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## WORLD EPIDEMIOLOGY REVIEW, No. 85

### Abstracts

The report contains worldwide press and radio coverage of incidence, outbreak, and other aspects of human, animal, and plant diseases, insect pests and control, sanitation conditions, immunization and public health programs.

### Key Words and Document Analysis

- **Descriptors**
  - Worldwide
  - Clinical Medicine
  - Environmental Biology
  - Hygiene and Sanitation
  - Microbiology

### COSATI Field/Group

- 2E, 6E, 6F, 6I, 6M

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WORLD EPIDEMIOLOGY REVIEW

No. 85

This serial publication, based on worldwide press and radio reports, contains information on the epidemiology of human, animal, and plant diseases. Disease incidence, reported outbreaks, and various related epidemiological factors are included. Items are presented by country of occurrence rather than by country of original press report.

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I. HUMAN DISEASES

ARGENTINA

OUTBREAK OF HEMORRHAGIC FEVER

Buenos Aires LA NACION in Spanish 9 Jun 77 p 10

[Text] La Plata--The Ministry of Social Welfare made known the number of cases of hemorrhagic fever (stubble sickness) reported by Sanitary Zone 4. There have been 407 cases reported from 1 January to the third of the current month, adds the communique, of which 360 were confined in the Dr Antonio Rodriguez Jauregui General Hospital of the zone, and 47 belonging to other areas were treated in various other medical facilities.

It was pointed out that there were 42 deaths among the total number of persons afflicted with the disease. It was added that of the 360 patients registered at the Pergamino hospital, 165 came from that area, 108 from several places in the south of Santa Fe, and the remaining 87 from other Buenos Aires districts. The greatest incidence started developing in March, with 31 cases, reaching a total of 151 cases in April, but the curve started dropping in May, registering 61 cases.

Sanitary Zone 3, based in Junin, reported that up to last Monday, the general hospital of the zone had treated 100 cases coming from that jurisdiction and from Rojas, Lincoln, General Arenales, General Viamonte, Chacabuco, General Pinto, Leandro N. Alem, and the provinces of Santa Fe, Cordoba, Santiago del Estero and La Pampa, with a total of only 5 cases registered in the last two.

It is indicated also that the hospitals of Pergamino and Junin are the centers specialized in the diagnosis and treatment of the stubble sickness and which possess the necessary equipment and doctors, as well as the trained technical and auxiliary personnel to provide the most adequate treatment.
Moreover, those medical facilities are able to provide technical assistance and to supply the proper medication to all the neighboring sanitary institutions which receive patients suffering from the mentioned disease.

Buenos Aires LA NACION in Spanish 9 Jun 77 p 10

[Text] Rosario—According to unofficial reports, Dr Julio Maiztegui, director of the Hemorrhagic Fever Study Center established in the Buenos Aires city of Pergamino, will arrive in Rosario tomorrow. He will be accompanied by Dr Nicanor de Laloye, chief of the provincial acute transmissible disease control department; Marta Sabattini, associate professor of the Virology Institute; and Dr Oscar Ramirez Blankenshort, federal sanitary delegate of the national Ministry of Social Welfare.

The mentioned specialists will meet with Dr Cesar Vidal, head of the Acute Transmissible Disease Division of Rosario. Dr Maiztegui will meet with a group of specialized colleagues in the Medical Club at 2130 hours.

It is emphasized that no cases of hemorrhagic fever were registered in the department of Rosario yesterday.

Buenos Aires LA NACION in Spanish 19 Jun 77 p 10

[Text] Junin—It became necessary for the Argentine hemorrhagic fever to knock at the door of a large city like Rosario for a suitable reaction to occur, creating the stimulus which should not have been forsaken in the search for definitive solutions to such a serious problem. The epidemic of the so-called "stubble sickness" is the topic of the day. And it is so not because it is new, not because its lethal statistics are today higher or lower than yesterday, but because the epidemic is showing at this time signs of a geographic extension which many did not believe when a few predicted it.

With Geometric Progression

The disease has existed for a long time. It would not be possible to determine since when. But in the memory of the elderly people of the large corn belt there is the recollection of a fever which would produce some hemorrhages. But in those times it was nothing more than "the fever."

The first epidemic occurred in 1958 in the small rural community of O'Higgins, in the district of Junin.

It was most virulent that year, and it attained a high rate of mortality. It was named "O'Higgins sickness" after the place of its occurrence, and that designation showed a somewhat mistaken preconception of geographical
location. To such a degree, that shortly afterward, when it spread to Junín, Rojas and Pergamino, the designation was replaced by that of Argentine hemorrhagic fever. And this time, foreseeing perhaps what reality now confirms, the geographic reference was accurate because the sickness threatens to spread throughout the country until it joins the epidemic which has been flailing Bolivia for many years.

The investigations conducted in 1958 made it possible to establish that the healthy carrier of the disease was the "colonis" rat, better known as the "corn mouse." The same studies determined that this rodent ranges over a radius of 25 meters from its nest. From this, it is possible to surmise the appearance of the first circle of infection in that year. The virus successively passed from one nest to another in a geometric progression of circles, therefore it is possible to venture that its geographical expansion will be of greater magnitude each time and each year.

The Present Limits

At present, hemorrhagic fever has vastly surpassed the borders of the province of Buenos Aires, to extend toward the north to the provinces of La Pampa, Córdoba and Santa Fe. Though it was not possible to obtain from official sources a map with the exact limits of the affected area, the statements secured allow one to draw a line from Pergamino, on the north, running south to include the districts of Salto, Chacabuco, Bragado, General Viamonte and Lincoln, to extend more diffusely toward the north of La Pampa and the south of Córdoba and Santa Fe. In the last mentioned province, cases were registered on the limits of Rosario. In Córdoba, at Pascanas, Monte Maiz, Etruria, Santa Eufemia, Villa Maria and Bel Ville. The greatest virulence of the sickness is observed in the areas of Pascanas and Etruria, where it broke out this year.

Toward the South

The information obtained from the medical teams working in the affected area made it possible to determine that isolated cases have been registered also in Olavarria, Tandil and Mar del Plata. The patients perhaps came into contact with the virus by casually handling bags, bales or machinery coming from the epidemic area.

However, the specialists of the so-called "Junín Group" assert that they have performed tests which show that the rats captured in the southern portion of the province of Buenos Aires are infected with the virus. The lack of a vector to transmit it to man, they stated, is what has prevented the onset of the epidemic.

The Biologic Imbalance

All press inquiries implicitly pose one question: Why? The answers in this case show a significant relationship among the various levels. On
a scientific plane, it was explained that the virus has a prolonged former existence, but with much greater attenuated effect and without epidemic characteristics. Something caused its mutation: cosmic rays perhaps, or maybe chemical agents. The fact is that its new form made a dramatic appearance in 1958.

On the plane shared by the inhabitants of the area, we were able to get statements such as that of a farmer who told us: "I have been estranged from my brother for many years. He uses chemical agents against the plagues, and they have killed many species."

Among the inhabitants in general, there is a consensus as to a biologic imbalance having taken place in the area. And there is agreement on that notion to the point that the doctors of some small communities hold meetings with the farmers to suggest to them to encourage, for example, the installation of owls' nests, reviving old superstitions. "The owl is an ally in this struggle..."

Buenos Aires LA PRENSA in Spanish 24 Jun 77 pp 1, 11

[Text] The Public Health Secretariat of the Ministry of Social Welfare issued an official press communique about the epidemic outbreak of the Argentine hemorrhagic fever which currently affects certain areas of the provinces of Buenos Aires, Santa Fe and Cordoba.

It is pointed out in that communique that the secretariat "has the duty to inform the population truthfully and objectively, expounding the official version of the problem, in consideration of the numerous reports of newspapers of this capital and of the interior, and keeping in mind that many of those reports are contradictory, constituting in many instances significant mistakes as to what is being done with regard to research on vaccines, and which could serve to confuse public opinion and create undue alarm."

The number of cases reported since 1 January of this year to date is 954, according to the public health information. In Sanitary Zone 4 of the province of Buenos Aires, which includes the Argentine Hemorrhagic Fever Study Center in Pergamino, there were 42 deaths out of a total of 407 patients to date, which represents a mortality rate of 10 percent.

There Is No Vaccine

It is explained in other paragraphs that "there is no effective preventive vaccine against this disease available up to now." It is then asserted that in 1966, Dr Armando Parodi developed a vaccine with the Junin strain of the virus which was named "attenuated strain of Junin virus (XJ CLON III)." Dr Ruggiero, of Junin, and associates proceeded
to administer it from 1968 until February 1971, vaccinating a group of 637 persons.

It is explained that several scientific controversies occurred in connection with the effectiveness of the vaccine. These developments and the disappearance of Dr Parodi on 23 June 1969 brought to a halt the investigations intended to obtain a suitable vaccine.

"Unfortunately," continues the public health report, "when studies in that connection were discontinued, when the vaccination which was being performed on a reduced number of people was halted, no definitive nor unanimous judgment was produced or is available to date."

The Secretariat of State for Public Health, jointly with the Secretariat of State for Science and Technology, promoted the unification of all the research centers of the country to stimulate the tasks which will lead to the production of an effective vaccine.

The most important research centers of the country are listed next, and they are the Microbiology Department of the School of Medicine of the University of Buenos Aires, where Prof Armando Parodi researched and developed the CLON III vaccine; the virus department of the Malbran Microbiology Institute; the Virology Institute of the National University of Cordoba; and the Argentine Hemorrhagic Fever Study Center of Pergamino.

It is also stressed that the secretariat mentioned has no definite opinion about the potential effectiveness of any particular type of vaccine, and left the investigators free to conduct their research in accordance with their own experience and judgment.

Administration of Vaccines

It is pointed out in another paragraph that "no vaccine produced in the country or abroad will be administered to human beings in the nation without the express authorization of the Secretariat of State for Public Health, and whoever does so will be liable to the penalties established by the applicable codes."

Subsequently, it is explained that the secretariat "will accept and sponsor any vaccine produced by any center of the country once its innocuousness and value as an immunizing agent have been satisfactorily tested."

Finally, the concern about the problem and the decision to resort to all means to achieve a successful solution within the shortest possible time are reiterated.
COMMENTS ON SCHISTOSOMIASIS

Sao Paulo FOLHA DE SAO PAULO in Portuguese 4 Jun 77 p 6

[Excerpts] The Epidemiology Division of the Health Ministry has been alerted to the appearance of a new type of schistosomiasis (vesical or urinary) in Brazil brought by Angolan immigrants.

