The Science

Children’s Health Defense
Generation 1: CDC’s Unpublished Verstraeten Study on Hep B Showed Dramatic Increased Risk of Autism (7.6X), Sleep Disorders (5X), Speech Disorders (2.1X) and Neurodevelopmental Disorders (1.8X)

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EIS Class Year of Entry: 1999
No previous EIS Conference presentations
Mackel Award consideration: No
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Strong preference for poster presentation: No

Thomas M. Verstraeten, R. Davies, D. Gu, F DeStefano

Increased risk of developmental neurologic impairment after high exposure to thimerosal-containing vaccine in first month of life.

Background: Concern has risen on the presence of the ethylmercury containing preservative thimerosal in vaccines. We assessed the risk for neurologic and renal impairment associated with part exposure to thimerosal-containing vaccine using automated data from the Vaccine Safety Datalink (VSD). VSD is a large linked database from four health maintenance organizations in Washington, Oregon and California, containing immunization, medical visit and demographic data on over 40,000 infants born between 1989 and 1997.

Methods: We categorized the cumulative ethylmercury exposure from thimerosal-containing vaccines after one month of life and assessed the subsequent risk of degenerative and developmental neurologic disorders and renal disorders before the age of six. We applied proportional hazard models adjusting for 1986 year of birth, and gender, excluding premature babies.

Results: We identified 2056 children with degenerative and 2702 with developmental neurologic disorders, and 310 with renal disorders. The relative risk (RR) of developing a neurologic development disorder was 1.8 (95% confidence intervals [CI] = 1.1-2.8) when comparing the highest exposure group at 1 month of age (cumulative dose > 25 ug) to the unexposed group. Within this group we also found an elevated risk for the following disorders: autism (RR 7.6, 95% CI=1.8-31.5), nonorganic sleep disorder (RR 5.0, 95% CI=1.6-15.9), and speech disorders (RR 2.1, 95% CI=1.1-4.0). For the neurologic degenerative

“...The relative risk (RR) of developing a neurologic development disorder was 1.8 (95% confidence intervals [CI] = 1.1-2.8) when comparing the highest exposure group at 1 month of age (cumulative dose > 25 ug) to the unexposed group. Within this group we also found an elevated risk for the following disorders: autism (RR 7.6, 95% CI=1.8-31.5), nonorganic sleep disorder (RR 5.0, 95% CI=1.6-15.9), and speech disorders (RR 2.1, 95% CI=1.1-4.0).”

CDC UNPUBLISHED DATA OBTAINED BY FOIA

Children’s Health Defense
DTP and Tetanus Vaccinations Increase the Odds of Allergies (1.63X) in Children

Published Feb 2000

“The odds of having had any allergy-related respiratory symptom in the past 12 months was 63% greater among vaccinated subjects than unvaccinated subjects. Conclusions: DTP or tetanus vaccination appears to increase the risk of allergies and related respiratory symptoms in children and adolescents.”
Hepatitis B Vaccines Increase the Odds for Special Education by 8.63X

Abstract

This study investigated the association between vaccination with the Hepatitis B triple series vaccine prior to 2000 and developmental disability in children aged 1–9 years (n = 1824), provided by parental report that their child receives early intervention or special education services (EIS). National Health and Nutrition Examination Survey 1999–2000 data were analyzed and adjusted for survey design by Taylor Linearization using SAS version 9.1.2 software, with SAS-callable SUDAAN version 10.0.1. The odds of receiving EIS were approximately nine times as great for vaccinated boys (n = 46) as for unvaccinated boys (n = 7), after adjustment for confounders. This study found statistically significant evidence to suggest that boys in the United States who were vaccinated with the triple series Hepatitis B vaccine, during the time period in which vaccines were manufactured with thimerosal, were more susceptible to developmental disability than were unvaccinated boys.

