

be substantial due to the lack of routine testing for this pathogen in stool cultures, the absence of public health surveillance in many regions, and incomplete follow-up of infected children. Temporary exclusion of all children was an effective control strategy but further research is needed to determine the optimal intervention.

FROM: Belongia EA et al. *JAMA* 1993;269:883-888.

### **Wild Poliovirus Type 3 in Canada Linked to Outbreak in Netherlands**

From September 1992 to February 1993, 68 cases of poliomyelitis occurred among members of a religious community in the Netherlands. An investigation was conducted of members of an affiliated religious community in Alberta, Canada who had direct contact (ie, travel to and from the Netherlands) with members of the affected community. Wild poliovirus type 3 (PV3) of a strain virtually identical to the one that caused the outbreak in the Netherlands was isolated from stool specimens obtained from 21 (47%) of 45 persons (primarily children). No cases of paralytic poliomyelitis have been identified in Canada since 1988; however, because the clinical to subclinical case ratio for PV3 infection may be as low as 1:1000, wild poliovirus can circulate in a population for several months before paralytic disease occurs.

The last outbreak of poliomyelitis in the United States occurred in 1979 when 10 paralytic cases were reported. That outbreak originated in the Netherlands in 1978 when poliovirus type 1 spread from the Netherlands to Canada and then to the United States, involving the same religious group.

Although efforts to protect religious communities that object to vaccination continue, success has been limited. Only global eradication of poliomyelitis—a health goal for the year 2000 adopted by the World Health Assembly in 1988—will ensure that poliovirus infection will not cause paralytic disease in the United States or the rest of the world.

FROM: The Centers for Disease Control and Prevention. *MMWR* 1993;42:338-339.

### **Female Condom Approved by FDA**

The FDA has approved the first female condom for distribution in the United States. The condom, available from Wisconsin Pharmacal Co., will cost about \$2.50. The company said the polyurethane used to make the condom is stronger than the latex used in an ordinary male condom and is resistant to oils and oil-based lubricants. Acquired immunodeficiency syn-

drome (AIDS) activists are pleased and believe that it will prevent transmission of HIV to women, especially those who are unable to insist that their partners wear condoms.

### **C-Section Deliveries May Reduce Risk of HIV in Newborns**

Dr. Paolo Villari and colleagues at Harvard School of Public Health recently conducted a meta-analysis of studies on perinatal HIV infection and found that 20.2% of infants born by vaginal delivery to infected mothers became infected and only approximately 14% of the babies delivered by C-section were infected. They concluded that performing elective C-sections in HIV-infected women is potentially an effective procedure to prevent HIV infection in newborns. These findings were distributed by the *Online Journal of Current Clinical Trials*.

### **Long-Term Mortality After Transfusion-Associated Non-A, Non-B Hepatitis Similar to Mortality from All Causes**

Non-A, non-B hepatitis was recognized in the mid-1970s during the course of several prospective studies of transfusion-associated hepatitis. These studies found an incidence of hepatitis ranging from 7% to 17%, 78% to 92% of which represented non-A, non-B hepatitis. Initial concern about posttransfusion non-A, non-B hepatitis was limited because the acute illness seemed clinically mild and often was identified only because of serum enzyme monitoring. However, in later studies, half or more of affected patients continued to have increased aminotransferase activity more than six months after the initial illness. More disturbing have been the reports linking primary hepatocellular carcinoma with earlier bouts of transfusion-associated non-A, non-B hepatitis. Although chronic hepatitis, cirrhosis, and hepatocellular carcinoma now are accepted as sequelae, their frequency, rate of development, and the degree to which they contribute to mortality are not yet well established because current data come largely from retrospective studies.

Dr. Leonard B. Seeff and colleagues with the National Heart, Lung, and Blood Institute Study Group conducted a prospective study comparing the morbidity and mortality among patients who had received transfusions and in whom non-A, non-B hepatitis developed with those in matched control groups of persons who had received transfusions but did not develop hepatitis. After an average follow-up of 18 years, the estimated