The organization of the Health Ministry has, moreover, recorded the occurrence of seven cases among Angolans since 1975, the period when the Angolans began to migrate to Brazil. This type of urinary schistosomiasis is caused by the Schistosoma haematobium.

According to research carried on by Prof Lobato Paraense, director of the Schistosomiasis Program at the Oswaldo Cruz Foundation, there is a very remote possibility that vesical or urinary schistosomiasis may become endemic in Brazil, because of the lack of a mollusk (snail) adaptable to developing the Schistosoma haematobium. This was confirmed by other scientists. The quality of the soft water in the South American rivers is not propitious to the existence of the ideal type of host snail. Schistosomiasis obeys the trematode-snail-man cycle, the snail being the point of contact for contagion. Without the host, the trematode does not develop, and this is what happens to the Schistosoma haematobium.

At the moment, the Health Ministry is concerned with alerting the medical profession to the existence of cases of double infection (intestinal and urinary schistosomiasis) among Angolan immigrants. The urinary type is carried by them; the intestinal type is acquired here in Brazil. And, as the trematode that produces urinary schistosomiasis demonstrated, in the 2 years of research that followed the arrival of the Angolans, there is no possibility of its developing a hold in our country. The health authorities believe that the cure is complete, without the possibility of reinfection. They believe, moreover, that cases of Schistosomiasis mansoni or haematobium have been erroneously diagnosed as peptic ulcer, colicystitis, hepatitis, pancreatitis, and appendicitis, which are also liable to be the reverse.

Sao Paulo FOLHA DE SAO PAULO in Portuguese 4 Jun 77 p 6

[Excerpt] With respect to the Schistosomiasis mansoni, known by Brazilians in the poorest regions of the country (where sanitary conditions are nonexistent), the Health Ministry is developing pilot projects to combat the snail, with a view to eliminating the host. The extermination of the mollusk has been tried by means of the Frio-Cruz 01 insecticide, still in an experimental stage. Nevertheless, Prof Lobato
Paraense insisted on the importance of initiating, along with extermination, a program of treating infected persons. With respect to this, scientists look for more permanent solutions, such as the reproduction in the laboratory of a type of snail that does not exist in Latin American waters, that is wholly antagonistic to the development of Schistosoma mansoni. This project, still in the initial phase, is fraught with many obstacles in the reproduction studies in the laboratory, which require a lot of time and special attention. In truth, schistosomiasis in Brazil that is reaching an endemic curve, can be found in almost the whole country, with rare exceptions.

Sao Paulo 0 ESTADO DE SAO PAULO in Portuguese 7 Jun 77 p 23

[Text] Brasilia--After research confirmed that 85 percent of the inhabitants of Aracaju are carriers of schistosomiasis, the Ministry of Health decided that it will be the first state capital to receive mass medication against the disease. The survey also showed that all the towns of Sergipe are infested with the snail, and that the disease afflicts 95 percent of the population of the district of Proveito and all of the inhabitants of the district of Bom Jesus.

Up to now, the Ministry of Health has treated only 45,472 persons suffering from schistosomiasis living in Rio Grande do Norte, using the medicine oxaminiquine (Mansil). Some 96 of those patients presented the serious form of the disease, but showed no symptoms (headache, vomiting, dizziness, diarrhea and various side effects) after 3 days of treatment, and 2,482 persons could not be treated.

This year, the Ministry of Health will spend 16,052 cruzeiros in Sergipe--for basic sanitation and treatment of the patients--and the state will rank fourth among the seven of the Northeast which are to benefit from the Special Program to Control Schistosomiasis (PECE), to wit, Alagoas, Pernambuco, Paraiba, Rio Grande do Norte, Ceara, Maranhao and Sergipe. The biggest allocation, or 59,911 cruzeiros, is intended for Pernambuco. The work of sanitation is most advanced in Sergipe and most retarded in Ceara, where only 11.8 percent of the population will receive some benefit.

INCIDENCE OF MENINGITIS

Rio de Janeiro 0 GLOBO in Portuguese 8 Jun 77 p 11

[Excerpt] Two girls died from meningitis yesterday at the Carlos Chagas Hospital.
Belo Horizonte—Dr Arquimedes Teodoro, the assistant secretary of health of Minas, denied that the five cases of meningitis registered in children of the Venda Nova section would constitute a threat to the population. He explained that the cases consist of bacterial meningitis, whose mortality rate is low.

"All the cases," he asserted, "are being treated at the Cicero Ferreira Hospital, and incidents produced by bacteria can take place without the population being affected."

He added that the secretariat is not aware of an outbreak of measles in the city of Santa Helena, 18 kilometers from the Minas-Bahia border, but he is going to investigate.

As of 5 September 1974, in the 26 hospitals that were admitting meningitis patients in Sao Paulo, 253 new patients had been admitted in that month alone. It was considered one of the worst outbreaks of meningococcal meningitis that had struck the state of Sao Paulo between 1971 and 1975. The hospitals had 6,107 new patients.

As of 6 March 1977, the Meningitis Information Center (CIM) of the Health Ministry, registered no admissions in the two hospitals, the only two that now handle meningitis cases, the Emilio Ribas and the Servidor Publico Estadual. In March 1977, there were 266 patients and 190 of them discharged. Meningitis comparative deaths were: in September 1974, 339; in March of this year, 35. These comparative figures may prove that now, despite the close attention given to meningitis figures this year by the health authorities, mainly in winter (the period of the highest incidence), there is no longer a great fear of an uncontrollable epidemic. Doctors and specialists of the Health Ministry explain this outlook in terms of the continual decrease in the disease incidence. In the município of Sao Paulo in January 1975, meningitis rates were 13.1 per [100,000?] inhabitants, dropping to 1.0 by the end of the year and going as low as 0.43 percent per 100,000 inhabitants in December of last year.

According to the ministry statistics, the continual drop in the disease is a result of the all-out vaccination program carried out in April 1975 in metropolitan Sao Paulo and in Baixada Santista and throughout that year in all the regions of the state. In this period, 19,690,750 doses of vaccine were administered, resulting in immunization of 95.2 percent of the population of the state.

Nevertheless, health officers are not concealing figures that prove the epidemic nature of the disease. According to them, although there is a
decline in cases, they have not as yet reached the figures of the period prior to 1970, or rather, those in the endemcity range. If today, however, there are coefficients of 0.43 per 100,000 inhabitants, those rates for the 1961 to 1970 period, before the epidemic, were 0.2 cases per 100,000 inhabitants. For this reason, however, the specialists are not stating that the meningitis incidence is returning to normal. "To say whether or not an epidemic has ended, we would have to analyze 1977 to see if the coefficient is unchanged even though the normal limit may be higher than that found between 1961-1970," the ministry health officials say. "Thus," they continued, "we would have a new limit of normalcy even higher than the old disease endemic level, established with the coefficients of the 1961-1970 period."

They explain, however, that this increase in the figures was possibly caused by an improvement in diagnostic procedures, in terms of the perfection of laboratory examinations currently in use that make it possible to diagnose most meningococcal meningitis cases. Specifically, this type of meningitis incidence reached 48.4 per 100,000 inhabitants in 1975 and dropped to 8.8 per 100,000 inhabitants in 1976 in Sao Paulo.

The mass vaccinations carried out in 1975 were for types A and C meningococcal infections, and according to research studies, the incidence of these types is also decreasing. In 1975, before vaccination, meningococci accounted for 50 percent of the suspected meningitis cases in the município of Sao Paulo. After vaccination, its incidence, compared to other meningococcal infections, dropped 35 percent. By comparison, other meningococcal infections of a known bacteriological etiology that represented 1.8 percent from January to April 1975, now represent 10 percent of the notified cases.

According to statistics of the Information Center of the Health Ministry on meningitis incidence, the population most susceptible and that runs the highest risk of infection, for an age range, is the infant under 1 year of age. Based on a coefficient of 162.7 per 100,000 inhabitants between January and April 1975; 93.6 for the period from May to August; and 53.2 for September through December, this group showed the smallest drop: about 42 percent for the periods before and after vaccination. The explanation for this is that infants under 6 months were not immunized.

MALARIA OUTBREAK IN ACRE CAUSES DEATHS

Rio de Janeiro JORNAL DO BRASIL in Portuguese 8 Jun 77 p 14

[Text] Rio Branco--The inhabitants of the município of Placido Castro, on the border with Bolivía, are being affected by an outbreak of malaria which has already caused some deaths, particularly among children. Last
weekend, a team of the Superintendency of Public Health Campaigns (SUCAM) verified 49 cases in 154 samplings, a ratio which is considered "critical and alarming."

In the opinion of State Health Secretary Manoel de Souza, a slight increase of cases toward the end of the winter, when the waters recede and become stagnant, can be viewed as normal, but in the case of the border municipios such as Placido de Castro and Basileia, the incidence is greater because the rubber-tree tappers contract the disease in Bolivia before returning to Acre.

OUTBREAK OF EPIDEMIC DIARRHEA
Rio de Janeiro JORNAL DO BRASIL in Portuguese 8 Jun 77 p 14

[Text] Campo Grande—Municipal Health Secretary Alfredo Pinto de Arruda acknowledged that 200 children have been hospitalized in the past 5 days as a result of an outbreak of epidemic diarrhea. He does not know the cause of the outbreak, but he has sent already samples of the water supplied by the State Sanitation Company to be tested in Sao Paulo. He explained that "the basic sanitation situation in Campo Grande is chaotic."

DIARRHEA EPIDEMIC AMONG XINGU PARK INDIANS BAFFLES DOCTORS
Rio de Janeiro O GLOBO in Portuguese 18 Jun 77 p 10

[Text] There is no explanation for an outbreak of diarrhea that struck 17 Indian villages in Xingu Park, causing quarantine of the reserve for 15 days, beginning the day before yesterday. Two children died but the National Indian Foundation [FUNAI] medical team has the situation under control in five villages: Kamauara, Yawalapiti, Txicao, Trumai, and Matipu.

Monday, the Base hospital in the Federal District, will be able to identify the disease, after examining the sick Indians. According to FUNAI president, General Ismarth de Oliveira, the theory of water or food contamination has been discarded, because the outbreak was in isolated tribes who live off of different foods and use different water sources.

According to General Ismarth de Oliveira, this is the first outbreak of diarrhea that has struck more than one Indian village. There is diarrhea in all the Xingu tribes, including the Kreen-Akarores, who were transferred to the park many years ago, and no tribe outside the park was affected. The theory that the contamination was brought in by an outsider also was ruled out, because there were no foreigners in the park.
when the first cases of diarrhea occurred, and no FUNAI official had become sick.

The third theory— that it was an airborne disease—is still being studied. The doctors who are studying the specimens should be able to say whether the disease is transmitted by a type of mosquito or if it is the result of toxicity from insecticides used on farms neighboring the park.

