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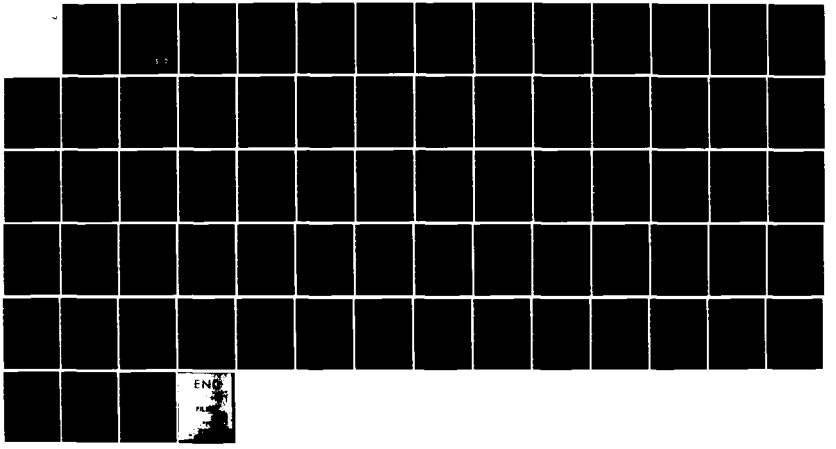

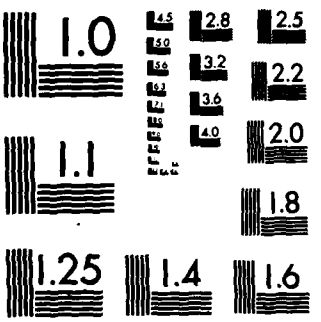

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DST-1810S-001-83

DISEASE OCCURRENCE - WORLDWIDE

JULY - DECEMBER 1983

Compilation of Unclassified Articles

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DISEASE OCCURRENCE - WORLDWIDE

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INTRODUCTION

This is an Armed Forces Medical Intelligence Center (AFMIC) unclassified publication of disease occurrence. The material has been extracted from the classified monthly publication "Disease Occurrence - Worldwide" released during the last 6 months of 1983. The document is designed to facilitate wider distribution and consumer utilization of unclassified intelligence information.

The material is formatted by regions of the world. The six regions (Africa, Americas, Asia, Europe, Middle East, and Oceania) are subdivided by the countries and then by month. The months indicate when the information originally appeared in the "Disease Occurrence - Worldwide" publication during the last 6 months of 1983.

There are three appendices included to assist in quick reference by country or disease. Appendix A shows a tabular summary of disease events by region, country, and time. Appendix B is an alphabetized listing by disease.

The information included in this publication is not intended to be complete or timely, nor does it represent all known occurrence of disease for 1983. Questions concerning this publication should be directed to AFMIC, Epidemiology Branch, Ft. Detrick, Frederick, Maryland 21701, AUTOVON 343-7603.

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SECTION I

AFRICA

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GENERAL

September - The first confirmed cases of chloroquine-resistant Plasmodium falciparum acquired in Africa were reported in 1978 and occurred in nonimmune travelers to East Africa. These reports of chloroquine-prophylaxis or treatment failures were substantiated by serial parasitologic and clinical observations of each infection and, when available, in vitro confirmation of drug resistance. Recent reports document that the transmission of resistant parasites is now occurring more widely in Africa than was previously described.

During the past year, confirmed chloroquine-resistant infections have been described from specific areas in Zambia and Sudan; previously, Kenya, Tanzania, Uganda, Madagascar, and the Comoros Islands were acknowledged to have transmission of chloroquine-resistant P. falciparum. It remains unclear whether these countries have nationwide transmission of disease and whether contiguous countries are similarly affected. In addition, a few apparent chloroquine-resistant infections have been reported in Malawi and northeastern Zaire.

Studies in several West African countries, as well as a recent assessment of drug susceptibility of P. falciparum infections in western and central Zaire, have failed to demonstrate chloroquine resistance. (This is a summary of information published by the Centers for Disease Control, Atlanta, GA.)

November - Thirty-one cases of yellow fever with 29 deaths were reported from Africa in 1982, compared to 7 cases and 2 deaths in 1981, and 17 cases and 9 deaths in 1980. The disease was reported only from Ghana (6) and the Ivory Coast (25). The cases in Ghana came from the Central, Volta, and Brong-Ahafo regions. All cases in the Ivory Coast came from Bouake' prefecture.

ALGERIA

August - The coastal region between Zemmouri and Boumerdes was quarantined due to reported cholera cases. The quarantine is expected to last 2 months. Cholera outbreaks are an annual occurrence precipitated by water shortages during periods of extreme heat.

GAMBIA

November - Recently returned travelers from this region report that an outbreak of yellow fever is underway.

GHANA

July - Cholera continues to be a problem in the Eastern Region with 15 additional deaths reported. A severe drought in the region has reduced the water supply; contaminated water supplies which were used as alternative water sources are blamed for the outbreak. Health officials have advised the

populace to boil drinking water and have appealed for medical supplies to combat the disease. Cholera has also been detected in the Western, Volta, and Brong Ahafo Regions where it has claimed 39, 28, and 30 lives, respectively. In the Western and Brong Ahafo Regions prison populations have been hardest hit by the epidemic. In the Volta Region, the regional medical officer indicated that precautionary measures, including health education, have already begun.

November - An outbreak of yellow fever in the Northern Region has killed 62 people. An immunization program has been launched and aerial spraying of the affected areas is being conducted to reduce the vector mosquito population.

KENYA

September - An epidemic of malaria has broken out in villages neighboring Kitui town. Cases were reported in both adults and children. Health officials are suggesting that chloroquine-resistant malaria may be in the area. However, the full extent of chloroquine-resistant falciparum malaria has yet to be determined. Approximately 85 percent of all malaria cases in Kenya are caused by P. falciparum.

As of 2 August 1983, an outbreak of dysentery in Kendu Bay had resulted in 17 cases with 1 death. Health officials have not identified the source of the outbreak. Speculation by local news sources suggested the disease was cholera; however, health officials denied the possibility of cholera.

December - Twenty cases of cholera were identified and treated in Nairobi.

MAURITIUS

October - The Health Ministry reported 12 cases of malaria during June, as compared to more than 60 cases reported in June 1982. Malaria cases recorded in the first 6 months of 1983 totaled 242, which represents a slight decrease from the same period in 1982. Climatic conditions affecting vector proliferation probably explain the apparent incidence variation.

MOZAMBIQUE

November - Approximately 300 suspected cholera cases were hospitalized in Maputo. Laboratory tests have confirmed over 100 of the cases as cholera. This outbreak is believed to have originated in Gaza Province and spread into the city of Maputo. Many of the initial cases were reported from the Machava prison in Maputo.

December - The cholera outbreak in Maputo is abating according to health officials. Only one death was reported during the last week of November. Five people died during this outbreak.

NAMIBIA

September - Since November 1982, 450 cases of bubonic plague have been recorded in the 330 sq km area between Oshakaii and Ondangua. Sixty-three cases, with three deaths, have been recorded in the last 6 weeks. To date, no South African Defense Force member has contracted the disease.

NIGERIA

October - In response to reports of cholera cases in Ghana, Nigerian authorities are now requiring all persons coming from Ghana to have a cholera vaccination certificate.

SOUTH AFRICA

July - The cholera epidemic in the Natal Region was still underway through the end of May. The present epidemic has claimed 54 lives and 19,269 people have been treated for the disease according to the Department of Health and Welfare in Pretoria. Of these cases, 4,339 have been confirmed as cholera by laboratory tests.

August - The mining town of Alexander Bay on the northwestern Cape coast was quarantined after an outbreak of meningitis. At least six cases were admitted to the local hospital.

September - A typhoid fever outbreak was reported from Qumbu in the Transki Territory. Forty-three cases, resulting in 6 deaths, were referred to the Nessie Knight Hospital in Sulenkama. Potable water was brought into the area by the Department of Health to be used for drinking and cooking.

November - Reports from the Teyateyaneng District in Lesotho indicate that several people have died from rabies. Health authorities have not determined the exact number of deaths.

December - Approximately 36,000 cases of tuberculosis were recorded by the Department of Health during the first 8 months of 1983. Other statistics released for this period include: cholera (6,202), typhoid fever (3,685), malaria (1,450), infectious hepatitis (1,285), meningococcal infections (359), and rabies--human contacts (87).

TANZANIA

July - Dysentery has killed five people in the Lindi Rural District and there have been an unknown number of additional deaths in the other districts of the Lindi Region. The Lindi Region Medical Officer has warned the populace that the disease has reached epidemic proportions. The disease has spread to all districts of the Lindi Region and 50 people have been admitted to the regional hospital. The initial disease outbreak occurred in October; however, the number of patients increased sharply during the second week of May. The

Mwanza Regional Medical officer reported that 15 people died in Sengerema and Geita Districts following an outbreak of dysentery. Between 1 May and 18 May, there were 62 and 177 additional patients hospitalized at the district hospitals in Sengerema and Geita Districts, respectively. Health officials in both regions blamed poor sanitation, dirty water, and the absence of pit latrines as the primary causes of the disease.

October - The Mtwara District Development Director reported 30 cases of dysentery with two deaths. Ten cases with two deaths were reported in Ziwani Division and 20 cases were recorded in Nanyamba Division. In the past, health officials blamed poor sanitation, dirty water, and the absence of pit latrines as primary causes of the disease. The cause of the latest outbreak was not reported.

December - An epidemic of plague in northeastern Tanzania near Tanga, has resulted in at least 19 human deaths. Tanzania is a plague endemic area. Drought conditions of recent years have concentrated animals and people around limited food and water sources, thereby increasing the risk of plague and other zoonotic diseases. If plague becomes established in the domestic rat population, a large scale epidemic could result.

UPPER VOLTA

November - Approximately 670 cases, including 245 deaths, of yellow fever were reported by the Upper Voltan Ministry of Health. Two hundred and seventy-three cases, including 215 deaths were from the Est Department and 40 cases, including 30 deaths, came from the Centre Department. The remaining 357 cases were from remote areas, primarily among the Fulani Nomads. Immunization of the population in the affected areas is underway.

ZAIRE

July - A cholera epidemic has been reported in Beni, Kivu Region, according to the Information, Culture, and Arts Minister (ICAM). The minister said the government has taken urgent measures to bring the disease under control. It is not known how many cases have been recorded or what control measures have been taken. According to the ICAM, these are the first cases of cholera since September 1979, which is contradictory to previous reports.

ZAMBIA

August - Health officials announced an outbreak of cholera in Luapula Province. Surveillance teams were sent to the province to monitor the situation. Residents were encouraged to improve sanitation and hygiene in an effort to control the disease.

October - Officials have reported six cases of meningitis (etiology unknown) in Mazabuka, Southern Province. All six victims were residents of a large sugar cane estate where overcrowded, unsanitary living conditions are common.

ZIMBABWE

August - Over 47,000 patients (one out of every 14 city residents) were treated for sexually transmitted diseases (STD) in Harare's (Salisbury) four municipal STD clinics in 1982. Gonorrhea remained the most prevalent STD with 37.2 percent of the patients treated for this disease. Chancroid accounted for 24.9 percent, nongonococcal urethritis for 16.3 percent, lymphogranuloma venereum for 8.2 percent, genital herpes for 6.1 percent, others, 7.3 percent. Contact tracing is still voluntary, limiting the program's success. Approximately 11 percent of the gonococcal infections are penicillin resistant.

September - Rabies is suspected in the Bonda area where 20 suspected cases and one death were reported. Those affected were treated after being attacked by a suspected rabid dog. Over 300 dogs have been vaccinated against rabies to help control the outbreak.

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SECTION II

AMERICAS

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GENERAL

November - Yellow Fever in the Americas - 1982 - Fewer cases of yellow fever were reported in the Americas in 1982 than in 1981. In 1982 there were 140 cases and 80 deaths, compared with 238 cases and 104 deaths in 1981. Cases were reported from Bolivia (95), Brazil (24), Peru (19), and Colombia (2). The majority of the cases occurred during January through May. The prime focus appears to be Santa Cruz Department in Bolivia and the adjacent Mato Grosso do Sul in Brazil. The disease has spread southward through the Amazon basin over the past 3 years. Regional health officials believe that official statistics reflect many less than the actual number of cases.

ARGENTINA

July - Extensive flooding of the upper Parana River occurred in northern Argentina earlier this month; as of 14 July, 100 towns in the Chaco and Misiones Provinces reportedly were under water. Thousands of acres of farmland have been inundated and large numbers of people left homeless. This may result in many health-related problems including increases in insect- and waterborne diseases. Distribution difficulties with emergency food and medical supplies could make relief and control measures difficult.

