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## 1995 Marks 10 Year Tetanus-Diphtheria Campaign

In 1925, an outbreak of diphtheria in Nome killed five people and led to a heroic sled dog run from Nenana to Nome to deliver life-saving diphtheria serum. This year, the 70th anniversary of this heroic effort brings a reminder that 10-year booster doses of tetanus and diphtheria (Td) vaccine are due for many adults in Alaska.

In 1975, a diphtheria outbreak resulted in 11 cases and 1 death in Alaska. The State Department of Health and Social Services conducted a massive Td immunization campaign, which by November 1975, had immunized over 180,000 people in public clinics. The last 10-year anniversary of this massive effort was celebrated in 1985-86 with a statewide effort to immunize adults with 10-year Td boosters. **During 1995, the state will again focus special efforts on immunizing adults who have not had a Td booster in the past 10 years.**

Diphtheria is an acute bacterial disease which can infect the tonsils, pharynx, larynx, nose, occasionally other mucous membranes or skin, and sometimes the conjunctivae or genitalia. It is transmitted person-to-person from the respiratory tract or skin lesions; and more rarely, by articles soiled with discharges from lesions of infected persons. The most frequent complications include myocarditis, neuritis, otitis media, and respiratory insufficiency. School immunization programs have dramatically reduced the incidence of diphtheria in children; cases now primarily occur among adults. The last known case of diphtheria in Alaska occurred in 1981. From 1981-1990, 33 cases of diphtheria were reported in the United States.

Tetanus is an acute, often fatal, disease caused by an exotoxin produced by *Clostridium tetani*. It is characterized by generalized increased rigidity and convulsive spasms of skeletal muscles. Bacilli are widely distributed in soil, dust, and in the intestines and feces of horses, sheep, cattle, dogs, cats, rats, guinea pigs, and chickens. The tetanus spore enters the body usually through sites of minor or major puncture wounds, scratches, or lacerations. Complications include laryngospasm, fractures of the spine or long bones (a result of sustained contraction and convulsion), hyperactivity of the autonomic nervous system, coma, generalized infection, pulmonary embolus, aspiration pneumonia, and death. The highest attack rates are among adults older than 50 years. Alaska's last reported tetanus case occurred in 1983. Currently, about 50-90 cases and 20-30 deaths are reported annually in the United States.

**Alaska has not had a case of diphtheria or tetanus since 1983. This attests to successful immunization programs among school and daycare children, as well as the 10-year Td booster campaign targeting adults.**

### Vaccine Indications:

**All adults who have not received a Td booster since the 1985-86 campaign should receive one now.** If a person has no recollection of ever receiving Td, he should receive a 3-dose primary series at 0, 1 and 6 months, and a booster dose every 10 years thereafter.

There are only two valid contraindications to Td vaccination: 1) moderate-severe illness, 2) anaphylactic reaction to the vaccine or a vaccine component. Vaccination is generally not recommended during the first trimester of pregnancy. Side effects of the vaccine include soreness, redness, or swelling at the injection site. Very rarely a serious allergic reaction, or deep, aching pain and muscle wasting in the upper arm may occur.

We encourage health-care providers to offer Td vaccine to all eligible adults. Vaccine is available free of charge from the Immunization Program. Special clinics will be held statewide throughout the year.

### Bibliography:

American Public Health Association (1990). Control of Communicable Diseases in Man. Abram S. Benenson (ed.), 15th edition. Baltimore, MA: Victor Graphics, Inc.

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