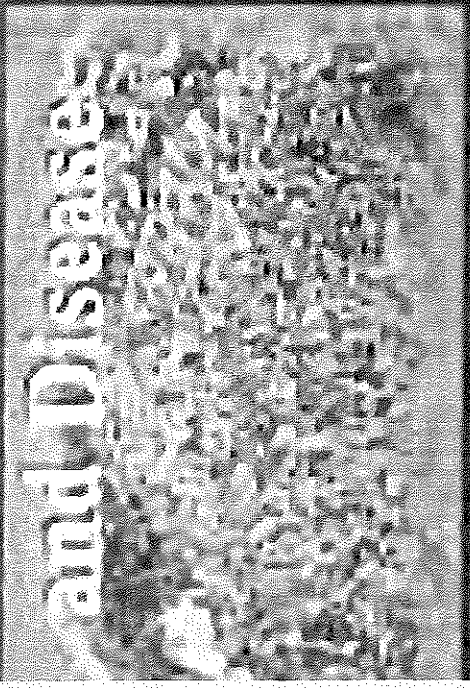


INFORMED CONSENT

- RISKS
- BENEFITS
- ALTERNATIVES (includes doing nothing!)

PF Zaida and AC Alfrey

Aluminium Toxicity in Infants' Health and Diseases



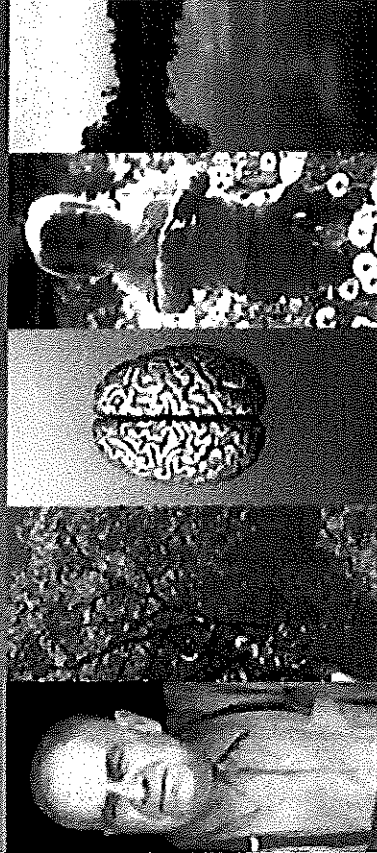
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RESEARCH ISSUES IN

ALZHEIMER TOXICITY



Edited by
Robert A. Yokel
and
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STUDIES on Aluminum Safety

- Neurological impairment when infants got 45micrograms/Kg/day when compared to 5 micrograms/Kg/day
 - Bishop et al “Aluminum neurotoxicity in preterm infants receiving intravenous-feeding solutions.”
- ***“Aluminum exposure from the standard intravenous solutions was calculated to be associated with a mean loss of one point on the Bayley Mental Development Index per day of full intravenous feeding”***
 - NEJM 1997;336:1557-1561 (<http://www.nejm.org/doi/full/10.1056/NEJM199705293362203#ft=articleTop>)

FDA Aluminum Recommendations

- FDA recommended aluminum not exceed 5 micrograms/Kg/d
- The FDA's recommended limit of 5 mcg/kg/day was only feasible in patients weighing over 50 kg. ***“compounded neonatal PN solutions still exceeded the FDA limit of 5 mcg/kg/day by 3 to 5 times”***

— <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3208446/>

Aluminum Safety Studies

- Study: “Do aluminum vaccine adjuvants contribute to rising prevalence of autism?” by Tomljenovic and Shaw showed: increased autism prevalence in USA and 7 western countries correlates with the increased exposure to aluminum.
- Early safety studies 1965: “Pertussis Vaccine Testing for freedom-from-toxicity.” *Appl. Microbiol.* 13(3):447-456
 - Injected rats dying from 1.29 – 5.85% by 14 days after the injections of aluminum containing vaccines.
- 2013 *J Inorg Biochem* “Administration of aluminum to neonatal mice in vaccine-relevant amounts is associated with adverse long term neurological outcomes” - affects focus and behavior.