BARBADOS

October - Acquired immune deficiency syndrome (AIDS) caused seven deaths during 1983. Six of the deaths were men between 22 and 34 years of age.

BERMUDA

July - The death of a young woman due to Pneumocystis carinii pneumonia and a case of Kaposi's sarcoma (currently under treatment) in a young male have led to the belief that Acquired Immune Deficiency Syndrome (AIDS) is present in Bermuda. The diagnosis of Pneumocystis carinii pneumonia, Kaposi's sarcoma, other opportunistic infections, or any combination of these conditions is characteristic of AIDS. Dr. Keith Cunningham, pathologist at King Edward VII Memorial Hospital, stated that AIDS in Bermuda is "...an almost inevitable consequence of the Island's link with the U.S...," and urged individuals in high risk groups not to donate blood. If these cases are confirmed, Bermuda will be the 21st country reporting AIDS.)

BOLIVIA

October - Many residents of the country's interior do not receive immunizations of any type. An effective vaccination program might have prevented a recent outbreak of diphtheria which resulted in the death of a 6-year-old child.

BRAZIL

July - While health authorities deny that an outbreak has occurred, four fatal cases of meningitis have been registered in Feira de Santana, some 108 km northwest of Salvador in eastern Brazil.

Twenty-eight cases of malaria have been reported from Camacari (about 30 km north-northeast of Salvador), Bahia Province, during the first 2 weeks of May. Jose Teixeira de Franca Filho, head of the Department of Epidemiology of the Superintendency for Public Health Campaigns in Bahia, stated that these were cases imported from the Amazon River region and that the focus of the disease was expected to be eradicated within the next few days.

August - Heavy flooding has continued to cause serious problems in southern Brazil (Parana, Rio Grande do Sul and Santa Catarina States). Although disease outbreaks directly related to this flooding have remained relatively minor (four confirmed cases of hepatitis), the large numbers of displaced persons, combined with disrupted transportation networks and shortages of food and potable water make it quite likely that the disease situation will worsen.

Earlier flooding caused an increase in hepatitis A in Belo Horizonte (Minas Gerais State, approximately 340 km north-northwest of Rio de Janeiro). The Minas Gerais Health Secretariat had recorded 550 cases by early June (147 in May alone), compared with 868 for all of 1982. According to Waltercy de Sa, coordinator of the Center for Epidemiological Vigilence of the Secretariat, these figures probably represent only five percent of the actual number of cases.

A related report estimated that up to 10,000 persons contracted malaria in the State of Acre (southwest Brazil) in 1982. Roraima Moreira da Rocha, director of the Superintendency for Public Health Campaigns, indicated that a high incidence of malaria was found in the Acre Valley area (100-150 km north of the Bolivian state of Pando), a site of several settlement projects.

September - The continued increase of malaria incidence (see DST 1810S-001-83 RPT 8) has resulted in changes in malaria control strategy. According to Jose Fiuze Lima, superintendent of the Superintendency for Public Health Campaigns, Ministry of Health, control efforts will be concentrated in areas of greatest incidence. With the bulk of next year's control resources targeted for the Amazon region, there appears to be an increased likelihood risk that malaria will recrudesce in areas where some degree of control has been implemented.

According to regional Health Secretariat reports, 250 cases of trachoma have occurred in Bebedouro, Sao Paulo State, for the year ending 27 July.

Health problems related to the extensive flooding in southern Brazil (see DST 1810S-001-83 RPT 8) include tetanus, dysentery, "fever" (unspecified etiology), respiratory infections, parasitic infections, and venomous snake bites. A fatal case of meningococcal meningitis also was reported. According to Dr. Oswaldo Vitorino de Oliveira, Health Secretariat Assistant for Public Affairs, there also has been an increase in hepatitis cases; but no figures were given. While medical resources are being diverted to this area,

disruption of transportation networks due to the flooding continues to cause difficulties in delivering the health care.

October - A case of human plague occurred in Ipu Municipality, Ceara State, bringing the total number of cases to 46 during 1983.

A death caused by leptospirosis was reported by the Santa Catarina Hospital. Since leptospirosis is often an inapparent, undiagnosed illness, more cases are probable. The U.S. Army's discovery of troops contracting leptospirosis while training in Panama seems to have spurred an increased awareness of the disease throughout Latin America.

Parasitic diseases are estimated to affect 110 million Brazilians, according to Dr. Rubin Campos, President of the Latin American Federation of Parasitologists. Approximately 10 million residents are infected with American trypanosomiasis (Chagas' disease); 50 million are infected with ascariasis (roundworms).

November - Dr. Davio de Faria Travares, Secretary of Health, recently released a summary indicating that some 900,000 citizens of Minas Gerais State suffer from schistosomiasis and 800,000 from Chagas' disease. Minas Gerais has a population of approximately 14,000,000.

Chagas' disease is a major source of morbidity in Brazil. During 1984, an attempt will be made by SUCAM (Superintendency for Public Health Campaigns) to spray all houses in the endemic area, approximately 2,000,000 sq km. A budget of 10 billion cruzeiros (about U.S. $12,165,000) has been allocated. According to the report, over five million Brazilians suffer from Chagas' disease.

A recent death in a Sao Paulo hospital is under investigation as a possible case of AIDS. If confirmed, this would be the ninth fatal case of AIDS in the city. All eight confirmed victims were homosexuals, with all but one having a history of recent travel outside of Brazil.

According to the regional director of SUCAM for Para State, malaria and hepatitis are of major concern in Itaituba in west central Para. Reportedly, some 20 percent of the 35,000 gold miners in the area are malaria carriers. No figures on hepatitis incidence were given. Itiatuba is located where the Trans-Amazonian Highway meets the Tapajos River. A disease outbreak there would have the potential for rapid spread to other regions in view of increased movement through this area to Acre State. During the past year, some 44,000 people have moved to Acre; as unemployment, drought, and other problems continue in northeast Brazil, this migration will continue. An estimated 50,000 families may migrate to Parana State alone. Officials fear that a major influx will coincide with the seasonal (winter/early spring) increase in mosquitoborne diseases.

December - The number of malaria cases reported annually continues to rise. The 173,565 cases reported by mid-September represents a 25 percent increase over the same period in 1982. More than 97 percent of the cases occurred in

the Amazon region. The Superintendency of Public Health Campaigns (SUCAM) expects difficulty in procuring sufficient DDT to carry out their control program. Brazil ceased in-country production of DDT in 1982.

CHILE

July - In an effort to combat chronic problems with typhoid fever (20,000 cases in 1982) and other enteric illnesses, the Ministry of Health has issued a proclamation prohibiting the irrigation of certain crops with "reused water" (water taken from courses that traverse urban areas). The crops specified in the proclamation are those usually eaten raw and therefore present the highest risk of contamination at the time of consumption.

September - Twelve cases of hepatitis (type unspecified), including at least one adult, have been reported from a kindergarten in the town of Hermanos Carrera, Vallenar City.

October - Tuberculosis remains a serious problem. According to health authorities, 7,500 new cases occur each year and 1,100 deaths are attributed to the disease annually. Control programs have been successful in reducing the number of deaths; 10 years ago 2,275 people died annually.

November - The incidence of hepatitis (type unspecified) has increased greatly in Iquique, northern Chile; 421 cases have been reported so far this year, compared with 20 during a similar period in 1982. An inspection by Dr. Jose Behm, chief of environmental hygiene, implicated poor sanitation.

COLOMBIA

August - Outbreaks of malaria and yellow fever in Choco and Antioquia Departments have been confirmed by the Indian Affairs Division of the Government Ministry. Indian and peasant communities near the San Juan and Atrato Rivers (Chaco) and the Murri River (Antioquia) are also highly affected.

September - A report issued by employees of the National Service for Malaria Eradication, Colombian Ministry of Health, cites a total of 80 deaths due to malaria and "other parasitic diseases" in Pacific Coast areas through mid-July. No figures on total numbers of cases were provided.

November - Three cases of AIDS have been reported in Colombia, according to the Colombian Association of Scientific Organizations.

COSTA RICA

July - Some 26 cases of malaria have been reported through April. These cases are believed to be largely the result of refugees arriving from Nicaragua. While stating that the situation is "under complete control," Health Vice Minister Dr. Luis Bonilla confirmed that Health Ministry authorities are "in

a state of alert." With continuing unrest in Nicaragua, refugee-related health problems are likely to impact on neighboring countries.)

September - Outbreaks of malaria along the Nicaraguan border have prompted the government of Costa Rica to declare a medical emergency in that area. The outbreaks were blamed on an influx of refugees from Nicaragua.

November - At the current level, endemic hepatitis (type unspecified) will attain its highest case rate since 1971. According to Dr. Willy Carillo Angula, chief of the Health Ministry's Epidemiological Investigations Department, 2,373 cases (102.9/100,000 inhabitants) were reported for the first half of 1983.

The malaria outbreak reported earlier (DST-1810S-001-83 RPT 9) is under control, according to Dr. Jose Luis Garces, chief of the Health Ministry's antimalaria department. The outbreak had involved at least 199 cases by 30 September.

DOMINICA

August - According to a statement released by the Ministry of Health, leptospirosis (number of cases unspecified) has been confirmed on the island, and is being blamed on an increase in the island's rat population. This is the first official report of leptospirosis from Dominica, but favorable environmental conditions and known distribution of the disease in the Caribbean make it likely that it has been present for some time.

DOMINICAN REPUBLIC

October - Malaria was detected in approximately one percent (1,828 of 186,386) of the people tested during the first 8 months of 1983, according to Dr. Delmin Cury, Director of the National Malaria Eradication Service. Most of the cases were from the eastern area bordering Haiti.

ECUADOR

July - Flooding along the southwest coast in early June has resulted in "dangerous outbreaks" of malaria and typhoid fever in El Oro Province. Reports from Machala, the provincial capital, state that numerous cases of these diseases also occurred across the border in Peru.

September - Malaria continues to be of major concern, with more than 3,000 cases reported from Esmeraldas Province (northwest pacific coast) through late July. The primary factor appears to be the heavier than normal rainfall and subsequent flooding.

A related report indicates "numerous cases" of typhoid and malaria in Portoviejo, Manabi Province, southwest of Esmeraldas.

EL SALVADOR

September - Gastrointestinal disease reportedly is the "number one cause of death," in El Salvador. Without prior treatment, all water in El Salvador is considered unsafe for human consumption. Water is contaminated by the following pathogenic organisms: coliform bacteria, Salmonella, Pseudomonas, Bacillus, viruses, Giardia, Entamoeba, and various helminths.

October - Through August 1983, 2,867 cases of dengue had been reported in El Salvador, with the majority reported since June. Figures were not available for September. Cases have been reported from all areas of the country, with most (1,005) reported from the eastern region bordering Honduras. Although laboratory data are limited, paired sera from 7 of 10 patients (70 percent) from San Salvador were positive for dengue, suggesting that a high percentage of reported cases, at least in the metropolitan area of San Salvador, were also dengue. Such a high rate of case confirmation usually is observed only during periods of epidemic transmission.

FRENCH GUIANA

September - According to official statistics, 481 cases of malaria have been reported through May, compared with 297 cases for the comparable period in 1982. This increase has been associated with drug-resistant malaria parasites and pesticide-resistant mosquitoes.

GUATEMALA

September - An outbreak of malaria in Puerto Barrios on the Caribbean coast reportedly is under control, according to Dr. Adolfo Castaneda Felice, Minister of Public Health and Social Welfare. Dr. Felice also stated that there was an increase in rabies cases in San Marcos, and that 2,500 doses of vaccine had been received from Colombia. Details concerning the number of cases of human or animal involvement were not provided, but Dr. Felice indicated that the situation was under control.

HAITI

December - An outbreak of dengue fever apparently has occurred in the Belladere area. Dengue 1 virus was isolated from blood samples drawn from two of the victims.

HONDURAS

July - A joint U.S.-Honduras medical civic action program carried out in May in the Choluteca and Valle Departments found villagers suffering from tuberculosis, diarrheal diseases, intestinal parasites, malaria, Chagas' disease, and others. Medical and dental treatment were provided to 12,611 patients, but statistical data are not available concerning the number of cases in the above mentioned disease categories.

August - The diagnosis of active cases of tuberculosis (TB) among prison and refugee populations is of concern to Honduran health authorities. While only 17 cases were reported from the Central Penitentiary, the situation is considered dangerous because many others may have become infected before proven cases could be isolated and removed. According to Alberto Guzman, Chief of the Division of Epidemiology of the Ministry of Public Health, 11 cases were detected in refugees in the Danli area. Since these cases were advanced, the infection probably did not originate in Honduras. Many more undetected cases probably exist. The crowded prisons and refugee camps create ideal conditions for the spread of TB.