Proportion Receiving Special Education Services

"The odds of receiving EIS were approximately nine times as great for vaccinated boys (n=46) as for unvaccinated boys (n=7) after adjustment for confounders."
Hepatitis B Vaccines in Male Newborns Increased the Odds of Autism 3X

Published Nov 2010

Relative Odds Autism Diagnoses in Male Newborns Vaccinated with Hep B vs. Unvaccinated

"Boys vaccinated as neonates had threefold greater odds for autism diagnosis compared to boys never vaccinated or vaccinated after the first month of life. Non-Hispanic white boys were 64% less likely to have autism diagnosis relative to nonwhite boys. Findings suggest that U.S. male neonates vaccinated with the hepatitis B vaccine prior to 1999 (from vaccination record) had a threefold higher risk for parental report of autism diagnosis compared to boys not vaccinated as neonates during that same time period. Nonwhite boys bore a greater risk."
Flu Shot Increases Rate of Non-Flu Infection 4.4X

**Increased Risk of Noninfluenza Respiratory Virus Infections Associated With Receipt of Inactivated Influenza Vaccine**

*Published Mar 2012*

**METHODS**

Recruitment and follow-up of participants:

We randomized 115 children to receive inactivated influenza vaccine (TIV) or placebo. Over the following 5 months, TIV recipients had an increased risk of respiratory-confirmed non-influenza infections (relative risk: 4.4X, 95% confidence interval: 1.3-14.3). Those protected against influenza, TIV recipients may lack temporary non-specific immunity that protects against other respiratory viruses.

**Vaccinated vs. Unvaccinated Risk of Non-Flu Infections**

- **Vaccinated, 4.4X**
- **Unvaccinated, 1X**

**Relative Risk of Non-Flu Infections**

“There was no statistically significant difference in the risk of confirmed seasonal influenza infection between recipients of TIV or placebo.”

“TIV recipients had higher risk of confirmed non-influenza respiratory virus infection.”
DTP Increases Mortality in Girls 10X

"DTP vaccinations were associated with increased infant mortality even though there was no vaccine-induced herd immunity. When unvaccinated controls were normal children who had not yet been eligible for vaccination, mortality was 5 times higher for DTP-vaccinated children."

"All currently available evidence suggests that DTP vaccine may kill more children from other causes than it saves from diphtheria, tetanus, or pertussis."

<table>
<thead>
<tr>
<th>Age group</th>
<th>Mortality rate (deaths/person-years)</th>
<th>DTP (Δ OPV) (N = 462)</th>
<th>DTP only (N = 101)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Unvaccinated (N = 651)</td>
<td>4.5 (5/111.4)</td>
<td>17.4 (11/631,1)</td>
<td>35.2 (5/14.2)</td>
</tr>
<tr>
<td>HR (95% CI) DTP vs unvaccinated</td>
<td>5.00 (2.61-10.1)</td>
<td>10.0 (2.61-38.6)</td>
<td></td>
</tr>
</tbody>
</table>
“Vaccination (i.e., receipt of one of more of the recommended vaccines) was significantly associated with NDD, while preterm birth without vaccination was not. Preterm birth coupled with vaccination, however, was associated with a synergistic increase in the odds of NDD, suggesting the possibility that vaccination could precipitate adverse neurodevelopmental outcomes in preterm infants. These results provide clues to the epidemiology and causation of NDD but question the safety of current vaccination programs for preterm infants.”
Vaccination Increases Risk of Allergic Rhinitis (30X), Allergy (3.1X), ADHD (4.2X), Autism (4.2X), Eczema (2.9X), Learning Disability (5.2X) and Neurodevelopmental Disorders (3.7X)

Odds of Chronic Diseases for Vaccinated vs. Unvaccinated Children

"In this pilot study of vaccinated and unvaccinated homeschool children, reduced odds of chickenpox and whooping cough were found among the vaccinated, as expected, but unexpectedly increased odds were found for many other physician-diagnosed conditions."
Vaccination Increases Type I Diabetes 3X

Cluster of cases of type 1 diabetes mellitus occurring 2-4 years after vaccination is consistent with clustering after infections and progression to type 1 diabetes mellitus in autoantibody positive individuals.

Objectives: We previously analyzed data from a hemophilus vaccine trial and identified clusters of new cases of type 1 diabetes mellitus (T1DM) related by the vaccine that occurred between 26 and 48 months after immunization. Published reports indicate clustering of cases of T1DM occurring approximately 2-4 years after mumps infection. Children have reported a 2-4 year delay between the onset of autoantibodies and the development of T1DM. We attempted to determine whether similar clustering of cases of T1DM occurred after immunization with vaccines other than hemophilus.

Methods: We searched MEDLINE and reviewed references from published papers to find databases on the incidence of T1DM and then searched MEDLINE to determine whether changes in immunization occurred in these regions during the times the incidence of T1DM was being reported.

Results: Distinct peaks in the incidence of T1DM occurred 2-4 years following the introduction of the MMR and pertussis vaccines. A drop in the incidence of T1DM was detected between 3-4 years following discontinuation of pertussis and BCG vaccines.