**THESIS SHOWS NO DROP IN DEATH RATE CAUSED BY INFECTIOUS DISEASES**

Sao Paulo 0 ESTADO DE SAO PAULO in Portuguese 22 Jun 77 p 15

[Text] If infectious and parasitic diseases were eliminated as a risk factor in mortality figures, there would be a drop of approximately 30 percent in the probable mortality of male infants under age 3. For children under age 4, the drop would be on the order of 35 percent.

Infectious and parasitic diseases that constitute the principal cause of death in the municipio of Sao Paulo in the 0 to 15 year age range could be significantly reduced by vaccination and by other measures, as, for example, broadening of the water supply system throughout the whole country. Nevertheless, despite official programs in the health area and expansion of basic sanitation systems, those diseases continue to contribute significantly to the mortality figures as is shown in the doctoral dissertation of Prof Sabina Davidson Gotlieb of the faculty of Public Health.

In her work that was recently received with praise, she also verified that mortality in the municipio of Sao Paulo in 1970 indicates the existence of health problems in a population that is composed of different backgrounds and is not a homogeneous population.

Thus, while infectious and parasitic diseases fundamentally strike the population in the lower socioeconomic levels, the diseases characteristic of the highly developed countries, such as cardiovascular diseases and malignant tumors, occur chiefly in that section of the population in the highest socioeconomic bracket. The thesis states, "having survived the early years, the population is then exposed to the possible risk factors of degenerative and chronic diseases."

The data found by Sabina Gotlieb for the academic year, relating to health levels, classify the municipio of Sao Paulo at one point in comparison with standards in developed countries, and at another point like a region in a developing country. The figures for life expectancy at birth, according to her thesis, are closer to the figures for Colombia and Mexico. And the increases in life expectancy at birth (or rather, the prolonging of the life span that would occur if cardiovascular
diseases and cancer were eliminated) are closer to those of Canada, the United States, and Israel.

In the opinion of different scholars, the fact that the município of São Paulo represents, with respect to the health of the population, the problems of the underdeveloped countries as well as those of the developed, is the result of a process of disordered growth. In her opinion, health problems that affect the population replicate the distribution of income.

This pattern also may be perceived in the way in which causes of death are distributed in a specific age group. In her analysis of mortality differentials in the município of São Paulo, Sabina Gotlieb, professor of the Department of Epidemiology, reported that for males in the 0 to 3 age group, the principal cause of death category was infectious and parasitic diseases; in the 4 to 40 age group, the principal causes were accidents, poisoning, and violence; and in the over 40 age group, the most significant were cardiovascular diseases. With respect to females, the principal causes of death, in an age specific group were: infectious diseases in children under age 4; accidents, poisoning, and violence in the 5 to 30 age group; and cardiovascular diseases for the over 40 age group.

To evaluate the impact of the categories, the professor, moreover, used the probability of survival. She presented for the 0 to 15 age group a like pattern of causes of death for both sexes, represented principally by infectious and parasitic diseases.

"With the age specific group of those economically active, in the 15 to 65 age group," the thesis said, "the preponderant role of cardiovascular diseases in both sexes can be detected, but with respect to men, accidents, poisonings, and violence are the second group in order of importance; for women, it is cancer."

In studying life expectancy at birth (in 1970, life expectancy at birth in the município of São Paulo was 60.12 years for men, and 67.21 for women), Sabina Gotlieb succeeded in establishing a classification of the principal causes of death. For males, they are distributed in order of rank as follows: 1) cardiovascular diseases; 2) infectious and parasitic diseases; 3) accidents, poisoning, and violence; 4) malignant tumors. For women: there was an inverse ratio to the two latter groupings, i.e., malignant tumors kill more than poisonings, accidents, and violence.

POLIOMYELITIS STRIKES INDIANS IN TERRITORY OF RONDONIA

São Paulo 0 ESTADO DE SAO PAULO in Portuguese 23 Jun 77 p 18

[Text] Upon the discovery of a case of poliomyelitis, it was suspected that there were other cases among the Paacas-novos Indian tribe in
Guajara Mirim in Rondonia. The National Indian Foundation [FUNAI] regional director, Delcio Vieira, confirmed the news. The fear of an outbreak in the Indian population led the organization to perform laboratory tests to evaluate the extent of the problem.

Several cases of poliomyelitis have recently been noted in the non-Indian population in the territory that has resulted in notification of a death from the disease. It was in the town of Lages that the Indian with the case of poliomyelitis was found. It is a region with one of the largest concentrations of the Paacas-novos Indians. Close to it is the urban center of the municipio of Guajara Mirim in which 12 cases of poliomyelitis were found as of 15 June. FUNAI decided to study the situation in the Paacas-novos villages in the area.

The FUNAI delegate in Para yesterday sent the chairman of the agency a report in which he stated that for the good of the health of the Indians, "We must change their customs, even if it goes against their cultural values." The delegate, however, was accused of violating the cultural values of the Parakanas with measures that include the digging of ditches in their villages. The health officers reported that the lack of hygienic standards of living invalidated FUNAI's efforts to provide remedies for the Indians.

The Rural Scene

FUNAI received no official communication from the organizers of the First Meeting of the Rural Pan-Amazonian Indian Population, with respect to its participation in the meeting that began Monday in Manaus, as was announced in the newspaper. Information relating to this was revealed yesterday by FUNAI with the explanation that actually the chairman of the organization, General Ismarth de Araujo Oliveira, had consulted with the National Conference of Brazilian Bishops [CNBB] president, Aloisio Larscheidner, on the possibility of its participation in the studies, but to date no official answer has been received rejecting the request.

After yesterday's debates at the First Meeting of the Rural Pan-Amazonian Indian Population in Manaus, missionaries concluded that the Brazilian Indians are in extreme danger of being eliminated. The Reverend Jose Chipanda, a representative of the Evangelical Church, said: "If we decimate or break up the Indian communities, it will mean the prelude to the disappearance of men on earth." The impact of the civilized world on the Indian communities was also analyzed, and most missionaries agreed that "a psychological shock can be seen that is manifested in resentment, an inferiority complex, shame about one's own identity, a progressive acceptance of foreign dress, a lack of confidence, and a feeling of impotence before a world that dominates and corrupts the Indian."
139,000 VACCINATED AGAINST MEASLES IN RIO IN 10 DAYS

Rio de Janeiro 0 GLOBO in Portuguese 12 Jul 77 p 10

[Text] According to figures released yesterday—and still subject to revision—59,684 children received the first dose of the Sabin vaccine, 197,848 received the second and 139,092 were vaccinated against measles during the 10 days of the Vaccination Campaign Against Poliomyelitis and Measles conducted by the municipal Health Secretariat.

The campaign was begun on 27-28 June in Jacarepagua, Bangu, Campo Grande and Santa Cruz, and was ended on 2-8 July with the vaccination of the children of Copacabana, Flamengo, Jardim Botanico and Ilha de Paqueta. The Health Secretariat advises that vaccination against poliomyelitis and measles is continuing in a normal fashion at the 23 health centers and the 11 sanitary units of Rio.

The following data were furnished by the municipal Health Secretariat in relation to the campaign:

27-28 June—Area: Jacarepagua, Bangu, Campo Grande and Santa Cruz. Some 21,733 children received the first Sabin dose, 57,756 received the second and 46,122 were vaccinated against measles.

29-30 June—Area: Penha, Iraja, Madureira and Anchieta. Some 10,227 children received the first Sabin dose, 51,224 the second and 33,227 were vaccinated against measles.

1-4 July—Area: Sao Cristovao, Vila Isabel, Ramos, Engenho da Rainha and Engenho de Dentro. Some 18,296 children received the first Sabin dose, 40,971 the second and 32,764 were vaccinated against measles.

5-6 July—Area: Port, Center, Rio Comprido, Tijuca, Ilha do Governador and Santa Teresa. Some 6,987 children received the first Sabin dose, 26,983 the second and 9,346 were vaccinated against measles.

7-8 July—Area: Flamengo, Copacabana, Jardim Botanico and Ilha de Paqueta. Some 2,441 children received the first Sabin dose, 11,924 the second and 7,583 were vaccinated against measles.

MALARIA CARRIER IN STATE OF AMAZONAS RESISTANT TO DDT

Sao Paulo 0 ESTADO DE SAO PAULO in Portuguese 13 Jul 77 p 13

[Text] Despite the repellent effect of DDT insecticides, researches conducted in an area of the interior of Amazonas State, 153 kilometers north of Manaus, disclosed that a certain type of malaria-transmitting
mosquito—known by the name of Anopheles darlingi—continues to invade the homes treated with DDT, goes directly to humans, feeds and leaves the house without suffering any effect from the insecticide.

The results of that test, as well as of the whole research process carried out by the Amazonia Research Institute (INPA) early this year, were presented yesterday by Prof Jack Hayes at the Seminar on Endemic Diseases. The specialist reached that conclusion by studying in two groups of homes—one treated with DDT and the other not—about 500 vectors collected from the interior and exterior walls of the dwellings and from the vegetation.

After 6 months of studies, once the rate of contact between man and mosquito had been established, the INPA team reached the conclusion that the malaria vivax and the malaria falciparum, which are resistant to medication, are transmitted in that area solely by that type of mosquito (Anopheles darlingi), and "inasmuch as that species avoids contact with DDT-treated areas, future studies are necessary to determine alternative means to control that vector."

Other researches on the vaccine against malaria were also presented by Prof Humberto Menezes, of the School of Medicine of Ribeirao Preto of the University of Sao Paulo (USP). After listing the principal parasitic species of malaria (among the 100 in existence) which infects birds and particularly mammals (which in turn are bitten by vectors which carry the disease to man), the specialist cited several experiments which have been underway since 1912 to discover an adequate immunizator.

At the end of his exposition, he said that "the dream of the eradication of malaria is still far from being realized." In the opinion of Humberto Menezes, several factors contribute to the slowness of science in those studies: "the vectors' resistance to insecticides (whose indiscriminate use has led to the extermination of the fauna of several areas), the lack of financial support, the parasites' resistance to drugs, and the lack of personnel."

