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PERTUSSIS IN HOONAH

On November 6, 1984, an alert Juneau physician suspected pertussis in a 16-month-old infant (A) who had onset on November 1, 1984 of an upper respiratory illness complicated by left otitis media. After 5 days of treatment with Pediazole, the infant still had a hard, hacking, persistent cough. On November 6, the baby's white blood count was 15,000 with 77% lymphocytes. Chest x-ray and PPD were negative. Because pertussis was suspected, the infant was cultured on November 6 and continued on erythromycin. In an effort to confirm the diagnosis, the physician cultured the mother on November 6, before placing her on erythromycin.

The mother developed a cough, temperature of 102, and chills on November 6. Two siblings of the infant were also ill; a 3-year-old female was treated with Trimox on November 19 for otitis media, a 5-year-old male developed a cough on November 25 but did not seek treatment. Infant (A) received only 1 DPT; other doses were postponed due to numerous ear infections and other mild febrile illnesses. The 3-year old and 5-year old were current with 4 DPTs, 4 OPVs, and an MMR each. On November 26, 1984, the Southeast Regional Laboratory reported a possible case of pertussis in Hoonah.

Case finding revealed a 4-month-old contact (B) in another family who had developed a bad cough, a runny nose, and fever of 101° F on October 23. The mother described the cough as hard, lasting 1-2 minutes, during which time the infant's face turned red. The infant, treated with Trimox on November 6, had not received any immunizations.

The father of infant (B), a 28-year-old logger, also had an intermittent, hacking cough on October 3, for which he received no medicine. A 6-year-old in the family developed a runny nose, slight cough, and temperature of 103° F on November 25. Both the 6-year-old and a 2-year-old, well sibling had current immunizations. The families of infants A and B visited each other's homes and often rode together in the same car.

All immunization records for children in Hoonah, especially preschoolers were reviewed. Nineteen children were not up-to-date with DPT immunizations; 2 were not up to date with MMR. On November 28, 17 children were vaccinated with DPT including infants A and B, and 1 child received MMR. Three children were out of town and will be vaccinated when they return.

Investigation of a possible pertussis case in Hoonah confirmed 2 cases in a mother and her infant who had URI symptoms compatible with pertussis. The mother's culture was positive for Bordetella pertussis. Case finding showed 3 other possible cases among close contacts. Immunization records

of the children in Hoonah showed 19 children with inadequate DPT immunizations; 17 children were immediately vaccinated with DPT.

RECOMMENDATIONS

1. Intensive surveillance was established in the community so that anyone developing symptoms compatible with pertussis will be identified and reported immediately to our office.
2. Vaccination records of all children in Hoonah were reviewed; 17 of 19 children who were found to be inadequately vaccinated against DPT were immediately vaccinated.
3. The immunization status of preschool children in other communities should be reviewed; children in need of vaccination should be vaccinated.
4. Immunizations should not be deferred due to presence of mild febrile illnesses!
5. The suspect case and mother were treated with erythromycin. No other cases have been identified.

(Reported by Billie Thomas, Microbiologist, Southeast Regional Laboratory; Mary Lou Follet, FNP, Hoonah; Shirley Johnson, PHN, Supervisor, Southeast Region; and R. Weist, M.D., Juneau)