October - Several dengue fever outbreaks occurred during the past summer. Dengue hemorrhagic fever was not reported.

JAMAICA

October - Commonly occurring infectious diseases include tuberculosis, influenza, infectious hepatitis, whooping cough, measles, mumps, and dengue fever. The resurgence of dengue fever throughout the Caribbean also affected Jamaica. Yellow fever has been eradicated and malaria is considered under control.

The recent drought has increased the likelihood of public water supply contamination. The water company has instituted conservation measures, including cutoffs, increasing the potential for contamination. Public water consumers are advised to boil drinking water. The American Embassy advises keeping typhoid, hepatitis, and polio inoculations current while in Jamaica.

The Jamaican environment is considered fairly healthy, but climatic conditions may have a debilitating effect. Sun and heat casualties are common. High pollen levels from large undeveloped areas will have an unpleasant effect on asthma and allergy sufferers.

An outbreak of influenza currently is under way. The epidemic is most serious in George's Plain and other areas of Westmoreland.

MEXICO

July - After a 9-year absence, typhoid fever has appeared in the Mazahua area. With two cases reported from Santa Ana Niche, the Public Health Department has quarantined 14 towns in the Mazahua area in an attempt to keep the disease from spreading. (Note: "Mazahua" refers to an indigenous Indian tribe, inhabiting an area west of Mexico City, near the border between the states of Mexico and Michoacan.)

A hepatitis outbreak together with a high incidence of gastrointestinal disease in Petatlan (between Acapulco and Zihuatanejo) has been reported for June. Public health officials have urged inhabitants to treat all drinking water with chlorine.

From 22 to 25 June, over 500 cattle reportedly died from paralytic rabies in Sinaloa State, on the west coast of Mexico. A campaign to control the vampire bat population has begun. This is the second report of a large outbreak of rabies in cattle in Latin America associated with vampire bats (see DST-1810S-001-83 RPT 6). While no human cases have been reported, the existence of a large population of rabid bats poses a potential threat to humans in the area.

August - Gastroenteritis complicated by dehydration was blamed for 148 deaths in 23 states from May through July. During the comparable period in 1982, 166 deaths occurred but the overall number of cases was lower. According to other sources, most of the fatalities were children under 2 years of age.

Another focus of gastroenteritis is in Ciudad Juarez, on the northern border of Chihuahua State. Nearly 16,000 cases had occurred by early July, compared with about 12,000 during a comparable period in 1982. The latest report indicated a weekly rate of 1,300, with the potential of 2,000 if preventive measures are not taken. In contrast with many other outbreaks, persons in the 15 to 44 year age group were hardest hit.

Manuel Campuzano, Director of the National Institute of Nutrition, has announced the diagnosis of four cases of acquired immune deficiency syndrome (AIDS).

Conflicting reports from Chiapas State (southern Mexico) indicate that tuberculosis is a serious problem in several municipalities. According to Dr. Victorico Ramos Grajales, Coordinator of Public Health for the affected area, tuberculosis affects some 15 to 20 percent of the Chiapas area population. Local sources claim up to a 40 percent rate for the municipality of Huitiupan. The influx of refugees from Guatemala to Chiapas has caused the problem to worsen. (See DST-1810S-001-83 RPT 5.)

A representative of the National Commission for the Eradication of Malaria has reported 568 cases of malaria from five municipalities in northern Sinaloa State (north-central coast of Mexico) for the first half of this year. While stating that this represented an increase, comparable 1982 figures were not given.

The first case of cholera acquired since 1900 in a western hemisphere country other than the United States has been reported in a visitor to Cancun on the Yucatan Peninsula. Hemolytic Vibrio cholerae O-group 1, biotype El Tor, serotype Inaba was isolated from the patient's stool.

A late June report indicated that five children died of meningitis (type unspecified) at the San Luis Potosi Central Hospital. According to Dr. Luis Fernando Rangel, hospital director, the children arrived in very poor condition, suffering from malnutrition and bronchopulmonary complications.

September - Recent reports indicate that Mexican health institutions can provide services to only 60 percent of the population along Mexico's southern border. This area also has some of the country's worst disease problems, including malaria, dengue fever, tuberculosis, and parasitic infections. (See DST 1810S-001-83 RPT 8 on Chiapas.)

Public health officials report 40 deaths due to tetanus in Guadalajara (Jalisco State) this year, as of 30 August. Officials also report 250 cases of malaria in the city of Colotlan, northwest Jalisco. There is some question as to the reliability of this report as Colotlan is roughly 1,800 m above sea level, and the areas of Mexico considered at risk for malaria are all below 1,000 m. Also, there is only one record in the literature of the primary malaria vector for that region being collected at an altitude above 500 m (approximately 1,600 m, near Oaxaca).

An outbreak of "salmonellosis" in Saltillo, southeast Coahuila State, reportedly had hospitalized 20 patients at the State Workers Social Security Clinic as of 1 September. The outbreak was blamed on the consumption of vegetables irrigated with sewage water, but poor hygienic measures by food preparation personnel may also have been involved. Waterborne disease has caused Chile to place restrictions on irrigation with potentially contaminated sources. (See DST 1810S-001-83 RPT 7 on Chile.)

Mass immunization of children is reportedly under way in Sinaloa State, following the detection of 30 cases of polio. A total of approximately 70 cases was reported for all of Mexico in 1982.

An outbreak of typhoid fever in Mazatlan, southern Sinaloa State, had reached "critical levels" in mid-August, with hospitals and private clinics reporting an average of 100 new cases daily. Another outbreak, apparently less serious, was reported from San Luis Potosi.

Unconfirmed reports from Oaxaca indicate that a major "dengue fever" epidemic was occurring along the south coast of this state in late July. While not giving any specific data, physicians in the area claimed that 40 percent of the coastal population was affected and that a "considerable number" of deaths had occurred.

October - A serious dengue fever epidemic continues in southern Mexico. During late September, dengue hemorrhagic fever syndrome claimed several lives in Veracruz State. The total number of cases reported to Mexican health authorities in 1983, through week 32, was 3,527. The largest numbers of cases have been reported from the states of Oaxaca (759), Guerrero (725) and Michoacan (542) on the Pacific coast and from Yucatan (592) and Veracruz (286) on the east coast. Additional cases have been reported from Chiapas, Puebla, Morelos, and Jalisco. Several of the epidemics have occurred in cities which had not previously reported dengue.

Rabies is endemic in Mexico. More than 2,000 cases of animal rabies are detected each year. Annually, approximately 75 humans die after being bitten by rabid dogs. The area between Texcoco and Chimalhuacan is considered most dangerous in terms of the number of human exposures.

An outbreak of trichinosis in Zacatecas State illustrates Mexico's inability to insure proper meat inspection prior to sale and to educate the populace on proper cooking procedures. Seventy-nine cases with six deaths resulted from the consumption of improperly cooked infected meat.

December - By the end of November, 22 states had reported dengue fever during 1983. Epidemic dengue transmission has continued, especially in states on the west coast. More than 600 cases were reported in Guaymas in Sonora. On the east coast, the disease was reported from Poza Rica, north of Veracruz. The epidemic in southern Mexico appears to be waning.

NICARAGUA

August - A recent report from the Nicaraguan Ministry of Health claims an 80 percent reduction in malaria (no figures provided) and no cases of dengue for the past year. However, the latest edition (1 June 1983) of the World Malaria Risk Chart published by the International Association for Medical Assistance to Travelers (IAMAT) indicates that, with the exception of five major urban centers, all of Nicaragua below 1,000 meters altitude is considered at risk for malaria. Also, recent statistics released by the Centers for Disease Control (CDC) show that several thousand cases occurred in 1982 in Honduras and El Salvador, immediately adjacent to Nicaragua. In 1982, dengue fever occurred throughout Latin America, from Brazil to Mexico and much of the Caribbean, thus it seems rather unlikely that Nicaragua would be completely spared.

October - A control program designed to combat the Aedes aegypti mosquito was started in August 1983. The probable reason for instituting the program was to reduce the incidence of dengue fever which has been plaguing much of Central America.

Aedes aegypti mosquitoes were nearly eradicated from Central America during past campaigns. However, when surveillance and eradication efforts were reduced, this species became reestablished. Current control efforts should be successful, especially if sufficient funds and personnel are committed.

PANAMA

September - Over 70 cases of hepatitis (type unspecified) have been reported from Varaguas Province health centers. The outbreak affected mostly children and was blamed on contaminated water wells.

PERU

July - An outbreak of malaria, with over 100 cases reported through the third week of June, has occurred in Piura (northern coastal area). Flooding in the area has been blamed for the outbreak.

An outbreak of rabies in dogs that began in 1979 is on the decline, following an intensive vaccination program. Nineteen cases of canine rabies were reported for May 1983, compared with 170 cases reported for May 1982. Forty-six cases were reported in 1980, 592 in 1981, and 1,023 in 1982. Although no human cases were reported, the presence of a large population of rabid animals, especially dogs, is a significant health threat.

August - According to Dr. Teodoro Palomino, a local Health Department official, one prison inmate at Lurigancho (northeast Lima) has died and two others are reportedly ill with a disease suspected as viral meningitis.

Three people bitten by dogs have died from rabies. The victims include two children, one from a new settlement near Lima, another from near Viru, and an adult from the Chicama area. Chicama and Viru are near Trujillo, about 500 km northwest of Lima. (See DST 1810S-001-83 RPT 7 for report on canine rabies in Peru.)

Bubonic plague claimed at least 20 lives in a mid-July outbreak near Ayabaca municipality, northern Peru. The affected region has suffered serious flooding and the presence of large numbers of plague-infected rodents has been reported. This is the second extensive outbreak of plague in humans in northeast South America reported this year. (See DST-1810S-001-83 RPT 6.)

The number of malaria cases in Peru could reach 120,000 this year, according to Leopoldo Cuzqueu, director for communicable diseases at the Ministry of Health. Cuzqueu stated that the area affected by malaria had increased from 180,000 sq km in 1981 to 700,000 sq km this year, and that malaria could spread throughout the country within 2 years if appropriate measures are not taken. Factors contributing to the spread include insufficient and ineffective control programs and pesticide resistant vector strains. Currently, the disease is most prevalant in the northeastern provinces, where some 13 percent of the population has malaria.

September - Earlier reports forecasting sweeping increases in malaria incidence (DST 1810S-001-83 RPT 8) were at least partially contradicted by Minister of Health, Juan Franco Ponce. In a recent interview, he stated that while "epidemic outbreaks" had occurred, they were not "catastrophic" and that the outbreaks were "completely under control." It is not known which version is more nearly correct.

Communities along the Rimac River, east of Lima, appear at higher risk of leptospirosis, with reported number of cases roughly triple that of last year. Contact with contaminated water, including swimming in the Rimac River, is blamed for the increase.

October - Tuberculosis (TB) is highly prevalent in Peru. Maruo Sanchez, head of Peru's tuberculosis monitoring program, recently stated that approximately 18,000 Peruvians (98 out of 100,000) suffer from tuberculosis. Because Peru's public health system is notoriously inadequate, the actual number of cases is probably much higher than reported.

December - Bubonic plague had claimed at least five lives in the Chiclayo area of Lambayeque Department by the first of December, according to a Cuban commission visiting the area. The commission stated that many other people are "in advanced stages of the disease..." The focus of the outbreak appeared to be in an agrarian cooperative in Udima; an increasing rat infestation was blamed. The area is about 270 km south of an outbreak previously reported near Ayabaca.

TRINIDAD AND TOBAGO

August - According to Dr. Chad Helmick of the Caribbean Epidemiology Center (CAREC), reporting of leptospirosis has been increasing (11 cases in 1980, 21 in 1981, and 31 in 1982; figures for 1983 were not given). (See also DST-1810S-001-83 RPT 8, Dominica).

A few cases of dengue fever were confirmed recently, according to a release from the Ministry of Information. No figures or exact locations were given, but unconfirmed reports placed the outbreak in St. George County. Trinidad and Tobago reported 12 cases of dengue in 1982.

Several persons were hospitalized, and one died from an illness suspected as viral meningitis. Dr. Oswell Warner, Medical Officer, St. Patrick, stated that viral meningitis had not been confirmed, but that an investigation was being conducted and precautions were being taken to prevent the spread of the illness.

December - Reports of dengue 4 cases continue in Trinidad. The Caribbean Epidemiology Center (CAREC) laboratory has reported 79 isolations in 1983.

