

Immunization Info Lags For Children Under 6

BY MIRIAM E. TUCKER
Senior Writer

Fewer than half of U.S. children under 6 years of age participated in an immunization information system in 2003, the Centers for Disease Control and Prevention reported.

One of the Healthy People 2010 goals is to increase to at least 95% the proportion of children under 6 years of age who participate in a fully operational, population-based immunization registry. Immunization registries collect data from multiple providers, generate recall and reminder notices, and assess vaccination coverage. An "immunization information system (IIS)" is defined as a registry with added capabilities, such as vaccine management, adverse event reporting, lifespan vaccination histories, and interoperability with electronic medical records.

A 2003 survey of vaccine program managers in 50 states, five cities, and the District of Columbia revealed that approximately 44% of U.S. children under 6 years of age participated in an IIS (MMWR 2005;54:722-4). Nine of the regions—Arkansas, Arizona, Delaware, the District of Columbia, Michigan, New York City, North Dakota, Oregon, and San Antonio—

had achieved the 2010 goal of at least 95% participation of children less than 6 years of age. An additional eight approached the 81%-94% objective.

Nationwide, 76% of public vaccination provider sites and 36% of private provider sites submitted immunization data to an IIS during the last 6 months of 2003. Twenty-five of the 56 regions reported that 95% or more of public provider sites submitted data to an IIS, while only five reported that 95% or more of private sites had done so.

A substantial number of the respondents reported linkages between an IIS and other information systems or entities, a process which enables data consolidation. Among them were 22 reporting electronic data sharing with a Medicaid Management Information System, 36 reporting data linkages with the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and 26 reporting IIS data access by health plans.

Such linkages are expected to result in more complete immunization histories, increased coverage levels, better support for outbreak containment, and decreased costs associated with overimmunization, as well as improved program effectiveness and efficiency, the CDC said. Efforts are being made to develop nationwide data standards, according to the report. ■

Federal Officials Aim to Boost Confidence in Childhood Vaccines

BY MARY ELLEN SCHNEIDER
Senior Writer

Federal health officials called a press conference to try to restore public confidence in childhood vaccines despite the charge by some parents that there is a connection between the vaccines and autism.

Several autism advocacy groups rallied on Capitol Hill recently to protest the use of mercury-containing thimerosal in vaccines.

But Julie Gerberding, M.D., director of the Centers for Disease Control and Prevention, said the predominance of evidence doesn't show an association between thimerosal in vaccines and autism.

Thimerosal has been used in vaccines as a preservative. However, since 2001 all vaccines recommended for children age 6 years and younger have either had no thimerosal or have contained only trace amounts.

One exception is the inactivated influenza vaccine, though, a preservative-free version, which contains trace amounts of thimerosal, is available in limited supplies. Food and Drug Administration officials are working with vaccine manufacturers to increase the supply of those doses, said Murray M. Lumpkin, M.D., deputy commissioner for international and special programs at FDA.



In addition, all new vaccines licensed since 1999 are free of thimerosal as a preservative. Dr. Lumpkin said.

Dr. Gerberding said government researchers will continue to look at whether the evidence supports a link between thimerosal and autism but said it's important for researchers, policy makers, and parents not to base decisions on "unproved hypotheses."

"Today the best available science indicates to us that vaccines save lives," she said.

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DR. GERBERDING

Researchers are trying to get an estimate of the prevalence of autism in children, and Dr. Gerberding said some of that data will be available next year. In addition, researchers with the National Institutes of Health are investigating the risk

factors and biological markers for autism.

"We need a war on autism, not a war on childhood vaccines," said Peter Hotez, M.D., chair, department of microbiology and tropical medicine at George Washington University, Washington, and father of an autistic child.

Dr. Hotez said he is confident vaccines has nothing to do with his daughter's autism, and if he could turn back time he would still have his daughter vaccinated.