Still at the endemic diseases symposium, parasitologist Joaquim Eduardo de Alencar, of the School of Medicine of the Federal University of Ceara (UFC) [?]—one of the few from Ceara attending the 29th meeting of the SBPC [expansion unknown]—presented an ample study on the reservoirs and vectors of Chagas disease in Ceara State. His investigations, begun in 1972, were conducted throughout the state and disclosed that the principal transmitter of that disease in Ceara is the Triatoma brasiliensi (semidomestic), which is found in 116 of the 141 existing municipios.
REPORT OF ENCEPHALITIS OUTBREAK IN ABC REGION DENIED

Sao Paulo 0 ESTADO DE SAO PAULO in Portuguese 13 Jul 77 p 18

[Text] Caio Ramacciotti, health secretary of Sao Bernardo do Campo, denied yesterday the news that there is an outbreak of encephalitis in the city when he explained that "the death of the girl Rosangela Francisco da Silva was not caused by epidemic encephalitis, such as the one which hit the Sao Paulo Littoral last year, but by secondary encephalitis produced by septicemia (a general infection of the organism)."

Concerned about the impact of the news, which alarmed all the sanitary authorities of the ABC [expansion unknown], Caio Ramacciotti expects today the official report of the medical examiners of the death certification service of the School of Medicine of the University of Sao Paulo (USP), who are in charge of performing the autopsy on the body of the child. In the meantime, seeing that he already has contacted those technicians, the health secretary guarantees that it is not a case of epidemic encephalitis. "The result of the autopsy," he ended by saying, "confirms the clinical diagnosis made by the Sao Bernardo Hospital (secondary encephalitis), and, furthermore, we do not even have in the city the vector of the disease--the Culex mosquito."

LEPROSY INCIDENCE INCREASES 41.6 PERCENT IN PERNAMBUCO IN 6 YEARS

Sao Paulo 0 ESTADO DE SAO PAULO in Portuguese 14 Jul 77 p 20

[Text] Recife--The incidence of leprosy among the people of Pernambuco increased 41.6 percent in the past 6 years, according to the statistical data of the Amaury de Medeiros Health Foundation (FUSAM) compiled by sanitarian Luiz de Gonzaga Virgolino, director of the Padre Antonio Manuel Sanitarium of Recife.

In a paper entitled "Leprosy and Its 6-Year Evolution in Pernambuco," the sanitarian shows that while the FUSAM recorded 131 new cases of the disease statewide in 1971, that total increased to 138 in 1972, 155 in 1973, 193 in 1974, 199 in 1975 and 441 in 1976.

Gonzaga Virgolino explained that "there is not a single factor which can be pointed out with certainty as the cause of that evolution, but it is believed that that growth is due to the constant increase of the population, without forgetting either that greater promiscuity would fatefuly augment those indices."
DENGUE HEMORRHAGIC FEVER CASES IN RANGOON

Rangoon THE WORKING PEOPLE'S DAILY in English 10 Jul 77 p 1

[Text] More than 1,260 cases of dengue haemorrhagic fever have been reported from all parts of the country from the beginning of January to the first week of July this year.

Rangoon Division had more than 600 cases during the period with 20 fatalities. Irrawaddy Division follows next with 282 reported cases, including 23 deaths.

Mandalay Division with 146 cases and six fatalities comes third followed by Pegu Division with 95 cases and eight fatalities.

Sixty-one cases with three fatalities were reported from Mon State and 23 cases with two fatalities were reported from Karen State.

Magwe Division had only one case, non-fatal. No cases were reported from the remaining States and Divisions.

VIRAL HEPATITIS APPROACHES EPIDEMIC LEVEL

Rangoon Domestic Service in Burmese 1330 GMT 22 Jun 77 BK

[Excerpt] The outbreak of viral hepatitis in Mandalay is now heading toward epidemic proportions and is spreading. The viral hepatitis which originated in Mandalay has begun to spread to other townships through travelers. In order to stop this disease from spreading, the Viral Hepatitis Committee has issued instructions to all medical superintendents of hospitals and all officials of health departments in states, divisions and townships.

The instruction reads: Blood transfusions must be avoided during treatment, except in "life-or-death" cases. Persons who have been infected with viral hepatitis in the past must not be used as blood donors. When treating patients, injections should be avoided in favor of oral medicines.

Rangoon THE WORKING PEOPLE'S DAILY in English 23 Jun 77 p 1

[Text] Rangoon, 22 Jun--Viral hepatitis which started in Mandalay having spread to other townships through travellers is now beginning to assume epidemic proportions.
As a result, the Viral Hepatitis Committee has directed heads of State/Division Health Departments and medical superintendents to take the following precautions to stop the spread of the epidemic.

Patients are not to be given blood transfusion unless it is absolutely necessary. Blood donations from persons who once had viral hepatitis are not to be accepted. Treatment by giving injections is to be refrained as far as possible.

A needle used for injecting a patient is to be boiled for at least 20 minutes or sterilised before injecting another patient with it.

These instructions are to be circulated to hospitals, dispensaries, secondary health centres, maternity and child and school health departments and rural health centres.

The Viral Hepatitis Committee is also taking steps to direct heads of State and Division Health Departments to act in consultation with the State/Division People's Councils to urge private clinics to keep sufficient stocks of hypodermic syringes and needles, to use them in a systematic manner and to report cases of viral hepatitis to the nearest Health Department immediately.

The Committee will coordinate with the Trade Corporation concerned for sale of sufficient quantities of hypodermic syringes and needles to private clinics.

YADANABON MINE MALARIA UNDER CONTROL

Rangoon THE WORKING PEOPLE'S DAILY in English 26 Jun 77 pp 1, 4

[Text] Mergui, 21 Jun--The malaria situation at the Yadanabon Mines in Tenasserim Division has been brought under control and activities at the mines have returned to normal.

A malaria epidemic struck the mines at the beginning of June and 13 persons including an engineer died.

Almost the entire population of the mines village was stricken with malaria and mining work was interrupted, (WPD 5 June).

A special health team, headed by Deputy Director of Health U Nyunt Hlaing (Malaria) and Assistant Director of Health Dr Khin Maung Kywe (Occupational Health) rushed to the Mines to give treatment and preventive inoculations, make blood tests and carry out comprehensive anti-malarial measures.
As a result, the situation at the mines has returned to normal.

The mines now carry stocks of anti-malaria medicines sufficient for one year.

Deputy Minister for Mines Col Than Tin visited the mines on 11 and 12 June and personally supervised measures taken (WPD 15 June).

CUBA

DIARRHEA, TYPHOID FEVER OUTBREAK IN OLD HAVANA

Havana Domestic Service in Spanish 1126 GMT 19 Jul 77 FL

[Text] The Provincial Public Health Division is continuing to warn the Havana city population in order to offset diarrhea illnesses and a typhoid fever outbreak discovered in the municipality of old Havana. To prevent the propagation of these outbreaks, the citizens are recommended to boil all water for human consumption and to take sanitary measures in the handling of food. It also asks the people not to throw garbage on the streets, empty lots or any other place where garbage can accumulate and become centers of infection. Also, the transit of heavy vehicles will be forbidden along places where their transit has caused ruptures which cause the contamination of potable water.

CYPRUS

HEALTH EFFORTS INTENSIFIED IN OUTLYING AREAS

Nicosia BOZKURT in Turkish 17 Jun 77 p 1

[Text] Nicosia--Efforts are being intensified to protect and preserve environmental health. According to an announcement by the Prime Minister's Press Office, sanitation workers supervised by health employees are working nonstop to combat flies and mosquitoes. In the past month, 8,894 residential areas outside the city limits have been sprayed with insecticide.

Inspection

Also within the same period, 4,499 homes, 49 hotels and public buildings, 325 stables and dairies, 34 factories, 133 restaurants, 19 slaughterhouses, 39 drinking water sources, and 206 grocery stores have been inspected, and 16 wells have been chlorinated.
Citations and Lectures

In the course of these inspections, 50 individual citations have been issued under the Village Public Health Law, 19 meetings have been arranged with village councils to discuss public health problems, and lectures on public health have been given—63 to adults and 43 for school children.

Combating Contagious Diseases

In addition, the battle against contagious disease continues. Each report or diagnosis of contagious disease is evaluated immediately and the necessary action taken. Anopheles larva were found in four units in the region east of Kyrenia and the necessary measures were taken by anti-malaria teams. The imported cases of malaria have been controlled, with most of them registering positive development. TFSC Health Services, during this month, have administered 216 diphtheria inoculations, 215 polio, 156 smallpox, and 162 cholera. In this connection, 96 ships and 31 aircraft arriving at our harbors and airports underwent sanitation inspections, with the necessary treatments being given and health certificates issued.

EAST GERMANY

EXPANSION OF MEDICAL CARE FACILITIES PLANNED

Bonn IWE-TAGESDIENST in German No 126, 6 Jul 77 p 2

[Text] By 1980 the GDR intends to put into effect "the hitherto most extensive investment program" in the area of public health, so as to improve the outpatient and inpatient care of the populace and to close the existing gaps. The investments provided by the current plan are more than double those of the previous five-year plan period. At the same time, the proportion of investments for health and social welfare to the overall investments for the economy has increased from 1.36 percent (1971-1975) to 2.4 percent (1976-1980). According to official East Berlin figures, the investments are primarily designated for the further expansion of basic outpatient and inpatient medical care in connection with the simultaneous reconstruction and modernization of available facilities. In addition, it is planned to establish newly equipped, highly specialized, and more efficient departments and clinics. There is to be increased emphasis on the construction of polyclinics, outpatient clinics, nursing homes, and pharmacies, particularly in the new housing areas so as to stabilize the availability of medical care. The enlargement of university clinics and medical academies is also planned, for which investments are to increase fourfold by 1980. Moreover, the GDR intends to expedite the new construction of reconstruction of local hospitals and the network of medical facilities in the older housing areas.
On the basis of Order No 1 of the minister for health for the establishment of Instant Medical Aid (SMH) in the plan year 1976 and the skeleton regulation for the direction of the organization and planning of SMH, dated 9 March 1976, the organization of SMH got under way in one kreis of every bezirk in close cooperation between the state health service and the German Red Cross of the GDR.

The goal of this important component of medical care, which is integrated in the basic outpatient and inpatient care, is to increase the quality and effectiveness of the socialist health service in such a way so as to make it possible to provide medical aid quickly to any citizen, at any time and at any place as well as during necessary transport until his admission in a health care facility.

The heart of this form of organization is the management of the SMH as an independent structural division which is subordinated to the Kreis Council, Department for Health and Social Services.

It fulfills the following tasks:

Acceptance of all emergency calls via the 115, as well as the other numbers reserved in the territory for medical emergency cases, through a dispatcher who has constant access to medical advice. Through this standardization the information route for the citizen is simplified and the time needed to obtain information is considerably shortened.

Giving the orders to go into action to the SMH squads directly or by radio, according to the assignment to be expected based on the information supplied by the citizen, in cases of doubt following a decision by the physician on duty.

DMH (Emergency Medical Aid) for all acutely life-threatening illnesses and accidents.

