

Five Children in Minn. Test Positive for Poliovirus

BY ROBERT FINN
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A small outbreak of poliovirus infection has been reported among unvaccinated children in rural Minnesota. All cases to date have been linked to the live attenuated virus used in the oral polio vaccine, according to the Minnesota Department of Health and the Centers for Disease Control and Prevention.

Because oral poliovirus vaccine (OPV) is known to cause paralysis in about 1 in every 13 million doses, its use was discontinued in Canada in 1997 and in the United States in 2000. An injected inactivated polio vaccine (IPV) is used instead in accordance with recommendations by the CDC's Advisory Committee on Immunization Practices and the American Academy of Pediatrics Committee on Infectious Diseases. But other countries around the world continue to use OPV. Health workers presume that a person vaccinated with OPV in another country was the original source of the outbreak, according to the CDC report.

The five children reported to have poliovirus infection are members of a remote Amish community in central Minnesota. The Amish often decline to vaccinate their children. None of the children exhibited the flaccid paralysis that accompanies poliovirus infection in 1 of every 200 cases. The first four cases are described by the CDC (MMWR 2005;54:1053-5), and the

fifth case was reported at press time.

The polio outbreak was discovered by chance on Sept. 29, 2005, during testing of a stool sample from a 7-month-old infant with severe combined immunodeficiency disease. Subsequent testing of other community members uncovered infections from the same viral strain in three unvaccinated siblings from an unrelated family and a fifth unvaccinated child from a third family. All three families are members of the same small Amish community, which

includes about 200 members in 24 families.

Partial sequencing of the viral capsid identified it as a type 1 poliovirus derived from one of the three strains in the Sabin OPV. The viral sequence differed from the original vaccine strain by 2.3%. This vaccine is known to mutate at a rate of about 1% per year, suggesting it's been circulating for 2-3 years.

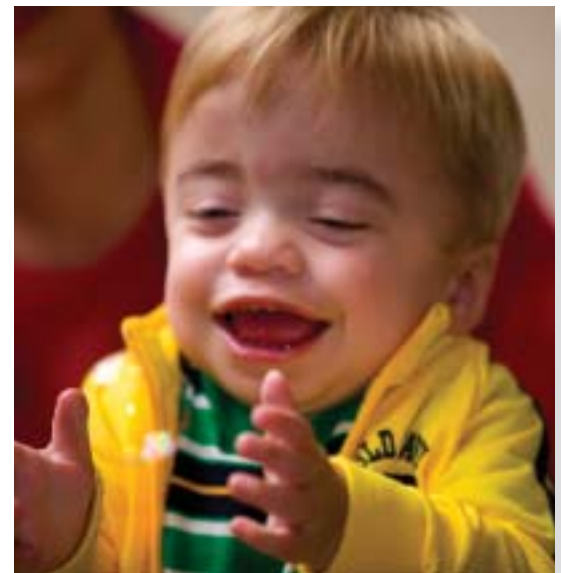
Although the source of the infection likely was someone who received OPV abroad, none of the infected children or

their family members had a recent history of international travel or contact with foreigners, and the community has little association with outsiders.

Public health officials have been going door to door in the affected community offering vaccinations. IPV offers protection against the OPV-derived vaccine strain of polio. As of Oct. 14, 2005, fewer than 20 children in the affected community have been vaccinated against polio since this outbreak of disease. ■

Early diagnosis is critical

Treatment options may give hope to children with MPS I



Jarrett presented with the following signs and symptoms:

- Chronic rhinitis
- Recurrent otitis media
- Umbilical hernia
- Coarse facial features

A suspicious cluster of signs and symptoms?

An urgent referral to a metabolic or genetic specialist is what your MPS I patients need most ...

For children like Jarrett, every day may make a difference. Early diagnosis and treatment are essential to help children avoid some of the debilitating effects of MPS I, which, if left untreated, can lead to significant morbidity and mortality.

Your recognition of an unusual sign or symptom, or a cluster of more common signs and symptoms, may make the difference. If you suspect MPS I, request an urgent referral.

Little Threat to Fetus With EBV In Pregnancy

ST. PETE BEACH, FLA. — Maternal infection with the Epstein-Barr virus does not appear to represent a major teratogenic risk, Meytal Avgil, M.D., reported at the annual meeting of the Teratology Society.

The herpes virus—and the cause of infectious mononucleosis—has not been well studied in pregnancy, but in a recent prospective study, the rate of major anomalies was 5% in a group of more than 200 EBV-exposed pregnancies, and 3% in a group of nearly 1,200 controls. The difference between groups was not statistically significant, and the rates were within the expected baseline risk for the general population, said Dr. Avgil of Hebrew University, Jerusalem.

Furthermore, the anomalies did not follow any specific pattern in the EBV group, and were similar in the two groups, she noted.

There also were no differences in the rate of live births, miscarriages, or elective terminations of pregnancy between the two groups; the median birth weight of infants was similar in both groups, ranging from about 3,200-3,300 g. The median gestational age at delivery was 40 weeks in both groups.

—Sharon Worcester

genzyme