Conclusions: The identification of clusters of cases of T1DM occurring in consistent temporal patterns allowed a link between the hemophilus vaccine and Type I diabetes... there are also clusters of cases of Type I diabetes occurring 2-4 years post-immunization with the pertussis, MMR and BCG vaccines.

Type I Diabetes Incidence per 100,000 Prior to and After Expansion of Vaccination Schedules

- Finland: 41/100,000
- U.K.: 19/100,000

After Expansion: 14/100,000, 12/100,000

Prior to Expansion: 41/100,000, 19/100,000

"The identification of clusters of cases of Type I diabetes occurring in consistent temporal patterns allowed a link between the hemophilus vaccine and Type I diabetes... there are also clusters of cases of Type I diabetes occurring 2-4 years post-immunization with the pertussis, MMR and BCG vaccines."
Polio Vaccination Increases Type I Diabetes 2.5X

Risk of Vaccine Induced Diabetes in Children with a Family History of Type 1 Diabetes

John Barthelow Classen*

Classen Immunotherapies Inc., 6517 Montrose Avenue, Baltimore, MD 21212, USA

Abstract: Cohort data from Denmark in all children born from January 1, 1990 to December 31, 2000 was analyzed to assess the association between immunization and type 1 diabetes in all Danish children and in a subgroup where children had a sibling with type 1 diabetes. Pediatric vaccines were associated with a statistically significant increased risk of type 1 diabetes in 12 of 21 endpoints in the general population. The rate ratios in children who received at least one dose of a specific vaccine were also elevated in the subgroup and were statistically the same as in the general population. Three doses of the hemophilus vaccine were associated with a rate ratio of 1.23 (1.00 < RR < 1.48) and an absolute risk in the general population of three cases/100,000 per year compared to 1.58 (1.00 < RR < 2.21) and an absolute risk of 2.85 cases/100,000 per year in the subgroup with a sibling with type 1 diabetes. The hemophilus immunization is associated with a cumulative attributable risk of 2.85/100 (2.7%) in the subgroup.

Keywords: Type 1 diabetes mellitus, vaccines, hemophilus, pertussis, polio.

Type I Diabetes Incidence per 100,000 Children Vaccinated or Unvaccinated with All 3 Recommended Polio Vaccines

“Pediatric vaccines were associated with a statistically significant increased risk of type 1 diabetes in 12 of 21 endpoints in the general population.”
Raw CDC Data Shows Vaccination on Time with MMR Increased Odds of Autism 3.64X

**Odds of Autism for MMR Vaccine Before and After 36 Months of Age**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Vaccinated</th>
<th>Unvaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1.49X</td>
<td>1X</td>
</tr>
<tr>
<td>Boys</td>
<td>1.67X</td>
<td>1X</td>
</tr>
<tr>
<td>African Americans</td>
<td>2.52X</td>
<td>1X</td>
</tr>
<tr>
<td>African American Boys</td>
<td>3.64X</td>
<td>1X</td>
</tr>
</tbody>
</table>

**CDC UNPUBLISHED DATA OBTAINED BY FOIA**

Press Release, August 2014: “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.” — Dr. William Thompson, CDC senior vaccine safety scientist
A two-phase study evaluating the relationship between Thimerosal-containing vaccine administration and the risk for an autism spectrum disorder diagnosis in the United States. **Abstract**

**Background:** Autism spectrum disorder (ASD) is defined by standardized criteria of qualitative impairments in social interaction, qualitative impairments in communication, and restricted and stereotyped patterns of behavior, interests, and activities. A significant number of children diagnosed with ASD suffer a loss of previously acquired skills, which is suggestive of neurodegeneration or a type of progressive encephalopathy with an etiological pathogenic basis occurring after birth. To date, the etiology of ASD remains under debate; however, many studies suggest toxicity, especially from mercury (Hg), in individuals diagnosed with an ASD. The present study evaluated concerns about the toxic effects of organic-Hg exposure from Thimerosal (43.5%) in childhood vaccines by conducting a two-phase hypothesis-generating/hypothesis-testing study with documented exposure to varying levels of Thimerosal from vaccinations.