VENEZUELA

August - Recent press releases indicate that a significant increase in malaria is occurring. Nearly 3,500 cases had been reported through June, compared with under 2,400 for all of 1982. The areas most affected are primarily in the south and west, including the states of Amazonas, Apure, Barinas, Bolivar, Portuguesa, Tachira, and Zulia. The situation is believed aggravated by an influx of foreign workers into the frontier areas. While the Minister of Health (Luis Jose Gonzalez Herrera) stated that there were sufficient insecticides and drugs available to control the disease, an analysis accompanying the report indicates that serious deficiencies in the control program exist and that the malaria problem may well be worse than published reports indicate.

September - The malaria resurgence (DST 1810S-001-83 RPT 8) continues unabated, with over 3,900 cases reported through July. Factors influencing this outbreak include: extensive personnel movement within the malaria-prone areas, a greatly reduced budget for malaria control, resistance of mosquitoes to pesticides, and inadequate usage of preventive measures. The situation will probably continue to deteriorate.

SECTION III

ASIA

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BANGLADESH

July - Cholera, previously reported from the Barisal and Mymensingh Districts (DST-1810S-001-83 RPT 5), has claimed victims in several other areas. Over 100 deaths were reported for April, with nearly half of these occurring in the Magura subdivision. According to local health department personnel, this outbreak is blamed largely on the scarcity of drinking water in conjunction with severe drought.

August - Cholera, dysentery and tuberculosis were reported at various locations throughout the country. Appalling health conditions continue to exacerbate the propagation of infectious diseases.

September - Cholera continues to be reported from several areas of the country. In addition to poor sanitation and lack of potable water, the situation is exacerbated by limited medical facilities and shortfalls in even the most basic medications.

An outbreak of influenza was reported ongoing in the Dhaka (Dacca) area in July. No morbidity or mortality figures were provided.

October - One hundred people died from malaria over the past 3 months in Bandarban, about 100 km southeast of Dhaka. According to reports, most of the deaths were attributed to inadequate health care. A Bandarban health official confirmed 30 of the deaths but denied the lack of medical attention.

A severe epidemic of intestinal disease of unknown etiology is ongoing in the northern five districts. Over 200,000 cases have been reported in Dinajpur, Rangpur, Bogra, Pabna, and Rajshahi districts. Reports indicate that standard curative and preventive measures have been ineffective and that the disease has been spreading to other areas. An outbreak of cholera, which claimed 100 victims in Faridpur, Rajshahi, Rangpur, Pabna, and Comilla districts also was reported.

November - An upsurge in the number of cholera cases apparently is signalling the beginning of another epidemic period. Cholera is endemic in Bangladesh and monsoon season outbreaks are considered normal.

HONG KONG

August - The number of cases of sexually transmitted diseases (STD) doubled among teenagers between 1980 and 1981 according to government statistics. The inclusion of herpes infections for the first time in 1980, with 267 cases reported, and 278 cases in 1981 explain part of the sharp increase. There were over 7,600 cases of STD reported in 1981. Government statistics do not reflect cases treated by the numerous private venereal disease clinics of Hong Kong.

INDIA

July - An outbreak of dysentery in June claimed 11 lives in a village in northeastern Manipur State (near the Burmese border). According to Dr. Chaoba Singh, State Epidemics Director, six of the dead were children. He also stated that the situation was "now under control."

Cholera has affected at least 72 persons, including 10 fatalities, in the Hassan District of Karnakata State. While district officials imposed a 2-week ban on all congregations to check the spread of the disease, no information on the trend of the outbreak was released.

August - As of 1 May 1983, 1,640 suspected cases of Kyasanur Forest disease (KFD) were reported. In Dakshina Kannada, there were 905 cases with 99 deaths and in Ultara Kannada, there were 522 cases with 19 deaths. Areas where cases originated also include: Sagan, Hosanagar, Tirthahali, and Sorab Taluka in Shimoga District; Belthangedy Taluk in Dakshina Kannada District; Honnavar and Bhatkal Taluks in Ultara Kannada District; and Koppa Taluk in Chikmagular District.

Kyasanur Forest disease (KFD) was first recognized in India in 1956 in the state of Sorab Taluk in the Shimoga District. An annual rise in the incidence of KFD occurs during the dry season (February through May) corresponding with peak vector (Haemaphysalis spinigera tick) activity. The disease is usually confined to isolated forest tracts inhabited by men and monkeys. Reservoirs for the virus include rodents with inapparent infections and monkeys which become visibly and often mortally ill.

Epidemics of cholera and dysentery currently are under way in much of the country.

September - Two outbreaks of gastroenteritis (etiology unknown, but food poisoning has been implicated in Chatarpur) have been reported from Jalpaiguri, West Bharat (300 cases, 4 deaths) and Chatarpur District, Madhya Pradesh (85 cases, 13 deaths).

According to Mohammed Maaqbook Dar, an opposition member of the Kashmir State Assembly, a dysentery outbreak has claimed over 200 lives in Jammu and other areas of Kashmir State. His report contradicts government claims of eight deaths.

An outbreak of cholera, claiming at least six lives, has been reported from the Bhatinda area (southern Punjab State). Contaminated drinking water is the suspected cause.

October - India's first outbreak of human plague in 16 years was reported recently. The disease reappeared in five villages of the Simla District. Villages involved are Tangnu, Deodi, Gumma, Jabbal, and Khabbal, where at least 18 deaths (nine men, three women, and six children) have occurred. Details of the epidemiological investigation conducted at the National Institute of Infectious Disease are not available.

In 25 flood-affected villages in Shahjahanpur District, over 200 people have died from a mysterious, unidentified disease. The villages of Dilhod, Negoi, and Kantabloc were badly affected by the disease during September. A team of medical experts has been sent to the area. Additional information is not available at this time.

Epidemics of cholera and gastroenteritis currently are underway in much of the country.

November - An increase in mosquitoborne illness has been observed in the Delhi area. Local physicians have noted unusually high numbers of cases of malaria, dengue fever, and viral fevers compared to previous years. Cases of Japanese B encephalitis are occurring countrywide. Hardest hit is the state of Karnataka, reporting over 250 cases with 65 deaths. Other affected states include: Andra Pradesh, Bihar, Timilnudu, Manipur, and Utter Pradesh. The disease is observed seasonally, beginning with the monsoons and ending with the beginning of winter, which correlates with the density of the vector mosquito population (primarily Culex tritaeniorynchus).

Cholera and gastroenteritis epidemics continue to occur countrywide. Many of the reports of gastroenteritis probably involve cholera.

INDONESIA

July - The cholera outbreak previously reported from Aceh Province (DST-1810S-001-83 RPT 6) has now claimed the lives of some 100 children. A potentiating factor has been the remoteness of the area from the nearest public health center. Cholera has also been reported from Samarinda, East Kalimantan on the island of Borneo, where at least 41 have died and hundreds have been hospitalized, and West Sumatra where 447 cases with 25 deaths were reported. According to a report in the Daily Kompas (Jakarta) on 16 June, another outbreak in the provincial capital of Padang involving at least 400 cases and 3 fatalities had not been previously publicized to avoid worrying delegates to the 13th National Koran Reading Competition. There was apparently no connection to an earlier outbreak on northeast Sumatra (Riau Province) that resulted in 14 deaths from 119 cases in March. Cholera was also detected in a Japanese tourist returning to Tokyo from a trip to Bali.

The Indonesian Health Department has reported 31,010 cases of cholera with 903 deaths for 1982, indicating a downward trend compared with previous years.

Dengue fever outbreaks on the islands of Borneo (Central Kalimantan) and Java (Surabaya) have killed at least 40 children and resulted in the hospitalization of some 300 more. Physicians in Surabaya, where 38 of the deaths occurred, have blamed the large death toll on the fact that many of the children were already in critical condition before reaching a hospital.

Gastroenteritis, previously reported (DST-1810S-001-83 RPT 6), continued in Aceh Province, North Sumatra (174 cases, 18 deaths) and Babelan District, West Java (142 cases, 6 deaths) in April. The outbreak on Sumatra was blamed on a prolonged drought. The relatively large number of deaths appeared to be primarily due to a delay in obtaining proper treatment.

A flu-like disease, thought to be Chikungunya, afflicated up to 50 percent of the population (more than 300,000 people) of Pontianak, West Kalimantan (Borneo) this spring. The febrile illness lasts 7 to 10 days, leaving its victims listless, sleepy, and sluggish. No fatalities have occurred, and the disease is reportedly spreading eastward into the interior of West Kalimantan. Dr. Gunawan Hadibrata of the West Kalimantan Provincial Office of the Ministry of Health stated that "...this is Chikungunya, although we are still waiting for virological and serological confirmation from Jakarta."

Rabies in humans has been reported from the Sangihe-Talaud (formerly Sangir Talaud) Archipelago, North Sulawesi, and West Java. Exact figures were not given, but indications were that at least a few deaths had occurred in Sangihe-Talaud and North Sulawesi. Figures for West Java included six deaths and some 4,000 incidents of dog bites in 1982. Densely crowded conditions and an increasing dog population were factors cited by Dr. Dadi S. Argaduredja, of the West Java Regional Office of the Department of Health.

August - The seasonal increase in the number of cases of cholera, variety El Tor, began in May in the Pidie Regency of Acah. Contaminated drinking water was the source for the outbreak, which affected several hundred victims. Cholera continues to be widespread throughout Indonesia and represents a significant health threat to the population and visitors to the region.

An outbreak of dengue fever, including dengue shock syndrome, occurred in Jatinegara District of East Jakarta. Worst hit was the Cipinang Besar subdistrict.

A rabies epidemic involving wild dogs was reported at several villages in Tabalong Regency, South Kalimantan (Borneo). Thirty-seven people bitten by dogs, assumed or proven to be rabid, have undergone prophylactic immunizations. Efforts to quell the epidemic included the quarantining of domestic and caged animals.

September - Additional figures are now available on the outbreaks of gastroenteritis that have afflicted many areas of Sumatera this year (see DST 1810S-001-83 RPT 6 and 7). The majority of the outbreaks occurred May through July, with at least 4,000 cases and 141 deaths. These figures probably reflect an underestimate of the severity of the epidemic because a large number of cases go unreported.

Two malaria outbreaks in the Maluku Islands had been reported as of July. Affecting principally Corong and Gorom Islands, "thousands" of cases and over 80 deaths have occurred.

Dengue fever continues to affect many areas of Java (see DST 1810S-001-83 RPT 7 and 8). Although an "appalling number" of deaths has been reported, official figures total 35 deaths in 810 cases.

An "epidemic" of chikungunya that began in April has been reported from the Kayu Manis area of east Jakarta. No case figures were given.

New reports of rabies from Java, South Kalimantan (Borneo) and South Sulawesi (Celebes Islands) indicate "at least 200" people have been bitten by suspected

rabid dogs since mid-June. Six human deaths were reported from South Kalimantan alone. (See DST 1810S-001-83 RPT 7 and 8).

November - Anthrax has caused approximately 220 deaths since July in Jayawijaya Regency, according to the Indonesian newspaper "Sinar Harapan." The deaths were attributed to the consumption of infected pork.

December - Health officials in South Kalimantan instituted additional rabies control measures during September. Animal traffic to the affected areas was temporarily halted until additional pet vaccine could be obtained. City governments have instructed police and animal service personnel to destroy dogs found running free. The government requested citizen cooperation in moving dead dogs to the roadside and reporting the location to health officials for appropriate handling and disposal.

The Indonesian Tuberculosis Eradication Association estimated that 400,000 Indonesians have tuberculosis (2.5 cases per 1,000 population); most of the cases are from North Sumatra.

JAPAN

October - Two cases of cholera in travelers who returned recently from the Philippines were reported in Tokyo this month. One person was hospitalized for treatment and the other is being sought for follow-up treatment. Eight cholera cases have been reported from Tokyo this year, all imported.

MALAYSIA

July - Cholera, previously reported from Sabah and Perak Provinces (DST-1810S-001-83 RPT 6) has occurred in Kelantan Province. Five deaths and over 300 confirmed and/or suspected cases have been reported since the outbreak began in early April. Another outbreak, beginning in mid-June in the neighboring state of Trengganu, has affected 50 persons (no fatalities). According to a health authority spokesman quoted by the Bernama News Agency, the outbreak has been brought under control.

Dengue fever appears on the increase in Sarawak, with at least 57 cases reported in the Lawas District as of 27 June. An earlier report indicated 22 cases in Sarawak in May, compared with 9 cases for the comparable period in 1982. The State Medical Department and local authorities reportedly were stepping up mosquito surveillance and abatement programs in the high-risk areas.

Fifty cases of infectious hepatitis occurred in Melaka State in June.

