Do vaccines cause autism? IOM panel demurs
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by Rabiya S. Tuma,  BioMedNet News

Existing data does not show a link
between a mercury-containing
preservative, thimerosal, and the
neurological disorders some
children develop after taking
vaccines. So says a report issued
today by the US Institute of
Medicine (IOM), a government
advisory body set up by the
National Academy of Sciences.

However, IOM held back from issuing any strong
recommendations on this controversial topic, saying that little
data exists, and more research must be done.

"There is really only one major epidemiologic study that has
examined this association in particular," said the chair of the
panel, Marie McCormick of Harvard's School of Public Health,
at a press conference. That is the Vaccine Safety Datalink
study done by the US Centers for Disease Control, which
according to McCormick showed a "small but significant"
increased risk for speech delays, language disorder and
attention deficit-disorder with hyperactivity - but not autism -
among children given vaccines containing thimerosal. A later
study in another population did not show significant results.

So why publish a report now? The real issue is not the
evidence, McCormick said, but the "level of concern." Although
there is no good data to suggest a risk, there is still some
biological basis for concern. Little is known about
ethylmercury, the metabolic product of thimerosal. Its close
relative, methylmercury, is a well-known neurotoxin, but it's
not clear that the two are metabolized in the same way.
(Thimerosal was removed from most childhood vaccines in
1999.)

Boyd Haley, a University of Kentucky professor of chemistry
who was involved in early warnings about the dangers of
thimerosal in vaccines, says that comparing the two
compounds is "very reasonable." In tissue culture
experiments, Haley sees complete neural cell lethality at 100
nanomolar thimerosal, a concentration he says may have been
reached in some children's blood stream after immunization.

Blood contains protective proteins that are not in culture medium, he admits, and Haley says he has no way of knowing how much mercury might get into a child's brain from such a vaccine. But the jury is still out on whether thimerosal causes autism, he says, calling it "stupid" and "unforgivable" to give vaccines containing a neurotoxin to children.

Recognizing the risk that it would be accused of vested interests, IOM sharply restricted membership of the panel, excluding researchers or clinicians with any ties to vaccine producers or prior vaccine advisory groups. Haley, who testified before the committee in July, said he thinks "good people are trying to prevent damage to the vaccine program" by trying to minimize the problems that would occur if much of the US public began to distrust vaccination.

At this point, balancing a perceived but hypothetical risk with the very real risk of infectious disease, the committee advises parents to continue having their children inoculated - even, if necessary, with vaccines containing thimerosal.

**Class-action lawsuit launched over vaccine preservative**

3 October 2001 17:00 EST

A coalition of more than 35 US law firms today filed a class-action lawsuit in nine states, aimed at forcing pharmaceutical firms to study whether the preservative thimerosal could be responsible for neurological conditions in children who were given vaccines that contained it, Associated Press reports. Few such vaccines are presently on the US market; the lawsuit is attempting to impose withdrawal of the rest.

A report released yesterday by the US Institute of Medicine (IOM), an advisory body to Congress, asserted that there is insufficient evidence to determine whether thimerosal in vaccines could be linked to increases in childhood neurological disorders such as autism and attention deficit-hyperactivity disorder.

The American Academy of Pediatrics and the US Public Health Service warned in 1999 that vaccines containing thimerosal should be withdrawn as quickly as possible. The IOM panel yesterday concluded this was a "prudent measure," but noted
that existing studies are not conclusive as to the risks.

Thimerosal is metabolized to a mercury-containing compound that is similar to a known neurotoxin. Lead attorney Michael Williams told Associated Press that drug companies did not tell doctors how much mercury the vaccines contained until compelled to do so by the Food and Drug Administration in 1997.

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