** for a partial listing of such pre-1998 reports in VAERS.

¹⁸ <http://www.fda.gov/downloads/BiologicsBloodVaccines/Vaccines/ApprovedProducts/UCM123789.pdf>, last visited 22 May 2013 – In addition, an MMR vaccine was ruled to have caused one child's regression into "autism" and awarded compensation for that child in the UK and the Merck M-M-R II vaccine was a factor in an award to the family of Hannah Poling for her post-vaccination of the development of the symptoms of "autism" by the "vaccine court" in the USA.

¹⁹ <http://www.dailymail.co.uk/news/article-2160054/MMR-A-mothers-victory-The-vast-majority-doctors-say-link-triple-jab-autism-Italian-court-case-reignite-controversial-debate.html>, 15-16 June 2012.

measles, mumps and rubella vaccine²⁰.

Unfortunately, the UK healthcare establishment chose to: **a)** cover up the problem; **b)** withdraw its support for the single vaccines for measles, mumps and rubella as well as the two-component measles and rubella vaccines; and **c)** attack the messenger, Wakefield, who dared to confront the lack of safety studies for the MMR vaccines.

As in the USA, the UK governmental vaccine regulators were, and still are, apparently more interested in protecting their image and the vaccine purveyors than in protecting the health of the people being vaccinated.

Moreover, the mainstream media outlets in both countries seem to be more lap dogs for the vaccine makers than guard dogs for the people's health.

“The consequences of this coverage go beyond squandering journalistic resources on a bogus story. There is evidence that fear of a link between vaccines and autism, stoked by press coverage, caused some parents to either delay vaccinations for their children or decline them altogether.”

Given

- the factual realities disclosed by this reviewer concerning the link between MMR vaccination and
- the subsequent regression into autism and other neurodevelopmental, developmental and behavioral conditions,

all that *“squandering journalistic resources”* on misleading attacks on Dr. Wakefield has actually accomplished is to increasingly undermine the public's confidence in the information that it is being provided by the media, the vaccine makers and the healthcare establishment about the safety of the current vaccination programs.

The *“fear of a link between vaccines and autism, stoked by press coverage”*, or not, is not what is causing *“some parents to either delay vaccinations for their children or decline them altogether”*.

²⁰ Based on the information filed in a recent federal *qui tam* lawsuit, <http://www.rescuepost.com/files/june-mumps-suit.pdf>, UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA United States of America ex rel., Stephen A Krahlung and Joan A Wlochowski, Plaintiffs, versus Merck & Co, Inc., Defendant. Civil Action No. 10-4374 (CJD) AMENDED COMPLAINT FOR VIOLATIONS OF THE FEDERAL FALSE CLAIMS ACT, the plaintiffs assert that, *for more than a decade*, Defendant Merck knowingly falsified the vaccine efficacy level for the mumps component in its measles-mumps-rubella (MMR) and measles-mumps-rubella-varicella (MMRV) vaccines in order to defraud the federal government and the consumers and maintain their monopoly in this segment of the vaccine business. As a result, anyone inoculated with these vaccines failed to be adequately protected from contracting mumps and the risk of contracting mumps was postponed until the recipients were adolescents and young adults where the risk for impaired fertility and sterility is much higher than in pre-adolescent children. Thus, not only is the vaccine not effective, vaccination with a vaccine containing Merck's mumps component significantly increases the recipients' risk of serious harm when the deficient protection fails in adolescence or early adulthood.

Instead, these decisions are being driven by the increasing realization that the mainstream media, the vaccine suppliers, medical care providers, the healthcare establishment and the public health agencies and officials are lying to the parents about the safety, effectiveness, and cost effectiveness of the current vaccines and vaccination programs.

If our governments can find the source of an outbreak of food poisoning in a matter of weeks, how can any rational person believe that the causes of the epidemics of chronic diseases that are now affecting more than 50% of our children and are projected to be life-time health burdens for more than 26% of them have not been identified.

Moreover, absent the requisite proofs of safety from a comparative study of initially healthy, never-vaccinated children to a matched group of initially healthy, fully-vaccinated children, how can any rational person continue to swallow the worn-out mantra, "we do not know what causes autism, but [we know] it is not the vaccines"?

This is especially true when the comparative survey studies dating back to Christchurch, New Zealand in 1977²¹ have all shown or, for the ongoing ones, are showing that the initially healthy, never-vaccinated children are, on average, significantly more healthy (have much less chronic disease) than the initially healthy, mostly- or fully- vaccinated children.

"To be sure, more than 90 percent of children in both the US and the UK receive the recommended shots according to schedule, but in 2012, measles infections were at an 18-year high in the UK, reflecting low and bypassed immunization in some areas. In the US, vaccine-preventable diseases reached an all-time low in 2011, but the roughly one in 10 children who get their shots over a different timeframe than the one recommended by the medical establishment, and the less than 1 percent who go entirely unvaccinated, are enough to endanger some communities. And American and British authorities have blamed recent outbreaks of measles and whooping cough on decisions to delay or decline vaccination."

Actually, what does it mean when you report, "*in 2012, measles infections were an 18-year high in the UK*" and the linked article reports "2,016

²¹ Excerpt from the text of the report referenced in footnote "33" (emphasis added), "In other research, a study of 1265 Christchurch children born in 1977 found that the of the unvaccinated children had asthma or had had doctors consultations for asthma or allergic conditions. The 23 children who received no diphtheria pertussis tetanus (DPT) and polio immunizations had no recorded asthma episodes or consultations for asthma or other allergic illness before age 10 years; in the immunized children, 23.1 % had asthma episodes, 22.5% asthma consultations, and 30.0% consultations for other allergic illness. Similar differences were observed at ages 5 and 16 years.'"

confirmed cases of measles” in a population of 56.1 million²² – or ~ 3.6 cases per 100,000 population – when, in France, with similar migrating Gypsy and Traveler communities, with 63.44 million people, in 2011, about 16,913 cases were diagnosed in a comparable period) or ~ 26.7 cases per 100,000 population – a rate that is roughly 7.4 times higher than the rate of cases in the UK in 2012.

Absent: **a)** any tabulation of population and measles cases over time, **b)** information about the number of measles cases in individuals with 1 dose of vaccine and those with 2 doses of vaccine, **c)** information about the distribution of outbreaks and the nature of the initial case in each cluster and **d)** the number of measles cases caused by the MMR vaccination program annually, this reviewer can only observe that historically measles is a cyclical disease and vaccination probably has affected the cycle of confirmed measles cases.

Moreover, *in today's developed countries*, it is the vigilance of the public-health gatekeepers in identifying the initial measles cases that limits the cases in a given outbreak and not the percentage who have been vaccinated twice *per se* because there are even well-documented measles cases in two (2) physicians who had received 3 or 5 MMR vaccinations²³ and documented instances of measles cases in vaccinated children in highly vaccinated populations.

After all, absent exposure to the measles virus, people should not contract measles.

Further, to this reviewer's knowledge, there has never been a long-term (> 50 years) double-blind, true-placebo-controlled comparative study that has established the relative risks to serious adverse effects and disease in the vaccinated as compared to the risks from measles in the never vaccinated using matched groups of not less than 10,000 individuals in each cohort.

In addition, there has been no informed-consent-based periodic, random, disease-challenge study using the most-virulent strain of measles in volunteers who are appropriately vaccinated and initially develop “fully protective” levels of “effective” measles antibodies to establish the true duration of protection as well as, if any, the “exogenous boosting” effects in the study population associated with

²² <http://www.ons.gov.uk/ons/rel/mro/news-release/census-21--england-and-wales/census-gives-insights-into-characteristics-of-the-population-in-england-and-wales.html>, last accessed on 23 May 2013.

²³ Rota JS, Hickman CJ, Sowers SB, Rota PA, Mercader S, Bellini WJ. Two Case Studies of Modified Measles in Vaccinated Physicians Exposed to Primary Measles Cases: High Risk of Infection But Low Risk of Transmission. *J Infect Dis.* (2011) 204 (suppl 1): S559-S563. doi: 10.1093/infdis/jir098. Available on the Internet at http://jid.oxfordjournals.org/content/204/suppl_1/S559.long.

their periodic random intentional measles-virus exposures.

Finally, having a single case of measles appears to provide protection from disease recurrence for 50 or more years and, for women, passes a significantly higher level of more effective and longer-duration antibodies to the mothers' offspring than the mothers who have been vaccinated in a 2-dose MMR vaccination program, which apparently provides effective measles protection for *no more than* 25 years.

Given the preceding realities, the people need to seriously consider a natural, nutritional-supplement-optimized program that minimizes the risk of adverse effects from the measles disease and uses no vaccinations to replace the current artificial 2-dose MMR vaccination program which does not even recognize the importance of optimal nutrition in establishing and maintaining the health of our developing children and ourselves.

Similar evaluations are needed for each of the other vaccines as well as for the use of probiotics and antibiotics to restore health.

“Beginning in 2004, Brian Deer, a British investigative journalist, brought a measure of redemption to journalism's performance on this story, publishing a series of articles about improprieties in Wakefield's work that culminated with the British General Medical Council stripping Wakefield of his license to practice in 2010, and *The Lancet* retracting his paper.”

Since a UK court has overturned the charges used by the British Medical Council to strip both Dr. Wakefield and Dr. Walker-Smith, who actually oversaw most of the research, of their medical licenses, reinstated Dr. Walker-Smith's medical license, and rebuked the British Medical Council for the very machinations that the council used against Drs. Wakefield and Walker-Smith, Mr. Brian Deer's actions seemingly were, and are, more of an attack on Dr. Wakefield for his daring to expose the lack of the required safety testing for the MMR vaccines than the actions of an ethical "*British investigative journalist*".

Further, since Mr. Deer apparently illegally accessed confidential medical records, this reviewer wonders why no criminal charges have been brought against Deer for his actions.

If anything, along with certain members of the media's illegally accessing voice mails and text messages, Deer's conduct has served to establish a new low for mainstream "*journalism*" in the UK.

“For most journalists, that should have effectively put an end to the autism story. But those who never bought the vaccine-autism link—in the press and elsewhere—have been waiting for the proverbial nail in the coffin on this story for years, and it never seems to come.”

While this reviewer understands the writer’s “it just won’t go away” concerns, this reviewer thinks that, *in the end*, the truth of the link between MMR vaccination and regression that ultimately leads to a diagnosis of autism or some other adverse neurodevelopmental, developmental or behavioral conditions in some children will ultimately be understood and accepted by even the most rabid vaccination-program defenders.

“In April, for instance, *The Independent* in London published an op-ed by Wakefield, in which he trotted out his argument about the mmr vaccine in the context of the current measles outbreak in Wales.”²⁴

This reviewer is bemused that the writer would bring up the faux “measles epidemic” in Wales in 2013²⁵, where most of the diagnosed measles cases were not confirmed as measles cases (as of the end of March 2013, there were only 26 confirmed cases of measles in Wales in the first 13 weeks of 2013 and only 14 confirmed measles cases in all of 2012 – an aggregate number insufficient to even cover the media’s claim that 83 individuals with measles had been hospitalized).

This reviewer agrees with Wakefield’s position that the single-disease vaccines for measles, mumps or rubella should again be readily available – especially since the mumps component vaccine may be a knowingly adulterated drug if the legal assertions made by Stephen A Krahlung and Joan A Wlochowski in their *qui tam* lawsuit (see footnote “20”) against Merck & Co., Inc are substantiated.

Further, this reviewer notes that both the writer and Wakefield were taken in by the non-existent Welsh measles “epidemic”, which has turned out to be an apparent public-health-/mainstream-media-generated hoax.

²⁴ Oddly, this reviewer notes that the writer switches from using “MMR” as the abbreviation for “measles, mumps, rubella” to “mmr” and later switches back to “MMR” and then back to “mmr” – indicating that either the writer was careless in editing the article or perhaps more than one person contributed to the final article and no one checked the final document for consistency of usage.

²⁵ <http://the-tap.blogspot.com/2013/05/welsh-government-now-denies-measles.html>, last accessed on 23 May 2013. This article and the actual data for confirmed measles cases contained in a “All Wales surveillance of laboratory confirmed infections” report at [http://www2.nphs.wales.nhs.uk:8080/CommunitySurveillanceDocs.nsf/3dc04669c9e1eaa880257062003b246b/38c4ee86b5fd701e80257b41003cdc52/\\$FILE/monthly%20lab%20201303.pdf](http://www2.nphs.wales.nhs.uk:8080/CommunitySurveillanceDocs.nsf/3dc04669c9e1eaa880257062003b246b/38c4ee86b5fd701e80257b41003cdc52/$FILE/monthly%20lab%20201303.pdf) combine to establish that the 2012-2013 “measles epidemic in Wales” was a media fraud. Instead of an epidemic, there were only 14 confirmed cases of measles in all of 2012 and only 26 in the first 13 weeks of 2013 – far less than the media’s claim of 83 hospitalized measles cases. Clearly, the media’s false reporting was an apparent fear mongering exercise designed to further increase the uptake of the MMR vaccine in Wales.

Hopefully, after examining the facts, the open-minded reader will understand that the media's intentional misrepresentations were fear mongering used as part of a campaign to increase MMR vaccine uptake in the UK by any means, including *knowingly* inflated reports of disease, hospitalizations and death, without regard to the facts or any outcome, including the erosion of the public's trust in the media.