August - A strain of drug resistant gonorrhea has infected patients in Pasar Mas and other towns in Kelantan District. Physicians report that they have been unable to determine an effective treatment for this disease. The high cost of effective antibiotics probably has limited their availability. Reports of dengue fever, cholera, and malaria indicate that these diseases continue to affect much of the population.

September - According to a Health Ministry report, cholera outbreaks have now claimed over 1,800 victims, including 28 deaths. The majority of cases have been from Sabah and Kelantan. A related report indicated that water samples from three rivers in Trengganu State were found positive for cholera.

Gonorrhea has "reached epidemic proportions," according to Deputy Health Minister Datuk K. Pathmanaban. Officially reported cases have increased from 2,795 in 1980 to 5,188 in 1982, and these are believed to represent only a small fraction of the true total. Another Health Ministry spokesman indicated that some 60 percent of cases tested were sensitive to penicillin treatment. (See DST 1810S-001-83 RPT 8).

November - Seven new cases of dengue fever were reported from Sarawak on 23 August 1983, bringing to 152 the number of cases for the year. The cholera epidemic continues in Malaysia. By 5 September 1983, 443 confirmed and 651 suspected cases had been recorded.

December - The Trengganu Medical and Health Services Department reported more than 500 cases of conjunctivitis during October. The etiology was not reported, but enterovirus 70 was responsible for similar regional epidemics in 1981.

The number of dengue fever cases in Sarawak through mid-November rose to over 400. The country total was not reported, but the disease is widespread throughout Malaysia and Indonesia.

A total of 774 cases of malaria was reported for the Sarawak region by the middle of November. This is a slight decrease from the same period in 1982, when 958 cases were reported.

NEPAL

July - Conflicting reports exist regarding an outbreak of meningitis that began several months ago in the Kathmandu Valley. While it is believed that at least 74 deaths had occurred by early May, fewer than 10 were officially reported. Measures taken to combat the outbreak included temporary closure of all schools, including university campuses; procurement of additional hospital beds to alleviate overcrowding; and threatening food vendors with "serious action" if they are found selling contaminated or adulterated foods. The latest available report indicated that the outbreak was on the decline.

August - An outbreak of hepatitis (serotype unspecified) occurred in the village of Besi, (Ramechap District). On 16 June, 107 patients were jaundiced and acutely ill. A non-A, non-B viral strain from a common water source was found to be the agent responsible for other recent hepatitis epidemics in the capital city of Kathmandu.

September - An outbreak of gastroenteritis in an area 75 km northwest of Kathmandu reportedly has claimed at least 71 lives, with over 140 patients still receiving treatment as of mid-August.

Serological studies indicate that Japanese B encephalitis is on the increase in Nepal, although reliable statistics on human involvement frequently are lacking. A favorable climate and terrain, and the presence of known vectors and amplifying hosts, present an almost ideal "ecological substrate" for the disease. The season of greatest risk appears to be from July to October.

October - The Nepalese Government has begun a rabies control program in Kathmandu Valley. Dogs are being vaccinated and tagged, strays are being destroyed. Reportedly, 5,000 people receive postexposure treatment for rabies annually in Kathmandu Valley. Approximately 100 people in Nepal die each year from rabies. In the past, control programs have failed because they lacked public support.

PEOPLE'S REPUBLIC OF CHINA

August - Epidemics of nonbacterial acute diarrheal disease have occurred in the mining districts of Lanzhou in the northwest and Fuxin and Jixi in the northeast since November of 1982. The disease is described as highly contagious. Symptoms include diarrhea, borborygmus (intestinal gas), and abdominal pain. Patients are afebrile or exhibit below normal temperatures. Tens of thousands of people have been infected. Preliminary evidence suggests a virus as the causative agent of the disease, currently termed "miner's diarrhea." Small round viral particles (about 52 nanometers in size) were found in 80 percent of patient stool specimens. The viral particles were coagulated by serum from recovering patients, but not by sera from patients in the acute stage of the disease or from people not infected.

October - An epidemiological survey (1966-1980) of bacillary dysentery among troops stationed in Sichuan revealed a general downward trend in annual incidence. During the period from 1966 to 1970, the average annual incidence was 18 per 1,000; during the 1976 to 1980 period, the average annual incidence was 11 per 1,000. Although the disease occurs year-round, its incidence peaks from June to October; this period accounts for 60 percent of the annual number of cases.

November - World Health Organization statistics for the People's Republic of China indicate that 2,040,000 Chinese were stricken by malaria during 1982; this was 33 percent fewer than in 1981. The incidence of filariasis also had dropped. The incidence of intestinal diseases fell by 80 to 90 percent in 40 counties in Hebei Province, where 80 percent of the population now has access to potable drinking water.

PHILIPPINES

July - The incidence of typhoid fever remained below the 5-year median at the end of May, according to Dr. Julio P. Valeva, Chief of the Disease Intelligence Center (DIC), Ministry of Health. Eleven cases were reported during the last week of May, all but one from Caloocan City and Manila.

An epidemic claiming several lives, reportedly due to the El Tor strain of cholera, has occurred on Polillo Island, Quezon. According to Dr. Virginia

Basaca Sevilla of the San Lazaro Hospital, the deaths were caused by "V Ogawa cholera el tor." Upon inquiry from the DIC, Jose Ybunez, Region IV Health Director, stated that cases suspected to be cholera el tor had not been reported. He gave no casualty figures and reported that the situation was not serious and that medical supplies had been sent to Quezon.

August - Four people died and 439 were hospitalized after eating anthrax-infected carabao meat (water buffalo) in Manila. The carabao was illegally slaughtered, distributed, and sold. Much of the meat sold in the Philippines does not receive proper inspection.

The Ministry of Health reported an increased incidence of typhoid fever in Manila and vicinity. Cases were reported in Caloocan City, Manila, Pasay City, Navotas, Makati, Valenzuela, and Paranaque.

September - An outbreak of dengue fever was announced recently in Iloilo City. At least 70 people became ill with the disease and there were four deaths (presumably dengue hemorrhagic fever).

Several outbreaks of acute diarrheal disease also were reported; the majority of cases were in Lucerna City and Roxas City. Etiological agents were unspecified except in the hinterland barangay of Lusaran in central Cebu where cholera (El Tor biotype) was confirmed.

October - Dengue fever with associated hemorrhagic fever syndrome continues to spread throughout the Philippines. One hundred and forty-five cases, including four deaths, were reported from Iloilo Province on 29 August. All four deaths and 132 of the 142 cases were reported from Iloilo City.

November - An outbreak of encephalitis (etiology unspecified) occurred on Caringo Island near the end of September. Nineteen persons were hospitalized and two of them died. Most of the cases were children between the ages of 3 and 14.

Gastroenteritis was reported to be on the rise again. In San Lazaro Hospital in Manila, 531 cases were reported between 11 September and 17 September. Several deaths were reported in Cebu and Pampanga.

December - There were 334 cases of pneumonia (of multiple etiologies) admitted to the hospitals in the Manila metropolitan area during the third week of October. This was a slight increase from the previous week's total of 291, and much higher than the 5-year average of 173 new cases per week. The majority of the cases were reported as bronchiopneumonia of viral origin.

Dengue fever with associated hemorrhagic fever syndrome continues in the Manila metropolitan area with over 40 new cases each week. This is an unusually high rate for October, and may be indicative of a new strain in the area.

REPUBLIC OF KOREA (South Korea)

August - Quarantine stations have been alerted in response to the Southeast Asian cholera pandemic. The Ministry of Health has ordered health officials and quarantine officers to check thoroughly passengers, toilets, water, and food aboard airlines and ships, especially those from regions where cholera either has been reported or is suspected to have occurred.

October - Twelve people have died and 29 others are receiving treatment after contracting Japanese B encephalitis, according to the Ministry of Health and Social Affairs. A total of 105 cases of Japanese encephalitis has been reported this year in Korea. Cholla Namdo reported 55 cases; Cholla Pukto, 16; Kyongsang Namdo, 14; and Seoul and surrounding areas, 8. The 12 remaining cases are scattered throughout the country.

Four cases of hemorrhagic fever were reported recently. The Ministry of Health and Social Affairs issued a warning concerning the possibility of the disease spreading throughout the country. The characteristics of the disease described indicate that the fever is probably Korean hemorrhagic fever, which is endemic to the country.

November - Japanese B encephalitis has stricken 119 South Koreans, and 12 others have died from the disease in 1983. The incidence is down from last year, when there were 1,048 cases and 32 deaths during the same period.

SRI LANKA

July - Infective hepatitis and typhoid fever reached epidemic proportions in areas of Colombo in late May. The outbreak appeared directly related to a filtration plant malfunction at the Kalatuwawa reservoir. According to N. D. Peiris, Chairman of the National Water Supply and Drainage Board, the malfunction resulted in the daily release of 20,000,000 gallons of contaminated water into the city's distribution system. He warned all residents to drink only boiled water until repairs could be effected.

September - A countrywide epidemic of bacillary dysentery currently is underway. During June, approximately 3,500 cases were recorded including 151 deaths. Shigellosis is a serious endemic problem for Sri Lanka. The most recent epidemic resulted from drought conditions and the pursuant degradation of personal hygiene and sanitation. Diarrheal disease is the number three killer in Sri Lanka, claiming 40 lives daily.

October - A renewed upsurge of malaria was reported from the Kurunegala District. No new cases had been reported since the previous epidemic in June and July. Most of the cases come from villages along the Maha Oya River which is an endemic area.

December - According to American Embassy personnel, most Americans contract symptoms consistent with dengue fever soon after arriving in Sri Lanka. According to medical authorities, all four dengue serotypes are endemic.

THAILAND

July - Dr. Natda Siyaphai, Director-General of the Communicable Disease Control Department, has issued a public health warning on the existing health risk posed by dengue hemorrhagic fever. He stated that through the end of June, over 3,000 cases and 26 deaths were due to this disease.

August - As of 1 June 1983, 91 cases of cholera, with 20 deaths, had been recorded from 12 provinces. Cholera cases were reported in Bangkok Metropolitan, Samut Prakan Province, Samut Songkhram Province, Nonthaburi Province, Pathum Thani Province, Chainat Province, Nakhon Nayok Province, Nakhon Si Thammarat Province, Pattani Province, Narathiwat Province, Chon Buri Province, and Nakhon Ratchasima Province.

Sexually transmitted diseases are extremely prevalent in Bangkok, including drug resistant strains of gonorrhea and herpes virus infections. Fifty-two percent of the cases of gonorrhea are currently of the "super" variety. Antibiotics and other pharmaceuticals are sold openly in drug stores, therefore self-medication is utilized as the cheapest and most expedient method for treatment. These practices greatly facilitate the development of resistant strains. The government has chosen to ignore, rather than adopt, programs which might reduce the incidence of disease, fearing loss of badly needed revenue.

November - An Australian health authority has stated that some of the falciparum malaria along the Thailand-Kampuchean border is resistant to all antimalarial agents used by Australia. These drugs include fansidar, chloroquine, and maloprim. The finding has discouraged Australia from committing military troops to the area until an effective antimalarial agent is discovered.

December - The strain of cholera causing the outbreak reported during June and July has been identified as El Tor biotype Inaba serotype. The outbreak involved 12 provinces including the Bangkok Metropolitan area.

Liver flukes are an important public health problem in Thailand. The Faculty of Tropical Medicine of Mahidon University treated over 200 cases each month during the first half of 1983. The faculty estimated that up to six million people in the northeast regions have the disease. The species of fluke was not reported but is suspected to be Fasciola gigantica.

SECTION IV

EUROPE

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GENERAL

October - Reports of new cases of acquired immune deficiency syndrome (AIDS) from Finland, Norway, and Sweden raises to 14 the number of countries in Europe where AIDS is known to have occurred. The other eleven countries reporting are Austria, Belgium, Denmark, France, Italy, Ireland, the Netherlands, Spain, Switzerland, the United Kingdom, and West Germany. The disease appears to be spreading rapidly around the world. The increased number of countries reporting cases is probably influenced by an informed public and better diagnostic techniques.

BELGIUM

July - Eleven deaths from Acquired Immune Deficiency Syndrome (AIDS) have been recorded in Belgium. The deaths include one Greek national, eight African nationals, and two Belgians. This is the first known report of a Greek citizen contracting AIDS.

CYPRUS

July - The resurgence of venereal diseases in young Cypriots is of great concern in the Cypriot medical community. The most common venereal diseases are gonorrhea and syphilis. However, there has been a noticeable rise in the number of herpes cases. Reportedly, between 20 and 30 venereal disease cases are recorded weekly.