DHD (Emergency House-Call Service) as medical aid service for all citizens at home, at their place of work or in other areas of life in the case of acute illnesses, conditions of pain and all cases which require medical aid by a physician, also for children.

All house calls classified as not urgent are to be carried out through the stand-by teams of the ambulance facilities and are transmitted to them.

Coordination and deployment of the workers and resources of the bases of SMH in the territory (DMH, DHD).
Through direct telephone connection to the SMH bases, the most important health facilities, the People's Police (VP), the fire department, the kreis and bezirk councils and the ambulance service of the DRK [German Red Cross] (in the case of noncentralized management), as well as through radio connection with the mobile units (ambulances, DMH and DHD cars), the [SMH] control center is an extraordinarily flexible operative organ for the solution or transmission of special tasks (toxicological counsel, procurement of rare blood types, organization of procedures in the case of organ transplants, protection during national disasters).

Organizational questions as well as safeguarding of materials, documentation and statistics.

The direction of the control center lies in the hands of a full-time physician-director in the bezirk cities and the large conglomeration areas and in the hands of a part-time director in all other SMH areas, which are to be developed in stages by 1980 or 1985. The director of the SMH ambulance service of the DRK functions as deputy physician-director for questions of organization and technology.

In the overwhelming majority of the developed and planned SMH control centers the facilities of the ambulance service were chosen for this new common task, with coordination between the two partners, the state health service and the German Red Cross of the GDR (the shared responsibility is also set down in the skeleton regulation). This was done in order to make full use of all available material resources (telephone, emergency call, radio, existing direct lines, premises) and personnel resources (qualified dispatchers, KT managers), as well as of the great experience of the DRK in the organization of transport. Function-specific building extensions that are necessary for the new task are being jointly planned and executed in order also to attain further improvements of the working and living conditions.

ECUADOR

ANTI-TUBERCULOSIS VACCINATION BEGINS

Guayaquil EL UNIVERSO in Spanish 13 May 77 p 7

[Text] Yesterday, 28 vaccinators from the Epidemiology Department of the Provincial Health Headquarters of Guayas started the BCG anti-tuberculosis vaccination campaign in the various federal, private and municipal schools of the town of Duran (Eloy Alfaro). About 2,000 children will be immunized in this preventive health campaign, and in addition a medical checkup of the youngsters will be done to observe the results of the first dose administered months ago.
POTENTIAL FOR EPIDEMIC EXISTS IN RIOBAMBA

QUITO EL COMERCIO in Spanish 29 May 77 p 24

[Text] Riobamba, 28 May—Yaruquies, the urban parish of Riobamba, currently has a latent infection problem which can unleash an epidemic of unpredictable consequences at any moment, for which reason it is necessary that the authorities take adequate measures in order to eliminate the situation.

The source of infection is primarily caused by the appearance of residual flows from the dwellings in the area, which form puddles of sewage in which flies and other disease-transmitting insects proliferate.

The concern of the inhabitants is justifiable in view of the imminent danger faced by all persons, especially children who are used to playing in such places.

THREAT OF TYPHOID INFECTION IN QUITO

QUITO EL COMERCIO in Spanish 17 Jun 77 p 14

[Text] The threat of a massive typhoid infection looms anew over the people of Quito and its environs, and the interim provincial chief of health of Pichincha issues a warning to prevent a repetition of what happened early this year, when whole sections were afflicted by this dangerous and bothersome disease.

Dr Jose Alvarez Alvarez, who is in charge of that office, made arrangements through the Epidemiology Department to analyze all kinds of prepared food sold at the Olympic Stadium during football games, and a frightful number of bacilli which cause not only typhoid, but a gamut of gastrointestinal diseases have been found in all the samplings.

The samples which are contaminated are the cooked beans, the dry rice, the stewed corn and the potato omelets, which, as a result of the exacting laboratory tests, were declared "unfit for human consumption." There are millions of germs in each one of those food items because of dirt and the careless handling by the vendors.

"There is no hygiene in the preparation and sale of those food items, and we will continue to take samplings in order that the proper sanitary authorities—in this instance the municipal—can take the necessary measures," said the public health officials.

Later on they urged the spectators who go to the stadium not to consume those food items. The only samples which are not contaminated are the meat pies, they added, because of the manner in which they are prepared.
INDIA

TYPHOID EPIDEMIC IN ASSAM

Bombay THE TIMES OF INDIA in English 15 Jul 77 p 7

[Text] Shillong, July 14—Nearly 1,660 cases of typhoid were reported in the Tamulpur area of Kamrup District in Assam recently, according to reports. Five persons have so far died.

Following preventive measures like mass vaccination and disinfection of drinking water, the epidemic has been brought under control.

Meanwhile Tamulpur has been declared a typhoid-affected area.

LAOS

INOCULATION AGAINST CHOLERA, SMALLPOX, MALARIA

Vientiane BULLETIN QUOTIDIEN in French 8 Apr 77 p 4

[Text] In order to protect the population from influenza and to maintain it in good health during the productive period of the first quarter of the year, the Public Health Service of Phin district, Savannakhet Province has sent a mobile sanitation team to vaccinate the population against influenza in the various communes of that district: Nagnom Manchi, Na Mouang-Sene, Tang A-lai and Houai Hoy.

At present, along with the vaccination, this sanitation team popularizes prophylactic methods among the population and encouraging the three-cleans campaign.

This vaccination campaign is not only for protection against influenza; it also contributes to eliminating superstition and above all to increasing the productive force.

Vientiane BULLETIN QUOTIDIEN in French 21 Apr 77 p 3

[Text] During the first quarter of this year the sanitation experts of the Nan District Hospital, province of Luang Prabang, consulted with and distributed medicines to more than 5,000 persons, healed more than 100 persons, cared for more than 50 emergency cases and aided more than 30 women in childbirth.
They also administered anti-cholera vaccine to more than 3,700 persons and explained the rules of the three cleans in simple language to 1,253 persons.

Vientiane VIENTIANE MAI in Lao 19 May 77 pp 1, 4

[Text] To insure the strong health of the people in order to serve agriculture so that it will achieve even greater victories than in the past, the Meuang [district] Sikhottabong, Vientiane City public health office sent a number of mobile health workers out between 13 and 16 May 1977 to give cholera and smallpox inoculations and to lecture on the three-cleans principle to people in villages throughout the district. They worked actively and effectively.

The mobile medical teams inoculated 11,700 students and other persons in 19 villages in 3 cantons. Over 1,900 persons heard lectures on the three-cleans principle. The activities of the medical workers were widely praised by the people and were in accordance with party health directives which take disease prevention as basic and [health] care as important.

Vientiane BULLETIN QUOTIDIEN in French 28 May 77 pp 3, 4

[Text] Since the first of this month, the Public Health Service of Paksan District, Vientiane Province, has been sending out mobile health teams to give medical care and anticholera vaccinations.

In parallel with this activity, the teams have disseminated information on basic hygiene among the population, given consultations to women and children in various nursery schools and kindergartens, etc.

Vientiane VIENTIANE MAI in Lao 21 May 77 pp 1, 4

[Text] On 19 May 1977 the Meuang [district] Sisattanak mobile medical unit completed inoculating cadres, students, and other persons in the district against cholera.

After the unit had been active with a high degree of responsibility for over 20 days, people in 28 villages and students in 32 schools, totaling 26,896 persons, had been inoculated.

In the near future, this unit will inoculate people in various villages against diphtheria, tetanus, and [whooping cough] in order to maintain the strong health of the people and to insure strength for continuously and steadily increasing production and studies.
Since late April the Vientiane city and provincial public health office has been sending mobile medical teams out to inoculate the population of the four municipal districts against cholera and malaria.

All students, cadres, organization workers, and other persons in the various schools, offices, and districts have now been inoculated.

ANTIMALARIA VACCINATIONS

Starting in April, mobile health teams of Phon Hong District have vaccinated 47,000 residents of the communes of Phon Hong, Phon Si, Thin Keo, Phon Mi, Na Lao, Phon Ho, Gnot Cheng, Nong Pen and Phon Soung against malaria.

In addition, they have likewise given out information on prophylactic methods and basic hygiene among the people.

MALAYSIA

CHOLERA CASES REPORTED IN SARAWAK

The Third Division of Sarawak has been declared cholera infected. This followed with the discovery of more confirmed cases in the (Daro), Mukah, Kanowit and Sibu districts.

The medical authorities have urged people in the infected areas to continue to observe personal hygiene and to take and drink only cooked and boiled water.

FINES FOR FAILURE TO USE MOSQUITO CONTROL MEASURES

Johore Baru, Thurs.—Twenty-nine people in the Muar and Tangkak districts have been fined $10 each for breeding the aedes mosquito. The offences— their first— were compounded.
A Health Department spokesman warned today that stricter measures may be introduced to prevent a dengue outbreak if the public continued to refuse to co-operate with the Health Ministry.

"We may increase the fines if the people fail to follow our instructions," said the spokesman.

Suspected

He said first offenders are fined $10, second offenders $25 and third offenders may be taken to court where the maximum fine amounts to $1,000.

He said the Health Ministry had given enough warnings about the danger of the fever but the people did not pay enough attention.

He said over the weekend, 10 people were admitted to the Muar and Tangkak hospitals for suspected dengue.

The Health Ministry, he said, had sufficient supplies of abate to go around and he called on the people to use them in their homes.

"Abate costs only 75 cents a packet," he said.

He added that the Health Ministry usually got the blame in case of an outbreak but the people were equally responsible because of their failure to co-operate.

"The Ministry has made every effort to remind the people of dengue through the press and other media," he added.

PERU

YELLOW FEVER CONTROLLED IN HUANUCO, NOT IN AYACUCHO

Lima EL COMERCIO in Spanish 11 Jun 77 p 4

[Text] Peruvian Air Force Gen Humberto Campodonico Hoyos, the minister of health, reported yesterday that the yellow fever outbreak which recently occurred in Huanuco has been totally dominated, but he announced also that a focus of this disease has been detected in an area of Ayacucho.

These announcements were made by the health minister shortly before leaving for Cusco. Campodonico said that some cases of yellow fever have appeared in the past few days in the area of Sycse, in Huanta, Ayacucho, and the Epidemiology Office has sent vaccine to control it. He pointed out that yellow fever is contracted by workers who go to small farms and tobacco-growing areas without getting vaccinated against that disease.
In relation to his trip to Cusco, he explained that during his visit to the Imperial City, he will inaugurate the Eye Bank and the Mother and Child Center, two important public welfare projects undertaken in Cusco.

He said also that he will have the opportunity to know at first hand the current medical infrastructure of the area to correct any existing deficiencies.

