

Autism Research Review

I N T E R N A T I O N A L

A quarterly publication of the Autism Research Institute

Reviewing biomedical and educational research in the field of autism and related disorders

New studies add to concerns about dangers of mercury in vaccines

Several new studies are adding to demands by parents and researchers that the FDA require manufacturers to remove thimerosal, a mercury-containing preservative, from childhood vaccines immediately.

As ARRI reported in June (ARRI 13/2), Sallie Bernard and a group of parents and professionals testified before a Food and Drug Administration (FDA) committee recently that the symptoms of autism are nearly identical to those in mercury poisoning. These symptoms include sensory disturbances, aversion to touch, unusual response to noise, toe-walking and other movement abnormalities, and cognitive impairments, including impairment of abstract and verbal reasoning.

Since then, three new studies have added to the evidence implicating the mercury in vaccines in neurological disorders. Among the studies' findings:

—Gregory Stajich and colleagues measured blood mercury levels before and after administration of a single dose of hepatitis B vaccine containing thimerosal to 15 premature and 15 normal-term infants. Both groups of infants showed significant increases in mercury levels following the injections, and

the premature infants had levels markedly higher than those detected in full-term infants. "Because mercury is known to be a potential neurotoxin to infants," the researchers say, "further study of its pharmacodynamics is warranted."

—The Centers for Disease Control and Prevention (CDC) has claimed for decades that vaccinations are safe. However, the CDC's Advisory Committee on Immunizations Practices (ACIP) recently reported that

a new preliminary, large-scale CDC study indicates that there is a small but statistically significant association between cumulative mercury from vaccinations and neurological disorders including tics, attention deficit disorder, language and speech delay, and other non-specific neurodevelopmental delays.

According to the Institute for Vaccine Safety at Johns Hopkins University, "The abnormalities that were significantly associ-

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Major report links toxic chemicals, disabilities

Three major national non-profit organizations have issued a new report, "Polluting our Future," which charges that hundreds of thousands of American children may suffer from birth defects due to toxic exposure.

The report, issued by the National Environmental Trust, Physicians for Social Responsibility, and the Learning Disabilities Association of America, follows a June report by the National Academy of Sciences, which concluded that as many as three percent of developmental and neurological deficits in children are caused by exposure to known toxic substances. This translates, the authors of "Polluting our Future" say, into 360,000 children, or one in every 200 U.S. children.

However, they say, "The actual total impact of developmental and neurological toxins on U.S. children is probably greater than this statistic would suggest," because the National Academy of Sciences also determined that an additional 25 percent of all developmental and neurological defects stem from environmental factors working in combination with genetic predisposition. If so, the number of defects due either partially or wholly to toxic exposure could number in the millions.

"With the increased production and use of developmental and neurological toxins over the past several decades, one would expect to see an increased incidence of developmental and neurological effects in U.S. children," the report notes. "In fact, this is exactly what we may be seeing." The authors cite massive increases in the number of cases of autism (see ARRI 14/2, 14/1, 13/4, 13/2,

13/1) and attention deficit hyperactivity disorder, as well as marked increases in the number of low birthweight and premature children (who are at greatly elevated risk for developmental and neurological problems).

In spite of the risks of toxic chemicals, the report's authors say, U.S. companies annually report releasing into the environment approximately 1.2 billion pounds of chemicals that have the potential to affect children's physical or mental development. Of these, they say, "more than half... are known or suspected developmental or neurological toxins." Moreover, they note, reported chemical emissions account for only about five percent of all chemicals released into the environment.

The report calls for vastly expanding both pre-market screening of new chemicals and testing of existing chemicals to determine their toxicity. It also calls for better labeling of chemicals, improved reporting of chemical emissions, better regulation of emissions from electric power plants, and expanded monitoring of diseases caused by toxic exposure.

Says Larry Silver, president of the Learning Disabilities Association of America, one of the organizations participating in the report, "Now we know what we have suspected for years, that toxic chemicals are bringing anguish to thousands of families in this country."

The full text of "Polluting our Future: Chemical Pollution in the U.S. that Affects Child Development and Learning" is available online at <http://www.safekidsinfo.org>.

DAN! Conference VI: another huge success!

The 6th Defeat Autism Now! (DAN!) Conference, held in San Diego, California, on September 15-17, was another highly successful event. Both the Friday health practitioners' clinical training seminar and the Saturday and Sunday expert presentation program were sold out. The enthusiastic audience of 1400 parents, physicians, and other professionals heard an array of world-class physicians and scientists presenting state-of-the-art information on research on the causes of autism and effective biomedical treatments.

Highlights of the DAN! VI meeting will be featured in the next issue of ARRI.