Health Effects of Aluminum

- Aluminum +/- total number of vaccines is triggering autoimmune disorders and brain dysfunction
- “Immune challenges during early development, including those vaccine-induced, can lead to permanent detrimental alterations of the brain and immune function. Experimental **evidence also shows that simultaneous administration of as little as two to three immune adjuvants can overcome genetic resistance to autoimmunity.** In some developed countries, by the time children are 4 to 6 years old, they will have received a total of 126 antigenic compounds along with high amounts of aluminum (Al) adjuvants through routine vaccinations.”

– <http://www.ncbi.nlm.nih.gov/pubmed/22235057>

Aluminum and Cellular Metabolism

- Aluminum interferes with cellular metabolism, DNA information transfer, and lipid peroxidation making cells vulnerable to free radicals.
 - Karlik SJ, et al. Interaction of aluminum species with deoxyribonucleic acid. Biochemistry. 1980 Dec 23;19(26): 5991-8. <http://www.ncbi.nlm.nih.gov/pubmed/7470444>
 - Troncoso JC, Immunocytochemical studies of neurofilament antigens in the neurofibrillary pathology induced by aluminum. Brain Res. 1986 Feb 5;364(2): 295-300. <http://www.ncbi.nlm.nih.gov/pubmed/3512034>
 - Dominguez MC et al Effect of aluminum and lead salts on lipid peroxidation and cell survival in human skin fibroblasts. Biol Trace Elem Res. 1995 Jan-Mar;47(1-3): 57-67.

Aluminum Storage

- ½ life of that aluminum present at 2 weeks was 7 years!
- “Whole-body retention of 15% at 13 d declined to approximately 4% at 1178 d, when the daily reduction corresponded to a *biological half-life of 7 years* suggesting that sustained intake of dietary aluminium may lead to a progressively increasing internal deposit”

– <http://www.ncbi.nlm.nih.gov/pubmed/7779460>

Plasma Aluminum & TPN

- Plasma aluminum increased 7 – fold after TPN in term infants with normal renal function
- “The urine aluminium/creatinine ratio remained high up to 10 weeks following withdrawal of parenteral nutrition and suggested tissular loading. This was confirmed after *high aluminium levels were found in post-mortem brain and bone samples from two preterm and one full-term infant*. We conclude that both preterm and full-term neonates are susceptible to accumulation of aluminium in tissue while receiving parenteral nutrition.”
- Study “Aluminum in the neonate related to parenteral nutrition.” Moreno et al Acta. Paediatr. 83: 25-29

Aluminum Storage

- Aluminum accumulates in bone and brain
- $\frac{1}{2}$ the injected aluminum is eliminated in 24 hours (or stored in bone and brain)
- $\frac{1}{4}$ of the injected aluminum is present at two weeks

– <http://www.nejm.org/doi/full/10.1056/NEJM198702053160602>

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Pediatrics Digest Summary

Duration of Protection After Infant Hepatitis B Vaccination Series

This Article

Published online May 19, 2014

(doi: 10.1542/peds.2013-2940d)

» [Abstract Free](#)

- 16-19 year olds in the US who had completed their 3 shot series by age 1.
- Just 24% of these teens had protective levels of >10 IU/ml.

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Infants vaccinated against HBV
have lost surface antigen protection
during adolescence

- **“A significant proportion of adolescents who had received primary infantile HB vaccination may have lost their immunological memories against HBsAg,”** the researchers wrote.

– Wu T-W. Hepatology. 2013;57:37-45.

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- Give booster dose if titer <10 IU/ml and repeat 3 shot series
- 16% of those vaccinated in first year have detectable anti-HBsAb
- If vaccinated 9 – 22 years before and over age 1 when vaccinated: 69-96% response to one booster dose.

– AAP News 2014; 35:13; doi:10.1542/aapnews.2014352-13; H. Cody Meissner

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JAMA

The Journal of the
American Medical Association

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Original Contribution | February 13, 2013

Association Between Maternal Use of Folic Acid Supplements and Risk of Autism Spectrum Disorders in Children **FREE**

Pål Surén, MD, MPH; Christine Roth, MSc; Michaeline Bresnahan, PhD; Margaretha Haugen, PhD; Mady Homig,

Paul Thomas, M.D.