**Methods:** A hypothesis-generating cohort study was undertaken to evaluate the relationship between exposure to organic-Hg from a Thimerosal-containing Diphtheria-Tetanus-acellular-Pertussis (DTaP) vaccine in comparison to a Thimerosal-free DTaP vaccine administered from 1998 through 2000, for the risk of ASD as reported in the Vaccine Adverse Event Reporting System (VAERS) database (phase I). A hypothesis testing case-control study was undertaken to evaluate the relationship between organic-Hg exposure from Thimerosal-containing hepatitis B vaccines administered at specific intervals in the first six months of life among cases diagnosed with an ASD and controls born between 1991 through 1995 in the Vaccine Safety Datalink (VSD) database (phase II).

**Results:** In phase I, it was observed that there was a significantly increased risk ratio for the incidence of ASD reported following the Thimerosal-containing DTaP vaccine in comparison to the Thimerosal-free DTaP vaccine. In phase II, it was observed that cases diagnosed with an ASD were significantly more likely than controls to receive increased organic-Hg from Thimerosal-containing hepatitis B vaccine administered within the first, second, and sixth month of life.

**Conclusions:** Routine childhood vaccination is important public health tool to reduce the mortality and morbidity associated with infectious diseases. But the present study provides new epidemiologic evidence supporting an association between increased organic-Hg exposure from Thimerosal-containing childhood vaccines and the subsequent risk of an ASD diagnosis.

**Odds of Receiving an Autism Diagnosis from Receiving Thimerosal-Containing Hepatitis B Vaccines**

<table>
<thead>
<tr>
<th>Vaccinated, 3.39X</th>
<th>Unvaccinated, 1X</th>
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"It was observed that cases diagnosed with an ASD were significantly more likely than controls to receive increased organic-Hg from Thimerosal-containing hepatitis B vaccine administered within the first, second, and sixth month of life."
A cross-sectional study of the relationship between reported human papillomavirus vaccine exposure and the incidence of reported asthma in the United States.

OBJECTIVES: Asthma is a chronic disorder that affects persons of all ages impacting the quality of their lives. This cross-sectional hypothesis-testing study evaluated the relationship between human papillomavirus vaccine and the risk of an incident asthma diagnosis in a defined temporal period post-vaccination.

METHODS: The 2015-2016 National Health and Nutrition Examination Survey data were examined for a group of 93,534,237 weighted persons between 0 and 25 years old in Statistical Analysis Software.

RESULTS: Reported incident asthma significantly clustered in the year of reported human papillomavirus vaccination. When the data were separated by gender, the effects observed remained significant for males but not females.

CONCLUSION: The results suggest that human papillomavirus vaccination resulted in an excess of 261,475 asthma cases with an estimated direct excess lifetime cost of such persons being US$42 billion. However, it is unclear what part of the vaccine and/or vaccine medium may have increased an individual’s susceptibility to an asthma episode, whether the asthma diagnosis represented one asthma episode or if it chronic, and how much therapeutic support was needed (if any) and for how long, which would impact cost. Despite the negative findings in this study, routine vaccination is an important public health tool, and the results observed need to be viewed in this context.

"The results suggest that human papillomavirus vaccination resulted in an excess of 261,475 asthma cases with an estimated direct excess lifetime cost of such persons being US$42 billion."
Thimerosal-Containing Hepatitis B Series Increases Odds of Premature Puberty 2.1X

Odds of Receiving an Premature Puberty Diagnosis from Receiving Thimerosal-Containing Hepatitis B Vaccines

Vaccinated, 2.1X

Unvaccinated, 1X

Premature Puberty

“The results of this study show a dose-dependent association between increasing organic Hg exposure from Thimerosal-containing hepatitis B vaccines administered within the first six months of life and the long-term risk of the child being diagnosed with premature puberty.”
MMR Vaccine Increases Risk of Crohn’s Disease 3.01X and Ulcerative Colitis 2.53X

Is measles vaccination a risk factor for inflammatory bowel disease?

Thompson HJ, Montgomery IL, Feurer RE, Wark JD

Abstract

Measles virus may persist in intestinal tissue, particularly that affected by Crohn's disease, and early exposure to measles may be a risk factor for the development of Crohn's disease. Crohn's disease and ulcerative colitis occur in the same families and may share a common etiology. In view of the rising incidence of inflammatory bowel disease (Crohn's disease and ulcerative colitis), we examined the impact of measles vaccination upon these conditions. Prevalences of Crohn's disease, ulcerative colitis, coeliac disease, and peptic ulceration were determined in 3645 people who had received live measles vaccine in 1964 as part of a measles vaccine trial. A longitudinal birth cohort of 11,407 subjects was one unvaccinated comparison cohort, and 2541 partners of those vaccinated was another. Compared with the birth cohort, the relative risk of developing Crohn's disease in the vaccinated group was 3.01 (95% CI 1.45-6.29) and of developing ulcerative colitis was 2.53 (1.16-5.60). There was no significant difference between these two groups in coeliac disease prevalence. Increased prevalence of inflammatory bowel disease, but not coeliac disease or peptic ulceration, was found in the vaccinated cohort compared with their partners. These findings suggest that measles virus may play a part in the development not only of Crohn's disease but also of ulcerative colitis.

