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**PERTUSSIS IN ALASKA: 1987**

Since January 1987, 4 cases of pertussis (whooping cough) have been documented in the villages of Fairbanks, Emmonak, North Pole, and Stebbins. All cases have occurred in children less than one year old and have required hospitalization. In addition to these cases, 3 other possible cases were identified in the villages of Gambell and St. Michaels, including a 4-month-old infant who died during a medivac to Nome.

A public health nurse conducted an extensive investigation and follow-up of contacts of possible cases in Stebbins, St. Michaels and Gambell. Nasopharyngeal swabs for pertussis cultures and fluorescent antibody (FA) slide tests were obtained on all family members and close contacts of known or suspected cases. In addition, throat swabs for viral cultures were obtained to test for respiratory syncytial virus (RSV) or adenovirus -- both can often mimic pertussis. All children in villages with current cases were brought up-to-date with immunizations. All family members and close contacts of known or suspected cases were placed on erythromycin prophylaxis for 14 days. All 26 FA slides and 33 cultures taken on family members and close contacts were negative for pertussis. Viral cultures are pending.

Currently several viruses, including RSV and adenovirus, are circulating in Alaskan communities. Several agents cause similar upper respiratory symptoms, making definitive diagnosis difficult. Physicians should maintain a high index of suspicion for pertussis when examining young children with acute upper respiratory illness. Children presenting with a significant cough, temperature, and an elevated WBC with significant lymphocytosis, should be cultured for pertussis as well as viruses. Because many children do not present with a classical picture of pertussis, proper laboratory tests are required to make the diagnosis.

A nasopharyngeal swab for pertussis culture taken prior to antibiotic usage is the definitive test for pertussis. In addition, a nasopharyngeal swab should be obtained for fluorescent antibody slide. Laboratory materials necessary to conduct these two tests, as well as viral transport media for viral cultures, are available from the state laboratories in Anchorage, Fairbanks and Juneau. Laboratory tests are free-of-charge. All suspected or diagnosed cases of pertussis should be reported immediately to the Section of Epidemiology, 561-4406.

Vaccinating young children on schedule is of critical importance in preventing diphtheria, pertussis, tetanus, polio, measles, mumps, and rubella.

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# Pertussis in Alaska, 1972 - 1987\*

\*1987 cases as of July 13, 1987

N=98

