"Hepatitis B in western Alaska," by D.H. Barrett, J.M. Burks, B. McMahon, K.R. Berquist, and J.E. Maynard (Alaska Activities, Bureau of Epidemiology-CDC, USPHS, USA). In 1973, epidemiological data and sera were collected from the residents of two remote Alaskan villages located in an area of high hepatitis incidence. A total of 418 sera were analysed by radioimmunoassay for HBAg and HBAb. Epidemiological and serological correlations implied that most symptomatic hepatitis cases were caused by hepatitis B infection. The over-all infection rate of 54.8 per cent in the two villages includes a 13.9 per cent prevalence of HBAb. The high HBAb rate in adults, and a 46 per cent HBAg prevalence in the 0-10 year age group of one village, suggested infection occurring in childhood. Families containing an individual with HBAg had significantly higher infection rates than those without antigen. Larger households, used as an approximate index of crowded living conditions, had higher rates of infection than smaller households. The preponderance of hepatitis cases noted in the fall suggested mosquito-induced transmission of hepatitis B in June or July, months of high mosquito populations. No evidence for a genetic susceptibility to infection was found.
"Botulism Type B outbreak in an Alaskan Eskimo village," by D.H. Barrett, M.S. Eisenberg, and J.M. Burks (Alaska Activities, Bureau of Epidemiology, CDC, USPHS USA). An outbreak of Type B botulism involving nine persons occurred in November 1973 in Cheforak, Alaska. Investigation revealed principal involvement of one family and implicated home-prepared dried smoked whitefish. Type B toxin was demonstrated in serum or faeces from five persons, and four additional cases were diagnosed on the basis of appropriate symptomatology. Toxin could not be found in any of the variety of native foods used by the family. Commercially prepared food had not been consumed near the the time of onset of the disease. Clinical symptoms of diplopia, blurred vision, dysphagia, and dry mouth and eyes were found in every case. Most demonstrated mydriasis and evidence of dysarthria. The outbreak was unusual because there were no fatalities; many cases had been symptomatic for over two weeks before being discovered. Only one patient had evidence of respiratory impairment but responded well to treatment with trivalent antitoxin (ABE). This is the first reported outbreak of Type B botulism in Alaska. All prior cases investigated have been due to Type E, the only type yet found in environmental samples collected in areas similar to Cheforak. The importance of initial treatment with polyvalent antitoxin prior to determination of the specific type involved cannot be overemphasized.

"Epidemiology of brucellosis in the north," by G.F. Byelov, A.N. Gudoshnik, and G.D. Netsky (Siberian Branch of the Academy of Medical Sciences, Novosibirsk Medical Institute, USSR). Clinically and with the help of laboratory tests 963 inhabitants of Taimir were studied (693 aborigines, 271 immigrants). In aborigines, brucellosis has been found only in primary latent form. No chronic forms of the disease and its consequences have been discovered in aborigines. In immigrants, brucellosis had primary latent, acute, and chronic forms. It is supposed that a milder course of brucellosis in aborigines is explained by mutual adaptation of organisms of the host and parasite. The infection of people with brucellosis occurs mainly through the alimentary tract and contact. The main reservoir of brucellosis infection on Taimir are domestic and wild reindeer. A high incidence of brucellosis among representatives of wild fauna (basic and additional hosts) makes it possible to state that on Taimir there are natural foci of brucellosis.
"Infectious hepatitis in Greenland, 1970-2," by Flemming Mikkelsen (Deputy Chief Medical Officer in Greenland).

During the period 1970-2 an epidemic of infectious hepatitis (IH) occurred in Greenland. A total of 4,183 cases were registered, corresponding to 8.9 per cent of the population, although this must be considerably less than the number of cases which actually occurred, as cases from settlements and outposts were not registered and a number of cases from the towns did not come to the notice of the health authorities. Seventeen deaths occurred during the epidemic as a result of IH or where IH was an important contributory factor (fatality: 0.4 per cent). The most frequent cause of death was hepatic coma and the next haemorrhagic diathesis. It did not prove possible to register all the complications which occurred during the epidemic, but the most frequent appear to have been hepatic failure and haemorrhage. The age distribution is of special interest. Only a few cases were described in children below the age of one year and in adults over the age of 45 years. The majority of cases occurred in the age-group from 1 to 14 years, corresponding to 63.8 per cent of notified cases. The previous epidemic of IH occurred in west Greenland in 1947, and judging from the age distribution of the most recent epidemic, the previous epidemic appears to have resulted in massive immunity in the population. Crowded housing and the prevailing poor hygiene were conditions of considerable importance for the spread of the epidemic, this being described throughout as a contact epidemic.

