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## **Diphtheria in Seward**

On April 23, a 13-year-old girl in Seward developed a membranous pharyngitis. She was hospitalized and an alert physician made the diagnosis of diphtheria. The patient was treated with diphtheria antitoxin and high doses of penicillin. The patient required a tracheotomy and is currently recovering. There were no cardiac or neurologic symptoms. A throat culture grew toxigenic diphtheria (*intermedius*).

The child's immunization history included a primary DPT series and a DT booster in 1972. The source of her infection could not be determined. Subsequent culturing of individuals with sore throats in Seward revealed one additional case and three possible cases (laboratory diagnosis in progress).

Efforts are underway to determine the source or sources of infection. Because of this outbreak, an immunization update clinic was held and 800 diphtheria-tetanus shots were given.  
(Reported by John Noyes, M.D., Janis Wilsgard, PHN)

Immunization against diphtheria only protects against the diphtheria toxin. A person can be fully immunized and still carry the organisms or have a severe pharyngitis as in the case of this 13-year-old child. The diphtheria toxoid is fairly effective in preventing the neurologic and cardiac complications of diphtheria.

A small outbreak such as described here should alert physicians and nurses to maintain high immunity levels in their patients against diphtheria. After childhood, a booster of diphtheria-tetanus (DT) every ten years is considered adequate protection.