Good Afternoon Chairman Weisz and members of the Human Services Committee. My name is Becca Bakke, and I am here to testify in opposition to House Bill 1306..

I have been a board-certified pediatrician for 10 years. I am also a mother of four and native North Dakotan, and I am so grateful to have legislators who care about the health and well-being of the children in our state. SIDS and autism are two issues that are close to the heart of every pediatrician and really everyone who cares about kids. But this bill will do nothing to prevent SIDS or treat autism, and the money and time can be better used to support the children and families of North Dakota.

First, SIDS, or Sudden Infant Death Syndrome, falls under a larger umbrella of infant death known as SUID or Sudden Unexplained Infant Death. SIDS is a sudden death in infants that occurs during unobserved sleep for which a cause cannot be found. Diagnosis of SIDS requires an investigation that includes evaluation of the scene, autopsy and thorough review of the baby's medical history. 90% of SIDS deaths occur before 6 months of age, and on a personal note, I will add that SIDS cases are among the most devastating cases I have ever been involved in as a physician. I was a medical student when I first cared for a baby who died from SIDS, and it was horrific. I will never forget it.

By its very definition, we don't know what causes SIDS. But we do have ways to prevent it. In 1992, the American Academy of Pediatrics recommended that babies be placed to sleep in the supine position in what became known as the "Back to Sleep" campaign. This single intervention reduced the number of yearly SIDS cases by more than 50%. There are additional interventions that we know make a difference too, including having babies sleep alone on a firm, flat surface, breastfeeding, not smoking during or after pregnancy and staying up-to-date on vaccines. I'm going to repeat that last one. Vaccines. Numerous studies, I will include a list for your reference, have shown that vaccines do not increase a baby's risk of SIDS, and several have actually shown that babies who are vaccinated have a DECREASED risk of unexplained death. If we want to prevent SIDS in this state, and we do, we should be encouraging parents to vaccinate their kids on time. We should not spend precious resources looking for a link that multiple studies have already shown does not exist.

Next, let's talk about autism, which is a common neurodevelopmental disorder. Autism is defined by 2 main characteristics. The first is a deficit in social communication and interaction, and the second characteristic is a pattern of repetitive and restrictive behaviors. The symptoms of autism spectrum disorder truly present on a spectrum, with some persons able to live an essentially normal life with some mild challenges, to severe cases, in which affected individuals require assistance in even the most basic activities of daily living. Concern for a link between autism and vaccines dates back to 1998, when a man named Andrew Wakefield published a case series in a medical journal called the Lancet suggesting that the MMR vaccine caused autism. Subsequently, the rates of MMR vaccination declined throughout the western world, and we began to see measles outbreaks. It was later discovered that Mr. Wakefield had done invasive research on children without obtaining appropriate ethical clearance; he actually drew blood from children attending his son's 10th birthday party. Wakefield also falsified data, was funded by lawyers who had plans to sue the vaccine manufacturing companies., and had a patent pending on a measles only vaccine prior to publishing his case series. The Lancet retracted his

paper, and Mr. Wakefield lost his medical license. Multiple studies later showed that MMR vaccine is not associated with an increased risk of autism in children. Other proposed links between autism and vaccines, including the theory that it is caused by the preservative thimerosol and the idea that "too many vaccines too soon" cause autism have also been thoroughly rebuffed in large, reproducible studies.

We do have some ideas of what causes autism, and both genetics and environment seem to play a role. The risk of autism is increased in children who have a sibling with autism. Children born prematurely, children with older parents, and children with certain genetic disorders also have an increased risk of being diagnosed with autism.

To best support children with autism and their families, they need therapy, which usually includes speech therapy, occupational therapy, and a special kind of therapy called Applied Behavioral Analysis, or ABA. ABA therapy has been shown in multiple studies to increase positive behaviors and teach social and adaptive skills to children with autism. When started early in life and done intensely, ABA can increase a child's independence and decrease the need for special services later in life. ABA saves money and heartache in the long run. It is also a therapy that families have to fight to obtain for their children, because therapists can be difficult to find and it is often not well covered by insurance.