“Contrary to popular belief, the autism scare didn't begin immediately after publication of Wakefield's 1998 paper. Initially, science and health journalists who, as Goldacre and others have noted, 'were often fairly capable of balancing risks and evidence,' handled most of the coverage and kept the story in its proper context.”

This reviewer agrees with the writer's "*noted*" observation that the mainstream media initially quote, "*handled most of the coverage*".

However, this reviewer finds that the "*context*" adopted by the mainstream media was, at best, distorted rather than "*proper*".

As the previous discussion established, the media apparently did not investigate whether there were medical reports in VAERS in the USA and the corresponding UK adverse-event reporting system supporting the views espoused by the parents nor did the media, as it should have, take the regulators to task for not requiring the makers of the MMR vaccines to conduct the safety testing required for any new vaccine.

Factually, the combination of multiple vaccine components for several diseases into a single formulation is not a trivial matter and, because there are interactions between various antigens and the immune system's reaction to them, the levels of the antigens for one or more of the disease-related components may need to be adjusted (typically, to a higher level).

Factually, absent the requisite safety studies and the submission of studies that prove the MMR vaccine is safe to all of the applicable standards, Merck's M-M-R II vaccine is and has been an adulterated drug regardless of the FDA's approval and licensing (see footnotes "**10**", "**12**", and "**20**").

This is the case because, by statute, the vaccine makers have an absolute, nondischargeable duty to prove the safety of any vaccine (see footnote "**11**") to all of the applicable current good manufacturing practice (CGMP) minimums(see footnote "**10**").

Had the media done its job properly, the MMR vaccines might have had to have full-scale safety testing and, perhaps, that testing, *if*

correctly conducted, would have established that the combination was significantly more risky than the individual vaccines.

In any case, since it appears that the required safety testing has never been done, Merck's M-M-R II vaccine is an adulterated drug in the USA under 21 U.S.C. § 351(a)(2)(B) [see footnote "10"].

Thus, this vaccine should not qualify for coverage by the U.S. National Vaccine Injury Compensation Program (NVICP) of 1986.

Therefore, it can argued that Merck is not immune from being sued for the harm caused by this vaccine that it *knowingly* produced and marketed in a manner that rendered said vaccine an adulterated drug.

Thus, from the viewpoint of the MMR vaccine makers, this was Wakefield's "crime" — exposing their failure to do the required safety testing.

Wakefield simply had to be stopped and discredited, and the mainstream media, the management of ***The Lancet***, and the British Medical Council were just the "fellows" to do the job.

"But the scare began to gain momentum in 2001, driven in large part by Wakefield, but also by the refusal of then-Prime Minister Tony Blair and his wife to say whether or not they had vaccinated their son, Leo, which raised suspicions nationwide. (Years later, they acknowledged that Leo was, in fact, vaccinated on schedule.)"

Here, the writer speaks of "*the scare*" while ignoring the reality that, for whatever reasons, the diagnostic rates for autism and related neurodevelopmental, developmental and behavioral disorders were soaring in both the UK and the USA.

Obviously, the writer is seeking to focus us on a person, Wakefield in this instance – diverting us from the real problem, soaring chronic childhood disease rates (including, but not limited to, autism, ADD, ADHD, asthma, non-hereditary diabetes, bowel disease, allergies and obesity), which the mainstream media seeks to deny or on which it minimally reports unless the study points to a "genetic" or lifestyle" issue.

"In the US, Wakefield's paper didn't garner much media attention at first. Concern about a link between vaccines and autism had quietly built among parents and some physicians throughout the 1990s, but it revolved around vaccines containing the preservative thimerosal, not around Wakefield's specific concerns about the MMR vaccine."

In general, this reviewer agrees that the preceding is consistent

with the mainstream media's views and pronouncements.

“It wasn't until a year later, when the Food and Drug Administration recommended removing thimerosal from childhood vaccines as a precautionary measure—stressing that it could find no positive link with autism—that the American press tucked into the debate. In 2000, Dan Burton, a former Republican Congressman from Indiana who believes that vaccines caused his grandson's autism, held congressional hearings wherein he asked the Department of Health and Human Services to study the alleged link, and Wakefield made his way into *The New York Times* for the first time. The 820-word story, buried on page 20, emphasized the danger of sowing mistrust of vaccines and the fact that the mainstream medical community considered them safe.”

Again, this reviewer finds that the writer's statements generally only reflect the history of what was transpiring from mainstream media's point of view.

“Then, six months later, Wakefield appeared on *60 Minutes*, where he linked vaccines to what he called an ‘epidemic of autism.’ In 2002, Burton held more hearings that led to more stories on the dangers of vaccines. Major reports from the Institute of Medicine, part of the National Academy of Sciences, in 2001 and 2004, rejected the link and drew a lot of coverage, but the level of concern among the public remained on the rise.”

Here, although the writer continues to parrot the mainstream media's views, this reviewer finds the writer's assertion about the 2001 report from the Institute of Medicine (IOM) is factually false.

This is the case because the 2001 IOM report on Thimerosal-containing vaccines and neurodevelopmental disorders²⁶ found that there was insufficient evidence to take a position about the link between Thimerosal-containing vaccines and such disorders.

Even the 14 May 2004 IOM consensus report on vaccines and autism²⁷ only observed that, based on the selective “evidence” that the IOM committee finally considered, those studies favored the rejection of a link between vaccines and autism.

The IOM report adopted this position even though: **a)** the cogent published studies on all vaccines were not reviewed and **b)** those peer-reviewed studies, which were published in reputable journals and found some vaccine-autism link, were dismissed on what seem to be unsubstantiated pretexts.

²⁶ <http://www.iom.edu/Reports/2001/Immunization-Safety-Review-Thimerosal---Containing-Vaccines-and-Neurodevelopmental-Disorders.aspx>.

²⁷ <http://www.iom.edu/reports/2004/immunization-safety-review-vaccines-and-autism.aspx>.

To get this result, the IOM committee first restricted its examination to one vaccine, MMR, and one vaccine component, Thimerosal.

Then, it rejected all of the toxicological studies and any animal study that supported evidence of a link as well as all of the published papers that had found evidence of a link between vaccines and neuro-developmental harm on pretexts that appear to have, in at least one instance, been fabricated out of “whole cloth”.

This left that IOM committee with about five (5) CDC and CDC-sponsored statistical population studies whose data and ancillary information had not even been allowed to be independently reviewed — much less permitted these studies’ reported findings to be independently confirmed.

Subsequently, the CDC claimed that it “lost” the original datasets for the CDC’s own study rendering the review and confirmation of that study impossible.

In addition, documents variously obtained under the U.S. Freedom of Information Act (FOIA), including those obtained by court order, have shown that one of the Danish studies reflected a conclusion (i.e., Thimerosal removed; autism increased) that was 180° the opposite of what the internal e-mails stated (i.e., Thimerosal removed; autism went down²⁸) [also, see footnote “**13**”] and the review comments from one of the journals that had refused to publish the study also pointed out that the data which that journal had reviewed showed that autism went down after Thimerosal was removed.

Yet the mainstream media in the USA failed to even point out that the statistical studies upon which the IOM chose to rely cannot be used to prove the nonexistence of any association – all they can validly be used to do is predict the probability of an association at some level of confidence.

Worse, they failed to report that, under the quality of evidence rating (QER) standards²⁹ developed for “evidence-based medicine”

²⁸ Had the data really shown that autism went up after Thimerosal removal, **1)** the Danes would have added it back – but they did not add it back; and **2)** the autism spectrum disorder [ASD] rate in Denmark would have been much higher than the rate in a 2010 article, one on the possible connection between autism and jaundice, where the pertinent data reported in that article’s “TABLE 2” indicated that the Danish rate for a diagnosis of “Pervasive developmental disorders (ICD-10 codes F84–F84.9)” (essentially the same as a diagnosis of an ASD in the USA) was 1 in 1272 (see {<http://pediatrics.aappublications.org/content/126/5/872.full.html>}) Maimburg RD, Bech BH, Vaeth M, Moller-Madsen B, Olsen J. Neonatal Jaundice, Autism and Other Disorders Of Psychological Development. *Pediatrics* 2010; 126: 872-878, [originally published online October 11, 2010; DOI: 10.1542/peds.2010-0052”]) at a time when the CDC’s selective-area, underascertained, survey rate for ASD diagnoses in the USA was about 1 in 91.

²⁹ Donohoe M. Evidence-Based Medicine and Shaken Baby Syndrome Part I: Literature Review, 1966–1998. *Am J Forensic Med Pathol* 2003; 24: 239–242. Here the author stated the basis for the use of quality of evidence ratings (QERs) and what evidence should be given credence as follows (emphasis added)

(EBM), because neither their raw data and ancillary data were available for independent review nor were they independently conducted nor were the studies replicated and there were independent studies that were capriciously excluded that reported conflicting findings, none of these published papers met even the *QER Level III-4* criteria for “evidence”.

Thus, the writer is reduced to “*the level of concern among the public remained on the rise*” in spite of massive media distortive hype about the IOM’s reports.

However, the writer also failed to report that the level of public concern was being driven by:

- The Establishment’s continuing failure to identify the cause or causes for autism,
- The misleading “removal of” (actually, only a reduction in the level initially) Thimerosal from many vaccines while adding Thimerosal-preserved influenza shots to the recommendations for young infants and also re-emphasizing, in 2002³⁰, that pregnant women should be given flu shots

“... ”

In assessment of the quality of the available scientific evidence, the author has taken an approach recently defined worldwide as an appropriate scale for review of quality of evidence. This approach has been described recently in context of setting Australian clinical guidelines.

Genuine hypothesis testing requires use of appropriate research methodologies, including collection of relevant control data, and suitable statistical analysis. The interpretation of individual study findings may be constrained by factors such as whether the cohort examined was adequately representative of the patient population in general. Replication across studies and in independent research centers is a key factor in the reliability of evidence.

Compelling evidence comes from consistent findings in 2 or more well-constructed, controlled trials or population-based epidemiologic studies (i.e., level I or level II evidence).”

Then he defined the QERs used for this literature review as follows:

***Quality of Evidence Ratings**

- I: Consistent evidence obtained from more than 2 independent, randomized, and controlled studies or from 2 independent, population-based epidemiologic studies. Studies included here are characterized by sufficient statistical power, rigorous methodologies, and inclusion of representative patient samples. Meta-analysis of smaller, well-characterized studies may support key findings.
- II: Consistent evidence from 2 randomized controlled studies from independent centers, a single multicenter randomized controlled study, or a population-based epidemiologic study. Data included here have sufficient statistical power, rigorous methodologies, and the inclusion of representative patient samples.
- III-1: Consistent evidence obtained from 2 or more well-designed and controlled studies performed by a single research group.
- III-2: Consistent evidence obtained from more than study but in which such studies have methodologic constraints, such as limited statistical power, or the inclusion of patient samples that may be nonrepresentative.
- III-3: Evidence obtained from a single case study or a selected cohort study.
- III-4: **Conflicting evidence** obtained from 2 or more well-designed and controlled studies.
- IV: Consensus opinions of authorities according to clinical experience or descriptive reports.

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Coincidentally, the CDC’s recommendation was made when the last batches of Thimerosal-preserved vaccines and serum were being followed by batches of reduced-Thimerosal vaccines though, based on the expiration dates on some retained multi-dose vials, the last Thimerosal-preserved early childhood vaccines (DTaP, DT, Hib, and hepatitis B) did not expire until 2005. Since no lots were recalled, the transition from all Thimerosal-preserved to mostly reduced-Thimerosal to mostly no-Thimerosal vaccines with a few remaining Thimerosal-preserved early childhood vaccines took place over a much longer period of time than most people realize. Therefore, the initial reduced-Thimerosal early childhood vaccines were mostly produced in the 2002 – 2007 period and the mostly no-Thimerosal early childhood vaccines started being distributed in the late 2000s. Thus, the CDC’s decision to add the flu shot to the early childhood vaccinations in 2002 as well as to reemphasize giving flu shots to pregnant women more than countered the drop in Thimerosal exposure from the now reduce-Thimerosal early childhood vaccines (DTaP, DT, Hib and hepatitis B). Instead of reducing the maximum or average level of Thimerosal exposure, the preceding CDC recommendations coupled with the CDC’s refusal to even state a preference that pregnant women and children only be given reduced-Thimerosal vaccines when such became available and then no-Thimerosal vaccines when such became available combined to increase the Thimerosal exposure in all but

when almost all were Thimerosal preserved doses (which, contrary to the Establishment's pronouncements, actually increased the maximum mercury exposure to the developing children who received Thimerosal-preserved flu shots³¹), and

- The increases in the rate of increase in diagnoses of autism and other chronic childhood diseases³².

“A number of studies linked coverage by the British media in that early period to declining rates of vaccinations and outbreaks of rare diseases. But again, the effect was slower to take hold in the US. In 2008, a group of epidemiologists in Philadelphia compared annual mmr immunization rates from 1995 to 2004 to coverage that mentioned a link with autism. Their study, published in the journal *Pediatrics*, found that MMR vaccinations started to decline in the US years before news coverage took off in 2001, suggesting ‘a limited influence of mainstream media on mmr immunization in the United States.’”