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Prenatal Folic Acid Supplements and ASD

- 85,000 mom-babies born 2002 – 2008
- Followed until 2012 (3.3 – 10.2 years)
- Folic acid moms: Autism 0.1% = 1/1,000
- Not taking folic: Autism 0.21% = 1/500
- Autism rate in USA for moms on folic acid:
1/100

Chances of second child being autistic?

JAMA Pediatrics

Formerly *Archives of Pediatrics & Adolescent Medicine*

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October 2013, Vol 167, No. 10 >

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Original Investigation | October 2013

Recurrence of Autism Spectrum Disorders in Full- and Half-Siblings and Trends Over Time A Population-Based Cohort Study **FREE**

Therese K. Grønberg, MSc¹; Diana E. Schendel, PhD²; Erik T. Parner, MSc, PhD¹

1/5 = 20% - will develop the condition by age 3.

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AUTISM and ALUMINUM or VACCINES?

- US population is the grand experiment
 - 1/50 to 1/100 autistic (ASD)
- Compare Norway (no newborn Hep B vaccine)
 - 1/1000 for those moms who took folate (1/500 if no folate)
 - JAMA. Feb 13, 2013; 309(6): 570--577. doi: 10.1001/jama.2012.155925, PMID: PMC3908544, NIHMSID: NIHMS526835

ASSOCIATION BETWEEN MATERNAL USE OF FOLIC ACID SUPPLEMENTS AND RISK OF AUTISM IN CHILDREN

- Pål Surén

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Entropy **2012**, *14*, 2227–2253; doi:10.3390/e14112227

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entropy

ISSN 1099-4300

www.mdpi.com/journal/entropy

Review

Empirical Data Confirm Autism Symptoms Related to Aluminum and Acetaminophen Exposure

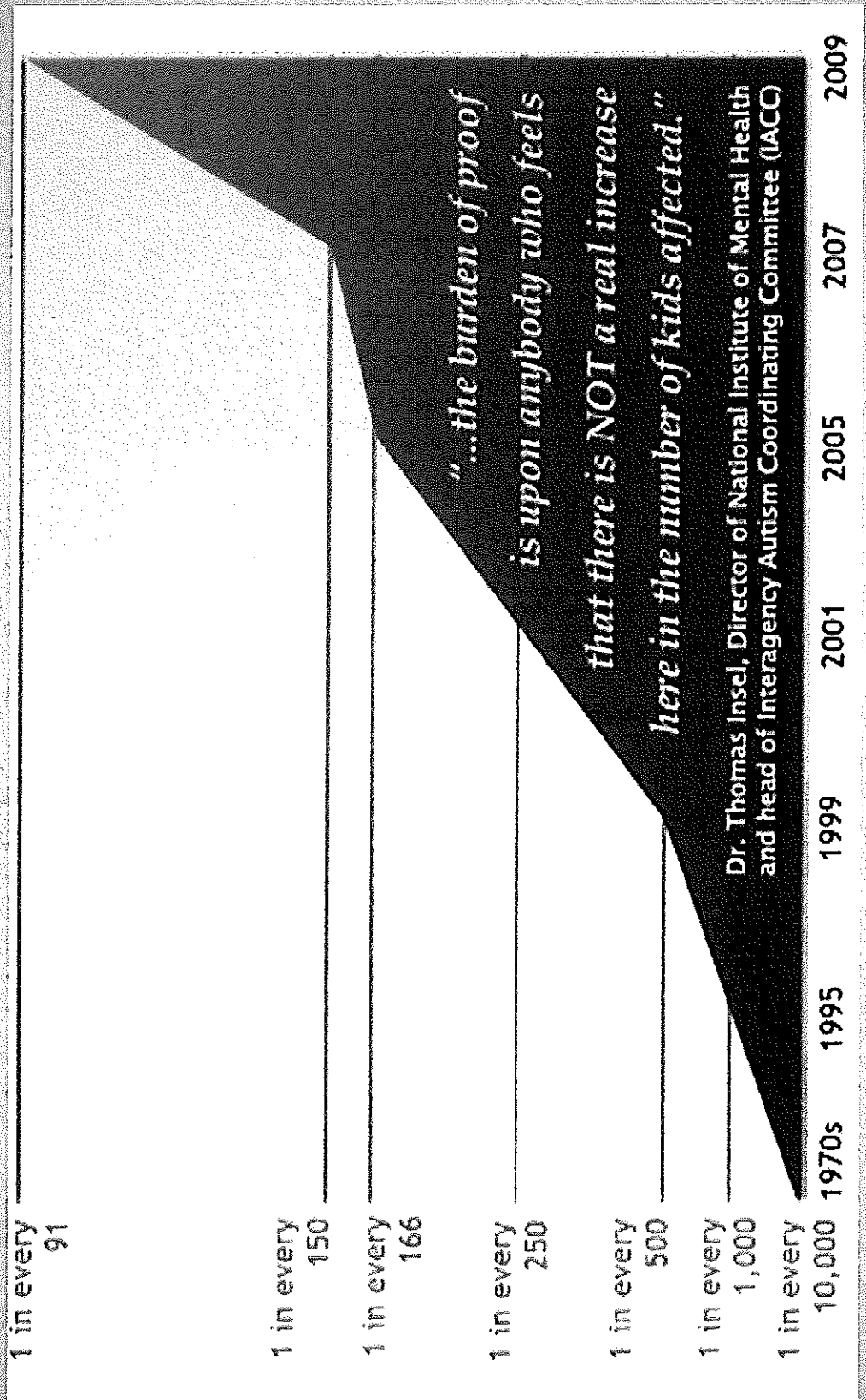
Stephanie Seneff^{1,*}, Robert M. Davidson² and Jingjing Liu¹