The health minister will return from Cusco tomorrow. He was seen off at the International Airport by high officials of that ministry.

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Lima EL COMERCIO in Spanish 21 Jun 77 p 18

[Text] Huancayo, 20 Jun—A dangerous focus of yellow fever which has already caused four deaths has been uncovered in the remote village of Siria, located between the department of Ayacucho and the Apurimac Valley, according to the Midcentral Health Zone headquartered in this city.

In view of the report of the inhabitants of the area, the sanitary authorities of Huancayo decided to dispatch a medical team headed by Dr Jose Portocarrero, chief of the Epidemiology Department of the Midcentral Health Zone, and Dr Miguel Arca, special envoy of the Ministry of Health.

They are taking vaccines and medicines to that remote area, which is completely devoid of means of communication and located in the middle of the jungle. This is the second focus of yellow fever occurring on our edge of the jungle because a similar situation developed a short time ago in Satipo, where the danger has been already eliminated by the prompt intervention of the sanitary authorities.

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TYPHOID OUTBREAK CONTROLLED

Lima EL COMERCIO in Spanish 21 Jun 77 p 18

[Text] Cusco, 20 Jun—An outbreak of exanthematous typhoid in Cusco and Paruro Province has just been brought under control by the Regional Health Directorate of the Southwest, according to an official announcement made by spokesmen of the local hospital sector.

The outbreak in Cusco occurred at the Penitentiary Center of Quencoro. Several inmates were afflicted with the illness and received urgent treatment, and preventive measures were put into practice at the mentioned institution of social rehabilitation.
Sanitary teams also proceeded to disinfect all the surrounding area in the district of San Jeronimo, where there were also other cases whose number has not been determined.

The situation attained dramatic overtones in Paruro Province, where the authorities reported several fatal cases had occurred.

THAILAND

MALARIA EPIDEMIC

Bangkok BANGKOK POST in English 13 Jul 77 p 1

[Text] A malaria epidemic has hit the southwestern coastal province of Ranong where 1,264 people are suffering from the disease, health officials report. The officials partially attributed the spread of the disease to the residents, reluctant to cooperate with the DDT spraying campaign.

TURKEY

INTESTINAL PARASITE DATA

Istanbul HURRIYET in Turkish 2 Jul 77 p 3

[Excerpts] According to a report called "A Systematic Examination of Intestinal Parasites," which was released by the Diyarbakir Medical Faculty Bacteriology Department, 42 out of 100 children in Turkey between the ages of 1 and 6 have one or more intestinal parasites. The report, which was prepared by Dr Omer Mete, stated that the incident rate varied from area to area. As an example, 35 out of 100 children in Izmir are inflicted, with 17 out of 100 in Ankara, 21 out of 100 in Istanbul, and 38 out of 100 in Hatay. Forty-nine out of 100 suffer from this malady in Diyarbakir, Elazig, Urfa, Siirt and Mardin.

MALARIA REAPPEARS IN IZMIR, 27 CASES REPORTED

Istanbul BARIS in Turkish 16 Jun 77 pp 1, 7

[Text] Izmir (Anatolian Agency)—Tests conducted in Izmir have revealed 27 cases of malaria. Officials of the regional Malaria Education Office said that effective methods against the malaria, found especially among those coming from the east, were being practiced, and asked for the public's help in this regard.
To prevent the spread of this strain of malaria, the officials requested that anyone suspecting he might have the disease go immediately to the nearest health center. Otherwise, they said, it would be impossible to prevent a dangerous outbreak because it is the season for mosquitoes, which carry the disease.

They said that the Malaria Education Office had been inundated recently with requests for malaria inspections but that they did not feel the situation was serious, except for the 27 cases.

The officials said that the cases discovered were of a strain popularly known as "secret malaria," which makes immediate diagnosis difficult and that symptoms such as a cold that begins with influenza-like symptoms, excessive sweating, and paleness should be checked out immediately.

NEW ANTIEPIDEMIC HEALTH MEASURES

Moscow MEDITSINSKAYA GAZETA in Russian 13 May 77 p 3

[Article by V. Kovshilo, chief of the Main Sanitary-Epidemiological Administration of the USSR Ministry of Health, V. Pokrovskiy, chief infectious-diseases specialist, and Yu. Solodovnikov, head of the All-Union Center for Shigellas: "New Guidelines"]

[Text] Bacterial dysentery and acute intestinal infections of undetermined etiology continue to be categorized as one of the most pressing problems of health care. According to data of WHO, no less than 500 million cases of the ailments were registered in the middle sixties in the world. At the present time, the epidemiological situation in the world has not changed significantly.

The newspaper has already reported on the development in the country of qualitatively new approaches to the solution of the problems of control of dysentery and other acute intestinal diseases. Scientific research on improving the system of prevention has been coordinated by the Infectious Diseases Commission and specialists of the USSR Ministry of Health.

The program of antiepidemic measures that existed in our country until recently was developed many years ago.

In recent years, the level of sanitary and municipal services of cities and city-type settlements, the general and sanitary level of people has risen markedly. Medical services to the population have been improved. All this could not help but have an effect on the character of the
epidemic process in dysentery. Both the clinic and the causative agents determining the picture of dysenterial morbidity in the country have changed significantly.

The light clinical course of dysentery and the almost total absence of secondary diseases at a focus testifying to the inactivation of the everyday channel of transmission have made it possible to expand the indications for treatment at home and to simplify considerably the procedure for discharge of patients from a hospital. The number of obligatory bacteriological examinations prior to discharge has been reduced. This permits, without detriment to antiepidemic work, a significant reduction in the volume of hospitalization and the time spent at a hospital by this category of patients. The laboratory load is reduced at the same time.

The new system of prevention of dysentery and other intestinal infections orients medics primarily toward sanitary-hygienic measures. The main attention is paid to enterprises, facilities and structures of potential danger in an epidemic sense.

Sanitary supervision must be especially strict in regard to water supply and sewerage systems of inhabited places, observance of antiepidemic and technology regimes at enterprises of the dairy and food industry, public dining, and at institutions of trade selling food products.

Physicians concerned with food hygiene must as of now increase their control over enterprises of the dairy industry. Are they ready for the "big milk" season, are sanitary-hygienic conditions stable at shops and sections? What is the quality of milk pasteurization, are necessary requirements adhered to in the production of dairy products, are rules for their sale being violated—such is the range of questions requiring daily attention on the part of the sanitary service.

A responsible part of the work is sanitary control over the conditions of feeding of contingents engaged in seasonal agricultural work. Cases are still found where food units of student detachments are located in unsuitable quarters which are not supplied with a sufficient quantity of equipment and implements. As a result, the rules for preparing food and storing foodstuffs are violated. Consequently, sanitary-epidemiological stations must maintain full and accurate data on the number of arrivals and of the places of their location.

Spring is a difficult time for the personnel of the sanitary-epidemiological stations, maintaining sanitary surveillance over the farm supply of drinking water. As we know, at flood time the character of the water of open water bodies deteriorates in regard to organoleptic indicators (suspended matter, turbidity, coloring and odor). The level of microbial contamination of the water increases, which makes it potentially
dangerous in an epidemic sense. For this reason purification water supply installations must be prepared ahead of time for operating under difficult conditions. Therefore one should make sure that water supply stations have adequate quantities of suitable reagents: coagulants (polyacrylamide desirable), chlorine and the like, insuring intensive purification and decontamination of the water. Rigid control is also necessary over subterranean waters: their quality also deteriorates in spring.

A number of measures have been rescinded, first of which is reduction of the cycle of bacteriological examinations of the population and epidemiological foci; the energies and time of epidemiologists are being freed for fundamental work. We refer to detailed and sound analysis of morbidity, fuller elucidation of transmission factors of infections. Epidemiology jointly with specialists from the sanitary-epidemiological service on hygiene of feeding and municipal hygiene can organize rationally preventive work. First of all, we have in mind strict laboratory control over the sanitary condition of enterprises and the quality of manufactured products.

Sanitary-bacteriological examination of plants and bacteriological examination of workers at enterprises should be done only when necessary. In each concrete case, there must be clear justification. Specialists must have confidence in the fact that an examination strengthens the complex of preventive measures.

Personnel of the sanitary-epidemiological service must have a good knowledge of the special features of water supply, sewerage systems, provision of the territory being served with food products and have a clear idea of the sanitary condition of the more "vulnerable" plants. They have to have at their disposal sanitary-bacteriological research data. Only under such conditions will epidemiological analysis be sufficiently valid.

It is important for this work to be conducted constantly and in a timely manner with the participation of all the specialists. The work is coordinated by territorial sanitary-epidemiological services.

Another responsible area exists in children's institutions. It is necessary to achieve systematically the optimum distribution of children and strict observance of antiepidemic conditions.

Analysis of the results of last year's summer health-improvement campaign shows that miscalculations were to be found in its organization. The quality of operation of medical examination of children and personnel was insufficiently strictly controlled locally; schedules of preventive sanitary supervision are not being kept in regard to the preparation and opening of children's health-improvement institutions. Complexes are frequently opened without the permission and knowledge of sanitary-epidemiological centers and while neglecting the fact that the
sanitary-hygienic conditions still do not meet existing norms and rules. Requisite demands are not made on heads of trade union organizations, ministries and branches under whose jurisdiction they are located.

There are still to be found cases of food poisoning and acute poisoning and intestinal diseases among children and personnel of children's pre-school institutions and Pioneer camps. They occur in those places where health-improvement institutions are opened without first having acquired medical documentation, where sleeping quarters are overcrowded, rules for storage, times for the sale of easily perishable products and prepared food are not obeyed and, more important, personnel of food units do not adhere to principles of personal hygiene.

For these reasons special attention should be paid to the timely preparation of quarters for food units, to their provision with efficient refrigeration facilities and hot flowing water. The commission should include without fail a representative of the local sanitary-epidemiological station. Work in the preparation of food must only be done by qualified cooks who have undergone special training and passed sanitary-minimum tests. Personnel of sanitary-epidemiological stations must make sure that the technology of preparation of food meets sanitary requirements and control strictly the conditions of foodstuff storage and food preparation.

Improvements in the system of prevention cannot be disjunct from explanatory and educational work with the population. It is necessary to search for more intelligible and effective forms for it.

Naturally, any reduction in the volume of bacteriological investigations, limitation of epidemiological indications for dispensary observation, and changes in its times must in no cases be reflected in the quality of treatment of patients. Adults, who have had dysentery, must come under the observation of a physician. The physician determines on the basis of clinical indicators the length of observation. The need is clear for stage treatment of children (department for convalescents) and their recovery from chronic dysentery (sanatorium). Clinical data are also used as a basis in these cases.