Vaccines are safe. They do not cause SIDS or autism. Spending additional time and money on investigating these issues is akin to doing additional studies to prove that smoking causes lung cancer. To prevent SIDS, promote safe sleep, breastfeeding and smoking cessation. To treat autism, fund ABA therapy. These questions surrounding vaccines have been asked and answered. We need to move on. Thank you.

Vaccines and SIDS

1. Yang YT and Shaw J. Sudden infant death syndrome, attention-deficit/hyperactivity disorder and vaccines: longitudinal population analyses. Vaccine 2018;36:595-598.
   The authors analyzed six years of vaccine uptake data for 3-month-olds from the National Immunization Survey and state-level National Vital Statistics SIDS reports and found vaccination coverage for routinely used childhood vaccines was not associated with an increased risk of SIDS.
2. Moro PL, Arana J, Cano M, Lewis P, Shimabukuro TT. Deaths reported to the Vaccine Adverse Event Reporting System, United States, 1997-2013. CID 2015;61:980-987.
   The authors examined deaths reported to VAERS in the United States during a 16-year period, with nearly half of the deaths attributed to SIDS. As with the previous 2001 study, SIDS reports progressively decreased over time, during

which the addition of seven-valent pneumococcal vaccine and rotavirus vaccine were added to the recommended vaccine schedule, and the DTaP-HepB-IPV combination vaccine was licensed for use.

3. Traversa G, Spila-Alegiani S, Bianchi C, Ciofi degli Atti M, Frova L, et al. Sudden unexpected deaths and vaccinations during the first two years of life in Italy: a case series study. PLoS ONE 2011;6(1):e16363.
   The authors found no increased risk for sudden unexplained death (SUD) and any vaccination in the time windows of 0-7 days or 0-14 days after vaccine receipt.
4. Vennemann, MMT, Butterfab-Bahloul T, Jorch G, et al. Sudden infant death syndrome: no increased risk after immunisation. Vaccine 2007;25: 336-340.
   The authors investigated the risk of SIDS with immunization in the first year of life, particularly with a hexavalent vaccine containing 15 different antigens. They found no increased risk of SIDS in the 14 days after immunization. As with previous studies, patients with SIDS were vaccinated less frequently and later than those infants without SIDS.
5. Eriksen EM, Perlman JA, Miller A, Marcy SM, Lee H, et al. Lack of association between hepatitis B birth immunization and neonatal death: A population-based study from the Vaccine Safety Datalink Project. Pediatr Infect Dis J 2004;23:656-661.
   The authors evaluated more than 360,000 births during a five-year period to determine if a correlation existed between hepatitis B vaccine receipt at birth and neonatal death. The authors found no relationship between hepatitis B vaccine receipt at birth and neonatal death, and the proportion of deaths from unexpected causes (e.g., SIDS) was not different between vaccinated and unvaccinated infants.
6. Fleming PJ, Blair PS, Platt MW, Tripp J, Smith IJ, et al. The UK accelerated immunisation programme and sudden unexpected death in infancy: case-control study. BMJ 2001;322:1-5.
   In the early 1990s, the schedule for routine infant immunizations in the United Kingdom was accelerated to give the vaccines at an earlier age. The authors found that the accelerated immunization program did not increase the risk of SIDS in a study population of 17.7 million infants. Immunization uptake was lowest among the infants who died from SIDS.
7. Jonville-Bera AP, Autret-Leca E, Barbeillon, Paris-Llado J and the French Reference Centers for SIDS. Sudden unexpected death in infants under 3 months of age and vaccination status – a case-control study. Br J Clin Pharmacol 2001;51:271-276.
   The authors conducted a two-year prospective study on the vaccination status of

infants with SIDS who died between 1 and 3 months of age to assess whether vaccination increased the risk of SIDS in this population in France. The authors found DTPP ± Hib immunization did not increase the risk of SIDS.