Again, this review agrees with the conclusions reported in the Abstract of the 2008 study in *Pediatrics* that the writer put in the embedded “study” link (<http://pediatrics.aappublications.org/content/121/4/e836.full>) states,

“CONCLUSIONS. There was a significant increase in selective MMR nonreceipt that was temporally associated with the publication of the original scientific literature, suggesting a link between MMR and autism, which preceded media coverage of the MMR-autism controversy. This finding suggests a limited influence of mainstream media on MMR immunization in the United States”.

and again observes that the cited article used the acronym “MMR” for the measles, mumps and rubella vaccine, while here the writer used “*mmr*”.

“That influence soon began to grow, however. In 2005, an unvaccinated Indiana teenager returned from a church trip to a Romanian orphanage, where she'd unknowingly contracted measles. The next day, she attended a gathering of fellow congregants, many of whom were also unvaccinated, and triggered what at the time was the largest measles outbreak in the US in nine years. ‘Concern about adverse events, particularly related to media reports of a putative association between vaccinations and autism and of the dangers of thimerosal, appeared to play a major role in the decision of these families to decline vaccination,’ according to a 2006 study published in *The New England Journal of Medicine*.”

those who: a) refused all vaccines or b) refused all vaccines that were Thimerosal-preserved. *When the reduced-Thimerosal vaccines became available*, the FDA cravenly noted that the minimum early childhood Thimerosal exposure (for those vaccinated with reduced-Thimerosal vaccines) had dropped to *less than “3”* micrograms of mercury but refused to observe that the maximum exposure level had actually increased (see footnote “31”).

31 http://dr-king.com/docs/090813_fldrft_TheNoThimerosalPreservedVaccineLie_r6b.pdf

32 http://dr-king.com/docs/091129_fnl_UpdatedEditorialOnSub_acuteMercury_Hg_PoisoningByMedicineb.pdf

This reviewer has several problems with the inferences generated from a measles outbreak in a religious community that mostly has religious objections to vaccination.

Furthermore, the reporting on this article (which is available at <http://www.nejm.org/doi/full/10.1056/NEJMoa060775#t=article>) is highly selective and ignores the actual major concerns that researchers had (emphasis added),

“Prolonged absence of a vaccine-preventable disease can result in increased public focus on adverse events related to the vaccine,³ decreased motivation of parents to vaccinate children,^{4,5} and perhaps, a shortened duration of vaccine-induced immunity due to a lack of antibody boosting from exposure to wild virus.⁶⁻⁸ Explosive outbreaks with devastating clinical and public health consequences can occur in environments that have been free of measles for more than a decade.^{9,10} Transmission of the measles virus, once reestablished, can be very difficult to interrupt.⁹⁻¹³”

Moreover, in context, the statement quoted by the writer reads (emphasis added),

“In the Indiana outbreak, 71 percent of school-age patients were home-schooled, although home-schooled children were estimated to constitute 1 percent of school-age children in Indiana (similar to estimates in other states).²⁸ Although every state requires two doses of measles vaccine for school attendance, only West Virginia has a similar requirement for home-schooled children.²⁹ Refusing vaccination, rather than limited access to vaccination services, was a primary reason that many patients in the outbreak in Indiana were unvaccinated. Concern about adverse events, particularly related to media reports of a putative association between vaccinations and autism and of the dangers of thimerosal, appeared to play a major role in the decision of these families to decline vaccination. Most families with these concerns continued to decline vaccination, even in the midst of an outbreak involving hospitalizations among their own community members. ...”

In their discussion, these researchers ignored the proverbial “bear in the woods”: Many of the Indiana home schoolers base their decisions on their personal religious beliefs, which for vaccines, are held to be contrary to those religious beliefs – or, as one who is religious might analogize, “do men gather figs” (“life saving” vaccines) “from thorn trees” (the vaccine producers who have been found to *knowingly* and repeatedly break the secular laws governing drugs and the marketing of drugs, and admittedly put monetary profit [the “love of money”, which is “the root of all evil”] above all else)?

Furthermore, if these families’ personal religious beliefs were simply based on nature, then they would tend to reject vaccination as being unnatural (i.e., against nature).

Ironically, in the developed nations, the reports on independent surveys of such groups who tend to shun vaccination because of their

personal beliefs have, from 1977 onwards (see, footnotes “33”, “34” and “35” for examples), seemed to indicate that their children, as a whole, are significantly healthier on a chronic-disease basis than those groups whose children are fully vaccinated.

Obviously, it is inappropriate for the writer to make population inferences for the USA based on a measles outbreak among a group of families who have personal religious beliefs that reject vaccination when most families (> 95% from the vaccination uptake data in the USA for 2005) seemingly did not have such beliefs.

“The year of the Indiana outbreak was a banner year for promoting the autism-vaccine link in the media. That summer, *Rolling Stone* and Salon published Robert Kennedy Jr.’s article alleging that the federal government covered up the danger of vaccines. A laundry list of corrections and clarifications followed, and in 2011, Salon retracted the article (*Rolling Stone* never did).

But it was the work of two veteran journalists, not Kennedy’s shameful piece, that really kept the story simmering. In February 2005, St. Martin’s Press published *Evidence of Harm* by journalist David Kirby, in which Kirby didn’t reach any specific conclusions about a link but presented a litany of parental suspicions that suggested one. And that winter, Dan Olmsted, a senior editor at United Press International, turned out a series called “Age of Autism,” for which he conducted an admittedly unscientific survey that found lower autism rates among ostensibly unvaccinated Amish communities (other studies found that vaccination rates are high in those communities). Few newspapers picked up Olmsted’s articles, but they got the attention of Representative Carolyn Maloney, a Democrat from New York. In March 2006, Maloney held a briefing at the National Press Club, where she cited Olmsted’s work as her motivation for drafting legislation that would compel the federal government to study autism rates in unvaccinated populations.”

Contrary to the writer’s views, the ever-increasing torrent of pro-vaccination articles and videos in the mainstream media continues to drown out the factual information on the connections between vaccines and chronic diseases just as similar campaigns by the biotech industry, the biocide industry, the planetary-systems-control groups, the water-fluoridation advocates and the dental-amalgam advocates are continually diluting or distorting the reality that their practices are detrimental to not only human health but also the health of the planet.

Further, this reviewer observes that the writer’s rhetoric clearly indicates that his approach is to distort, attack and/or belittle any article and/or its author (e.g., “*Kennedy’s shameful piece*”, “*Kirby didn’t reach any specific conclusions*” [as if a book whose full title is, EVIDENCE OF HARM MERCURY IN VACCINES AND THE AUTISM EPIDEMIC: A MEDICAL CONTROVERSY, should be

expected to reach conclusions?], and "he conducted an admittedly unscientific survey that found lower autism rates among ostensibly unvaccinated Amish communities (other studies found that vaccination rates are high in those communities)", which dared to speak unkindly about vaccines apparently based either on his own personal beliefs or the support he receives from those who have engaged his services).

The writer's reporting on Dan Olmsted is especially biased as the writer neglected to mention that, *in addition to the survey in one Pennsylvania Amish community to which he alludes and attempts to debunk by mentioning similar anecdotal survey studies in other Amish communities*, Olmsted also reported on the lack of autism and other chronic diseases, like childhood asthma, in a mostly non-vaccinating mixed-heritage community of parents who used the services of a Chicago healthcare provider, Homefirst, then headed by a doctor, Mayer Eisenstein, MD, JD, MPH, who does not think that vaccines and vaccination programs produce healthy children.

Finally, the writer failed to report that, *as with other investigative reporters who have attempted to expose the problems with vaccines and vaccination programs*, Olmsted's "Age of Autism," series abruptly ended when Olmsted was "reassigned" by "United Press International".

In addition, **a)** "Rolling Stone and Salon" are not major mainstream media outlets; **b)** David Kirby's book, EVIDENCE OF HARM MERCURY IN VACCINES AND THE AUTISM EPIDEMIC: A MEDICAL CONTROVERSY, did not get major play in the mainstream media; and **c)** *as the writer states*, the articles by Dan Olmsted, "a senior editor at United Press International", received little circulation in the mainstream print media and even less exposure elsewhere in the mainstream media.

"Maloney's bill went nowhere, but Kirby and Olmsted went on to build their careers around the idea that a link exists in some children. Olmsted launched Age of Autism in November 2007, branding it the 'Daily Web Newspaper of the Autism Epidemic'; it continues to be one of the most popular sites for those who doubt, or are concerned about, the safety of vaccines. And Kirby has written numerous columns on the subject for The Huffington Post. (HuffPost has long been a sympathetic home for the vaccine-autism crowd; it published a number of misleading pieces by celebrity-advocate Jenny McCarthy, for instance, whose son has autism. McCarthy's fame allowed her to spread her theories far and wide in the media, including via influential TV programs like *Oprah* and *Ellen*.)

CJR, too, played a role in sustaining the vaccine story. In a 2005 piece, Daniel Schulman, who's now an editor at *Mother Jones*, advised that it was 'too soon for the press to shut the door on the debate' about vaccines and thimerosal."

AUTISM AND CHRONIC CHILDHOOD DISEASE REALITIES

First, this reviewer notes that "*Maloney's bill went nowhere*" because the pharmaceutical industry's lobbyists and contributions have long locked out any attempt to compare the current health of initially healthy, full-term children who, *as most all are*, are fully vaccinated according to the CDC's recommended schedule to the current health of a matched group of initially healthy, full-term children who have never been vaccinated.

The reason for this is obvious: The independent surveys comparing the health of vaccinated children to the health of a comparable group of never-vaccinated children have repeatedly found that the never-vaccinated children are, as a group, significantly healthier than the vaccinated children (for chronic diseases in breastfed children in New Zealand in 1992)³³; a 2007 survey in the USA reporting differences in rates for the diagnoses of abnormal neurodevelopment [ADD, ADHD, Asperger's, PDD-NOS and autistic disorder {autism}], as well as for asthma and juvenile diabetes in the children who were 4 to 7 years of age in certain counties in the states of California and Oregon³⁴; and an ongoing survey of never-vaccinated/unvaccinated chil-

³³ Though no longer available on their web site (<http://ias.org/nz>), in 2005, the Immunisation Awareness Society of New Zealand published a "Special Report" titled "**UNVACCINATED CHILDREN ARE HEALTHIER**" written by "Sue Claridge". This report, comparing 226 vaccinated children and 269 similar unvaccinated children stated,

"The results overwhelmingly showed that unvaccinated children suffer far less from chronic childhood conditions than vaccinated children. The results are summarised in the table and graph on the opposite page.

The survey results showed that there was a significant difference in the incidence of asthma, eczema, and ear infections in vaccinated and unvaccinated children. While overall the incidence of grommets, tonsillitis, tonsillectomies, apnoea and hyperactivity were lower the trend is similar. Note the ten-fold increase in tonsillitis in vaccinated children and the complete lack of tonsillectomies in unvaccinated children. In the vaccinated, 73% of the cases of tonsillitis and 92% of the tonsillectomies were in children who had received the measles vaccines. As only 52% of the total vaccinated children received a measles vaccine, one would expect about 52% of the tonsillitis/tonsillectomies to occur in children to have had the vaccine. The higher rate of tonsillitis and tonsillectomy in recipients of the measles vaccine suggests that the vaccine made some children more susceptible to tonsillitis"

Though not discussed in the report's text, the data for hyperactivity, epilepsy, and slow development in the figure provided indicated that vaccination was a causal factor for all three of these medical conditions and an apparently exclusive factor for cases of epilepsy.

In addition, this "Special Report" also contained the following passage about the findings in a previous 1977 survey study,

"In other research, a study of 1265 Christchurch children born in 1977 found that ten of the unvaccinated children had asthma or had had doctors consultations for asthma or allergic conditions.

'The 23 children who received no diphtherial pertussis tetanus (DPT) and polio immunizations had no recorded asthma episodes or consultations for asthma or other allergic illness before age 10 years; in the immunized children, 23.1 % had asthma episodes, 22.5% asthma consultations, and 30.0% consultations for other allergic illness.

Similar differences were observed at ages 5 and 16 years.!

While this was a very limited study, particularly in terms of the numbers of unvaccinated children that were involved and the range of chronic conditions investigated, it provides solid scientific evidence in support of considerable anecdotal evidence that unvaccinated children are healthier than their vaccinated peers."

Based on these surveys, it is clear that vaccines are a causal factor in chronic diseases.

³⁴ <http://educate-yourself.org/vcd/califoregonunvaccinatedchildrensurvey03nov07.shtml>. This study reported the following statistically significant findings based on a telephone survey of more 13,000 families and completed interviews with more than 11,800 families and 17,670 children where 991 were identified as never-vaccinated children,

"All vaccinated boys, compared to unvaccinated boys:

dren's health with respect to a range of chronic diseases as compared to the levels of those chronic diseases in the general population health statistics for German children who are mostly [$>95\%$] vaccinated, which was first released in 2011 and is ongoing³⁵).

Given these surveys' findings, those who are vaccine/vaccination acolytes and apologists continue to do all they can to derail any such valid retrospective population survey and/or to postpone the start of any prospective study.