Such are the strategy and tactics of dealing with dysentery and other intestinal infections for the immediate years ahead.
VENEZUELA

HIGH INCIDENCE OF CANCER IN GUAYANA

Caracas EL UNIVERSAL in Spanish 11 Jun 77 p 2-28

[Text] Ciudad Bolivar, 7 Jun--The state of Bolivar has a high number of cases of cancer of the lungs in males and of the cervix uteri in females, declared oncologist Jose Nicolas Rojas, who works at the assistance institutes of this capital.

The well-known doctor reiterated that at this time cancer is the second-ranking cause of death among the population of the country. He explained that according to medical records, the Ruiz y Paez University Hospital alone registered in 1964 some 61 cases of cancer of the cervix uteri, 50 of them advanced; 31 cases of lung cancer, all of them advanced; as well as 24 cases of stomach cancer and 9 cases of breast cancer.

He emphasized that the statistics remain the same, with the cases of lung cancer increasing as a result of the number of cigarettes which are smoked in this area.

These types of cancer are detected when the person is in a serious condition because the disease becomes evident in its most advanced stage, hence it is necessary to have periodic checkups in order to make valid the advice that cancer is curable if diagnosed in time, noted Dr Rojas.

He pointed out that while Bolivar City is being scourged by lung cancer, the disease in the Andes attacks the stomach of both sexes because cigars and chewing tobacco are much used in that area, while cigarettes are consumed at an alarming rate here.

In his statements, Dr Rojas, who is a member of the local League Against Cancer, called upon the community to cooperate with that organization in order to obtain the necessary resources to diagnose cancer at the proper time, thus saving many lives.

In his closing statement, Dr Jose Nicolas Rojas said that a campaign to inform the people should be carried out in Guayana in an effort to reduce the incidence of cancer as a result of the widespread use of cigarettes.
INCREASE IN POLIOMYELITIS

Caracas ULTIMAS NOTICIAS in Spanish 11 Jun 77 p 22

[Article by Carlos Villegas]

[Text] The minister of health of the last administration responded harshly to the present holder of that office, pointing out that during this administration, the incidence of poliomyelitis has increased, there is a national hospital crisis and infant mortality has not decreased.

Dr J. J. Mayz Lyon, ex-minister of health and social welfare of the past Committee of Independent Political Electoral Organization (COPEI) government, who called a press conference yesterday to dispute the statements of the incumbent minister, Dr Antonio Parra Leon, said:

"On Thursday, the 8th of the current month, I read with amazement a press report concerning the recent interpellation of Health Minister Antonio Parra Leon by the Control Committee of the National Congress, and which bore the headline 'The Ministry of Health was at the level of real apprehension in early 1974.'"

The former minister contested each point of the statements of Minister Parra Leon regarding the Ministry of Health and Social Welfare, and in answer to the ensuing questions of the newsmen, Dr Mayz Lyon (who was accompanied by Dr Henry Fossaert Carranza and Dr Demetrio Castillo) said:

"The incidence of poliomyelitis has increased in Venezuela at this time, and I can point out that an outbreak which reached 568 cases occurred in 1968, dropping to 400 cases in 1971. House-to-house vaccination was carried out with the following results: 81 cases in 1972, 31 in 1973, 22 in 1974, and 70 in 1975. There are no official figures for 1976, but there were reports of 46 cases although verification raised them to 77."

He termed this a "failure in the Ministry of Health" and pointed out in relation to the hospitals that "there is a hospital crisis in Venezuela at this time because Democratic Action (AD) is opening hospitals without providing them with the necessary funds or the adequate equipment and personnel. As to infant mortality, it is false that it has decreased."

HEALTH DEPARTMENT CRACKS DOWN ON STREET VENDORS

Caracas EL UNIVERSAL in Spanish 17 Jun 77 p 1-22

[Text] The Caracas city government is to have the Metropolitan Police remove over 1,000 street peddlers selling food.
The request to act was made of Governor Manuel Montilla by the Health Commission of the Federal District and by the state of Miranda.

This operation is essential for protection of public health, unless concern about adverse public reaction prevents its application. [as published]

Caracas, a city in crisis—because of the severe traffic problem, filth, garbage, the number of mentally disturbed people and beggars roaming its streets, noise, and the permanent transformation of its streets into gullies—does not look like a capital, but rather a sprawling hamlet with street-corner stands selling broiled food, alcoholic beverages [chicha], juices and fruits.

Health officials believe that people who eat this food risk gastrointestinal diseases and food poisoning.

An official of the Ministry of Health stated that it was not granting permission to engage in this type of business so that authorities can act freely.

The food sold at these stands is prepared in homes under sanitary conditions unknown to health officials, by people who may not have health certificates or may even carry diseases.

Also, these stands do not meet the minimum conditions set by the General Food Law, in that the nature and quality of all food should meet the buyer's expectations and it is not to be sold in poor condition or when for any other reason it may be harmful to health. This sort of portable stand lacks facilities for drinkable water and for waste water, a basic requirement established by health officials for operation of a business selling prepared food.

STRICTER CONTROL OF SAUSAGE DISTRIBUTION

Caracas EL UNIVERSAL in Spanish 17 Jun 77 p 2-31

[Text] Maracaibo, 16 Jun (INNAC)—The local Department of Health, through its Department of Food Sanitation, has ordered strict control of the distribution of sausage for human consumption because of repeated complaints about its poor quality. A great deal of this food is prepared outside the state of Zulia, but the majority of it is made here, and the public continues to complain about the appalling condition of much of it, especially the kind called chorizo.

Dr Jose Rodriguez, chief of the Department of Food Sanitation, made the announcement, stating that samples of sausage were to be obtained for analysis to determine its quality and to decide whether that quality warrants the high price often asked.
Dr Rodriguez said that the Department of Health hopes that the public will cooperate by reporting food products that are not labeled and whose quality thus cannot readily be judged by health officials.

DEATH, SICKNESS FROM GASTROENTERITIS CONTINUE

Caracas ULTIMAS NOTICIAS in Spanish 17 Jun 77 p 22

[Text] Barquisimeto, 16 Jun--Some 79 children have died in Lara State as a result of gastroenteritis, according to Dr Miguel Moreno, commissioner of health.

The figure is alarming, and in addition to those deaths, a total of 2,807 cases were registered throughout this area. The number of cases and deaths broken down by months is as follows: 966 cases and 21 deaths in January, 531 cases and 27 deaths in February, 448 cases and 11 deaths in March, 428 cases and 9 deaths in April, and 434 cases and 11 deaths in May.

The health commissioner considers, however, that the number has dropped in comparison to last year because there were 2,930 cases in the first 5 months of last year in contrast to 2,807 cases registered in 1977. The number of deaths also dropped from 91 in 1976 to 79 in 1977.

Dr Miguel Moreno said that there was a total of 6,810 cases and 213 deaths last year. The figures will drop substantially this year because the remaining months produce the lowest incidence of the disease.

HEPATITIS CASES CONFIRMED; WATER SUPPLY BLAMED

Caracas EL NACIONAL in Spanish 24 Jun 77 p C-4

[Text] Maracaibo, 23 Jun--Some 56 cases of hepatitis were clinically confirmed by the sanitary authorities in the months of April and May at La Concepcion, a former oil field in the district of Maracaibo.

Dr Elias Anzola Perez, epidemiologist of the cooperative health services, said that the majority of the cases were children between the ages of 3 and 10 years, and that there were no fatalities.

He pointed out that the factors which contributed to the outbreak of hepatitis were of a sanitary nature, and that a number of recommendations which are to be implemented by the National Institute of Sanitation Works (INOS) in an effort to correct the situation were promptly taken into consideration.
"It is necessary," he pointed out, "that a new chlorinator be installed for the water used by the population, that the three water storage tanks be cleaned and maintained, that sewer pipes be extended to drain in uninhabited areas because they currently dump waste waters at places where they are used for the irrigation of vegetables and fruit trees, and that broken pipes be fixed and samples taken from the storage tanks which supply water to the people for bacteriological testing."

He said that the situation had developed as a result of the problems of environmental sanitation which exist in La Concepcion.

VACCINATION PROGRAM AGAINST SEVERAL DISEASES TO BEGIN 1 AUGUST

Caracas ULTIMAS NOTICIAS in Spanish 26 Jun 77 p 18

[Article by Ricardo Marquez]

[Text] The Ministry of Health and Social Welfare will start on 1 August an intense vaccination campaign against diphtheria, measles, whooping cough and tetanus among children under 3 years of age.

The decision was made at a meeting of general health commissioners which started last Thursday in this city under the chairmanship of Dr Antonio Parra Leon, minister of health and social welfare.

It was explained that Health and Social Welfare (SAS) seeks to reduce to a minimum the rates of morbidity and death caused by diseases which are susceptible to preventive treatment with vaccines.

It is considered regrettable, it was said, that up to 1975, the country had a large number of deaths caused by diseases such as measles, which can be eradicated with vaccine. For that reason, an intensive national vaccination campaign was conducted in 1976 with the use of the anti-measles vaccine and the triple vaccine against diphtheria, tetanus and whooping cough, and there was a substantial drop in the number of cases and deaths caused by those diseases.

With such an experience, it has been now decided to intensify the vaccination campaign, and the first dose of those vaccines will be administered starting on 1 August, repeated in September, and again in October to bring the immunization program to a close.
VIETNAM

SRV PREMIER ISSUES DIRECTIVE ON ERADICATION OF MALARIA

Hanoi Domestic Service in Vietnamese 1300 GMT 27 Jun 77 BK

[Text] The premier of the government recently issued a directive on the eradication of malaria throughout the country. The directive points out:

After several years of malaria eradication efforts, today the number of malaria victims in the northern provinces has been reduced to four-ten thousandths of the population. Some active malaria-breeding areas, however, still exist in a number of localities, mainly in the mountain and former Zone 4 provinces.

In the southern provinces, under the former U.S.-puppet regime, malaria ran rampant in all localities, especially the Tay Nguyen region and the former zones 5 and 6, causing many deaths. Since the complete liberation of the south, the revolutionary administration has made considerable antimalaria efforts and has recorded remarkable results. Malaria, however, still remains prevalent. Today, there still are about 10 million people living in malaria-infested areas and the percentage of splenitis and malaria victims remains very high, thus seriously affecting the people's health and the restoration and development of production.