DENMARK

August - Four deaths linked to acquired immune deficiency syndrome (AIDS) were reported during July. The Health Agency of Denmark has initiated educational programs to orient the medical profession to this new disease and is requiring that all cases be reported as part of a surveillance program. The government also is requesting that persons in the AIDS high-risk groups refrain from donating blood. A similar request has been made in several other countries where AIDS cases have appeared.

FRANCE

December - A typhoid fever outbreak was reported from the Var Department in southern France. A total of 27 cases occurred during the last 2 weeks of November. The source of the outbreak was not identified.

NORWAY

October - Norwegian health officials are reporting a 50 percent increase in the number of meningococcal meningitis cases compared to last year. At the current rate of infection, a total of 500 cases can be anticipated in 1983. Most patients are children less than 1-year-old and adolescents in the 14 to

17-year age group. Mortality is running at approximately 11 percent (this will result in approximately 50 deaths in 1983).

PORTUGAL

July - The rate of pulmonary tuberculosis has been on the rise for the last 3 years. There were 6,635 new cases recorded in 1979, 6,873 in 1980, 7,249 in 1981, and 7,658 in 1982. The rate has increased from 68 per 100,000 population in 1979, to 76 per 100,000 population in 1982, indicative of overcrowded living conditions.

November - During the first 6 months of 1983, 132 cases of typhoid fever were reported to the National Institute of Health. Only 133 cases were reported for the entire year of 1982. Fifty-five of the cases in 1983 occurred in Barreiro, most of them during a May outbreak.

SPAIN

August - An outbreak of "Legionnaire's pneumonia" affected 10 percent of the residents of Valencia. Twenty-three persons were hospitalized and one death was reported. A similar outbreak occurred at the military residence (post) in Zaragoza. This outbreak caused the death of six military officers.

September - Since its outbreak, 95 cases of Legionnaire's disease had been reported throughout Spain as of mid-August 1983. Of these, 40 cases, including 6 deaths, occurred at the military residence of Zaragoza; 35 cases, including 1 death, in the locality of Luchente and Valencia; and 20 cases in other areas of the country.

An outbreak of typhoid fever was confirmed in the psychiatric hospital in Murcia. To date, 16 cases, including 5 deaths, have been reported. Health officials suspect a contaminated water supply as the source of the outbreak. An unknown gastrointestinal condition has affected 100 soldiers stationed in Madrid. All cases were treated at the military infirmary and none required hospitalization. A contaminated water supply also is suspected as the source of this outbreak.

December - Three new cases of "Legionnaire's Disease" were diagnosed in officers residing at the military residence of Castillejos in Zaragoza. The residence, used to house Spanish military officers, has been the focus of an epidemiological investigation to determine the source of the Legionella organism. The residence reopened in mid-October and the current cases stayed there shortly thereafter.

Twenty-six school children and one professor from the National School Rosalia de Pastia of Pontevedra were treated for typhoid fever. An additional 18 cases are suspected. The source for the outbreak has not been identified.

Recent statistics indicate that 74.1 percent of all imported cases of malaria in Spain came from Africa and 46.9 percent of the total came from Equatorial

Guinea. Many of these cases occurred in the guest workers who came to Spain to for employment.

TURKEY

July - Recent information indicates that an outbreak of typhoid fever has occurred in Istanbul. Contaminated drinking water is suspected as being the source for the outbreak. Seven persons were hospitalized and another 100 persons treated and released. Contamination of the water supply in Istanbul has become a major problem over the past several years. Officials fear that a major outbreak of typhoid fever would have a disastrous effect on the tourist trade.

September - There has been an increase in the number of animal rabies cases in various areas of Turkey. Cases were reported from Kastamonu, Usak, Kayseri, Izmir, Istanbul, and Edirne. Villages near Kayseri and Edirne were quarantined in an effort to stop the spread of the disease. No human cases have been reported; however, the Ministry of Health has issued a warning to the public to avoid contact with wild animals and suspected rabid animals.

October - Approximately 1.5 million people were screened for malaria during the first 6 months of 1983. The screening results suggest a 24 percent decrease in the number of cases recorded during the same period in 1982. The World Health Organization reported 56,000 cases in 1981. Over 132,000 homes where malaria cases were found were treated with insecticides against mosquitoes. Spraying alone is of limited value in controlling the spread of malaria. In order for a malaria eradication program to be successful, breeding areas for mosquitoes also must be eliminated and all active human cases must be effectively treated.

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SECTION V

MIDDLE EAST

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BAHRAIN

November - On 18 October, the Ministry of Health reported that only 45 cases of typhoid fever had been recorded thus far in 1983, compared to 212 for the same period of 1982. Many of the cases were believed imported. Health authorities attribute the decrease to the construction of a modern sewer system, improvement in water supplies, and the vaccination of children beginning school.

EGYPT

July - Acute hepatitis non-A, non-B was reported in Cairo residents. Of 110 patients admitted with jaundice to the Abbassia Fever Hospital in Cairo, 49 had acute hepatitis A infection (positive for anti-A specific 1 gM), 28 had hepatitis B infection (positive for HBsAg) and 7 had both markers. Of great interest, however, was the finding that the remaining 26 patients had no markers for either A or B virus infections. None of the 26 patients lacking both markers gave a history of previous blood transfusion or parenteral injections. Thus, the possibility of a fecal-oral or waterborne infection must be considered in these cases. Details of this report are contained in "Transactions of the Royal Society of Tropical Medicine and Hygiene," Vol. 77, No. 3, 382-383, 1983.

IRAQ

September - Several typhoid fever and malaria cases have been recorded in the Baghdad area.

ISRAEL

August - Ten residents of the El'Ad settlement in the southern portion of the Golan Heights are receiving preventive rabies treatment. The persons were believed exposed to rabies infected animals. Although rabies is generally a major health problem throughout the Middle East, it has not been a serious health threat in Israel.

September - Ten residents of the El'Ad settlement in the southern part of the Golan Heights, are receiving treatment following exposure to rabid domestic animals. The cattle at the settlement were infected by a rabid dog and have been quarantined. This is the second outbreak in the Golan Heights area during August.

October - An outbreak of a tickborne spotted fever was reported from the Hefer Valley settlements. According to health officials, the outbreak continues to spread to more of the settlements in the valley. Approximately 40 percent of all cases in Israel are reported from these settlements. The disease characteristics are consistent with boutonneuse fever, a rickettsial disease which is endemic to the area.

An infectious hepatitis epidemic has broken out in northern Israel. The disease spread from the village of Tur'an, near Nazareth, to the settlements of Migdal Ha'emeq and Upper Nazareth.

The seventh case of acquired immune deficiency syndrome (AIDS) was reported in Israel. Of the six previous cases, four were homosexual males and two were hemophiliacs. The latest case is being attributed to a contaminated blood transfusion received by the patient 3 years ago. AIDS is now a reportable disease in Israel.

Two cases of cholera were reported from the Gaza area on the 24th of September. Both cases were treated at a local hospital and sent home for convalescence. These are the first reported cases since October 1982.

The population of East Jerusalem suffered twice as many cases of gastro-intestinal diseases this year compared to last year, according to health officials. Victims were encouraged to use a salt and sugar solution for oral rehydration.

November - Five cases of meningitis were reported from the Shluhot Kibbute in the Bet She'an valley. All cases were among children living in the kibbutz (collective farm). Preventive measures have been instituted by health authorities.

An outbreak of infectious hepatitis was reported from northern Israel. The focus of the outbreak is the village of Tur'an, near Nazareth. The disease has spread to two additional settlements, Migdal Ha'emeg and Upper Nazareth.

December - An outbreak of infectious hepatitis has affected dozens of children in the village of Tur'an. Personnel from the Epidemiology Department of the Ministry of Health were sent to the village to help isolate the source of the outbreak. This is the second outbreak in the village this year according to health sources.

KUWAIT

July - Reports from the Minister of Health indicate that Kuwait is experiencing a major health problem with herpes, with approximately 15 new cases reported monthly. Since this problem became evident, over 500 cases have been reported. In general, 20 percent of the adult population showed antibody to herpes Type 2 virus, the prevalence reaching 60 percent of the population among lower socioeconomic groups.

LEBANON

July - Diarrhea has been the major source of morbidity in the American Marine contingent of the multinational peacekeeping force in Beirut. Unsanitary conditions in swimming areas, latrine facilities, and food sources have all been correlated with outbreaks. Etiological agents isolated from specimen cultures included enterotoxigenic Escherichia coli, Campylobacter sp, Salmonella sp, and to a lesser extent, Shigella sp, and Entamoeba sp.

Preliminary results indicate that Campylobacter is a more important etiologic agent for acute diarrheal disease (ADD) in the Middle East than previously thought. Viruses also play some role in ADD, but identification of specific causative agents has not been accomplished. Recent epidemiologic surveys indicate that viruses responsible for ADD are more prevalent in areas where unsanitary conditions exist.

September - Fifteen cases of typhoid fever were reported from Shhim. Physicians blame a shortage of water and a lack of hygiene for the outbreak. Typhoid usually is associated with inadequate sanitation facilities and questionable water supplies, conditions concomitant with poverty, war, or natural disaster.

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SECTION VI

OCEANIA

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AUSTRALIA

July - Five cases of confirmed Legionnaire's disease have been reported from the State of Victoria since March. Three of these patients have died. Prior to this report, only 30 cases, with 1 death, had been diagnosed in Victoria since 1978. These new cases could signal the beginning of a major outbreak. Epidemiologists continue to investigate these apparently unrelated cases.

A bacterial infection has forced the closing of the intensive care ward of the Royal Alexander Hospital for Children at Camperdown. The suspected bacteria is methecillin-resistant Staphylococcus aureus. The incidence of this bacterial infection increased 500 percent between 1980 and 1982. A recent outbreak forced the closure of the intensive care and surgical wards at St. Vincent's hospital in Sidney and has affected the operations at the Liverpool Hospital in Sidney.

November - Influenza was reported from three states in Australia. In the state of New South Wales, which was hit the hardest, worker absenteeism has been running at 9 percent for at least 6 weeks. The usual absentee rate is 3 to 4 percent. In Western Australia State, the school age population is the hardest hit group. In one school, the 10th school year group had an absentee rate of approximately 30 percent. Cases also have been reported in the state of Queensland. Philippines-A influenza virus was isolated from several patients.

December - Two new cases of acquired immune deficiency syndrome (AIDS) were reported from Victoria, Australia, bringing to five the total number of cases identified in Australia. One death was recorded earlier this year.

NEW ZEALAND

August - A major influenza epidemic is spreading throughout New Zealand. The virus was identified as H1N1, related to a Russian strain responsible for the worldwide pandemic in 1977. The Hong Kong strain of influenza virus was isolated in several cases in Wellington. Initially, most of the cases were in school children, but many adult cases now are being reported.

November - Three new cases of meningitis were reported by the Whangaparaoa Health Department, bringing the reported case total in this outbreak to seven. Health officials stress that the outbreak is unusual. The etiological agent has not been identified.

Six additional cases of hepatitis were reported from the Christchurch Health Department. The total number of cases for the outbreak is 14. Health officials have not been able to determine the source of infection.

December - Twenty-six cases of meningitis have been reported in New Zealand. This exceeds the number of cases reported each year since 1980.

The number of hepatitis cases from an outbreak at Christchurch had risen to 19 by the first of October.

SOLOMON ISLANDS

October - In the Western Province there were 3,046 cases of malaria reported between January and June 1983. Between July and December 1982, 2,065 cases were reported. Approximately 25 percent of the cases were falciparum, the remainder were vivax.

SECTION VII

EPIDEMIOLOGICAL NOTES

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July - Until the mid-1940s, almost all citizens in Baghdad between the ages of 3 months and 10 years contracted cutaneous leishmaniasis. The incidence of the disease began to decline in the latter half of the 1940's, continued to decrease until the mid-1950's, then leveled off. Possible reasons for the decrease in the disease are: 1) a decrease in the sandfly vector population as a result of eradication programs; 2) an improvement in sanitation; 3) a decrease in the number of stray dogs (a common reservoir of infection); and 4) a reduction in the number of houses daubed with mud (this provides suitable resting and ovipositing places for the sandflies).

From the mid-1960s, the incidence rate of the disease in Baghdad began to increase, rising sharply to 3,060 cases in 1981. Suspension of the malaria eradication program allowed the sandfly vector population to rebuild.