“Yet evidence in support of closing that door continued to pile up, and if history remembers no other journalist who fought back against the spurious claims about vaccines, it will remember Brian Deer. Between 2004 and 2011, the investigative reporter produced a series of reports for *The Sunday Times of London*, the UK's Channel 4 Television, and the *British Medical Journal* (BMJ) that exposed how Wakefield had exhibited a pattern of gross medical misconduct in his work on the vaccine-autism question, including the unethical treatment of children and undisclosed conflicts of interest. After *The Lancet* retracted Wakefield's 1998 paper and he was stripped of his medical license, the *British Medical Journal* published Deer's *coup de grace*: a series revealing that Wakefield had actually doctored medical histories presented in his 1998 paper. In an accompanying editorial, the BMJ accused Wakefield of perpetrating an 'elaborate fraud.'”

- Vaccinated boys were 155% more likely to have a neurological disorder (RR 2.55)

- Vaccinated boys were 224% more likely to have ADHD (RR 3.24)

- Vaccinated boys were 61% more likely to have autism (RR 1.61)

Older vaccinated boys, ages 11-17 (about half the boys surveyed), compared to older unvaccinated boys:

- Vaccinated boys were 158% more likely to have a neurological disorder (RR 2.58)

- Vaccinated boys were 317% more likely to have ADHD (RR 4.17)

- Vaccinated boys were 112% more likely to have autism (RR 2.12)

(Note: older children may be a more reliable indicator because many children are not diagnosed until they are 6-8 years old, and we captured data beginning at age 4.)

All vaccinated boys, removing one county with unusual results (Multnomah, OR), compared to unvaccinated boys:

- Vaccinated boys were 185% more likely to have a neurological disorder (RR 2.85)

- Vaccinated boys were 279% more likely to have ADHD (RR 3.79)

- Vaccinated boys were 146% more likely to have autism (RR 2.46)

All vaccinated boys and girls, compared to unvaccinated boys and girls:

- Vaccinated boys and girls were 120% more likely to have asthma (RR 2.20) - No correlation established for juvenile diabetes

All vaccinated girls, compared to unvaccinated girls:

- No meaningful differences in prevalence were noted for NDs (which may be due to the smaller sample size of the study because girls represent about 20% of cases.)

Commentary

Generation Rescue is not representing that our study proves that the U.S. vaccine schedule has caused an epidemic in neurological disorders amongst our children. We are a small non-profit organization. For less than \$200,000, we were able to complete a study that the CDC, with an \$8 billion a year budget, has been unable or unwilling to do. We think the results of our survey lend credibility to the urgent need to do a larger scale study to compare vaccinated and unvaccinated children for neurodevelopmental outcomes.”

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<http://www.nyrnaturalnews.com/children-2/2013/01/survey-shows-unvaccinated-children-get-sick-less-often/>, “Survey shows unvaccinated children get sick less often” posted on 13 January 2013. Currently, in a survey project started by Andreas Bachmaire, a practicing homeopath, in 2010, data for the unvaccinated/never vaccinated children is being compared to the health outcomes reported in the national German KIGGS health study of German children in the general population, though the project has begun to also collect survey data on vaccinated children. For the most recent reporting of the ongoing study's findings, please visit <http://www.vaccineinjury.info/vaccinations-in-general/health-unvaccinated-children/survey-results-illnesses.html>. The most recent interim results have found that unvaccinated children are 2 to 5 times healthier than the general population of children depending on the chronic disease being compared.

Other than to point out that the evidence about which this writer is speaking is a never-ending stream of contrived tobacco-science statistical perversions, this reviewer sees no need to touch the writer's obviously biased views about the players in the on-going "Wakefield Saga".

Hopefully, when those studies of the MMR vaccines that meet the quality of evidence rating (QER) standards established for evidence-based medicine (EBM) are identified and the failure of the vaccine makers to do the required safety studies for the MMR vaccine before selling it is confirmed, then, *when the vaccine makers' defense's experts are restricted, under "Daubert"³⁶, to only basing their expert testimony on those studies meeting the appropriate QER standards*, there will be an admission that the safety of the MMR vaccine, like most other vaccines (see footnote "12"), has not been proven.

Finally, the "600-pound gorilla" that is driving the people's concern about the safety of vaccines and the current vaccination programs is the reality that the health of our children continues to decline.

In addition, though the incidence of chronic childhood disease is beyond epidemic, the vaccine acolytes and apologists continue to deny that the current vaccination programs even could be a causal factor for either of the preceding realities.

Moreover, rather than focusing on the real problem, chronic disease, these proponents of vaccination continue to inappropriately focus on autism³⁷ while the rates for other chronic childhood diseases are soaring (e.g., the prevalence of childhood asthma [17.6% in 2008³⁸] and childhood obesity [16.9% in 2009-2010³⁹] exceed 15% in

³⁶ Holcomb KR. Justification for a Federal Injunction to suspend all vaccine licenses based on unreasonable health risks and causal links to chronic disease pandemics *Medical Veritas* 6 (2009) 1925–1936, page 1931, column 2.

"For example, if the CDC put forth a hypothesis that the MMR vaccine was safe and could not cause autism and based this opinion on the Madsen Denmark population study which in turn had used a significantly flawed scientific methodology [see: "An Investigation of Association between MMR vaccination and Autism in Denmark," by G.S. Goldman, F.E. Yazbak, *Journal of the American Physicians and Surgeons*, 2004; 9(3):70-75. (Ref. 10), finding temporal association between MMR and a statistically significant rise in autism prior to the change in enrollments and classification], then the Federal Court should find that *Daubert v. Merrell Dow Pharmaceutical Inc*, 509 US 579, 113 S.Ct 2786 (1993) would prohibit testimony which relied upon the CDC Madsen study (Ref. 32).

Daubert is the Federal Court test which governs the admissibility of expert testimony and scientific evidence. It "entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid." Another "pertinent consideration is ... peer-review and publication ... because it increases the likelihood that substantive flaws in methodology will be detected ..." Consideration is also given to a scientific technique "known or potential rate of error ... and the existence and maintenance of standards controlling the technique's operation ... the focus, of course, must be solely on principles and methodology, not on the conclusions that they generate." *Id*, 505 US, at 592-595.

Since the Madsen study example did not utilize valid scientific methodology and had significant flaws, it would not meet the *Daubert* test and the CDC could not rely on it. It should also be noted, by contrast, that to qualify for the highest QER Tier, the epidemiological study must be "independent," as was the case of the Goldman/Yazbak study. [Ref. 10]

³⁷ http://dr-king.com/docs/20110330_VaccinesAndAutism__TheWrongArgument_corr1a.pdf

³⁸ Hansen TE, Evjenth B, Holt J. Increasing prevalence of asthma, allergic rhinoconjunctivitis and eczema among schoolchildren: three surveys during the period 1985–2008. *Acta Paediatrica* 2013 Jan; 102(1): 47-52. <http://onlinelibrary.wiley.com/doi/10.1111/apa.12030/full>.

³⁹ <http://www.cdc.gov/nchs/data/databriefs/db82.htm>, last visited on 3 June 2013.

the mostly vaccinated children in the USA).

“Between 1998 and 2006, 60 percent of vaccine-autism articles in British newspapers, and 49 percent in American papers, were ‘balanced,’ in the sense that they either mentioned both pro-link and anti-link perspectives, or neither perspective, according to a 2008 study by Christopher Clarke at Cornell University. The remainder—40 percent in the British press and 51 percent in the American press—mentioned only one perspective or the other, but British journalists were more likely to focus on pro-link claims and the Americans were more likely to focus on anti-link claims.”

Since this reviewer does not have access to the cited “2008 study”, this reviewer can only accept that the writer’s portrayal of the statistics on the balance of reporting may possibly be accurate.

However, this reviewer again notes that most of the papers focus on one small part of the chronic disease problem, autism, and ignore the broader issue of the chronic childhood disease epidemics that, based on the published NHANES study for the 2006 cohort, is projected to affect more than one in four children for their lifetime⁴⁰.

“While it’s somewhat reassuring that almost half the US stories (41 percent) tried, to varying degrees, to rebut the vaccine-autism connection, the study raises the problem of ‘objectivity’ in stories for which a preponderance of evidence is on one side of a ‘debate.’ In such cases, ‘balanced’ coverage can be irresponsible, because it suggests a controversy where none really exists. (Think climate change, and how such he-said-she-said coverage helped sustain the illusion of a genuine debate within the science community.) A follow-up study by Clarke and Graham Dixon, published in November 2012, makes this point. The two scholars assigned 320 undergrads to read either a ‘balanced’ article or one that was one-sided for or against a link between vaccines and autism. Those students who read the ‘balanced’ articles were far more likely to believe that a link existed than those who read articles that said no link exists.”

As a scientist, this reviewer recognizes that the argument raised by the writer here is a false argument because all articles written by humans are, of necessity, subjective and, as such, the classification of articles by some group of researchers is not only biased but also, *unless those classifiers have a fundamental understanding of the sound science, if any, on both sides of the argument, the resulting classifications are meaningless.*

⁴⁰ <http://www.medscape.com/viewarticle/717030>, –

“February 16, 2010 — The rate of chronic health conditions among children in the United States increased from 12.8% in 1994 to 26.6% in 2006, particularly for asthma, obesity, and behavior and learning problems, according to results of a new prospective study published in the February 17 issue of the Journal of the American Medical Association” and “The end-study prevalence of any chronic health condition was 12.8% (95% CI, 11.2% - 14.5%) for cohort 1 in 1994, 25.1% (95% CI, 22.7% - 27.6%) for cohort 2 in 2000, and 26.6% (95% CI, 23.5% - 29.9%) for cohort 3 in 2006”.

Thus, the reported outcomes observed lack scientific meaning.

What is truly irresponsible are the tactics used by the mainstream media to not only attack the peer-reviewed, published articles with which it disagrees with rhetoric rather than sound science, but also to disparage the writers' of such articles often using *ad hominem* attacks.

Overall, this latest tactic, to demand that the "other side" of the argument (the vaccines cause harm and/or are not safe) not be allowed to be published because the pro-vaccination talking points in the argument have been declared to be fact even though, as this reviewer has repeatedly proven, there is little or no sound science to support those talking points.

- How can medicines that are not even properly tested for safety be "the safest of medicines"?
- How can administering live-virus orally, superficially or by injection not infect the recipient?
- How can extended paralysis induced directly or indirectly by repeatedly inoculating the population with live polioviruses not be paralytic polio?
- Since when does simply declaring, without any in-depth scientifically sound and appropriate study, that a medical practice or a vaccine contaminant is "safe" makes it so?
- Since when is using an adverse-reaction-inducing material as a "placebo", which is supposed to be an innocuous substance, in a short-term adverse-events vaccine study sound science? – because an IOM committee hired by pro-vaccine regulators said it was.

The problem with the current vaccines and vaccination programs is that, rather than being grounded on sound science, they are based on: **a)** *knowingly* omitted, statutorily required, critical preclinical toxicological studies, **b)** intentionally biased statistical short-term safety and efficacy studies, **c)** governmental/industry propaganda, and **d)** advertising campaigns.

When used in today's vaccination programs, today's recommended vaccines lack long-term toxicological proof that they are not carcinogenic, mutagenic (teratogenic) and/or reproductively toxic to the most susceptible group of recipients for which their use is approved (see footnote "**12**").

Worse, our vaccination high priests (vaccine creators, approvers, and recommenders), acolytes and apologists "preach" about how the

vaccines protect us from disease even though neither they nor anyone else knows exactly what are all of the entities involved in producing properly controlled immunity or exactly how the overall immune systems function to maintain the health of not only the human body but also the health of the millions of microorganisms whose health is crucial for human health.

“In that context, Susan Dominus’s 2011 profile of Andrew Wakefield in *The New York Times Magazine* is problematic. Dominus trailed Wakefield around Texas, where he now lives, as he continued to proselytize to one crowd after another. And while her story was highly critical of Wakefield, the decision to publish it at all was controversial among science journalists. Some worried that people would undoubtedly read it as martyr story; others argued that journalists should simply stop paying attention to Wakefield.

Reporters don’t need Wakefield, however, to keep this story alive. Also in 2011, Robert MacNeil, a former host of *PBS NewsHour*, came out of retirement to produce a six-part series for the program, called ‘Autism Now.’ In part one, MacNeil interviewed his daughter, Alison, whose son has autism, and let her make unfounded claims about vaccines. MacNeil, who narrated the series, told viewers there was no scientific evidence to support those claims, but it was a throwaway line that allowed MacNeil to claim ‘balance’ while sowing serious misunderstanding about vaccines.”

First, this reviewer simply notes that the writer’s remarks are simply the tactics used by those who do not like a message to disparage that message and attack the messenger.

Moreover, having listened to the interview in question and having studied the science behind vaccines for more than a decade, this reviewer disagrees – most of the claims that Alison made are supported by the sound toxicological science underpinning vaccines and Robert MacNeil’s remark was driven by his own non-science-based beliefs.

“Thankfully, the Web is now full of watchdogs who are looking out for such shenanigans. One is Seth Mnookin, author of *The Panic Virus*, who wrote a blog post calling the PBS series ‘an embarrassing coda’ to MacNeil’s career.”

Here, this writer misportrays the vested-interest and hired-professional trolls and “astroturfers” who populate the Internet seeking to proverbially “hammer down any nail that sticks up” (those who speak in opposition to the Establishment’s politically correct view of vaccines and vaccination programs) as “*watchdogs who are looking out for shenanigans*” when, *if they are “dogs”, they are not “watchdogs” but rather attack*

dogs who are trained to attack whenever their masters give the signal because they have been conditioned to defend those who handsomely reward them for their service.

