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Aseptic Meningitis — Statewide

During July and August there has been a dramatic increase in cases and suspect cases of aseptic meningitis reported. This was not reflected in last month's *Bulletin* in which the semi-annual report through the end of June was published. However, since June 1 twenty-five cases have been reported; the majority occurring in August with reports continuing to occur. By comparison only four cases were reported between June 1 and September 1, 1978.

This increase is further reflected by a concomitant increase in submission of specimens to the Virology-Rabies Unit for viral isolation. Fifteen specimens from 8 patients were submitted in July and August, 1978; however, since July 1 of this year 49 specimens from 22 patients have been forwarded for testing. The cases appear to be occurring throughout the state since the submitting physician was located in Anchorage for 16 cases, Fairbanks for 4 cases, Kotzebue for 1 case, Bethel for 3 cases, and Ketchikan for 1 case. The ages of patients has ranged from 5 months to 51 years, with 50% of the cases being 10 years or less. No race or sex predominance is noted in the reported cases.

The specific etiologic agent(s) of these cases is uncertain. The Virology Unit has isolated the following enteroviruses this summer although not all of the isolates are from cases of aseptic meningitis: ECHO types 24, 30, and 68; Coxsackie A-9 and B-4; and poliovirus type 2 (probably a vaccine strain). Other possible viral agents, especially mumps virus and arboviruses, have not been prominent this summer.

An enteroviral agent is the most probable cause of the aseptic meningitis being reported. If so, cases can be expected to continue through August and early fall. Fecal-oral (and possibly respiratory transmission) is the usual method of transmission of enteroviruses. A number of syndromes are associated with infection with enteroviruses ranging from no illness (possibly in the vast majority) to upper respiratory syndromes and/or gastroenteritis to aseptic meningitis/encephalitis and myocarditis. Diagnosis is made by viral isolation from the pharynx, feces, or CSF and four-fold serologic titer change. Neither culture or serology alone is sufficient. Enteroviruses can be found in the pharynx and feces of normal individuals so that isolation alone is not diagnostic. Similarly sera alone without an isolate cannot be tested since over 60 specific types of enteroviruses are known thus making "shotgun" serologic testing impractical.

Almost certainly the reported cases represent a "tip-of-the-iceberg" phenomenon with many more cases occurring without being reported. The Section of Communicable Disease Control can provide consultation on virologic diagnosis for aseptic meningitis or other illness, and the Virology-Rabies Unit provides in-state diagnostic virology capability.

#### Influenza Vaccine 1979-1980

A reminder that last year's (1978-79) influenza vaccine can be used this year as long as the expiration date has not been exceeded. Please see the *Bulletin*, Number 11, for week ending June 8, 1979, for details. Vaccine orders are being received in our offices now and the vaccine is expected by September 15, 1979.