8. Silvers LE, Ellenberg SS, Wise RP, Varricchio FE, Mootrey GT, et al. The epidemiology of fatalities reported to the Vaccine Adverse Event Reporting System 1990-1997. Pharmacoepidemiol Drug Saf 2001; 279-285.
   The authors examined fatalities reported to VAERS in the United States during a seven-year period and found that reports peaked in 1992-1993 and then declined, with nearly half of the deaths attributed to SIDS. The trend in decreasing SIDS rates correlated with the 1992 American Academy of Pediatrics recommendation for infants to sleep on their side or back and the National Institute of Child Health and Human Development "Back to Sleep" campaign in 1994. The authors concluded that these data support findings of past controlled studies showing that the temporal association between infant vaccination and SIDS is coincidental and not causal.
9. Griffin MR, Ray WA, Livengood JR, Schaffner W. Risk of sudden infant death syndrome after immunization with the diphtheria-tetanus-pertussis vaccine. New Engl J Med 1988;319(10):618-623.
   The authors evaluated recent immunization with DTP as a possible risk factor for SIDS during a 10-year period in Tennessee. They found no increase in the risk of SIDS after immunization with DTP vaccine and no correlation between SIDS and age at first immunization. Additionally, the rate of SIDS decreased in the first week after immunization.
10. Hoffman HJ, Hunter JC, Damus K, Pakter J, Peterson DR, et al. Diphtheria-tetanus-pertussis immunization and sudden infant death: results of the National Institute of Child Health and Human Development Cooperative Epidemiological Study of Sudden Infant Death Syndrome Risk Factors. Pediatrics 1987;79:598-611.
    The authors investigated the possible association between diphtheria-tetanus-pertussis (DTP) immunization and subsequent occurrence of sudden infant death in the United States using data from a national SIDS epidemiological database. They found no temporal association between SIDS and DTP vaccine receipt. Infants with SIDS were less likely to have been immunized than infants without SIDS.
11. Keens TG, Davidson Ward SL, Gates EP, Andree DI, Hart LD. Ventilatory pattern following diphtheria-tetanus-pertussis immunization in infants at risk for sudden infant death syndrome. AJDC 1985;139:991-994.
    The authors evaluated the effects of DTP immunization on the ventilatory pattern

during sleep in infants at increased risk for SIDS, including those with unexplained apnea and those who were siblings of SIDS victims. Overnight pneumograms were recorded the night before and the night following DTP immunization. The authors found that DTP immunization did not increase abnormalities of the ventilatory pattern in infants at increased risk for SIDS.

Autism

Literature Reviews: Autism and Vaccines

1. Measles, Mumps, Rubella Vaccination and Autism: A Nationwide Cohort Study
   PDF available here
   Annals of Internal Medicine
   March 2019
   The study strongly supports that MMR vaccination does not increase the risk for autism, does not trigger autism in susceptible children, and is not associated with clustering of autism cases after vaccination. It adds to previous studies through significant additional statistical power and by addressing hypotheses of susceptible subgroups and clustering of cases.
2. Autism Occurrence by MMR Vaccine Status Among US Children With Older Siblings With and Without Autism
   http://jama.jamanetwork.com/article.aspx?articleid=2275444
   The Journal of the American Medical Association
   April 2015
   In this large sample of privately insured children with older siblings, receipt of the MMR vaccine was not associated with increased risk of ASD, regardless of whether older siblings had ASD. These findings indicate no harmful association between MMR vaccine receipt and ASD even among children already at higher risk for ASD.
3. Safety of Vaccines Used for Routine Immunization of U.S. Children: A Systematic Review
   http://www.ncbi.nlm.nih.gov/pubmed/25086160
   Pediatrics
   August 2014
   We found evidence that some vaccines are associated with serious AEs; however, these events are extremely rare and must be weighed against the protective benefits that vaccines provide.