In the case of Seth Mnookin, this reviewer simply notes that he is still waiting for Mr. Mnookin's in-depth, science-based rebuttal to this reviewer's 27 January 2012 article, "A Review of Seth Mnookin's "The Autism Vaccine Controversy and the Need for Responsible Science Journalism""⁴¹.

"Today, people who worry that childhood inoculations trigger autism prefer to be described as 'vaccine-hesitant,' rather than 'anti-vaccine,' and think the CDC's immunization schedule 'overwhelms' kids' immune systems. This rhetorical shift is illustrates how those who claim a link exists keep moving the goalposts. For the last three years, the idea that the shots are 'too much, too soon' has the been the argument of last resort in the face of mounting evidence that vaccines have nothing to do with autism."

Whenever anyone:

- Describes the preferences and thoughts of those on the other side of an issue ("*people who worry that childhood inoculations trigger autism prefer to be described as 'vaccine-hesitant,' rather than 'anti-vaccine,' and think the CDC's immunization schedule 'overwhelms' kids' immune systems*") and
- Using grammatically challenged language ("*... shift is illustrates ...*" [sic]), finger points to some alleged action on the other side's part ("*This rhetorical shift is illustrates how those who claim a link exists keep moving the goalposts*"),

this reviewer suggests that such remarks should be ignored and remembers that when one finger points, three fingers are pointing at the finger pointer.

As a scientific researcher on the side that asserts that today's vaccines and vaccination programs are problematic, this reviewer's position is essentially the same as it was when his research findings compelled him to question today's vaccines and vaccination programs:

1. This reviewer was and remains only opposed to those vaccines that have not been proven to be safe and effective by the vaccine makers according to the applicable statutory and regulatory requirements for establishing the safety and the effectiveness for such biological drug products.
2. This reviewer also opposes programs of mass vaccination

⁴¹ http://dr-king.com/docs/120127_RevisdDrft_RevuOfAutsmControvrsyNeedForResponsibleScienceJournlsm_b.pdf.

that have not been properly proven to be safe and/or effective, or whose use is not medically cost effective.

Thus, this reviewer's goal posts have remained where they were initially placed.

However, *as this reviewer's understanding of the facts concerning today's licensed vaccines and recommended vaccination programs has improved*, what has declined is the number of vaccines that have been, as required by law, proven to be safe and effective by the vaccine makers while the number of vaccination programs that are not medically cost-effective has increased.

Since there is no scientifically sound and independently confirmed "*evidence that vaccines have nothing to do with autism*", this reviewer suggests that all should ignore this obvious vaccine apologist's attempt to paint the "other side" in a negative light.

As a rule, only those scientifically sound, evidence-supported statements that address the issue should be given credence.

Subjective attacks on the message and/or the messenger should be ignored because, *at best*, they are counterproductive and inflammatory when what are needed are logical science-based remarks.

"Accordingly, federal authorities have stepped up efforts to reassure people that the number, frequency, timing, order, and age at which vaccines are given is safe."

This reviewer accepts that federal agencies "*have stepped up efforts to reassure people that the number, frequency, timing, order, and age at which vaccines are given*" are⁴² safe.

However, this reviewer must again point out that, in the USA, the vaccine manufacturers have an absolute, nondischargeable duty to prove the safety of their vaccines⁴³; and they have *knowingly* shirked

⁴² Because an "and-connected list" of items is being addressed, "*number, frequency, timing, order, and age at which vaccines are given*", the plural verb "are" is required for a grammatically correct sentence.

⁴³ 42 U.S.C. Sec 262. Regulation of biological products [emphasis added]

(a) Biologics license

(1) No person shall introduce or deliver for introduction into interstate commerce any biological product unless -

(A) a biologics license is in effect for the biological product; and

(B) each package of the biological product is plainly marked with -

(i) the proper name of the biological product contained in the package;

(ii) the name, address, and applicable license number of the manufacturer of the biological product; and

(iii) the expiration date of the biological product.

(2)(A) The Secretary shall establish, by regulation, requirements for the approval, suspension, and revocation of biologics licenses.

(B) Pediatric studies. - A person that submits an application for a license under this paragraph shall submit to the Secretary as part of the application any assessments required under section 505B of the Federal Food, Drug, and Cosmetic Act [21 U.S.C. 355c].

(C) The Secretary shall approve a biologics license application -

(i) on the basis of a demonstration that -

(I) the biological product that is the subject of the application is safe, pure, and potent; and ...

this duty during the development of today's vaccines and are apparently shirking their duty to prove safety today.

Worse, the agencies charged with regulating the vaccine makers' conduct have obviously colluded with the vaccine makers to allow them to market vaccines that have not been proven to be safe and are deemed to be adulterated drugs.

Worse still, Congress has enacted and the President has signed legislation granting the vaccine makers and providers immunity from being sued for the harm an approved vaccine may cause as well as, for vaccines for possible pandemic diseases, like the 2009 A-H1N1 influenza, legislation that allows the use of such vaccines without any safety testing and protects everyone involved from being sued by a person harmed by said vaccine unless the Secretary lets that person seek redress and limits redress to an unfunded "pandemic vaccine court" such that there is effectively no compensation even if the vaccine maker were to intentionally make a vaccine for a possible "pandemic disease" that it knew was harmful.

Yet, Brainard only addresses the fact that *"federal authorities have stepped up efforts to reassure people"*.

Absent the requisite proofs of safety from the vaccine manufacturers that are required by law, the reassurances by federal authorities are of no value.

"In January and March, the Institute of Medicine and the CDC both released evaluations of the current vaccination schedule—which includes as many as 24 immunizations by a child's second birthday—and reiterated that the shots are unrelated to autoimmune diseases, asthma, hypersensitivity, seizures, or learning and developmental disorders."

First, the January 2013 IOM's evaluation of the *"the current vaccination schedule"*, **"The Childhood Immunization Schedule and Safety: Stakeholder Concerns, Scientific Evidence, and Future Studies"**⁴⁴, has an Abstract that "says it all" (emphasis added),

"The charge to the Committee on the Assessment of Studies of Health Outcomes Related to the Recommended Childhood Immunization Schedule was to (1) review scientific findings and stakeholder concerns related to the safety of the recommended childhood immunization schedule and (2) identify potential research approaches, methodologies, and study designs that could inform this question, considering strengths, weaknesses, as well as the ethical and financial feasibility of each approach. As reviewed by prior Institute of Medicine studies, a substantial literature exists on adverse effects of individual vaccines, but

⁴⁴ <http://www.iom.edu/Reports/2013/The-Childhood-Immunization-Schedule-and-Safety.aspx>.

few studies have focused on elements of or the recommended childhood immunization schedule as a whole. The lack of conclusive evidence linking adverse events to multiple immunizations or other "schedule" exposures suggests that the recommended schedule is safe. There are concerns from some stakeholders that merit exploration through research if epidemiological signals are detected and an indication of biological plausibility is available. However, the committee concludes that it is not ethical to implement any study requiring that some children receive fewer vaccines than recommended as part of the childhood immunization schedule because this would needlessly endanger children's lives. The committee concludes that data from existing surveillance systems, such as the Vaccine Safety Datalink, could be used and offer the best means for ongoing research efforts regarding the safety of the schedule. In recognition of this, future federal research approaches should

- collect and assess evidence regarding public confidence in and concerns about the entire childhood immunization schedule, with the goal to improve communication with health care professionals, and between health care professionals and the public regarding safety;
- standardize definitions of key elements of the schedule, and relevant health outcomes;
- establish research priorities on the basis of epidemiological evidence, biological plausibility, and feasibility; and
- continue to fund and support the Vaccine Safety Datalink project to study the safety of the recommended immunization schedule."

This IOM report clearly does not address the writer's assertion that *"the shots are unrelated to autoimmune diseases, asthma, hypersensitivity, seizures, or learning and developmental disorders"*.

Rather the IOM report opines, "lack of conclusive evidence linking adverse events to multiple immunizations or other "schedule" exposures suggests that the recommended schedule is safe".

Moreover, other than proposing that future studies should "assess evidence regarding public confidence in and concerns about the entire childhood immunization schedule" to meet the committee's primary charge, "review scientific findings and stakeholder concerns related to the safety of the recommended childhood immunization schedule", this IOM report apparently ducks the safety issue entirely.

This is an obvious reality because no epidemiological study of a vaccination program as it is recommended can address any safety issue especially those related to *"autoimmune diseases, asthma, hypersensitivity, seizures, or learning and developmental disorders"*.

All any population study can do is evaluate the probability that some component of the vaccination program may be causing some harm (adverse outcome) at some level of confidence.

Moreover, the IOM's "it is not ethical to implement any study requiring that some children receive fewer vaccines than recommended as part of the childhood immunization

schedule because this would needlessly endanger children's lives" would, *if accepted*, certainly preclude any fully-vaccinated versus never-vaccinated vaccine study or vaccination-program study on the grounds that such studies are "*not ethical*".

Because, as this reviewer has clearly established, none of today's vaccines has been proven to be safe to all of the applicable statutes and regulatory standards required [see footnote "**12**"], how is it ethical to give these vaccines to human beings?

In addition, how is it ethical to require parents, guardians and legally competent children to give their consent to be inoculated with a vaccine when they are not able to make an informed-consent decision because the vaccines lack of proven safety is concealed behind a *knowingly* sham slogan, "vaccines, the safest of medicines"?

Further, since vaccines have not been properly proven to be safe at all and all carry some risk of serious permanent injury and/or death to the recipient, how is it ethical to administer such vaccines?

Since:

- Absent disease-agent exposure, no one can contract a clinical case of any of the diseases for which there is an FDA-approved human vaccine
- In the USA, the risk of exposure to any vaccine-covered disease is low to virtually non-existent, and
- If truly healthy, since the individual's risk of serious harm or death from the diseases in the USA for which we have a vaccine is the same or less than the *a priori* risk associated with the certain exposure to a vaccine dose, *in the absence of an outbreak*, the withholding of a given vaccine is certainly more ethical than giving vaccines that are deemed to be adulterated drugs (see footnote "**10**") because their safety has not been proven to the applicable standards required,

if "*ethics*" were truly the issue, then no one should be opposing giving fewer doses of such adulterated drugs to humans.

Obviously, given the ever-increasing damning findings in the survey studies that have been and/or are being conducted, studies comparing the health of initially healthy children who receive no vaccinations (i.e., the never vaccinated) to those who receive all vaccinations must be resisted using any pretext; and "*ethics*" is a convenient excuse.

Turning to the second evaluation, the CDC news item, this reviewer reads (emphasis added),

“Vaccines not associated with risk of autism

A new study evaluating parents' concerns of “too many vaccines too soon” and autism has been published online in the [Journal of Pediatrics](#), [PDF - 256], March 29, 2013. It adds to the conclusion of a [2004](#) comprehensive review by the Institute of Medicine (IOM) that there is not a causal relationship between certain vaccine types and autism. The results provide relevant data for the current childhood immunization schedule.

The study looked at the amount of antigens from vaccines received on one day of vaccination and the amount of antigens from vaccines received in total during the first two years of life and found no connection to the development of autism spectrum disorder (ASD) in children. Antigens are substances in vaccines that cause the body's immune system to produce antibodies to fight disease.

Researchers collected data from 3 managed care organizations in a group of 256 children with ASD compared with 752 children without ASD.

The study's main findings report:

- The total amount of antigens from vaccines received was the same between children with ASD and those that did not have ASD.
- Children with ASD with regression (the loss of developmental skills during the second year of life) did not receive an increased number of vaccine antigens when compared to children without ASD with regression.
- The number of vaccine antigens has decreased in recent years. Although the routine childhood vaccine immunization schedule in 2013 contains more vaccines than the schedule in the late 1990s, the maximum number of vaccine antigens that a child would be exposed to by 2 years of age in 2013 is 315, compared with several thousand in the late 1990s. This is due to changes in the vaccines. For example, the older whole cell pertussis vaccine causes the body to produce about 3,000 different antibodies, whereas the newer acellular pertussis vaccines cause the production of 6 or fewer different antibodies.

An infant's immune system is capable of responding to a large amount of immunologic stimuli and, from time of birth, infants are exposed to hundreds of viruses and countless antigens that are not associated with vaccination. This study demonstrates that autism spectrum disorder is not associated with immunological stimulation from vaccines during the first 2 years of life.

Parents should expect the vaccines their children receive are safe and effective. CDC, along with other federal agencies, is committed to assuring the safety of vaccines through rigorous pre-licensure trials and post-licensure monitoring”.

Based on the text, this notice only purports to address the CDC's views on antigens as a potential factor in diagnoses of an autism spectrum disorder (ASD [with or without regression]).

This CDC report clearly does not address the broader issues of “*autoimmune diseases, asthma, hypersensitivity, seizures, or learning and developmental disorders*” — it only addresses the very narrow neurodevelopmental issue of ASD diagnoses.

In addition, the definition used by the CDC for “Antigens”, “Antigens are

substances in vaccines that cause the body's immune system to produce antibodies to fight disease" is purposely false!