Risk of Crohn's Disease and Ulcerative Colitis After MMR Vaccine

- Vaccinated: 3.01X
- Vaccinated: 2.53X
- Unvaccinated: 1X

Crohn's Disease

Ulcerative Colitis

“These findings suggest that measles virus may play a part in the development not only of Crohn's disease but also of ulcerative colitis.”
A cross-sectional study of the relationship between infant Thimerosal-containing hepatitis B vaccine exposure and attention-deficit/hyperactivity disorder.

Abstract

Attention-deficit/hyperactivity disorder (ADHD) is characterized by a marked pattern of inattention and/or hyperactivity-impulsivity that is inconsistent with developmental level and interferes with normal functioning in at least two settings. This study evaluated the hypothesis that infant Thimerosal-containing hepatitis B vaccine (T-HepB) exposure would increase the risk of an ADHD diagnosis. This cross-sectional study examined 2363 persons between 13 and 19 years of age from the combined 1999-2000 National Health and Nutrition Examination Survey (NHANES) by analyzing demographic, immunization, socioeconomic, and health-related variables using the SAS system. Three doses of T-HepB exposure in comparison to no exposure significantly increased the risk of an ADHD diagnosis using logistic regression (adjusted odds ratio = 1.986). Spasmam's test (R = 0.04467) and 2×2 contingency table (rate ratio = 1.603) statistical modeling even when considering other covariates such as gender, race, and socioeconomic status. Current health status outcomes selected as a priori to not be biologically plausible linked to T-HepB exposure showed no relationship with T-HepB. The observed study results are biologically plausible and supported by numerous previous epidemiological studies, but because the NHANES data is collected on a cross-sectional basis, it is not possible to ascribe a direct cause-effect relationship between exposure to T-HepB and an ADHD diagnosis. During the decade from 1991 to 2001 that infants were routinely exposed to T-HepB (thimerosal containing HepB) in the United States (US), an estimated 1.3-2.5 million children were diagnosed with ADHD with excess lifetime costs estimated at US $350-$660 billion as a consequence of T-HepB. Although Thimerosal use in the HepB in the US has been discontinued, Thimerosal remains in the HepB in developing countries. Routine vaccination in an important public health tool to prevent infectious diseases, but every effort should be made to eliminate Thimerosal exposure.
"Autism risks were the highest of all the diagnostic codes, with a relative risk at one month of 11.35 between the high and zero exposure groups."
“SAB (spontaneous abortion) was associated with influenza vaccination in the preceding 28 days. The association was significant only among women vaccinated in the previous influenza season with pH1N1-containing vaccine.”
H1N1 Influenza Vaccine Increases Risks of Bell’s Palsy (1.34X), Paraesthesia (1.25X) and Inflammatory Bowel Disease (1.25X) in High Risk Patients

**Risks of Various Disorders Within 45 Days of H1N1 Influenza Vaccine**

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<table>
<thead>
<tr>
<th>Disorder</th>
<th>Influenza Vaccine</th>
<th>No Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell's Palsy</td>
<td>1.34X</td>
<td>1X</td>
</tr>
<tr>
<td>Paraesthesia</td>
<td>1.25X</td>
<td>1X</td>
</tr>
<tr>
<td>IBD</td>
<td>1.25X</td>
<td>1X</td>
</tr>
</tbody>
</table>
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“Relative risks were significantly increased for Bell’s palsy, paraesthesia, and inflammatory bowel disease after vaccination, predominantly in the early phase of the vaccination campaign.”
HPV Vaccination Increases Odds of Memory Impairment (1.23X) and Involuntary Movement (1.53X)

"Based on our analysis using data from the Nagoya City surveillance survey, a possible association between HPV vaccination and distinct symptoms such as cognitive impairment or movement disorders exists."
Thimerosal Containing Triple HepB Series in the First Six Months of Life Increases Odds of Emotional Disturbances by 2.37X

Odds of Emotional Disturbances After Exposure to Thimerosal Containing Triple HepB Series

Emotional Disturbances Odds
- 3 HepB
- No Exposure

“The results show a significant relationship between mercury exposure from Thimerosal-containing childhood vaccines and the subsequent risk of an emotional disturbances diagnosis.”
Human papillomavirus (HPV) vaccination is a common preventive measure to protect against certain types of cervical cancer and other HPV-related diseases. However, a recent study investigated whether HPV vaccination might increase the risk of celiac disease, an autoimmune condition affecting the digestive system.