4. Vaccines are Not Associated with Autism: An Evidence-Based Meta-Analysis of Case-Control and Cohort Studies
   http://www.ncbi.nlm.nih.gov/pubmed/24814559
   Vaccine
   June 2014
   Findings of this meta-analysis suggest that vaccinations are not associated with the development of autism or autism spectrum disorder. Furthermore, the components of the vaccines (thimerosal or mercury) or multiple vaccines (MMR) are not associated with the development of autism or autism spectrum disorder.
5. On-time Vaccine Receipt in the First Year Does Not Adversely Affect Neuropsychological Outcomes
   http://pediatrics.aappublications.org/cgi/content/abstract/125/6/1134
   Pediatrics
   Smith, M and Woods, C
   June 2010
   Timely vaccination during infancy has no adverse effect on neuropsychological outcomes 7 to 10 years later. These data may reassure parents who are concerned that children receive too many vaccines too soon.
6. Vaccines and Autism: A Tale of Shifting Hypotheses
   http://www.journals.uchicago.edu/doi/full/10.1086/596476
   Clinical Infectious Diseases
   Offit, Paul and Gerber, Jeffrey S.
   February 2009
   Twenty epidemiologic studies have shown that neither thimerosal nor MMR vaccine causes autism. These studies have been performed in several countries by many different investigators who have employed a multitude of epidemiologic and statistical methods. The large size of the studied populations has afforded a level of statistical power sufficient to detect even rare associations. These studies, in concert with the biological implausibility that vaccines overwhelm a child's immune system, have effectively dismissed the notion that vaccines cause autism. Further studies on the cause or causes of autism should focus on more-promising leads.
7. Immunization Safety Review: Vaccines and Autism
   http://www.iom.edu/reports/2004/immunization-safety-review-vaccines-and-autism.aspx
   Institute of Medicine
   May 2004

8. Adverse Effects of Pertussis and Rubella Vaccines: A Report of the Committee to Review the Adverse Consequences of Pertussis and Rubella Vaccines
   http://www.nap.edu/catalog/1815/adverse-effects-of-pertussis-and-rubella-vaccines
   Institute of Medicine
   1991

Too Many Too Soon?

9. Addressing Parents' Concerns: Do Multiple Vaccines Overwhelm or Weaken the Infant's Immune System?
   http://pediatrics.aappublications.org/cgi/content/full/109/1/124
   Pediatrics
   Offit, Paul A., Quarles, Jessica, et al.
   2002
   Current studies do not support the hypothesis that multiple vaccines overwhelm, weaken, or "use up" the immune system. On the contrary, young infants have an enormous capacity to respond to multiple vaccines, as well as to the many other challenges present in the environment. By providing protection against a number of bacterial and viral pathogens, vaccines prevent the "weakening" of the immune system and consequent secondary bacterial infections occasionally caused by natural infection.
10. Immunization Safety Review: Multiple Immunizations and Immune Dysfunction
    http://www.iom.edu/reports/2002/immunization-safety-review-multiple-immunizations-and-immune-dysfunction.aspx
    Institute of Medicine
    February 2002
11. Cellular Immune Responses in Neonates
    http://www.ncbi.nlm.nih.gov/pubmed/10763708
    International Reviews of Immunology
    Fadel S, Sarazotti M.
    2000
12. Neonatal and Early Life Vaccinology
    http://www.ncbi.nlm.nih.gov/pubmed/11348697
    Vaccine
    Siegrist CA.
    2001
13. The Problem with Dr. Bob's Alternative Vaccine Schedule
    http://pediatrics.aappublications.org/content/123/1/e164.abstract