Factually, an antigen is "any substance capable of inducing a specific immune response and of reacting with the products of that response, i.e., with specific antibody or specifically sensitized T lymphocytes, or both."⁴⁵

Obviously, the CDC and this writer want to redefine the term "antigen" so that they can make claims concerning the reduction in the number of antigens and ignore all other antigens, substances like:

- a. Thimerosal, sodium ethylmercury thiosalicylate (as well as its mercury-containing breakdown products [ethylmercury chloride and ethylmercury hydroxide] because Thimerosal is unstable⁴⁶ in the aqueous saline environments used as the formulation carrier for most liquid vaccines;
 - b. Polymeric hydrated aluminum salts used as adjuvants;
 - c. Sucrose (sugar);
 - d. All of the immune-system-reactive components in fetal calf serum (bovine);
 - e. Adventitious viruses;
 - f. Viral fragments;
 - g. Surfactants;
 - h. Ionic strength additives;
 - i. Yeast-derived components,
 - j. Oil-based chemicals (e.g., squalene) used as adjuvants;
 - k. Egg-derived components;
 - l. Insect-derived components
 - m. Dog-derived components;
 - n. Pig (porcine)-derived components;
 - o. Antibiotics;
 - p. Enzymes;
 - q. Stabilizers;
 - r. Human-embryonic-cell-line-derived components;
 - s. Growth-medium-derived components; and
 - t. Other components in today's vaccines,
- which, *regardless of their use or origin*, produce an immune response when introduced into the body.

Thus, the writer's remarks that follow should be disregarded as

⁴⁵ <http://medical-dictionary.thefreedictionary.com/antigen>, last visited on 26 May 2013.

⁴⁶ Kharasch, U.S. patent number 1672615 (1928), which was assigned to Eli Lilly.

they are based on a *knowingly*⁴⁷ false definition of the term “Antigen”.

Further, the tobacco-industry studies before this study similarly “established” that smoking “brand X” cigarettes could not be the cause of lung cancer because not all smokers got lung cancer after some cumulative cigarette smoking exposure to “brand X” cigarettes – but, as we know, cigarette smoking is a major causal factor for lung cancer.

Following the tobacco-industry’s lead, the cited CDC study in the *Journal of Pediatrics* claims that vaccination cannot be the cause of autism because, although everyone had the “same” vaccine exposures, not everyone was diagnosed with autism.

Obviously the CDC’s scientists, like the tobacco-companies’ scientists before them, know how to design and conduct “tobacco science” studies.

In addition, this reviewer notes that the cited paper is an example of “tobacco science” of the worst kind.

Worse, it is a knowing bastardization of a brilliant 2010 Polish study, which established that it was not the exposure to organic mercury from Thimerosal per se but rather the differences in the excretion of mercury that separated those children with a serious neurodevelopmental diagnosis from those classified as neurotypical⁴⁸.

The 2010 Polish study unequivocally established that it was a subgroup of children who, *for whatever reasons*, had trouble excreting mercury when they were young, who were at risk of being diagnosed with autism (or with a related neurodevelopmental and/or some other developmental disorder and/or behavioral problem) because all of the children studied had been similarly vaccinated with Thimerosal-preserved vaccines⁴⁹ as set forth in the applicable Polish vaccination schedule⁵⁰.

“While it’s true that children today get more shots than they once did, it’s not the number of shots that the body notices, but rather the amount of antigens—the substances that

⁴⁷ The term “knowingly” as it is here and previously is defined in 21 U.S.C. § 321(bb) as: (bb) The term “knowingly” or “knew” means that a person, with respect to information -
(1) has actual knowledge of the information, or
(2) acts in deliberate ignorance or reckless disregard of the truth or falsity of the information.

⁴⁸ <http://184.168.115.17/17759/files/16769/9609/9.+Acta+hair+mercury.pdf>, which was last reviewed on 26 May 2013. Majewska, MD, Urbanowicz E, Rok-Bujko P, Namyslowska I, Mierzejewski P. Age-dependent lower or higher levels of hair mercury in autistic children than in healthy controls. *Acta Neurobiol Exp* 2010, 70: 196–208.

⁴⁹ Several of the childhood vaccines in use in Poland still were Thimerosal-preserved vaccines (e.g., DTP, Hib, and Hep B).

⁵⁰ During the study period, the Polish recommended vaccination schedule was similar to the CDC’s 1999 recommended vaccination schedule in the USA except that)the BCG vaccine for tuberculosis was given shortly after birth.

produce an immune response—they contain. These days, thanks to the development of more efficient vaccines, a child is exposed to a maximum of 315 antigens by the time he turns two, compared with ‘several thousand’ in the late 1990s.”

As shown in this reviewer’s previous comments, the writer’s “*maximum of 315*” antigens grossly underestimates the maximum number of antigens in today’s vaccination program to which a child may be exposed “*by the time he*” or she “*turns two*”.

In addition, the danger is not in just the number and amounts of all of antigens, *as that term is properly defined (see footnote “45”),* in the vaccines.

The true danger is in the nature, magnitude and duration of the immune-system responses that a given overall exposure to the entire mixture of antigens (disease-related and all of the others) provokes in each individual child at the time that child is exposed to that not-well-defined, but highly complex mixture of antigens.

Given these two facts, *at best,* the writer’s statements here should simply be ignored or chalked up to the writer’s mindless parroting of any factoid that the relevant federal agencies or other vaccine apologists disseminate.

“The US media greeted the reports with a collective yawn. In some sense, the media’s apathy is welcome, as there was never any proof that the vaccination schedule was unsafe to begin with.”

Here, this reviewer gives the writer credit for attempting to turn a vaccine schedule deficiency, the absence of the required proofs of safety (“*there was never any proof that the vaccination schedule was unsafe*”), into a positive.

Factually, this reviewer knows of no requirement for anyone to prove that the vaccination schedule is unsafe – the requirement is to prove that it is safe!

However, the writer is also either uninformed or deliberately hiding the withdrawal, for whatever “convenient” reason, of vaccines that were not only approved but also recommended – including, but not limited to, an ill-fated Lyme-disease vaccine in the USA; the original rotavirus vaccine, then-Lederle’s RotaShield® in the USA; as well as two (2) MMR vaccines in the UK which contained the Urabe-strain of mumps; and ...

Additionally, instead of being terminated, *as they should have*

been, recommended vaccination programs, which have failed to meet their cost-effectiveness approval criteria and/or have actually increased the health risk from contracting a covered disease later in life, have, instead, had additional doses recommended making them even less cost effective (e.g., the chickenpox vaccination program in the USA⁵¹) and more potentially harmful (e.g., the mumps component in Merck's M-M-R[®] II vaccine).

“But it would be unfortunate if part of the autism story’s legacy is that reporters and editors are wary of tackling any story about vaccine safety. Because there are rare, but genuine, safety issues with vaccines that the public needs to know about. In a series of articles for Reuters in January and February, reporter Kate Kelland described how a Finnish researcher endured months of ridicule and accusations from colleagues while trying to establish a link between a flu vaccine called Pandemrix and an outbreak of narcolepsy among children in Europe. Eventually, other studies confirmed the link, Kelland reported, but she added a cautionary note: ‘After the false alarm sounded by British doctor Andrew Wakefield, some scientists say they are more hesitant to credit reports of potential side effects from vaccines.’ That chilling effect might extend to journalists as well; Kelland was one of only a few reporters in the US or the UK to cover the Pandemrix story.”

While this reviewer shares the writer’s concerns here, this reviewer knows, and has shown, that, *contrary to the writer’s view of the “autism issues” as “autism story’s legacy”*, both the MMR vaccines and Thimerosal-preserved vaccines have been and are issues associated with chronic childhood disease along with the DTP and DTaP vaccines (linked to childhood asthma), the annual influenza vaccines (linked to post-vaccination vasculitis and other cardiovascular events), the recombinant Hep B vaccines (clearly linked to increased risk of multiple sclerosis beyond four years after the last dose has been given) and the recombinant HPV vaccines (linked to a significant post-vaccination risk of fainting and/or developing any of a wide variety of immune/autoimmune-related medical conditions that apparently are long-lasting or, for some, fatal).

Finally, this reviewer must consider Thimerosal is a major underlying causal factor for the current epidemics of chronic childhood disease because:

- a. Though it is the highly toxic, bioaccumulates in the human

⁵¹ Goldman GS, King PG. Review of the United States universal varicella vaccination program: Herpes zoster incidence rates, cost effectiveness, and vaccine efficacy based primarily on the Antelope Valley Varicella Active Surveillance Project data. Vaccine 2013 March 25; 31(13): 1680-1684. [open access]

brain and, at levels below 1 part-per-million (< 0.0001%), it is a proven human carcinogen, mutagen, teratogen, immune-system disruptor and reproductive toxin, which the defenders of the vaccination programs have refused to remove from all vaccines, even though there are safer alternatives that are more effective preservatives in the actual vaccine formulation (e.g., the use of 2-phenoxyethanol as the preservative in a multi-dose Pfizer Prevnar[®] 13 formulation⁵²),

- b.** After implicitly promising in 1999 to remove Thimerosal from all vaccines given to children as soon as possible, *without proof of effectiveness in young children*, starting in 2002, the CDC's Advisory Committee on Immunization Practice (ACIP) began making a recommendation to give flu shots to babies 6 to 23 months of age when almost all the available doses of the vaccine approved for this age range, Sanofi Pasteur's Fluzone[®], were Thimerosal preserved,
- c.** *Still with no proof of effectiveness in children under two years of age*, the CDC has continually firmed up and broadened its recommendations until, *today*, annual flu shots are recommended for everyone at 6 months and 7 months of age and annually every year thereafter, and
- d.** More than half of all of the available doses of influenza vaccine are still Thimerosal-preserved – resulting in a maximum Thimerosal-derived organic mercury dose that exceeds the maximum dose under the 1999 vaccination schedule by more than a factor of 2⁵³.

Worse, because of this “false Thimerosal-removal” trick, the estimated incidence for ASDs is now about 1 in 50 and the real incidence

52 <http://www.ncbi.nlm.nih.gov/pubmed/21651942> [abstract].. Khandke L, Yang C, Krylova K, Jansen KU, Rashidbaigi A. Preservative of choice for Preve(n)ar 13[™] in a multi-dose formulation. *Vaccine*. 2011 Sep 22;29(41):7144-53. doi: 10.1016/j.vaccine.2011.05.074. Epub 2011 Jun 7, which states (emphasis added),

“Abstract

Development of a Preve(n)ar 13[™] multi-dose vaccine, in support of vaccinating populations against pneumococcal disease, required the addition of a preservative to the vaccine formulation that met antimicrobial effectiveness tests based on the European Pharmacopoeia (EP) requirements, including deliberate multiple challenge studies and recommendation by the WHO Open Vial Policy. ... These results indicate that 2-PE provides a superior antimicrobial effectiveness over Thimerosal for this vaccine formulation”.

53 http://dr-king.com/docs/090813_fnl_dft_TheNoThimerosalPreservedVaccineLie_r6b.pdf. Since recommendations for the influenza vaccine were made annual in 2010, the maximum organic mercury exposure dose to age 65 has increased from 665.8 micrograms at 18 years of age to nominally 1816 micrograms (1.82 mg) of organic mercury from Thimerosal making the relative maximum mercury dose to age 65 now 1816/300 or 6.05 times the 1999 vaccination schedule's maximum dose excluding a TT vaccine every “10 years” [if the TT were used for the 1999 schedule, the Tdap used for the current schedule, and the person was given 4 TT or Tdap shots depending upon the program, the maximum relative exposure level would drop to 1816/400 or 4.54. In no case was the maximum exposure reduced and presuming the percentage of Thimerosal-preserved doses of influenza vaccine remain about 50%, the population average mercury-exposure ration (current program/1999 program) is closer to between 2.3 and 3.0. times the 1999 program level.

may be closer to, or higher than, 1 in 25.

Worse still, based on failure of the rate of autism to decrease after the false removal of Thimerosal, the U.S. Public Health Service, the American Academy of Pediatrics, and other groups are now supporting the reintroduction of Thimerosal-preserved vaccines so that, *if this happens*, the rate of chronic childhood diseases, including neurodevelopmental disorders, like autism, will most certainly not decline.

CLOSING REMARKS

This review has clearly established that the fundamental child health issue concerning “parents” is the epidemic increases in chronic childhood diseases, including autism.

In addition, it has unequivocally shown that vaccines are a major causal contributor to the observed increase in the burden of chronic childhood disease on our children, their parents, and society.

Along the way, this reviewer has addressed the distortions and unwarranted personal attacks on those who seek to tell the public about the failure of vaccines to meet the safety standard minimums required for biological drug products.

Finally, this reviewer has again shown that the “1500-pound elephant” residing in the recommended vaccination programs for children in the USA is the ongoing presence of Thimerosal in vaccines to an extent that there is, *for many individuals*, more than twice the lifetime exposure to Thimerosal from the flu shots in the current CDC-recommended vaccination program than there was to Thimerosal in the 1999 CDC-recommended vaccination program when the DTaP, DT, TT, Dt, Hib, and Hep B vaccines were all Thimerosal-preserved.

However, no flu shots, *which were then all Thimerosal-preserved and for which more than 50% of the doses were still Thimerosal-preserved*, were recommended for mass administration to developing children in 1999.

Beginning in 2002, without proof of effectiveness, the CDC made a recommendation that children 6 months to 23 months of age be given an annual flu shot when feasible to do so⁵⁴.

