



Bulletin No. 25  
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Meningococcal Meningitis

Five cases of meningococcal meningitis or fulminant meningococcemia have been reported since November 11, 1980. Four of the five cases occurred in Anchorage; one case occurred in Fairbanks. Two of the cases occurred in adults, age 23 and 32; three cases occurred in children, ages one and a half, two, and seven. One of the cases proved to be fatal as a two-year-old girl died 14 hours after the onset of her first symptoms. All of the family and close contacts of the five cases were treated with Rifampin, and no secondary cases are known to have occurred. None of the five cases were linked epidemiologically. One case was due to serogroup A, two cases from serogroup B, and two cases where the serogroup is unknown. We urge all health care providers to maintain high index of suspicion of this disease so that rapid diagnosis and treatment will be possible. If the diagnosis is suspected or confirmed, immediately contact Dr. John Middaugh, State Epidemiologist, 272-7534 (office).

### SHIGELLA EPIDEMIC - ALAKANUK AND EMMONAK - FOLLOW-UP

Spread of *Shigella flexneri* is continuing in Alakanuk and Emmonak in spite of intensive efforts to control the epidemic (reported in Communicable Disease Bulletin Number 24, week ending November 21, 1980). Over 40 new cases have occurred since November 21, bringing the total number of people diagnosed with *Shigella* to over 200. After intensive control measures were instituted, there was a dramatic decrease in transmission of illness to household contacts. However, the epidemic has not been stopped. Most of the new cases of illness are now occurring in Emmonak. Recent isolates of *Shigella* organisms obtained from patients from Emmonak have shown a **shift** in their antibiotic sensitivity pattern. These organisms are **resistant** to Ampicillin, Carbenicillin, Cephalothin and Erythromycin. The organisms remain sensitive to Trimethoprim-Sulfamethoxazole (Bactrim and Septra), Tetracycline, Chloramphenicol, and others.

In spite of intensive efforts to control the epidemic through the widespread use of antibiotic prophylaxis, we have been unsuccessful in stopping the epidemic. In addition to the continued occurrence of cases in Emmonak, cases of *Shigella* have been reported from Kwethluk and from Sheldon's Point. Therefore, we make the following recommendations for the future:

1. Of major importance in the control of any enteric disease transmitted person-to-person is meticulous personal hygiene with frequent hand washing.
2. All cases of acute febrile gastrointestinal illness with bloody diarrhea should be treated with an antibiotic chosen to cover *Shigella* pending stool culture results.
3. When the diagnosis of Shigellosis is made, stool cultures should be obtained from all household contacts, and treatment limited to those household contacts who are symptomatic or who have positive cultures.
4. Widespread use of antibiotic prophylaxis should not be continued due to the small likelihood of eradicating the outbreak and the real possibility of inducing antibiotic resistance.
5. Prompt reporting of all persons who are suspected or confirmed to have *Shigella* is essential to direct control measures and to follow the course of the outbreak.

The potential exists for the spread of *Shigella* from these few villages in the Lower Yukon Delta region to other parts of the state. Any practitioner who suspects or diagnoses a person with *Shigella* is urged to call Dr. Charles Ryan or Dr. John Middaugh, Section of Communicable Disease Control, Anchorage, at 272-7534; or call through the toll free Rapid Telephonic Reporting System at ZENITH 1700.