Pediatrics
Offit, Paul A. and Moser, Charlotte A.
January 2009

Thimerosal and Autism Studies

14. Neuropsychological performance 10 years after immunization in infancy with thimerosal-containing vaccines.
    https://pediatrics.aappublications.org/content/123/2/475?
    Pediatrics
    Tozzi AE, Bisiacchi P, Tarantino V, De Mei B, D'Elia L, Chariotti F, Salmaso S.
    January 2009
    Given the large number of statistical comparisons performed, the few associations found between thimerosal exposure and neuropsychological development might be attributable to chance. The associations found, although statistically significant, were based on small differences in mean test scores, and their clinical relevance remains to be determined.
15. Continuing Increases in Autism Reported to California's Developmental Services System
    http://archpsyc.ama-assn.org/cgi/content/full/65/1/19
    Archives of General Psychiatry
    Robert Schechter, MD, MSc and Judith K. Grether, PhD
    January 2008
    The DDS data do not show any recent decrease in autism in California despite the exclusion of more than trace levels of thimerosal from nearly all childhood vaccines. The DDS data do not support the hypothesis that exposure to thimerosal during childhood is a primary cause of autism.
16. Early Thimerosal Exposure and Neuropsychological Outcomes at 7 to 10 Years
    http://content.nejm.org/cgi/content/full/357/13/1281
    New England Journal of Medicine
    Thompson WW, Price C, Goodson B, et al.
    September 2007
17. Lack of Association Between Rh Status, Rh Immune Globulin in Pregnancy and Autism
    http://www3.interscience.wiley.com/cgi-bin/abstract/114264055/ABSTRACT
    American Journal of Medical Genetics
    Judith H. Miles and T. Nicole Takahashi
    May 2007

18. Comparison of Blood and Brain Mercury Levels in Infant Monkeys Exposed to Methylmercury or Vaccines Containing Thimerosal
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16079072&query_hl=1
Environmental Health Perspectives
Thomas M. Burbacher, PhD
April 2005
The results indicate that MeHg is not a suitable reference for risk assessment from exposure to thimerosal-derived Hg. Knowledge of the toxicokinetics and developmental toxicity of thimerosal is needed to afford a meaningful assessment of the developmental effects of thimerosal-containing vaccines.
19. Thimerosal Exposure in Infants and Developmental Disorders: A Prospective Cohort Study in the United Kingdom Does Not Support a Causal Association
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15342824&query_hl=5
Pediatrics
John Heron and Nick Andrews, PhD and Jean Golding, DSc
September 2004
We could find no convincing evidence that early exposure to thimerosal had any deleterious effect on neurologic or psychological outcome.
20. Neurotoxic Effects of Postnatal Thimerosal Are Mouse Strain Dependent
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15184908&query_hl=10
Molecular Psychiatry
M Hornig, M
June 2004
21. Safety of Thimerosal-Containing Vaccines: A Two-Phased Study of Computerized Health Maintenance Organization Database
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14595043&query_hl=59
Pediatrics
Thomas Verstraeten, MD
November 2003
No consistent significant associations were found between TCVs and neurodevelopmental outcomes. Conflicting results were found at different HMOs for certain outcomes. For resolving the conflicting findings, studies with uniform

neurodevelopmental assessments of children with a range of cumulative thimerosal exposures are needed.

22. Association Between Thimerosal-Containing Vaccine and Autism
    http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14519711&query_hl=16
    Journal of the American Medical Association
    Anders Hviid, MSc
    October 2003
    The results do not support a causal relationship between childhood vaccination with thimerosal-containing vaccines and development of autistic-spectrum disorders.
23. Thimerosal and the Occurrence of Autism: Negative Ecological Evidence from Danish Population-Based Data
    http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15496004&query_hl=19
    Pediatrics
    Kreesten M. Madsen, MD
    September 2003
24. "Autism and Thimerosal-Containing Vaccines: Lack of Consistent Evidence for an Association"
    http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12880876&query_hl=21
    American Journal of Preventive Medicine
    Paul Stehr-Green, DrPh, MPH
    August 2003
    The body of existing data, including the ecologic data presented herein, is not consistent with the hypothesis that increased exposure to Thimerosal-containing vaccines is responsible for the apparent increase in the rates of autism in young children being observed worldwide.
25. Thimerosal and Autism?
    http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12612255&query_hl=22
    Pediatrics
    Karen Nelson, MD
    March 2003
26. Mercury concentrations and metabolism in infants receiving vaccines containing thiomersal: A descriptive study

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12480426&query_hl=30
The Lancet
Michael Pichichero, MD
November 2002
Administration of vaccines containing thiomersal does not seem to raise blood concentrations of mercury above safe values in infants. Ethylmercury seems to be eliminated from blood rapidly via the stools after parenteral administration of thiomersal in vaccines.