⁵⁴ Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2002 Apr 12; 51(RR-03): 1-31.

“The 2002 recommendations include five principal changes or updates, as follows:

1.
2.
3. Because young, otherwise healthy children are at increased risk for influenza-related hospitalization, influenza vaccination of healthy children aged 6–23

In addition, when the CDC made its initial unsubstantiated recommendations that pregnant women be given a flu shot in their second and third trimester from 1997⁵⁵ to 2002 (see footnote “54”), the percentage of pregnant women getting a flu shot did not exceed 15% of the population of pregnant women in the USA.

To increase the risk of Thimerosal exposure, in 2004⁵⁶, the CDC removed the restriction on the stage in pregnancy when a flu shot could be given, and formalized the recommendation that children 6 to 23 months of age get a flu shot.

In 2006⁵⁷, the CDC increased the age range for children to 6 to 59 months and formalized the recommendations for a second dose “1 month” after the first flu shot and, as an alternative, recommended the live-virus influenza vaccine for children 4 years of age or older, who can spread the vaccine’s genetically engineered live viruses.

In 2009, to boost flu-vaccine uptake in pregnant women and increase it in young children, the CDC increased the age range for children to 6 months to 18 years; created a false influenza pandemic with its own mostly Thimerosal-preserved “swine flu” (2009-A-H1N1) vaccine doses; and recommended that pregnant women and children get both the “swine flu” shot⁵⁸ and the seasonal flu shot⁵⁹ as well as

months is encouraged when feasible. Vaccination of children aged >6 months who have certain medical conditions continues to be strongly recommended.

4.

5. A limited amount of influenza vaccine with reduced thimerosal content will be available for the 2002--2003 influenza season” and

“Vaccination is recommended for the following groups of persons who are at increased risk for complications from influenza:

- ...; and
- women who will be in the second or third trimester of pregnancy during the influenza season.”.

55 Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1997 Apr 25; 46(RR-9): 1-25. “TARGET GROUPS FOR SPECIAL VACCINATION PROGRAMS Groups at Increased Risk for Influenza-Related Complications:

- ...
- Women who will be in the second or third trimester of pregnancy during the influenza season”

56 Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2004 May 28; 53(RR-06): 1-40.

“Target Groups for Vaccination

Persons at Increased Risk for Complications

Vaccination with inactivated influenza vaccine is recommended for the following persons who are at increased risk for complications from influenza:

- ...;
- women who will be pregnant during the influenza season; and
- children aged 6--23 months..

57 Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2006 Jul 28; 55(RR10):1-42. “Principal changes include 1) recommending vaccination of children aged 24--59 months and their household contacts and out-of-home caregivers against influenza; 2) highlighting the importance of administering 2 doses of influenza vaccine for children aged 6 months--<9 years who were previously unvaccinated; 3) ...”

58 Prevention and Control of Seasonal Influenza with Vaccines Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2009. *MMWR* 2009 Jul 31; 58(RR08):1-52. “Highlights of the 2009 recommendations include 1) a recommendation that annual vaccination be administered to all children aged 6 months--18 years for the 2009--10 influenza season; 2) Approximately 83% of the United States population is specifically recommended for annual vaccination against seasonal influenza; however, <40% of the U.S. population received the 2008--09 influenza vaccine.”

59 Use of Influenza A (H1N1) 2009 Monovalent Vaccine Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2008 Aug 28; 58(RR10):1-8. “Highlights of these recommendations include 1) the identification of five initial target groups for vaccination efforts (pregnant women, persons who live with or provide care for infants aged <6 months, health-care and emergency medical services personnel,

that children under 9 years of age be given 2 doses of the pandemic flu vaccine if they had not previously had doses of the seasonal flu shot along with 2 doses of the seasonal flu shot when such children were under 3 years of age.

In addition to boosting seasonal and pandemic influenza uptake in pregnant women from about "12%" in the 2008-09 flu season to about "40%" in the 2009-2010 flu season, the two doses of the inactivated-influenza-virus vaccine the pregnant women received, nominal one trivalent seasonal shot and one monovalent 2009-A-H1N1 shot, generated a more than 24-fold increase of raw reports of fetal loss to VAERS from "7" in the 2008-09 flu season to "178" in the 2009-10 season^{60,61}.

Even after removing the non-relevant reports from the list and correcting for the increased uptake in the 2009-2010 flu season over 2008-2009 flu season, the spike in fetal-loss reports indicated that the total mercury exposure to some developing children was exceeding some inherent threshold for fetal mercury poisoning⁶².

This was the case because, even though: **a)** the 2009-A-H1N1 (pandemic) virus was added to the seasonal influenza formulation for the 2010-11 flu season, **b)** uptake remained high and **c)** the number of seasonal doses that were Thimerosal-preserved was about the same, the number of fetal-loss reports for the "seasonal" inactivated-influenza vaccine dropped to about 21.

Therefore, these findings left the nominal doubling of the fetuses' mercury-exposure level in the 2009-2010 flu season as the likely causal factor for the observed "170-plus" spike in fetal-loss reports associated with a flu shot in VAERS for the 2009-2010 flu season.

Yet, even after observing this dramatic mercury-exposure-level-related increase in fetal losses, the CDC continues to state no preference for both pregnant women (about 4 million a year) and developing children (about 72 million a year) to receive no-Thimerosal flu shots.

Further, for the dose of Thimerosal in a Thimerosal-preserved vaccine to be "safe", that dose would have to be lower than the no-

children and young adults aged 6 months--24 years, and persons aged 25--64 years who have medical conditions that put them at higher risk for influenza-related complications), 2) ..."

60 <http://www.progressiveconvergence.com/H1N1-RELATED%20miscarriages.htm>. This file contains copies of the actual VAERS reports reviewed along with important ancillary information.

61 <http://www.progressiveconvergence.com/Final%20Press%20Release%20CDC%20Allegedly%20falsified.pdf>. [Note: In the October 2010 press release, some of the reports in 2008-2009 and 2009-2010 flu seasons were not possibly causal or were for the banned live-virus flu vaccination, and these were removed in the final published paper.]

62 Goldman, GS. Comparison of VAERS fetal-loss reports during three consecutive influenza seasons: Was there a synergistic fetal toxicity associated with the two-vaccine 2009/2010 season? *Hum Exp Toxicol* 2013 May; 32(5): 464-475.

observed-adverse-effect-level (NOAEL) for injected Thimerosal.

Based on the only published estimate for the NOAEL for injected Thimerosal⁶³, "< 0.0086 micrograms of Thimerosal per kilogram (kg) per day": For children under the age of three years, the lowest mercury dose from a 0.25-milliliter injection of a Thimerosal-preserved flu shot (nominally 25 micrograms of injected Thimerosal) is only safe if these children weigh more than (>) $25/0.0086 = > 2907 \text{ kg}$ (> 6409 pounds [>3.2 tons]).

Since this weight is **impossible** for any child under 3 years of age as is twice that weight (> 5814 kg or > 12818 pounds [> 6.4 tons]) for any child 3 years of age or older, who gets a 0.5-mL dose, Thimerosal-preserved vaccines are not, and have never been, safe to give to developing children, *although Thimerosal-preserved vaccines are still being given to developing children today.*

Yet, ignoring all of the toxicological studies showing serious toxic effects including the preceding published estimate for the NOAEL for injected Thimerosal in developing humans and its obvious ramifications, the American Academy of Pediatrics (supported by the U.S. Public Health Service and other groups supposedly caring about the health of children) recently revised its official position to state (emphasis added),

"...

Once the FDA calculations revealed that even 1 federal guideline was exceeded, the AAP and USPHS were obligated to full public disclosure. With that disclosure, it was important to demonstrate a response that could prevent exceeding the guideline levels and also to continue to protect infants by still ensuring full immunization. The joint statement met those obligations while demonstrating an abundance of caution: putting safety first.

The priority to 'first, do no harm' guides all USPHS and AAP recommendations.

Given the complexity of the science involved in making guidelines, the polarity between vaccine advocates and those believing their children have been harmed, the media's attraction to controversy, and, in retrospect, inadequate follow-up education about the issues to clinicians and the general public, it is not surprising that the steps taken left misunderstanding and anxiety in the United States and concerns in the global public health community.

Since 1999, studies to better understand the pharmacology and toxicology of ethyl mercury have documented the profound differences between ethyl and methyl mercury. In addition, efforts to find evidence of harm to children from TCVs, used globally for .60 years, have failed to reveal any such damage. This is in sharp contrast to experience involving methyl mercury, a documented serious neurotoxin.

⁶³ http://dr-king.com/docs/090812_fldrft_TheTruthAboutTheToxicityOfThimerosalr5b.pdf. "[C]onverting the reported/observed LOAEL into an NOAEL, with no safety factor, that no-safety-factor NOAEL injected Thimerosal, developing child is clearly: < 0.0086 µg Thimerosal/kg/day".

Had the AAP (and, we suspect, the USPHS) known what research has revealed in the intervening 14 years, it is inconceivable to us that these organizations would have made the joint statement of July 7, 1999. The World Health Organization recommendation to delete the ban on thimerosal must be heeded or it will cause tremendous damage to current programs to protect all children from death and disability caused by vaccine-preventable diseases."⁶⁴.

First, this reviewer must point out that independent scientifically sound and appropriate toxicological studies, including mercury redistribution and bioaccumulation studies, done since the 1940s on rats, monkeys, pheasants, pigs, rabbits, fertile eggs, snail neurons, human spinal cord and skin samples, and in cell cultures of all types, have clearly established the reality that the toxicity of a given ethylmercury compound is similar to that of the corresponding methylmercury compound.

The difference between an ethylmercury compound and the corresponding methylmercury compound is the ethylmercury compound, as the results reported by Burbacher T, et al. (2005)⁶⁵ and Rodriques JL, et al. (2010)⁶⁶ indicate, gets into the animals' tissues and breaks down faster in mammalian systems than methylmercury chloride into the tissue-retained "inorganic mercury" species, which are responsible for the bioaccumulative long-term toxicity of organic mercury compounds as elucidated by Sugita M (1978)⁶⁷.

Recently, the mercury component speciation studies by Rodriques JL, et al. (2010) [see footnote "66"] have shown that the breakdown of Thimerosal, sodium ethylmercury thiosalicylate, in the human body proceeds via the initial rapid "solvolytic" formation of ethylmercury chloride (with probably some ethylmercury hydroxide), which is rapidly transported out of the blood stream into the tissues where some percentage of the ethylmercury species further degrade into tissue-retained inorganic mercury species by unspecified pathway(s) that generates(generate) some level of the corresponding methylmercury species.

More than 4 decades earlier, studies by Takeda Y, et al. (1968)⁶⁸

⁶⁴ Cooper LZ, Katz SL. Ban on Thimerosal in Draft Treaty on Mercury: Why the AAP's Position in 2012 Is So Important. *Pediatrics* 2012 Dec. 12 (online). DOI: 10.1542/peds.2012-1823.

⁶⁵ Burbacher TM, Shen DD, Liberato N, Grant KS, Cernichiari E, Clarkson T. Comparison of blood and brain mercury levels in infant monkeys exposed to methylmercury or vaccines containing Thimerosal. *Environ Health Persp* 2005; 113(8): 1015-1021.

⁶⁶ Rodriques JL, Serpeloni JM, Batista BL, Souza S, Barbarosa Jr F. Identification and distribution of mercury species in rat tissues following administration of Thimerosal or methyl mercury (chloride). *Arch Toxicol* 2010; 84: 891-896.

⁶⁷ Sugita M. The biological half-time of heavy metals. The existence of a third, "slowest" component. *Int Arch Occup Environ Health* 1978; 41(1): 25-40.

⁶⁸ Takeda Y, Kunugi T, Hoshino O, Ukita T. Distribution of Inorganic, Aryl, and Alkyl ²⁰³Hg-labeled Mercury Compounds In Rats. *Toxicol Appl Pharmacol* 1968; 13: 156-164.

using radiolabeled inorganic, ethylmercury, and other aryl mercury and alkyl mercury compounds injected into adult 7-week-old rats clearly established that *less than 15 %* of the total dose of the ethylmercury chloride that was given cleared these “adult” rats via their feces and urine within the 8 days after an injection of 10 mg of ²⁰³Hg-radio-labeled ethylmercury chloride (EtHgCl) per kg (10 µg of ²⁰³Hg-radio-labeled EtHgCl per gram [g], or 10 parts-per-million [ppm]) of rat weight.

“Table I. Distribution of Radioactive Mercury in Tissues of Rats” [that] “received ²⁰³Hg—EtHgCl (950 µgHg/kg)” [0.95 µg Hg/g] “by Intraperitoneal injection”

Tissue	µgHg/g after[*] (Ratio to initial exposure level)						
	60 min	3 hr	6 hr	24 hr	2 day	4 day	8 day
Liver	3.05 (3.21)	4.04 (4.25)	4.43 (4.66)	4.70 (4.95)	5.05 (5.32)	3.70 (3.89)	3.30 (3.47)
Kidney	4.90 (5.16)	5.10 (5.37)	5.90 (6.21)	6.80 (7.16)	10.40 (10.95)	11.80 (12.42)	17.90 (18.84)
Brain	0.07 (0.074)	0.13 (0.137)	0.14 (0.147)	0.14 (0.147)	0.23 (0.242)	0.27 (0.284)	0.31 (0.326)

[] **Bolding** added for emphasis by this reviewer for those values that exceeded the initial dosing level of **0.950 µg Hg/g** when the initial dose was “²⁰³Hg—EtHgCl (950 µgHg/kg)”

Shortly thereafter, mercury distribution studies by Takahashi T, et al. (1971)⁶⁹ conducted in rats and monkeys using the radiolabeled organic mercury compound, ²⁰³Hg ethylmercury chloride, the principal initial mercury-containing solvolysis product of Thimerosal in the body, showed that the dose was accumulating in the brains of both the rats and squirrel monkeys tested (see “Table I” above and “Table II” below).

