

USA POLIO VACCINE RECOMMENDATION

Current recommendations for children in the United States include a 4-dose vaccination series with inactivated poliovirus vaccine (IPV) at ages 2, 4, 6-18 months, and 4-6 years. Unvaccinated adults should receive three doses of IPV, the first two doses at intervals of 4-8 weeks, and the third dose 6-12 months after the second. If three doses cannot be administered within the recommended intervals before protection is needed, alternative schedules are proposed. For incompletely vaccinated persons, additional IPV doses are recommended to complete a series. Booster doses of IPV may be considered for persons who previously have completed a primary series of polio vaccination and who may be traveling to areas where polio is endemic.

similarity to OPV¹. The differences in nucleotide sequences among the outbreak isolates suggest that the virus has been circulating for approximately 2 years in an area where vaccination coverage is very low and that the virus had accumulated genetic changes that restored the essential properties of wild poliovirus.

The ministries of health of the Dominican Republic and Haiti, with the assistance of the Pan American Health Organization and CDC, are investigating the outbreak to determine the extent of spread, evaluate the reasons for the outbreak, and initiate appropriate control measures. The Dominican Republic has started a nationwide mass vaccination campaign with OPV, and three nationwide vaccination rounds with OPV are planned for January, February, and March 2001 in Haiti.

Circulation of OPV-derived polioviruses in areas with very low OPV coverage has been documented in one other setting – type 2 OPV-derived virus circulated in Egypt for an estimated 10 years (1983-1993) and was associated with >30 reported cases². Vaccination coverage was very low in the affected areas, and circulation of a vaccine-derived poliovirus stopped when OPV coverage increased. The key factor in controlling circulating OPV-derived viruses and wild polioviruses is achieving and maintaining high vaccination coverage. No evidence for circulation of OPV-derived virus has been found in areas with high coverage.

Since 1991, no cases of polio attributed to wild poliovirus have

been detected in the Western Hemisphere. The current outbreak underscores the need for polio-free areas to maintain high coverage with polio vaccine until global polio eradication has been achieved. OPV is safe and effective and recommended for the eradication of polio. All countries should maintain high quality AFP and poliovirus surveillance and accelerate current activities to complete the global eradication of wild polioviruses.

Health care providers should consider polio as a diagnosis in case-patients with a history of travel to other countries of the Western Hemisphere from the Dominican Republic and Haiti who present with AFP usually accompanied by fever. These possible cases should be investigated properly, including collection of stool samples. Suspected cases should be reported immediately to state and local health departments.

Travelers to the Dominican Republic and Haiti who are not vaccinated adequately should be considered at risk for polio. All travelers should be vaccinated fully against polio according to national vaccination policies³.

Reported by: Ministry of Health, Pan American Health Organization, Santo Domingo, Dominican Republic. Ministry of Health, Pan American Health Organization, Port-au-Prince, Haiti. Caribbean Epidemiology Center Laboratory, Pan

American Health Organization, Trinidad and Tobago. Div of Vaccines and Immunization, Pan American Health Organization, Washington, DC. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, and Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

References

1. Kew, O.M., Mulders, M.N., Lipskaya, G.Y., et al. Molecular epidemiology of polioviruses. *Sem Virol* 1995;6:401-14.
2. Naguib, T., Yang, S.J., Pallansch, M., Kew, O. Prolonged circulation of Sabin 2-derived polioviruses. In: *Program and abstracts of progress in polio eradication: vaccination strategies for the end game*. Geneva, Switzerland: International Association for Biologicals, 2000.
3. CDC. Poliomyelitis prevention in the United States: updated recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2000;49 (no. RR-5).

SOURCE: *MMWR* 49(48): 1094, 1103, 2000.

Polio Technical Document

In their continuing support of the global campaign to eradicate polio, the United States Pharmacopeia (USP) has updated the technical document entitled "Poliomyelitis, OPV and Misconceptions on Vaccinations." It includes a discussion of the disease* and its prevention with oral poliovirus vaccine. The report addresses misinformation and superstitions known to exist in different parts of the world that may prevent people from fully immunizing their families.

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