The incidence of cutaneous leishmaniasis in Baghdad during the period 1966 to 1972, and 1981 was:

YEAR	NUMBER OF CASES	YEAR	NUMBER OF CASES
1965	885	1970	1,012
1966	693	1971	902
1967	750	1972	1,048
1968	851	1981	3,060
1969	946		

Leishmaniasis is most prevalent is Baghdad, followed by Mosul. The basins of the Tigris and Euphrates Rivers are also high prevalence areas. Several areas in these basins once had an extremely high incidence of the disease, but the incidence has declined in recent years. The disease rarely occurs in the mountainous areas near the Syrian and Turkish borders.

Leishmaniasis shows definite seasonal fluctuations. Incidence begins to increase in September and October, peaks in January and February, then declines in March. The lowest incidence occurs in July and August.

While incidence of visceral leishmaniasis is relatively low in Iraq, Baghdad and Mosul were confirmed as endemic areas in 1954. In recent years, approximately 100 cases have been reported annually in the Baghdad vicinity. Most of those infected are between the ages of 4 months and 6 years, with two-thirds of all cases under 2 years of age. Very few cases are reported after 8 years of age. Areas most severely affected by the disease are Baghdad and the rural areas within 10 to 20 km of the city. Within this radius the most heavily affected areas are Ad Dawrah within the city of Baghdad, Abu Ghurayb to the west of the city, and Salman Pak to the south of the city. The peak incidence occurs between December and May.

Decisive preventive and therapeutic methods have not been established for either form of leishmaniasis and control programs have not been effective in

controlling the sandfly vector. It does not appear that the disease will be eradicated in Iraq in the near future.

August - The incidence of scrub typhus in Japan has shown a pattern of gradual decline from the early 1950's through the mid-1970's. This decline has been largely attributed to the introduction of the antibiotics chloramphenicol and tetracycline in 1950. However, their use as generally prescribed anti-rickettsial agents has virtually ceased since 1975. This circumstance, combined with an increased awareness of the so-called "new type" scrub typhus appears related to the steady increase in number of cases since 1976 (see table). The "new type" scrub typhus, characterized by a spring-autumn pattern of occurrence, has been reported mainly from Shizuoka and Tokyo prefectures in the past. This appears to be changing. As an example, Miyazaki and Kagoshima prefectures accounted for 2.6 percent of scrub typhus cases in Japan from 1970 through 1978, but 55.2 percent from 1979 through 1982. It is uncertain how much of the apparent increase reflected in the attached table is due to the disease becoming more widespread, or to better reporting of cases.

Annual Incidence of Scrub Typhus
in Japan
(1950-1982)

YEAR	NUMBER OF CASES	YEAR	NUMBER OF CASES
1950	195	1967	3
1951	339	1968	1
1952	385	1969	3
1953	367	1970	6
1954	187	1971	11
1955	191	1972	7
1956	179	1973	6
1957	80	1974	5
1958	42	1975	5
1959	47	1976	29
1960	85	1977	53
1961	100	1978	68
1962	68	1979	107
1963	39	1980	236
1964	19	1981	382
1965	7	1982	504
1966	7		

September - Dengue Fever in the Americas, 1982 - Dengue fever activity in the Americas has remained at a relatively high level in recent years with epidemics of all four serotypes occurring in various parts of the region. The importance of dengue as a public health problem in the Western Hemisphere was underscored in 1981 by the epidemic of dengue hemorrhagic fever in Cuba, in which over 350,000 cases and 159 deaths were reported. In 1982, widespread

epidemic dengue activity was reported from Surinam in the east to Mexico in the west. Table I summarizes the countries reporting dengue fever, the month it was reported in those countries, the approximate number of cases, and the known serotypes involved. Relatively large numbers of cases were reported in 1982 in Colombia, El Salvador, Mexico, and Puerto Rico. In addition, epidemics also occurred in Belize, Brazil, Surinam, and possibly Honduras. Overall, 49,280 cases of suspected dengue fever were reported from the Americas in 1982. However, there was a lack of reporting by some countries, and probable underreporting by all. For example, large epidemics with thousands of cases occurred in both Paramaribo, Surinam, and Boa Vista, Brazil. Thus, the number of cases of dengue fever in the region was probably much higher than estimated. Available information indicates that Mexico had extensive epidemics in 1982, where, for the first time in many years, transmission occurred in cities in the western part of the country. Although the data are limited, most of the epidemic activity in Mexico was apparently due to dengue 1. The Boa Vista epidemic in northern Brazil was the first report of dengue transmission in that country in 50 years. Both dengue 1 and 4 were isolated. The epidemic of dengue 4 in Surinam began in January 1982, and a serological survey carried out in March suggested an infection rate of at least 10 percent in Paramaribo, the capital city. Colombia and El Salvador also experienced large epidemics, but little information is available from those countries. The Colombia epidemic was caused by dengue 4, and serological data from the Centers for Disease Control laboratory suggest that this serotype also was present in El Salvador. Figure 1 and the last column of Table I show the known distribution of dengue viruses in the Americas in 1982. Virus serotype distribution was based on both virologic and serologic results. Dengue 4 was the most widespread and was the predominant dengue serotype in the region during 1982, although dengue 1 was still being transmitted in some countries. Dengue 2 also had a widespread distribution, with serological evidence of transmission in Tamaulipas, Mexico in the west and virological evidence for transmission in both Jamaica and in Trinidad in the eastern part of the region. Clinically, the disease in most countries was of the classical type. There were, however, scattered cases of severe and fatal dengue reported from several countries. In Surinam, three cases of dengue shock syndrome were reported by health officials, and a case of fatal dengue encephalopathy in Puerto Rico was confirmed by isolation of dengue 4.

Table I. Reported Cases of Dengue Fever in Geographic Areas of the Caribbean Basin, Central and South America, 1982

GEOGRAPHIC AREA	DATE OF LAST REPORTED CASE	CUMULATIVE TOTAL FOR YEAR	VIRUS SEROTYPE
Antigua	October	25	
Barbados	December	99	Dengue 4
Belize	December	482	
Brazil	May	?	Dengue 1 & 4
Colombia	October	6,537	Dengue 4
Dominican Republic	November	435	Dengue 4
El Salvador	December	5,095	Dengue 4
Grenada	November	7	
Guadeloupe	December	Sporadic	
Guatemala	December	33	
French Guiana	December	Sporadic	Dengue 4
Haiti	December	215	Dengue 1
Honduras	December	1,217	
Jamaica	December	21	Dengue 2 & 4
Martinique	December	Sporadic	Dengue 4
Mexico	December	30,904	Dengue 1 & 2
Puerto Rico	December	4,141	Dengue 1 & 4
St. Lucia	November	31	
St. Vincent	September	1	Dengue 1, 2, & 4
Surinam	December	25?	Dengue 1 & 4
Trinidad & Tobago	December	12	Dengue 1, 2, & 4
TOTAL		49,280	Dengue 1, 2, & 4

October - Pakistan, with just under 95 million people, is the ninth most populated country in the world. The population is increasing rapidly, with an annual growth rate of 2.9 percent. Life expectancy is low (51 years), and the infant mortality rate is high (126/1000 live births).

The standard of living is low. Nationwide there is poverty, overcrowded and inadequate housing, a lack of proper sewage disposal, and shortages of potable water. Under these conditions, infectious diseases affect most of the populace. Prevalent diseases include most dysenteries and enteric diseases, tuberculosis and other respiratory diseases, typhoid and paratyphoid fevers, helminthiasis, meningococcal infections, sexually transmitted diseases, childhood diseases, and nutritional disorders. Malaria is endemic countrywide, and drug-resistant falciparum strains are suspected along the coast. Trachoma is a serious problem throughout the country. A major epidemic of acute viral conjunctivitis occurred between June and August 1981; enterovirus 70 was believed to be the primary agent. The outbreak appeared to start in Karachi, then spread virtually countrywide. This was the third outbreak since 1968. There were no reports in 1982 and none so far in 1983. The principal causes of death in the adult population include malaria, tuberculosis, cardiovascular disease, and cancer.

Available disease statistics are incomplete, inaccurate, and unreliable because of an ineffective surveillance system. In addition, accurate reporting of epidemiological data is hampered by a lack of qualified personnel and by incorrect diagnoses.

Although Pakistan is a world leader in exporting physicians and medical materiel, the health status of its people is poor and is not likely to improve soon. Pakistan's medical care system is seriously deficient. There are shortages of medical personnel, hospitals and clinics are poorly equipped, supplies of drugs and medical materiel are inadequate, and services are severely maldistributed. The public health services are not adequate to meet health needs. Urban areas are served much better than rural areas, but standards are still far below those of Western societies. The medical infrastructure will continue to be strained by problems such as: (1) high population growth rate; (2) low nutritional levels; (3) inadequate distribution of services; (4) low level of health consciousness; (5) inadequate environmental sanitation; (6) lack of protected drinking water; (7) high cost of health care; and, (9) insufficient equipment and staffing for existing facilities.

November - Disease Information for El Salvador - El Salvador is typical of Central American countries, having a high annual rainfall (150 to 200 cm), a tropical climate, and a poorly developed socioeconomic structure. Water supply and sewage waste disposal are inadequate throughout the country. Most Salvadorans do not have access to potable water. Food is poorly distributed to the population and is often contaminated by unsanitary handling procedures. These conditions, exacerbated by many years of government instability, favor increased incidence of communicable diseases.

Malaria is a serious endemic disease in El Salvador. A substantial increase in the number of cases reported occurred between 1977 and 1980 (1977, 32,000

cases; 1980, 96,000 cases). Although official statistics are unavailable, the percentage of the population affected has undoubtedly continued to increase. Chlorquine-resistant Plasmodium falciparum malaria has not been reported.

Leptospirosis is highly prevalent throughout Central America. There are extensive coastal swamp areas in El Salvador which provide ecological conditions which favor survival of the leptospira organisms for extended periods of time. The symptoms of leptospirosis mimic those of many other diseases. This disease may be the cause of much of the undiagnosed illness in Central America.

Although dengue epidemics occur frequently in the Americas, the pandemic of dengue serotype 1 which began in 1977 ushered in a period of extreme dengue activity. The first reported occurrence of dengue hemorrhagic fever in the Caribbean region followed introduction of dengue serotype 4 into the area in 1981. The number of dengue cases in El Salvador peaked in 1975 when 23,146 cases were reported officially. The number of cases decreased to 1,651 in 1980, but increased to over 5,000 in 1981 and 1982. The primary serotype identified in El Salvador in 1982 was serotype 4.

Acute hemorrhagic conjunctivitis (AHC) also has been of recent concern in Central America. A pandemic of AHC spread rapidly through the tropical regions of the Americas in 1980.

Hepatitis in its A, B, non-A, and non-B forms is widely distributed throughout the region. The precise incidence cannot be determined due to the lack of adequate surveillance or laboratory support. The technology for identifying viral types is lacking in most of the developing world.

Numerous enteric diseases (shigellosis, amebiasis, salmonellosis, typhoid and paratyphoid) and intestinal parasites are prevalent in El Salvador. Many of these are the result of poor sanitation and personal hygiene practices typical of less developed countries. Other important diseases include leishmaniasis, relapsing fever, meningococcal infections, tuberculosis, and viral encephalitis. Risk of Chagas' disease (American trypanosomiasis) is present in most rural areas below 1,500 m elevation.

December - Malaysia - Disease Information - Collection of disease statistics is the responsibility of the Minister of Health (MOH); statistics are published by the Department of Statistics. Like many developing countries, the collection of information is less than optimal and the reported data probably represent only a fraction of actual disease occurrence. Reports often indicate only the number of persons treated for a disease in a hospital and not actual disease incidence. Epidemiological data from East Malaysia are less reliable than the data collected from West Malaysia. Disease information in rural regions of both areas is difficult to collect because of communication and transportation limitations.

Health conditions in Malaysia are better than in most neighboring countries, but communicable diseases are still the principal health threat. Environmental factors which contribute to the high incidence of communicable diseases include overcrowded living conditions in urban areas and communal

housing practices in rural areas, polluted water supplies, lack of adequate waste disposal facilities, and poor sanitary practices. Recent urban housing improvements, expansion of sanitation systems, and "clean up Malaysia" campaigns sponsored by the government could contribute to a reduction in the incidence of infectious disease. Contaminated food and water supplies are prevalent. Dietary deficiencies lower resistance of the native population making them more susceptible to communicable diseases such as amebic and bacillary dysenteries, tuberculosis, typhoid and paratyphoid fevers, infectious hepatitis, and meningococcal infections.

Principal communicable diseases include pulmonary tuberculosis and other respiratory diseases, dysenteries (all forms) and other enteric diseases, malaria, dengue fever, cholera, venereal diseases, and helminthiases.