Furthermore, these ²⁰³Hg radiolabelled studies in the monkeys exhibited bioaccumulation of the mercury in the monkey’s brain even when the blood levels were less than the mercury test method’s limit of quantitation.

After 8 days, the level of mercury in the monkey’s brain from the radiolabeled ethylmercury chloride dosed was higher (0.96 to 1.24 micrograms of mercury per wet gram of brain tissue) than the dosing concentration (0.8 micrograms of organic mercury per gram of body weight) [see the tables for the reported data and, *in parentheses*, the level normalized to the dose of radiolabeled mercury {²⁰³Hg}].

⁶⁹ Takahashi T, Kimura T, Sato Y, Shiraki H, Ukita T. Time-dependent Distribution of [²⁰³Hg]-Mercury Compounds in Rat and Monkey as Studied by Whole Body Autoradiography. *J Hygenic Chem* (Japan) 1971; 17(2): 93-107.

Clearly, from these data, mercury has bioaccumulated in the rat's liver for the first 2 days to the point that its level is more than 5 times the exposure level.

Eight (8) days after dosing, the level of mercury in the liver is still about 3.5 times the exposure level.

Empirically, the half-life of the longest retained mercury (that of the tissue-retained inorganic mercury) in the rat's liver appears to be much greater than 40 days.

From these data, one would need to have a radiolabel experiment that could last for one year (about half of the rats' average lifetime)

“Table II. Distribution of Radioactive Mercury in Monkey Tissues 60 Minutes after Intravenous Injection and 8 days after Intraperitoneal Injection of ²⁰³Hg—EtHgCl (800 µgHg/kg)”
[0.800 µg of Hg/g of subject weight]

	µgHg/g after ^[1] (Fraction of Exposure)			µgHg/g after ^[1] (Fraction of Exposure)	
	60 min	8 day		60 min	8 day
General Tissues			Portion of brain		
Kidney	6.73 (8.41)	8.60 (10.75)	Cerebellum		0.214 (0.2675) 1.22 (1.525)
Liver	6.50 (8.125)	3.04 (3.80)	Cerebral Cortex	frontal lobe	0.170 (0.2125) 1.39 (1.7375)
Lung	5.10 (6.375)	0.44 (0.55)		parietal lobe	0.176 (0.22) 1.47 (1.8375)
Myocardium	4.62 (5.775)	0.81 (1.0125)		occipital lobe	0.213 (0.26625) 1.68 (2.10)
Arteries	3.36 (4.2)	0.28 (0.35)	Cerebral white matter	frontal lobe	0.064 (0.080) 1.16 (1.45)
Intestinal wall	1.28 (1.6)	0.77 (0.9625)		parietal lobe	0.067 (0.8375) 1.14 (1.425)
Muscle	1.05 (1.3125)	0.41 (0.50125)		occipital lobe	0.068 (0.85) 1.10 (1.375)
Tongue	0.94 (1.175)	0.62 (0.775)	Midbrain		0.188 (0.235) 1.24 (1.55)
Testis	0.37 (0.4625)	0.07 (0.085)	Corpus callosum		0.047 (0.5875) 0.96 (1.2)

^[1] **Bolding** added for emphasis for those values that significantly exceeded the initial dosing level of 0.800 µg Hg/g when the initial dose was ²⁰³Hg—EtHgCl (800 µgHg/kg)”

before one could begin to get an accurate estimate for the half-life of the tissue-retained inorganic mercury derived from the breakdown of the ^{203}Hg -labeled ethylmercury chloride in the brain and the kidney of the rat.

Moreover, 8 days after dosing, the ratio of the brain level to the kidney level is 0.326 to 18.84, or 0.0173, in the rat.

Turning to the data from the squirrel monkeys, one sees somewhat similar 60-minute and 8-day values were reported for the results for the monkeys' kidney and liver, but, at eight days, the level in the monkeys' brain tissues evaluated exceeded the exposure level by 20% to 110%.

Crudely averaging the reported Hg levels relative to the exposure, the "average" relative level of the Hg in the brain is about 1.578 (1.20 – 2.10, $n=9$) times the exposure level and the ratio of the brain level to the kidney level is 1.578 to 10.75, or 0.1468, in the monkey.

Since the exposure levels in the rat (0.95 microgram/kg) and the monkey (0.80 microgram/kg) were comparable, the results reported apparently show that the rats studied protected their brain by accumulating a higher percentage of the mercury dose in the kidney than the monkey did.

In addition, the relative rat to monkey brain-to-kidney ratios (0.0173_{rat} to 0.1468_{monkey}) support the presumption that ethylmercury is "10" times more toxic to the monkey brain than it is to the rat brain, although, *in the absence of half-life data*, the brain-to-kidney ratios are, at best, crude indicators of the relative toxicity to the brain.

Overall, these data plainly support: **a)** the bioaccumulation of mercury in the brain when ethylmercury chloride is injected into rats and monkeys, and **b)** the reality that the interim mercury level values in the monkey brain exceeded the dosing level by 20% to 110% when the dosing level is 0.8 ppm of Hg as ethylmercury chloride.

More recently, initially reported online 1 June 2012, a reproductive rat toxicity study by Ida-Eto M, et al⁷⁰, research that was partially supported by the "Ministry of Health, Labor and Welfare of the Japanese Government", has clearly demonstrated that a single dose of Thimerosal given to the pregnant rat has deleterious effects on her offspring that persist into the adulthood of her offspring.

⁷⁰ Ida-Eto M, Oyabu A, Ohkawara T, Tashiro Y, Narita N, Narita M. Prenatal exposure to organomercury, thimerosal, persistently impairs the serotonergic and dopaminergic systems in the rat brain: Implications for association with developmental disorders. *Brain Develop* 2013 Mar; 35(3): 261-264. The article is still available through <http://dx.doi.org/10.1016/j.braindev.2012.05.004>, last visited on 28 May 2013.

In this article's abstract, the study's researchers stated (emphasis added),

"... These results indicate that embryonic exposure to thimerosal produces lasting impairment of brain monoaminergic system, and thus every effort should be made to avoid the use of thimerosal".

Furthermore, Hewitson L, et al. (2010)⁷¹ had already established that even the at-birth administration of the equivalent of nominally 25 micrograms of Thimerosal (delivering about 12.5 micrograms of organic mercury) given to newborn humans to newborn male Macaque monkeys led to significant delays "in the acquisition of root, snout, and suck reflexes, compared with unexposed animals", which adversely affected their ability to breastfeed in a manner that, absent intervention, would have significantly impaired the survivability of the Thimerosal-dosed newborn male Macaque monkeys used in the study.

Based on the preceding realities, the cited studies have shown that the use of Thimerosal as a preservative in vaccines is not safe for use in pregnant women and developing children and that this use of Thimerosal as a preservative in vaccines and other drugs should be abandoned immediately.

Thus, the AAP's revised position on Thimerosal in vaccines has:

- Nothing to do with autism or with its self-serving assertion, "[t]he priority to 'first, do no harm' guides all USPHS and AAP recommendations" and
- **Everything to do with continuing the knowing, on-going, for-profit mercury poisoning of fetuses, developing children and adults via Thimerosal-preserved vaccines** and, to a lesser extent, the Thimerosal-containing vaccines, which, without all of the required proofs of safety,

⁷¹ Hewitson L, Houser LA, Stott C, Sackett G, Tomko JL, Atwood D, Blue L, White ER. Delayed acquisition of neonatal reflexes in newborn primates receiving a thimerosal-containing hepatitis B vaccine: influence of gestational age and birth weight. *J Toxicol Environ Health A*. 2010;73(19):1298-313. doi: 10.1080/15287394.2010.484709.

Abstract in PubMed, <http://www.ncbi.nlm.nih.gov/pubmed/20711932>, states (emphasis added),

"This study examined whether acquisition of neonatal reflexes in newborn rhesus macaques was influenced by receipt of a single neonatal dose of hepatitis B vaccine containing the preservative thimerosal (Th). Hepatitis B vaccine containing a weight-adjusted Th dose was administered to male macaques within 24 h of birth (n = 13). Unexposed animals received saline placebo (n = 4) or no injection (n = 3). Infants were tested daily for acquisition of nine survival, motor, and sensorimotor reflexes. In exposed animals there was a significant delay in the acquisition of root, snout, and suck reflexes, compared with unexposed animals. No neonatal responses were significantly delayed in unexposed animals. Gestational age (GA) and birth weight (BW) were not significantly correlated. Cox regression models were used to evaluate main effects and interactions of exposure with BW and GA as independent predictors and time-invariant covariates. Significant main effects remained for exposure on root and suck when controlling for GA and BW, such that exposed animals were relatively delayed in time-to-criterion. Interaction models indicated there were various interactions between exposure, GA, and BW and that inclusion of the relevant interaction terms significantly improved model fit. This, in turn, indicated that lower BW and/or lower GA exacerbated the adverse effects following vaccine exposure. This primate model provides a possible means of assessing adverse neurodevelopmental outcomes from neonatal Th-containing hepatitis B vaccine exposure, particularly in infants of lower GA or BW. The mechanisms underlying these effects and the requirements for Th requires further study."

continue to be given to pregnant women, developing children, and adults **in the USA and elsewhere.**

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ABOUT THE WRITER, Curtis Brainard

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Curtis Brainard has covered science, environment, and medical news for the Columbia Journalism Review since 2006. In January 2008, he launched The Observatory, CJR's first full time department dedicated to critically analyzing science coverage in the media as well as the opportunities and challenges facing science journalists today.

News outlets from NPR to Al-Jazeera English, as well as research organizations such as the Reuters Institute at Oxford University and the U.K.'s Science Media Centre, have interviewed Brainard about the state of science journalism and the coverage of particular stories. He has also been invited to speak to the World Conference of Science Journalists, the National Association of Science Writers, the International Press Institute, the Knight Science Journalism Fellows at MIT, the Association of Environmental Grantmakers, and National Center for Atmospheric Research, among others.

Brainard has master's degrees in environmental science and journalism from Columbia University, where his research involved studying fossil corals to determine historic fluctuations in cosmic radiation and atmospheric carbon.

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ABOUT THE REVIEWER, Paul G. King, PhD

In addition to the information available on his Internet web site, <http://www.dr-king.com/>, Paul G. King, PhD Analytical Chemist, is the Science Advisor to, and current Secretary for, the Coalition for Mercury-Free Drugs (CoMeD, Inc., which is a 501(3)(c) not-for-profit corporation with a web site at <http://www.mercury-freedrugs.org/>).

As a scientist and student of the federal regulations and statutes that govern drugs, including vaccines, Dr. King has led CoMeD, on two (2) separate occasions, in the drafting and submission of a "Citizen Petition" seeking to have the federal government comply with the law, and, based on the improper denial of the Citizen Petition submitted, a federal lawsuit seeking to have the Federal District Court for the District of Columbia compel the Secretary of the Department of Health and Human Services (DHHS) and the Commissioner of the FDA to comply with the statutes, laws (regulations) and policies that regulate

the lawful conduct of the Secretary of the DHHS, the FDA commissioner and CDC and FDA official's.

In addition, Dr. King has, *on several occasions*, drafted legislation for submission to the Congress of the USA as well as to the legislatures of various States, submitted cogent comments in opposition to proposed changes to federal and state regulations that are not in the public interest or appear to be at odds with the law, reviewed numerous documents, and written articles on a variety of vaccine-related and other issues.

Further, Dr. King has provided diverse groups with his analysis of various Congressional bills, resolutions and treaty documents as well as federal and state judicial proceedings.

In addition, he been an author of several papers bearing on issues related to the toxicity of Thimerosal and other compounds and, if any, their connection to a range of chronic neurodevelopmental, other developmental and behavioral abnormalities that appear to be well-above (> 1 in 10 children; asthma and obesity), above (> 1 in 100 children; the autism spectrum disorders), at (> 1 in 1000 children; non-genetic childhood type 1 diabetes), or approaching (life-threatening peanut allergy) epidemic childhood levels in the USA.

Most recently, Dr. King was the co-author of a paper in the journal **Vaccine** with Gary S. Goldman, PhD, which reviewed the United States universal varicella vaccination program and found that the current CDC-recommended vaccination program was neither effective in preventing those who are vaccinated from getting chickenpox nor, *since it greatly increases the public's risk of having clinical cases of shingles*, cost effective for universal use [see footnote "16"].

Though, as a scientist, Dr. King is neither anti-vaccine nor anti-vaccination per se, his research into the "safety" and "effectiveness" of most of the vaccines given to our children and his religious beliefs compel him to reject the current prophylactic vaccines and vaccination programs because they are false gods that do not provide the disease immunity that they are purported to provide.