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Representative Dan Burton: Ban thimerosal-containing vaccines now!

Representative Dan Burton is calling for an immediate ban on vaccines containing thimerosal, a mercury-based preservative.

"I will say tonight that mercury should be taken out of every vaccine in the country, and it should be taken out today," Burton said on May 15. "There should be an instant recall on any vaccine that is going into our children that has mercury in it." He noted that vaccines that do not contain mercury are currently available.

Several lines of research link mercury to autism (see ARRI 14/2), and many health professionals are concerned that the multiple vaccinations often given to children on a single day can grossly exceed federal safety standards for mercury.

Burton's grandson developed symptoms of autism within days after receiving nine vaccinations, six of them containing mercury, in one day. "He spoke normally. He acted like any other normal child," Burton testified. "Yet within one week he was running around flapping his arms, walking on his toes, [suffering from] a severe bowel disorder, banging his head against the wall, and he could not speak clearly anymore, and he still has those problems."

Burton also raised concerns about other toxins, including aluminum and formaldehyde, currently contained in some vaccines.

Late-breaking news...

California halts vaccine escalation. For the first time in the state's 150-year history, legislators refused to approve proposals that would have required adding more vaccines to the list of mandatory innoculations required by children entering school or daycare. Bill AB 182, which would have required vaccinating against hepatitis A, and Bill AB 1354, requiring the pneumococcal vaccine Prevnar, were voted down in committee after the members were astonished to learn that 22 vaccines were already required. Passing the bills would have added six more doses to the 35 vaccine doses currently administered. In the past, in California and elsewhere, requests to mandate more vaccines were routinely rubber-stamped by state legislatures.

ASA panel. Four physicians who are parents of autistic children, and who have treated hundreds of other autistic children in their medical practices, will appear on a panel Thursday afternoon, July 19, at the Autism Society of America's 2001 Annual Meeting in San Diego. Parents Jeff Bradstreet, Miriam Jang, Amy Holmes and Jim Laidler, all MDs, will report on their success using the Defeat Autism Now! (DAN!) methods.

Secretin biomarkers found. ARRI 15/1 announced that the Repligen Corporation had revealed preliminary evidence that children most likely to benefit from the hormone secretin could be identified by certain laboratory tests. Repligen has now identified the biomarkers alluded to in their earlier report: the protein calprotectin and the hormone chymotrysin. Children whose stool samples test normal for these two substances show significantly more improvement on secretin than controls on all three measures of treatment efficacy, with significance levels at ($p=.016$, $p=.02$, and $p<.001$).

The epidemic continues. Eric Fombonne, child psychiatrist at the University of London, and coauthor Suniti

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Reelin gene variant linked to autism vulnerability

A gene variant tentatively associated with schizophrenia may also increase the risk of autism, according to Antonio Persico and colleagues.

The researchers report that two different studies—a case-controlled study of 95 autistic subjects and 186 ethnically matched controls, and a family study involving 165 families—found that 20 percent of autistic subjects, double the number of controls, carried a long version of the reelin gene. This, they say, most likely results in reduced levels of reelin in the brain, creating a vulnerability to autism. The family study, the researchers say, revealed that "transmission of a 'long' allele from either parent significantly enhances... the overall probability of a child being affected [with autism]."

> Twenty percent of autistic subjects carry a long version of the reelin gene, believed to cause reduced levels of reelin in the brain.

Supporting the link between reelin and autism, S. H. Fatemi et al. (in press) report finding reduced reelin in the cerebella of autistic individuals examined in post mortem studies. Moreover, mice bred to carry a mutant reelin gene exhibit cerebellar hypoplasia (underdevelopment), an abnormality frequently reported in post-mortem studies of autistic individuals.

Reelin plays a critical role in the migration, positioning, and alignment of cells in the cerebral cortex, hippocampus, cerebellum, and several brainstem nuclei during fetal development. In addition, it is present in the adult brain and other organs.

Previous research on reelin, by Erminio Costa and colleagues, found that in post-mortem studies, levels of reelin in schizophrenic subjects were half the levels in non-disabled controls. In schizophrenia, Costa et al. theorized, the reelin gene variant, combined with prenatal or post-natal insults (such as viral infections, prematurity, low birth weight, or brain damage) causes an initial genetic vulnerability. Then, they theorize, a "second hit" in late puberty or adulthood, during the final pruning of neuronal connections, precipitates the disorder. Persico believes a similar "two-hit" process may occur in autism.

Costa and colleagues say reelin is associated with the development of dendritic spines—the branching extensions of neurons that receive input from surrounding cells—in the cortex of the brain. In schizophrenic subjects, the density of dendritic spines in the cortex is much lower than in the brains of control subjects.

In other studies, researchers have reported finding significant reductions in reelin in the

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