The study analyzed data from Danish and Swedish healthcare registers, focusing on women aged 15-44 years who were vaccinated against HPV. The researchers found that women who received the HPV vaccine had an increased risk of celiac disease diagnosis compared to those who did not receive the vaccine.

The risk of celiac disease diagnosis after HPV vaccination was 1.56 times higher compared to those without exposure. The study concluded that while HPV vaccination is important for preventing cervical cancer, it is also crucial to consider potential risks and benefits of vaccination, especially for individuals with a family history of celiac disease.

“Relative Risks for celiac disease were increased for both the period any time after vaccination (RR 1.56, 1.29–1.89), the first 179 days (1.54, 1.16–2.03) and the more than 180 days after vaccination period (1.58, 1.22–2.05).”
The H1N1 and Seasonal Influenza Vaccines Both Given During Pregnancy Increase Fetal Loss by 11.4X Compared to the Seasonal Influenza Vaccine Only

Rate of Fetal Loss in Women Receiving Both the H1N1 and Seasonal Flu Vaccines

"Because of the order of magnitude increase in fetal-loss report rates, from 6.8 fetal-loss reports per million pregnant women vaccinated in the single-dose 2008/2009 season to 77.8 in the two-dose 2009/2010 season, further long-term studies are needed to assess adverse outcomes in the surviving children."
Swine Flu Vaccine (Pandemrix) Increases Rate of Narcolepsy in Swedish Children by 25X

"The incidence of narcolepsy was 25 times higher after the vaccination compared with the time period before. The children in the postvaccination group had a lower age at onset and a more sudden onset than that generally seen."
Risk of Chorioamnionitis in Pregnant Women Vaccinated with Tdap Versus Pregnant Women Not Vaccinated with Tdap

Among women who received Tdap at anytime during pregnancy, 6.1% were diagnosed with chorioamnionitis compared with 5.5% of unexposed women. After adjusting for site, receipt of 1 or more other vaccines in pregnancy and the propensity score, the adjusted relative risk (RR) was 1.19 (95% CI, 1.13–1.26).
An increased risk of intussusception 1 to 7 days after the first dose of RV1 was identified among infants in Mexico with the use of both the case-series method (incidence ratio, 5.3; 95% confidence interval [CI], 3.0 to 9.3) and the case-control method (odds ratio, 5.8; 95% CI, 2.6 to 13.0).
Measles Vaccination Versus Measles Infection Increases the Odds of Atopy (Allergy) by 2.8X

“17 (12.8%) of 133 participants who had had measles infection were atopic compared with 33 (25.6%) of 129 of those who had been vaccinated and not had measles”
Higher Exposure to Thimerosal from Infant Vaccines Increases the Odds of Motor Tics (2.19X) and Phonic Tics (2.44X) in Boys

“Among boys, higher exposure to mercury from birth to 7 months was associated with ... a higher likelihood of motor and phonic tics, as reported by the children’s evaluators.”
“Among 11,531 children who received at least 4 doses of DPT, the risk of asthma was reduced to (1/2) in children whose first dose of DPT was delayed by more than 2 months. The likelihood of asthma in children with delays in all 3 doses was 0.39 (95% CI, 0.18-0.86).”
Exposure to Higher Levels of Thimerosal in Infant Vaccines Before 13 Months of Age Increases the Rate of Premature Puberty by 6.45X

Rate of Premature Puberty Diagnosis After Exposure to 100 Additional Micrograms Mercury in Thimerosal Containing Vaccines (TCVs)

“Significantly increased (P<0.0001) rate ratios were observed for premature puberty for a 100 μg difference in Hg exposure from TCVs in the birth-7 months (rate ratio=5.58) and birth-13 months (rate ratio=6.45) of age exposure windows. By contrast, none of the control outcomes had significantly increased rate ratios with Hg exposure from TCVs.”