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www.mdpi.com

Hepatitis B Vaccine and Autism

- Boys given Hepatitis vaccine in first month of life:
 - 300% increase autism
- Hepatitis B vaccines given to infants are not providing lasting immunity:
 - Wu et.al. 2013 “Chronic hepatitis B infection in adolescents who received primary infantile vaccination”.



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Neuroglial activation and neuroinflammation in the brain of patients with autism

Issue

Diana L. Vargas MD^{1,2}, Caterina Nascimbene MD^{1,2,3}, Chitra Krishnan MHS¹, Andrew W. Zimmerman MD^{1,4} and Carlos A. Pardo MD^{1,2,5,*}

Annals of Neurology
Volume 57, Issue 1, pages
67-81, January 2005

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REPORT BRIEF

JANUARY 2013

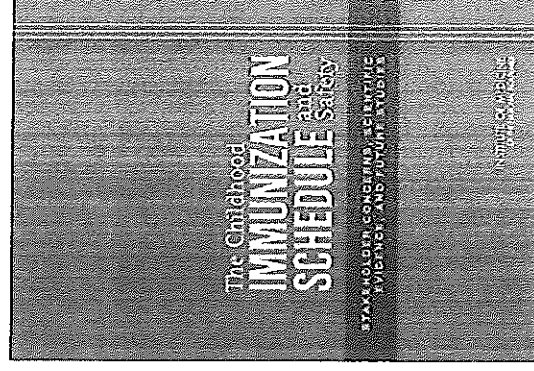
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Stakeholder Concerns, Scientific Evidence, and Future Studies



