

# ACIP Backs Rotavirus Vaccine for Kids With HIV

BY HEIDI SPLETE  
Senior Writer

ATLANTA — Physicians now have formal approval to vaccinate HIV-exposed or HIV-infected infants and children against rotavirus.

The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) voted at its summer meeting to approve changes in wording to the childhood immunization schedule and endorse the use of rotavirus vaccine for HIV-infected infants and children aged 0-18 years.

Dr. Jane Seward, a member of the CDC's division of viral diseases, presented the rationale for the changes, which were approved by the committee.

"Rotavirus is a ubiquitous infection in childhood," she said. "If these children are not vaccinated, they will almost certainly come down with wild rotavirus disease."

Although many physicians already routinely administer the rotavirus vaccine to HIV-infected infants and children, Dr. Seward said ACIP proposed modifying the language related to rotavirus vaccination of HIV-infected children based on three main considerations:

► The HIV diagnosis may not be established before the age of the first rotavirus vaccine dose.



The rotavirus vaccine is as safe as other similar vaccines given to HIV-infected children, said Dr. Jane Seward.

► Natural rotavirus infection does not appear to be more severe in HIV-infected infants.

► The rotavirus vaccine (RotaTeq) that would be used in HIV-positive children is attenuated considerably.

The previous wording of the childhood vaccination schedule stated that data were insufficient to support the administration of rotavirus vaccine for HIV-infected chil-

dren and infants, and therefore practitioners should consider the risks and benefits before vaccinating these patients.

"So the option was there for physicians to vaccinate based on the risks and benefits," Dr. Seward said.

Although studies in the United States are limited because of the small numbers of HIV-infected children, recent data from large studies in Africa support evidence that rotavirus disease is not more severe in HIV-positive infants and children than in those who don't have HIV, although more data are needed in older children, Dr. Seward explained.

The rotavirus vaccine is as safe as other similar vaccines given to HIV-infected children, she added. She cited the oral polio vaccine as an example; it is considered safe for HIV-infected children and replicates more quickly in the digestive tract than does the rotavirus vaccine.

No trials to assess the safety and efficacy of the rotavirus vaccine in HIV-infected children are planned for the United States, but manufacturers including GlaxoSmithKline and Merck & Co. are planning additional studies in developing countries where the burden of disease is greater, Dr. Seward said.

## Varicella Breaks Out Despite Double Doses of Vaccine

BY HEIDI SPLETE  
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ATLANTA — Children who had received two doses of varicella vaccine comprised nearly a third of the cases in a varicella outbreak among elementary school children in Arkansas.

"This was one of the largest varicella outbreaks investigated in recent years, and it was the first U.S. outbreak reported with a significant number of two-dose vaccines," said Adriana Lopez, an epidemiologist with the Centers for Disease Control and Prevention's division of viral diseases.

A total of 85 cases were identified during the outbreak, which occurred among children in prekindergarten through sixth grade in the fall of 2006. Of these, 25 (29%) had received two doses of varicella vaccine, 54 (64%) had received one dose, and 6 (7%) had not received any varicella vaccination. "The moderate level of two-dose coverage was insufficient to prevent the outbreak," said Ms. Lopez, who presented the results at a meeting of the CDC's Advisory Committee on Immunization Practices (ACIP).

Overall, the school's varicella vaccination coverage was 97% among 758 children and 41% of the vaccinated children had received two doses. The CDC was invited to investigate the outbreak in order to confirm varicella in the children who had received two doses of the vaccine and to characterize the vaccine's effectiveness among one- and two-dose recipients. "Disease in vaccinated persons is generally mild, with fewer than 50 lesions and a shorter duration of illness," noted Ms. Lopez.

For purposes of the investigation, a varicella case was defined as an acute

macular papular vesicular rash without another apparent cause. Because of the frequency of insect bites in the region of the outbreak, a child needed at least three lesions to be considered a case.

A total of 27 cases were sampled for testing. Six of these were confirmed as positive using five polymerase chain reaction tests on lesion samples and one using an IgM serum spot test. The positive results for the PCR tests included one child who had received two doses of vaccine, three children who had each received single doses, and one unvaccinated child who had a history of varicella. The positive IgM serum spot test was used for a child who had received one dose of vaccine.

In June 2006, ACIP recommended a routine two-dose varicella vaccination plan for children, with the first dose given at age 12-15 months, the second dose given at age 4-6 years, and catch-up doses given to anyone older than 6 years.

Varicella cases associated with the outbreak were identified by local health data, the school nurse, and through school surveys on vaccination status and disease history. Parents of the children who were identified as cases were contacted and asked for additional information about medical history and vaccination status. Vaccination history was verified using the state's immunization registry, local health records, and the parents' surveys. Children were considered unvaccinated if they had received their first dose of vaccine 42 days or less before they became ill.

"As next steps, additional vaccine effectiveness studies for two doses are needed," said Ms. Lopez. Data from more than 30 postlicensure studies show effectiveness estimates for a single dose of varicella vaccine ranging from 44% to 100%. ■

## CDC Ties Hepatitis A Infections To Adopted Ethiopian Children

BY JOHN R. BELL  
Associate Editor

The Centers for Disease Control and Prevention issued a health advisory urging families who adopt children from Ethiopia to make sure all family members are vaccinated for hepatitis A, which is endemic throughout the African continent.

The advisory, issued July 19 via the CDC's Clinician Outreach and Communication Activity (COCA) Listserv, said the agency had received an undisclosed number of reports of hepatitis A in adults and children "linked" to children adopted from Ethiopia.

"Other household members and caregivers of children adopted from Ethiopia should consider being vaccinated before adopted children are brought to the United States," the advisory warned.

Most children younger than the age of 6 years do not get sick from hepatitis A virus infection, but they can spread it to older children and adults, who often become ill, the CDC says.

Symptoms usually last up to 2 months, but there is no chronic disease. Older persons and those with chronic liver disease can have more serious illness. Overall mortality is 0.3%, but it is 1.8% in those aged 50 years and older.

If adopted children, household members, or others who have been in contact are experiencing symptoms of hepatitis A (fatigue, abdominal pain, loss of appetite, nausea, jaundice), they should contact a physician. Persons exposed to hepatitis A who have not previously been immunized should contact their physician or local health department to see if they should receive an immunization or immunoglobulin that might prevent illness, the CDC said.

According to the U.S. Department of State, Ethiopia in 2003 was the 15th most common source country for foreign adoptions; in 2006, it was 5th. (See graphic.) Last year, Ethiopia accounted for 732 (4%) of 20,679 foreign adoptions overall into the United States.

The CDC also urged persons traveling to Ethiopia or other areas with a high incidence of hepatitis A to be vaccinated against the disease before travel.

According to the World Health Organization, Africa as a whole is considered to have "very high" endemicity of hepatitis A, and most hepatitis A patients there are younger than 5 years. Most adults in endemic countries, however, are immune to the disease. (The report is available at [www.who.int/csr/disease/hepatitis](http://www.who.int/csr/disease/hepatitis).)

"CDC also recommends that all children [at least] 1 year of age receive the hepatitis A vaccine," the advisory noted. This is part of the U.S. Childhood and Adolescent Immunization Schedule. ■

### U.S. Adoptions From Ethiopia

Number of visas issued



Note: Based on the number of immigrant U.S. visas issued to orphans.  
Source: U.S. Department of State