Parents should be reminded of the consequences of not vaccinating their children, he said. ■

Combination Shot Found as Safe as Its Five Components

BY MICHELE G. SULLIVAN
Mid-Atlantic Bureau

WASHINGTON — Children who received a combined pertussis, diphtheria, tetanus, polio, and *Haemophilus influenzae* type b vaccine experienced fever and injection site reactions at rates similar to, or less than, those seen in children who received the component vaccines, Arnd Herz, M.D., said in a poster presented at the annual meeting of the Pediatric Academic Societies.

Dr. Herz of the Kaiser Permanente Vaccine Study Center, Oakland, Calif., presented the combined results of three U.S. studies and one Canadian study at the meeting sponsored by the American Pediatric Society, the Society for Pediatric Research, Ambulatory Pediatric Association, and the American Academy of Pediatrics. These studies examined safety of the combined pertussis, diphtheria, tetanus, polio, and *Haemophilus influenzae* (Hib) type b vaccine (Pentacel) in both the infant series and fourth dose of the toddler series, sponsored by Sanofi Pasteur Inc.

In the infant series, 4,198 infants received the combination vaccine, and 2,486 received control vaccines given separately. In the fourth dose studies, 5,033 chil-

dren received the combination vaccine, and 1,157 received the control vaccines given separately.

All combination and control vaccines were given along with other recommended childhood vaccines.

The rate of fever was similar between groups in both series. In the infant series, fever occurred in 28% of the combination group and 31% of the control group. In the fourth dose studies, fever occurred in 11% of both groups.

Injection site reactions were similar among groups in both studies. In the infant series, 10% of the combination group experienced mild redness, 5% experienced swelling, and 60% experienced tenderness. Among the control group, 20% experienced redness, 10% experienced swelling, and 78% experienced tenderness. One infant in the combination group had an immediate reaction of urticaria.

In the fourth dose studies, redness occurred in 20% of both groups. Swelling occurred in 10% of both groups, and tenderness occurred in 50% of the combination group and 60% of the control group.

Crying and fussiness in the 3 days after vaccination were similar in all groups.

There were no serious vaccine-related adverse events in any of the studies. ■

Varicella Vaccine Found Effective in Outbreak at an Elementary School

BY KEVIN FOLEY
Senior Writer

Varicella vaccination was found to be highly effective during an outbreak of varicella among elementary school children in Utah, reported Maryam B. Haddad of the Centers for Disease Control and Prevention, Atlanta, and associates.

The outbreak occurred from October 2002 until February 2003 in two schools, one with 597 students (school A) and another with 952 students (school B). Parents returned a questionnaire about their children's health. Those who reported varicella symptoms in their children were interviewed, their children's vaccination records verified, and they were asked to submit any existing lesions for polymerase chain reaction (PCR) testing.

Utah implemented a new varicella vaccination requirement for kindergarten children in 2002.

During the outbreak, 57 unvaccinated and 26 vaccinated children were reported to have varicella, with 17 more cases among household contacts, they said. PCR analysis found wild-type varicella in five unvaccinated and three vaccinated children (two other vaccinated children had specimens insufficient for testing). Nine unvaccinated children with vari-

cella reported it as a second occurrence of the disease.

In school A, 27% of the 66 unvaccinated children acquired varicella, while only 4% of the 223 vaccinated children did. In school B, 41% of the 74 unvaccinated children reported varicella, while only 5% of the 348 vaccinated children did (Pediatrics 2005;115:1488-93).

The varicella vaccine overall was 87% effective. It was 90% effective against moderate or severe disease in school A and 99% effective in school B. Among the nine unvaccinated children with a history of varicella, the attack rate was 0.4% in school A and 1.4% in school B. Mild varicella was more common among vaccinated children (69%) than unvaccinated children (15%).

Risk factors for breakthrough varicella included a history of eczema (3.8 times greater risk), time since vaccination (relative risk 3.0 if vaccinated 5 or more years before the outbreak), and age at vaccination (relative risk 2.6 if vaccinated at age 18 months or less).

Among the 163 children vaccinated 5 or more years before the outbreak, children vaccinated at age 18 months or less were 9.3 times more likely than those vaccinated after age 18 months to develop breakthrough varicella. ■