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CALLOUS DISREGARD

AUTISM AND VACCINES—THE TRUTH BEHIND A TRAGEDY

MEDICAL
CORRUPT



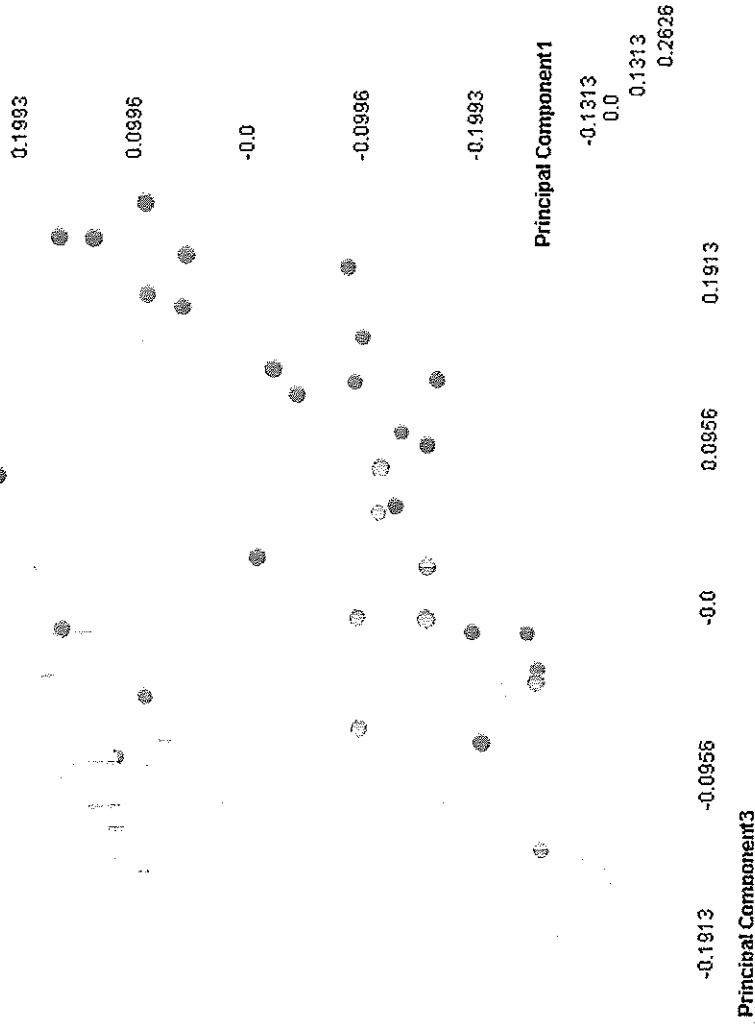
ANDREW J. WAKEFIELD
INTRODUCTION BY JENNY MCCARTHY

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Principal Component2

• ASD
• Control
• CD
• UC



Identification of Unique Gene Expression Profile in Children with Regressive Autism Spectrum Disorder (ASD) and Ileocolitis

Stephen J. Walker , John Fortunato, Lenny G. Gonzalez, Arthur Krigsman

Published: March 08, 2013 • DOI: 10.1371/journal.pone.0058058

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Measles-mumps-rubella vaccination timing and autism among young african american boys: a reanalysis of CDC data

— Brian S Hooker bhooker@simpsonu.edu

— Simpson University, Redding, CA, USA

— *Translational Neurodegeneration* 2014, 3:16 doi:
10.1186/2047-9158-3-16

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www.tdroaonline.com

Transl Neurodegener. 2014; 3: 22.

Published online Oct 3, 2014. doi: [10.1186/2047-9158-3-22](https://doi.org/10.1186/2047-9158-3-22)

PMCID: PMC4183946

Retraction: Measles-mumps-rubella vaccination timing and autism among young African American boys: a reanalysis of CDC data