Measles-Mumps-Rubella (MMR) Vaccine and Autism Studies

27. Examination of the Safety of Pediatric Vaccine Schedules in a Non-Human Primate Model: Assessments of Neurodevelopment, Learning, and Social Behavior
    http://ehp.niehs.nih.gov/wp-content/uploads/advpub/2015/2/ehp.1408257.acco.pdf
    Environmental Health Perspectives
    February 2015
28. Early Exposure to the Combined Measles-Mumps-Rubella Vaccine and Thimerosal-Containing Vaccines and Risk of Autism Spectrum Disorder
    http://www.ncbi.nlm.nih.gov/pubmed/25562790
    Vaccine
    January 3, 2015
    No convincing evidence was found in this study that MMR vaccination and increasing thimerosal dose were associated with an increased risk of ASD onset.
29. Lack of Association Between Measles Virus Vaccine and Autism with Enteropathy: A Case-Control Study
    http://www.plosone.org/article/info%3Adoi/10.1371/journal.pone.0003140
    PLoS One
    Hornig M, Briese T, Buie T, Bauman ML, Lauwers G, et al.
    September 2008
    This study provides strong evidence against association of autism with persistent MV RNA in the GI tract or MMR exposure. Autism with GI disturbances is associated with elevated rates of regression in language or other skills and may represent an endophenotype distinct from other ASD.
30. Measles Vaccination and Antibody Response in Autism Spectrum Disorders
    https://adc.bmj.com/content/93/10/832.abstract?
    Archives of Disease in Childhood

Gillian Baird, F.R.C.Paed.
February 2008
No association between measles vaccination and ASD was shown.

31. Pervasive Developmental Disorders in Montreal, Quebec, Canada: Prevalence and Links With Immunizations
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=16818529&query_hl=2&itool=pubmed_docsum
Pediatrics
Eric Fombonne, MD
July 2006
The prevalence of pervasive developmental disorder in Montreal was high, increasing in recent birth cohorts as found in most countries. Factors accounting for the increase include a broadening of diagnostic concepts and criteria, increased awareness and, therefore, better identification of children with pervasive developmental disorders in communities and epidemiologic surveys, and improved access to services. The findings ruled out an association between pervasive developmental disorder and either high levels of ethylmercury exposure comparable with those experienced in the United States in the 1990s or 1- or 2-dose measles-mumps-rubella vaccinations.
32. MMR Vaccination and Pervasive Developmental Disorders: A Case-Control Study
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15364187&query_hl=38
The Lancet
Liam Smeeth, MRCGP
September 11, 2004
Our findings suggest that MMR vaccination is not associated with an increased risk of pervasive developmental disorders.
33. Association of Autistic Spectrum Disorder and the Measles, Mumps, and Rubella Vaccine
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12860782&query_hl=40
Archives of Pediatrics & Adolescent Medicine
Kumanan Wilson, MD, MSc, FRCP
July 2003
The current literature does not suggest an association between ASD and the MMR vaccine; however, limited epidemiological evidence exists to rule out a link between a rare variant form of ASD and the MMR vaccine. Given the real risks of

not vaccinating and that the risks and existence of variant ASD remain theoretical, current policies should continue to advocate the use of the MMR vaccine.

34. Neurologic Disorders After Measles-Mumps-Rubella Vaccination
    http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12415036&query_hl=64
    Pediatrics
    Annamari Makela, MD
    November 2002
    We did not identify any association between MMR vaccination and encephalitis, aseptic meningitis, or autism.
35. No Evidence for a New Variant of Measles-Mumps-Rubella-Induced Autism
    http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11581466&query_hl=66
    Pediatrics
    Eric Fombonne, FRCPsych
    October 2001
    No evidence was found to support a distinct syndrome of MMR-induced autism or of "autistic enterocolitis." These results add to the recent accumulation of large-scale epidemiologic studies that all failed to support an association between MMR and autism at population level. When combined, the current findings do not argue for changes in current immunization programs and recommendations.