

with a number of conditions, such as FXS, tuberous sclerosis, Prader-Willie syndrome, metabolic disorders, fetal rubella syndrome, *Haemophilus influenzae* meningitis, and structural brain anomalies ([National Autism Association, 2015a](#); [Peterson and Barbel, 2013](#)). Recent reports have retrospectively tied ASD to prenatal and perinatal events, such as maternal and paternal ages over 40 years old (for fathers, 1 in 116 births; for mothers, 1 in 123 births), uterine bleeding during pregnancy, low Apgar score, fetal distress, and neonatal hyperbilirubinemia ([Amin, Smith, and Wang, 2011](#); [Kolevzon, Gross, and Reichenberg, 2007](#); [National Autism Association, 2015b](#); [Rutter, 2011](#)). These same researchers, however, urge caution in interpreting these findings.

Translating Evidence into Practice

Thimerosal-Containing Vaccines and Autism Spectrum Disorders

Rosalind Bryant

Ask the Question

Is the incidence of autism spectrum disorders (ASDs) increased in children receiving vaccines containing thimerosal?

Search for the Evidence

Search Strategies

Published studies from 2004 to 2015 focused on the pediatric population and restricted to the English language

Databases Used

PubMed, Cochrane Collaboration, MD Consult, Vaccine Adverse Events Reporting System (VAERS) database, American Academy of Pediatrics, Autism Research Institute

Critically Analyze the Evidence

Grade criteria: Moderate evidence with strong recommendations for practice ([Balshem, Helfand, Schünemann, et al, 2011](#)). Evidence does not support an association between the increase incidence of autism and mercury exposure from the pharmaceutical