

1993 Marks Fewest Reported Measles Cases in U.S.

As of July 3, 1993, (week 26), local and state health departments reported a provisional total of 167 measles cases for 1993—the lowest total reported for the first 26 weeks of any year since surveillance began in 1943. The represents a 99% decrease from the 13,787 cases reported during the first 26 weeks of 1990, the peak of the recent resurgence.

Overall, 39 reported case patients (22%) had received one dose of measles-containing vaccine on or after their first birthday; no cases were reported among persons who had received two doses of vaccine. A total of 47 reported case patients (27%) were unvaccinated but vaccine eligible (ie, U.S. citizens aged ≥ 16 months without medical, religious, or philosophical exemption to vaccination). Other unvaccinated groups included 3 persons (20%) with philosophical exemptions, 30 (17%) who were aged < 16 months, 10 (6%) who were born before 1957, and 10 (6%) who were non-U.S. citizens.

During 1993, measles cases have involved predominantly school-aged persons, and the largest outbreaks have occurred among school-aged children who received one dose of measles vaccine (ie, vaccine failures). In contrast, from 1989 through 1991, cases involved predominantly preschool-aged children, and the largest outbreaks occurred among unvaccinated preschool-aged children living in large urban areas.

The decline in measles incidence during 1992 and 1993 most likely reflects increased measles vaccination coverage levels among preschool-aged children. The estimated level of measles vaccination coverage for children aged two years was substantially higher in 1991 (83%) than in 1985 (61%). The decline also may reflect a decrease in measles importation from other countries in the Western hemisphere associated with aggressive measles control programs.

Although the low reported incidence of measles in 1993 suggests transmission has been interrupted in many parts of the United States, the report of 102 indigenous cases without a known source indicates that undetected transmission still is occurring in some areas.

FROM: Centers for Disease Control and Prevention. *MMWR* 1993;42:813-816

Nationwide Study of Latex Allergies in HCWs

The Health Industry Manufacturers Association (HIMA) and the Centers for Disease Control and Prevention (CDC) are collaborating on a study of

reactions to latex-containing products to determine the prevalence and type of natural rubber latex reactions among workers at healthcare facilities and latex manufacturing plants nationwide.

Reports of adverse reactions to products containing latex have been increasing both in the medical literature and in the Medical Device Accident Report System at the Food and Drug Administration (FDA). These reports have identified healthcare workers and pediatric patients with myelodysplasia and other congenital abnormalities as high-risk groups for adverse reactions to products containing natural rubber latex. However, no such reports have occurred among natural rubber latex manufacturing workers.

Only two nationwide surveys of healthcare workers have been conducted to determine the prevalence of reactions to latex-containing products. One study by the Association of Operating Room Nurses (AORN) (in press), in collaboration with the CDC, surveyed operating room nurses, and another study surveyed army dentists (*JAMA* 1992;268:2695). However, the prevalence of reactions to products containing natural rubber latex among all types of healthcare workers and among latex manufacturing workers is unknown.

HIMA and CDC are soliciting healthcare facilities and organizations to participate in this study. For more information on this project, contact Siiri N. Bennett, MD, CDC, Hospital Infections Program, Mailstop A-07, 1600 Clifton Rd. NE, Atlanta GA 30333. Telephone (404) 639-1550 or FAX (404) 639-3770.

Valaciclovir More Effective Than Acyclovir in Reducing Pain from Shingles

Patients with shingles who were treated with the experimental drug valaciclovir were found to have one to two weeks less herpetic pain than patients treated with acyclovir, according to Dr. Karl Beutner at the University of California, San Francisco. The results from an international, double-blind randomized study involving more than 1,100 adults was presented at the 33rd Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) held on October 17-20, 1993, in New Orleans.

Shingles, also called herpes zoster, is caused by the reactivation of the varicella zoster virus acquired from an earlier episode of chickenpox.

Valaciclovir is an ester of acyclovir and is converted rapidly to acyclovir after oral administration. Because it is absorbed significantly better than acyclovir when taken orally, it requires fewer daily doses and may be more effective. Valaciclovir is being studied to define its safety and efficacy for individuals

with shingles, genital herpes, and those at risk for CMV infection. There are eight multinational Phase 2/3 studies under way involving sites in the United States, Canada, Europe, and Australia.

WHO Aims to Eliminate Leprosy

The World Health Organization (WHO) has set a goal of eliminating leprosy by the end of the century. An investment of \$420 million would be needed to eliminate the disease by the year 2000—one third of the amount needed for multidrug therapies (MDT).

Leprosy currently affects an estimated 3.1 million people worldwide; 2.3 million of those cases are currently undergoing treatment, with 600,000 new cases annually. India accounts for 64% of all registered cases. Brazil, Indonesia, Myanmar (Burma), and Nigeria account for another 17%. WHO strategy calls for an increased focus on these highly endemic areas for case detection and MDT coverage.

FROM: *The Nation's Health* November 1993.

ELISA and Antigen 60 for Diagnosis of TB in Children

Researchers found that enzyme-linked immunosorbent assay (ELISA) using antigen 60 (A60) improves the diagnosis of TB in children and may distinguish recent infection without disease from infection with disease.

Results obtained in 31 children with active TB and in 16 patients with tuberculous infection without disease were compared with the results of 198 control subjects with no mycobacterial disease. In control

children, anti-A60 IgG increased with age and the optical density (OD) in ELISA assays rose from 0.079 ± 0.053 (OD \pm SD) in children younger than five years old to 0.146 ± 0.082 OD in children older than five years. In control subjects younger than two years old, IgG OD values were significantly higher in BCG-vaccinated children than in nonvaccinated children. At a chosen specificity of 98%, a positive serodiagnosis was observed in 68% of children with clinically active tuberculosis. In these children with active disease, smears were positive in only 26% of cases and mycobacterial cultures yielded the organism in 45% of cases. None of the infected children without disease had high IgG OD values.

IgM measurements also were evaluated. Mean values from control and diseased children overlapped, leading to a low sensitivity (19%) in children with clinically active tuberculosis. The authors concluded that anti-A60 IgG measure is a rapid and low-cost technique that enhances the diagnosis of clinically active tuberculosis in children and may distinguish recent infection without disease from infection with disease.

FROM: Rooney MW, Hirsch LJ, Mahtru M. *Anesthesiology* 1993;79:60-63.

Additional news items in this issue: *International Conference on the Prevention of Infection* (page 11), *FDA Issues Alert on Hemodialysis Water Quality Systems* (page 21), *Lab Errors Responsible for Some False-Positive Multidrug-Resistant TB Cases during Outbreaks* (page 26), *TB Transmitted to Healthcare Worker from Intubated Neonate* (page 31).