Typhoid and paratyphoid fevers, amebiasis, shigellosis, cholera, and diarrheas of various etiologies are the principal waterborne diseases in the country. An improvement in the standard of living and environmental sanitation has helped to reduce the incidence of shigellosis during the past several years. S. flexneri and S. sonnei are the two species of Shigella most commonly found. They affect the 1- to 5-year-old age group most often. Important etiological agents for diarrhea also include E. coli, Campylobacter, Salmonella, plus a variety of viral and other bacterial organisms.

Pulmonary tuberculosis has become less prevalent in Malaysia over the past 20 years. In 1952, it was estimated that 10 percent of the population had pulmonary tuberculosis. Recent surveys suggest that this figure should be revised to 0.3 percent. The decreasing prevalence of tuberculosis is attributed to an intensive identification and treatment program which began in 1961.

Malaria, still a major health problem, is most prevalent in remote rural areas within the states of Kelantan, Terengganu, Pahang, Perak, Kedah, Sabah, and Sarawak. A drug-resistant strain of Plasmodium falciparum is found throughout malaria endemic areas in-country. The highest incidence of malaria occurs along the Malaysian Thai border, and in Sabah, where up to 80 percent of the falciparum cases are resistant to chloroquine. Malaria is most prevalent among three socioeconomic groups: contract migrant workers employed in jungle areas, soldiers patroling border areas, and the indigenous Orang Asli (many of whom are asymtomatic carriers). In the 10-year period prior to 1982, government officials reported a steady decline in the number of malaria cases. In 1982, 12,411 cases (representing a 23 percent increase over 1981) were reported by the MOH for peninsular Malaysia. Malaria cases in Sabah and Sarawak were estimated as 30,000 and 1,000, respectively for the same year.

Cholera is a continuing health problem in Malaysia. The disease, reported countrywide, is considered endemic with frequent epidemic episodes. The most recent outbreak was in early 1983 and involved over 1,800 cases with 28 deaths. During this time, 6.3 percent of river and seawater samples collected and examined were contaminated by Vibrio cholerae.

Acute hemorrhagic conjunctivitis was first reported in 1969. Major outbreaks were reported in 1978 and 1980 in all areas of the country. The virus is well

suited to tropical areas and spreads rapidly, especially among susceptible, overcrowded populations.

Dengue fever is prevalent throughout the region and the number of cases reported has increased during the past few years. In 1981, there were 555 cases, while 755 cases were reported in the first 6 months of 1982. Dengue hemorrhagic fever also is present in-country, but the number of cases is unknown.

Venereal disease is a major problem in Malaysia. Between 600 and 800 cases of syphilis and 30 to 50 cases of chancroid were reported each year between 1980 and 1982. During this 3-year period, the incidence of gonorrhea increased steadily. The MOH recorded 5,188 cases of gonorrhea in 1982 but acknowledged gross underreporting despite requirements to the contrary. Drug-resistant gonorrhea is prevalent.

Principal causes of deaths include pneumonia, diarrheal disease, meningitis, cardiovascular diseases, malignant neoplasms, and parasites.

Additional details will be provided in the soon to be published Medical Capabilities Study of Malaysia.

APPENDIX A.

TABULAR SUMMARY OF DISEASE EVENTS BY REGIONS AND TIME

Tables 1 through 5 present the disease data for each region and each country within the regions by month of occurrence. A legend of diseases is provided to interpret the symbols used in the tables.

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LEGEND

A = Anthrax
AI = Acquired Immune Deficiency Syndrome (AIDS)
C = Cholera
CD = Chagas' Disease
CH = Chikungunya
CO = Conjunctivitis
DF = Dengue Fever
DI = Diphtheria
DS = Disease Statistics
EN = Encephalitis
EV = Environmental Problems
G = Gastrointestinal Disorders
H = Hepatitis
HE = Health General
HF = Hemorrhagic Fever
I = Influenza
K = Kyasanur Forest Disease
L = Leptospirosis
LD = Legionnaire's Disease
M = Meningitis
MA = Malaria
P = Polio
PA = Parasitosis
PL = Plague
PN = Pneumonia
R = Rabies
SF = Spotted Fever
T = Typhoid Fever
TB = Tuberculosis
TE = Tetanus
TR = Trachoma
VD = Venereal Disease
Y = Yellow Fever

AFRICA

	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
General			PA		Y	
Algeria		C				
Gambia					Y	
Ghana	C				Y	
Kenya			MA,G			C
Mauritius				MA		
Mozambique					C	C
Namibia			PL			
Nigeria				HE		
South Africa	C	M	T		R	DS
Tanzania	G			G		PL
Upper Volta					Y	
Zaire	C					
Zambia		C		M		
Zimbabwe		VD	R			

AMERICAS

	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
General					Y	
Argentina	EV					
Barbados				AI		
Bermuda	AI					
Bolivia				HE		
Brazil	M,MA	EV,H,MA	MA,TR,HE	PL,L,PA	DS,CD, AI,MA,H	MA
Chile	T		H	TB	H	
Colombia		MA,Y	MA,PA		AI	
Costa Rica	MA		MA		H,MA	
Dominica		L				
Dominican Republic				MA		
Ecuador	MA,T		MA,T			
El Salvador			G	DF		
French Guiana			MA			
Guatemala			MA			
Haiti						DF
Honduras	HE	TB		DF		
Jamaica				HE,EV,I		
Mexico	T,H, G,R	G,AI,TB, MA,C,M	HE,TE,MA G,P,T,DF	DF,R,G		DF
Nicaragua		MA,DF		DF,HE		
Panama			H	H		
Peru	MA,R	M,R, PL,MA	MA,L	TB		PL
Trinidad and Tobago		L,DF,M				DF
Venezuela		MA	MA			

ASIA

	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Bangladesh	C	C,G,TB	C,I	MA,G,C	C	
Hong Kong		VD				
India	G,C	K,C,G	G,C	PL,HE,C,G	HE,C,G	
Indonesia	C,DF,G, CH,R	C,DF,R	G,MA,DF, CH,R		A	R,TB
Japan				C		
Malaysia	C,DF,H	VD,HE	C,VD		DF,C	CO,DF,MA
Nepal	M	H	G,EN	R		
PRC		G		G	DS	
Philippines	T,C	A,T	DF,G	DF	EN,G	PN,DF
South Korea		C		EN,HF	EN	
Sri Lanka	H,T		G	MA		DF
Thailand	DF	C,VD			MA	C,DS

EUROPE

	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
General				AI		
Belgium	AI					
Cyprus	VD					
Denmark		AI				
France						T
Norway				M		
Portugal	TB				T	
Spain		LD	LD,T,G			LD,T,MA
Turkey	T		R	MA		

MIDDLE EAST

	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Bahrain					T	
Egypt	H					
Iraq			T,MA			
Israel		R	R	SF,H,AI C,G	M,H	H
Kuwait	VD					
Lebanon	G		T			

OCEANIA

	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Australia	LD,HE				I	AI
New Zealand		I			M,H	M,H
Solomon Islands				MA		

APPENDIX B.

ALPHABETIZED LISTING OF EPIDEMIOLOGICAL EVENTS

Acquired Immune Deficiency Syndrome (AIDS)

Americas:
- Barbados - October
- Bermuda - July
- Brazil - November
- Colombia - November
- Mexico - August

Asia:
- Indonesia - November
- Philippines - August

Europe:
- General - October
- Belgium - July
- Denmark - August

Middle East:
- Israel - October

Oceania:
- Australia - December

Anthrax

Asia:
- Indonesia - November
- Philippines - August

Bacterial Infection

Oceania:
- Australia - July

Chagas' Disease

Americas:
- Brazil - November

Chikungunya

Asia:
Indonesia - July, September

Cholera

Africa:
Algeria - August
Ghana - July
Kenya - December
Mozambique - November, December
South Africa - July
Zaire - July
Zambia - August

Americas:
Mexico - August

Asia:
Bangladesh - July, August, September, October, November
India - July, August, September, October, November
Indonesia - July, August
Japan - October
Malaysia - July,September, November
Philippines - July
South Korea - August
Thailand - August, December

Middle East:
Israel - October

Conjunctivitis

Asia:
Malaysia - December

Dengue Fever

Americas:
El Salvador - October
Haiti - December
Honduras - October
Mexico - September, October, December
Nicaragua - August, October
Trinidad and Tobago - August, December

Dengue Fever (Continued)

Asia:
Indonesia - July, August, September
Malaysia - July, November, December
Philippines - September, October, December
Sri Lanka - December
Thailand - July

Disease Statistics

Africa:
South Africa - December

Americas:
Brazil - November

Asia:
People's Republic of China - November
Thailand - December

Encephalitis

Asia:
Nepal - September
Philippines - November
South Korea - October, November

Environmental Problems

Americas:
Argentina - July
Brazil - August
Jamaica - October

Gastrointestinal Disorders

Africa:
Kenya - September
Tanzania - July, October

Americas:
El Salvador - September
Mexico - July, August, September, October

Gastrointestinal Disorders (Continued)

Asia:
Bangladesh - August, October
India - July, August, September, October, November
Indonesia - July, September
Nepal - September
People's Republic of China - August, October
Philippines - September, November
Sri Lanka - September

Europe:
Spain - September

Middle East:
Israel - October
Lebanon - July

Health General

Africa:
Nigeria - October

Americas:
Bolivia - October
Brazil - September
Honduras - July
Jamaica - October
Mexico - September
Nicaragua - October

Asia:
India - October, November
Malaysia - August

Hemorrhagic Fever

Asia:
South Korea - October

Hepatitis

Americas:
Brazil - August, November
Chile - September, November
Costa Rica - November
Mexico - July
Panama - September, October

Hepatitis (Continued)

Asia:
Malaysia - July
Nepal - August
Sri Lanka - July

Middle East:
Egypt - July
Israel - October, November, December

Oceania:
New Zealand - November, December

Influenza

Americas:
Jamaica - October

Asia:
Bangladesh - September

Oceania:
Australia - November
New Zealand - August

Kyasanur Forest Disease

Asia:
India - August

Legionnaire's Disease

Europe:
Spain - August, September, December

Oceania:
Australia - July

Leptospirosis

Americas:
Brazil - October
Dominica - August
Peru - September
Trinidad and Tobago - August

Malaria

Africa:
- Kenya - September
- Mauritius - October

Americas:
- Brazil - July, August, September, November, December
- Colombia - August, September
- Costa Rica - July, September, November
- Dominican Republic - October
- Ecuador - July, September
- French Guiana - September
- Guatemala - September
- Mexico - August, September
- Nicaragua - August
- Peru - July, September
- Venezuela - August, September

Asia:
- Bangladesh - October
- Indonesia - September
- Malaysia - December
- Sri Lanka - October
- Thailand - November

Europe:
- Spain - December
- Turkey - October

Middle East:
- Iraq - September

Oceania:
- Solomon Islands - October

Meningitis

Africa:
- South Africa - August
- Zambia - October

Americas:
- Brazil - July
- Mexico - August
- Peru - August
- Trinidad and Tobago - August
- Nepal - July

Meningitis (Continued)

Europe:
Norway - October

Middle East:
Israel - November

Oceania:
New Zealand - November, December

Parasitosis

Africa:
General - September

Americas:
Brazil - October
Colombia - September

Plague

Africa:
Namibia - September
Tanzania - December

Americas:
Brazil - October
Peru - August, December

Asia:
India - October

Pneumonia

Asia:
Philippines - December

Polio

Americas:
Mexico - September

Rabies

Africa:
South Africa - November
Zimbabwe - September
Mexico - July, October
Peru - July, August

Asia:
Indonesia - July, August, September, December
Nepal - October

Europe:
Turkey - September

Middle East:
Israel - August, September

Spotted Fever

Middle East:
Israel - October

Tetanus

Americas:
Mexico - September

Trachoma

Americas:
Brazil - September

Tuberculosis

Americas:
Chile - October
Honduras - August
Mexico - August
Peru - October

Asia:
Bangladesh - August
Indonesia - December

Europe:
Portugal - July

Typhoid Fever

Africa:
- South Africa - September

Americas:
- Chile - July
- Ecuador - July, September
- Mexico - July, September

Asia:
- Philippines - July, August
- Sri Lanka - July

Europe:
- France - December
- Portugal - November
- Spain - September, December
- Turkey - July

Middle East:
- Bahrain - November
- Iraq - September
- Lebanon - September

Venereal Disease

Africa:
- Zimbabwe - August

Asia:
- Hong Kong - August
- Malaysia - August, September
- Thailand - August

Europe:
- Cyprus - July

Middle East:
- Kuwait - July

Yellow Fever

Africa:
- General - November
- Gambia - November
- Ghana - November
- Upper Volta - November

Yellow Fever (Continued)

Americas:
General - November
Colombia - August

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