"Problem of zooanthroponoses in the arctic area of Siberia," by G.I. Netsky (Omsk Institute of Natural Foci Infections of the Ministry of Health of RSFSR, Siberian Branch of the Academy of Medical Sciences of USSR, USSR). The mechanism of adaptation is the principal basis of geographic pathology in the arctic area (V.P. Kaznacheyev). The mechanism of adaptation is studied on two levels: the evolution of foci and the interadaptation of man with the agents of zooanthroponoses in arctic conditions. These two aspects supplement each other. The foci of zooanthroponoses in contemporary arctic Siberia are a relic of foci that existed there at the commencement of the posglacial period, when the tundra was covered with forests. This is the most probable basis for preservation of foci of zooanthroponoses and their northward limits of spread seen today. Assumption of the activity of agents of tick-borne encephalitis, rabies, Asian tick-borne rickettsiosis, Q-rickettsiosis, leptospi-
rosis, tularemia, and brucellosis in the arctic area of Siberia has been confirmed during mass inspection of the population, and of northern deer and lemmings. The activity of the West Nile virus, probably connected with the mass concentration of migrating birds, has also been ascertained. The circumpolar distribution of some zoanthsroponoses serves as the basis for doing a comparative and cooperative study of the structure, spread, and evolution of their foci in different countries.

"Streptococcal surveillance and control in remote arctic populations," by T.R. Bender, J.S. Edelen, and J.M. Burks (Alaska Activities, Bureau of Epidemiology-CDC, USPHS, USA). Rheumatic heart disease is a major cause of morbidity among Alaskan natives. Because of this, a surveillance program to detect streptococcal pharyngitis and non-suppurative sequelae has been operative in nine remote Alaskan Eskimo villages since September 1971. The village health aide cultured a 25 per cent sample of school-children in each village each week, such that each child received a throat culture once a month. In addition, persons of any age with symptomatic pharyngitis were cultured. Persons with cultures positive for group A streptococci were treated regardless of symptoms. Despite an average delay of 10 days between culturing and treatment, group A streptococcal prevalence was reduced from 27 to 10 per cent during the first study year, and to 5 per cent at the end of the second study year. In contrast, point prevalence in nine matched control villages averaged 19 per cent. No cases of acute rheumatic fever were detected in any of the study villages. A streptococcal surveillance program of this type can result in a significant decrease in group A streptococcal prevalence, even if mail-in procedures necessitate considerable delay. Such a program is a feasible method of streptococcal control in high-risk areas.

"Rheumatic fever and rheumatic heart disease among Alaskan natives, 1964-73," by J.S. Edelen, J.M. Burks, D.H. Barrett, and P. Steer (Alaska Activities, Bureau of Epidemiology-CDC, USPHS, USA). Acute rheumatic fever (ARF) and rheumatic heart disease (RHD) are major health problems among Alaska natives. We have reviewed the medical records of all Alaska natives who acquired ARF from FY 1964 through FY 1973, and all with the diagnosis of RHD. The average annual incidence
of ARF among children aged 5-19 was 44 cases per 100,000 population. There was considerable variation within the state: the Yukon-Kuskokwim delta area had an incident rate of 82, whereas the incidence in the North Slope area was only 16. Carditis was present in 70 per cent of the cases. RHD prevalence in 1973 was 605 cases per 100,000 population of all ages. For the 5-19 year age group, RHD prevalence was 377 per 100,000. Regional variations within the state again showed highest rates in the Yukon-Kuskokwim delta, and lowest prevalence in the far north. Mitral stenosis was diagnosed at a young age in an unusually high percentage of patients, suggesting that carditis is severe in this population. Vigorous efforts to control group A streptococcal infections are indicated in those areas where the incidence of rheumatic fever is high.