Brian S Hooker¹

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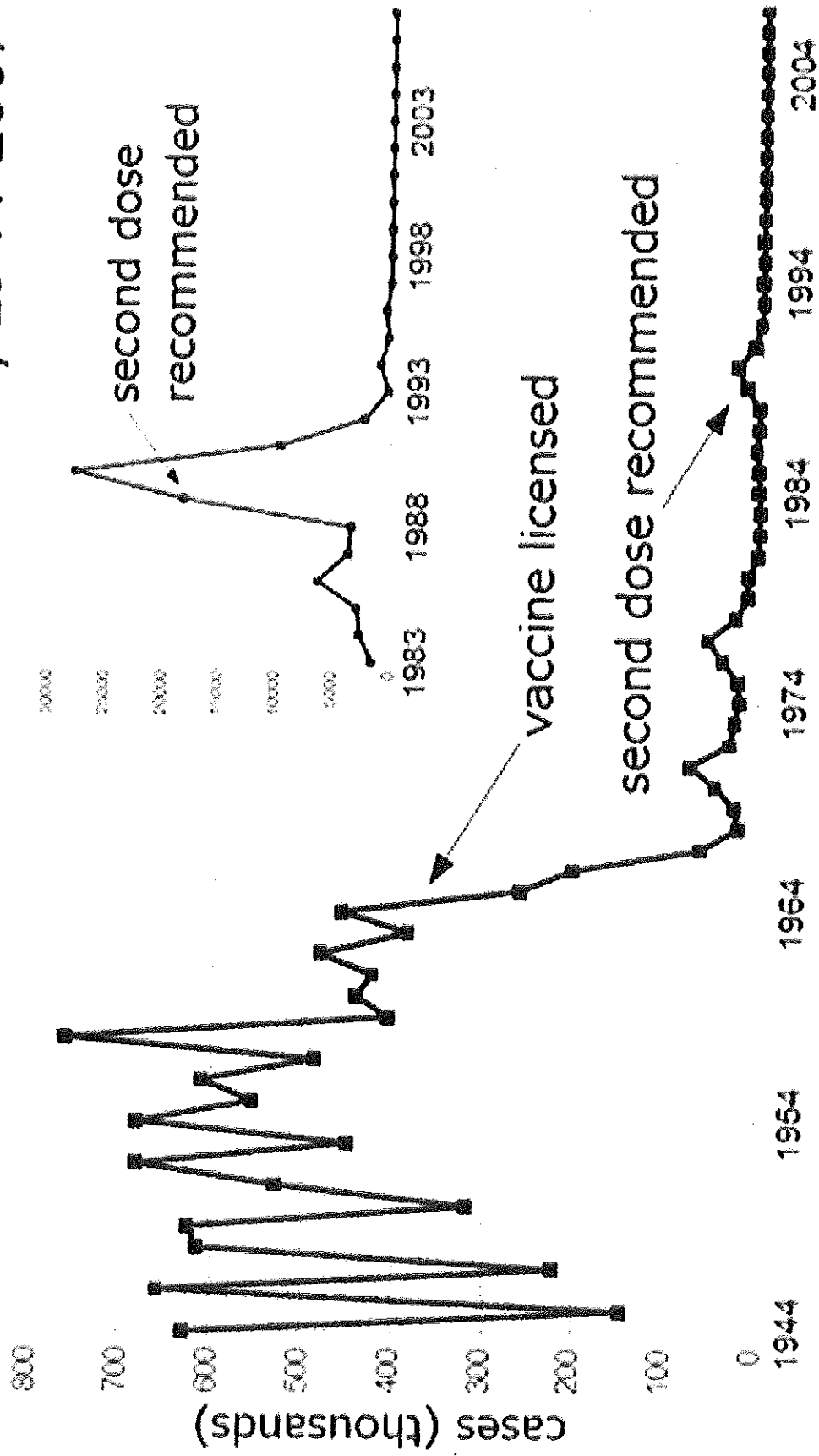
STATEMENT OF WILLIAM W. THOMPSON, Ph.D., REGARDING THE 2004 ARTICLE EXAMINING THE POSSIBILITY OF A RELATIONSHIP BETWEEN MMR VACCINE AND AUTISM

My name is William Thompson. I am a Senior Scientist with the Centers for Disease Control and Prevention, where I have worked since 1998.

I regret that my coauthors and I omitted statistically significant information in our 2004 article published in the journal *Pediatrics*. The omitted data suggested that African American males who received the MMR vaccine before age 36 months were at increased risk for autism. Decisions were made regarding which findings to report after the data were collected, and I believe that the final study protocol was not followed.

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Measles cases in the United States, 1944-2007



Paul Thomas, M.D.

Why vaccinate differently?

1. First do no harm
2. Inject fewer toxins
3. Less neurotoxicity (Autism, ASD, ADHD, anxiety etc.)
4. Less vaccines associated with fewer infections
5. Less vaccines – less allergies

RISKS may outweigh BENEFITS!!