Taking into account the menace of malaria throughout the country and in order to implement the fourth party congress resolution on eradicating malaria in all localities, the premier of the government orders the following:

1. From now until the end of 1980, efforts must be made to basically stamp out malaria throughout the country. This is a very important and pressing task aimed at protecting and improving the people's health, at creating favorable conditions for economic and cultural development in accordance with the orientations of the Second Five-Year Plan, and at satisfactorily preparing for the Third Five-Year Plan.

All state organs and mass organizations at all levels should carry out propaganda to enable the people to realize the momentous political, economic and cultural significance of the malaria eradication work. They should also motivate cadres, employees, workers, the armed forces, assault youths, and the people to actively participate in the malaria eradication campaign which the government has placed under the unified leadership of the Ministry of Public Health.

The targets to be fulfilled between now and 1980 are:
In the northern provinces, malaria must be completely eradicated to protect the people in key areas such as new economic areas and former malaria-infested areas where malaria epidemics may recur.

In the southern provinces, in 1977 and 1978 efforts must be concentrated on stepping up antimalaria activities in order to protect the 4 million people who live in key areas such as malaria-infested areas, new economic areas, former resistance base areas and war-ravaged areas, or work in various government agencies or at worksites, state farms, state forests and in factories, as well as members of the armed forces units stationed in malaria-infested areas.

Between 1979 and 1980 malaria must be basically stamped out in all southern provinces and cities.

3. [as heard] The people's committees at all levels in malaria-infested areas must rely on the guidance of the Ministry of Public Health to formulate plans to gradually eradicate malaria in their localities. These people's committees also have the responsibility to mobilize manpower, to underwrite the expenses of mosquito-exterminating spraying units and provide them with food, and to treat malaria victims.

State organs and armed forces units stationed in the various localities should actively participate in malaria eradication activities under a unified plan in order to save manpower, materials, medicine, chemicals, and so forth.

4. We must intensively and resolutely carry out the malaria eradication campaign by simultaneously satisfactorily applying urgent malaria control and prevention measures, training and improving antimalaria specialists, stepping up basic surveys and scientific study, and building the grassroots public health network to support malaria eradication activities.

We must speedily develop and strengthen the force specializing in malaria prevention work, especially in the southern provinces, which comprises local antimalaria facilities, provincial and municipal malaria control stations, and malaria control teams of the sanitation and epidemic prevention units or of the mobile medical units belonging to the various districts, precincts, cities and wards.

In malaria-infested areas, antimalaria specialists should be assigned to the medical establishments and stations of villages, government agencies, worksites, state farms, state forests, factories, schools, and so forth.

The directive also reminds the Ministry of Public Health to formulate plans to work in close coordination with the local sectors and administrative levels so as to step up malaria eradication activities throughout the country, especially in the southern provinces and cities. The ministry must also make periodic reports on its work to the premier of the government.
II. ANIMAL DISEASES

BRAZIL

IMMUNIZATION TO BEGIN AGAINST FOOT-AND-MOUTH DISEASE

Sao Paulo 0 ESTADO DE SAO PAULO in Portuguese 5 Jun 77 p 61

[Text] Porto Alegre--The general compulsory vaccination of the herds against foot-and-mouth disease will begin in Rio Grande do Sul on the 16th, using the trivalent vaccine which includes the A-Bage virus. Foot-and-mouth disease currently afflicts almost all of the state herds, and it has already caused the suspension of animal auctions and exhibitions in border municípios.

According to Agriculture Secretary Getulio Marcantonio, the efficacy of all vaccine stocks will be controlled by the Ministry of Agriculture at this stage of the vaccination. "The vaccine normally used in the state has been effective in immunizing against the 0 and the C viruses," recalled the secretary, "and the proof of that is that we have had long periods without any foci of those viruses. The problem has been with the type A-Bage virus, and if the vaccine which is going to be used at this time contains that virus under the control of the Ministry of Agriculture, I believe that we can reduce the existing foci in the state to an insignificant number."

During the past few weeks, foci of foot-and-mouth disease have been registered in almost all the border municípios, where the large cattle-raising ranches are located. The disease has spread among the herds of Livramento, Dom Pedrito, Bage, Uruguaiana, Rosario do Sul, Pinheiro Machado and Cangucu. The Veterinary Inspection Office cancelled two auctions in Quarai, and the cattle exhibitions in Piratini were suspended also to prevent the movement of animals and the spread of the foot-and-mouth disease virus to unaffected areas.
The Agriculture Secretariat has no information on the existing foci. The disease spread rapidly because only 70 percent of the herds were treated in the last vaccination conducted in February, and the vaccine did not immunize against the A-Bage virus. The damage, according to the technicians, is difficult to assess because foot-and-mouth disease does not always kill the animal immediately. The cattle remain weak, stop feeding and cannot endure the winter; those which survive do not regain their weight so that they can be sold after the spring, when the annual roundup starts.

The secretary of agriculture reported that the country's laboratories had agreed with the ministry to deliver the vaccine under the required conditions and within a prearranged schedule in order to make it possible to vaccinate all the herds.

BURMA

PREVENTION OF CATTLE DISEASES IN FOUR ZONES

Rangoon THE WORKING PEOPLE'S DAILY in English 13 Jul 77 p 1

[Text] Rangoon, 12 Jul—There are four groups of viruses which cause cattle foot and mouth disease in Burma.

This discovery was made by veterinarians who carried out the classification of foot and mouth disease viruses beginning 1975 for the purpose of preventing the epidemic.

Vaccine for prevention of all the four kinds of foot and mouth diseases for 6,000 head of cattle was imported with World Bank aid in June 1977.

The vaccine is being given to the cattle in Shwebo, Rangoon, Pegu and Magwe zones covered by the Livestock Development Project beginning 11 June 1977.

Up to date, 1,106 head of cattle have been inoculated in Shwebo zone, 1,561 head of cattle in Rangoon zone, 996 head of cattle in Pegu zone and 1,000 head of cattle in Magwe zone.
CYPRUS

ANIMAL DISEASE RESEARCH, ARTIFICIAL INSEMINATION PROJECT

Nicosia BOZKURT in Turkish 18 Jun 77 p 1

[Text] Nicosia (ENF)—Preliminary efforts have been completed on the "Animal Disease Research and Artificial Insemination Project" begun by the veterinary bureau of the Ministry of Food, Agriculture, and Animal Husbandry.

The 5-year project will be conducted in the large area beyond the Nicosia circumferential highway.

The objective of the project is to prevent zoonosis which threatens animal health, causing substantial economic loss, and to produce a superior animal population that is healthy, uniform, and highly productive. In addition, animal farmers will be spared the expense of keeping bulls for small herds.

By avoiding animal replacement and other economic losses and by having a healthy and highly productive animal population, animal husbandry will become an economical undertaking. Therefore, the contribution of this sector to the national income will be raised significantly.

When completed, the project, which will be the only one of its kind in the country, will have a quarantine center and laboratories for food and environmental health, pathology, bacteriology, virology, parasitology, serology, and vaccine production.

ECUADOR

RARE EPIDEMIC ATTACKS MARINE LIFE IN ESMERALDAS RIVERS

Quito EL COMERCIO in Spanish 14 May 77 p 3

[Text] Esmeraldas, 13 May—A rare disease is attacking the marine life in the Viche, Tachina and Cube rivers, killing hundreds of fishes and other species and causing logical losses for the inhabitants who depend on the fishing resources for their daily sustenance.

A delegation of inhabitants of the Cube area visited this city for the purpose of informing the proper authorities about this problem which has come up, so that suitable measures can be taken to prevent the spread of this strange disease and to eradicate it.
On the other hand, it was announced that the inhabitants of the Cube area will meet in the near future to discuss important problems, such as the present one.

PERU

FOOT-AND-MOUTH DISEASE VACCINATION CAMPAIGN TO BEGIN SECOND PHASE

Lima EL COMERCIO in Spanish 15 Jun 77 p 30

[Text] Cusco, 14 Jun—The second phase of vaccination against the dreadful epizootic foot-and-mouth disease for 1977 will begin on Monday, 20 June, according to an announcement made by Zone 11 of the Ministry of Food.

The campaign will be carried out in the departments of Cusco, Apurimac and Madre de Dios for the purpose of immunizing the bovine population over 4 months of age in a periodic and systematic fashion.

The authorities headed by engineer Teodoro Peralta Aguilar, regional food director, are informing the cattlemen that the sanitary measure has been adopted to reduce to a minimum the possible occurrence of outbreaks of foot-and-mouth disease.

It is reminded that in previous years, this disease has caused substantial losses which have affected not only individuals, but the economy of a region and of the country as well.

The present arrangements call for the vaccination of the cattle every 4 months. The required dose costs 8 soles and should be paid directly to the vaccinators, who will go all over the area in teams.

Those who disregard the vaccination against foot-and-mouth disease will be fined in accordance with the provisions of Supreme Resolution 0469-74.

On the other hand, Food Zone 11 has been appealing to all persons who are aware of the existence of animals afflicted with foot-and-mouth disease or any other vesicular sickness to report the fact to the nearest Production Agency.

The zonal chief of the National Foot-and-Mouth Disease Control Program is Dr Raul Luyo Sanches, who has said that cattlemen can help the country in this national crusade by helping themselves.
TURKEY

CHICKEN PESTILENCE IN TURKEY

Istanbul MILLIYET in Turkish 2 Jul 77 p 13

[Text] Five thousand chickens from the Ceylanpinar State Production Farm have reportedly succumbed to pestilence. According to the deputy director of the farm, Selahattin Korkut, 5,000 chickens have died from "pseudo chicken pestilence" recently, despite the many efforts which have been taken to halt the spread of the disease.

VENEZUELA

OUTBREAK OF BOVINE RABIES

Caracas EL UNIVERSAL in Spanish 11 Jun 77 p 2-28

[Text] San Felipe, 10 Jun—The regional sanitary authorities and the office of the Ministry of Agriculture and Animal Husbandry (MAC) are keeping under control the outbreak of bovine rabies which was detected in the area of the hollows [?] of Aroa in this state. Four animals have died, and seven persons are being vaccinated against the disease, including the veterinarian and three assistants who were in contact with the sick animals.

The outbreak is under control and there is no danger that the disease will spread to other cattle areas, said an official of the MAC assigned to the area of Aroa. He added that the focus was located on a farm owned by Tomas Primavera, who had bought a drove of cattle in the J. E. Losada municipio of Zulia, who started to die about 15 days later, and it was then that the MAC began the investigations which determined the presence of the virus which causes paralytic rabies.

For its part, the General Health Commissioner's Office headed by Dr Luis Yoris assigned the regional epidemiologist, Dr Victor Pulido, and qualified personnel of the Veterinary Service to establish precautions against human contacts and to adopt other essential measures in the area where the outbreak was detected. The seven persons who handled the sick animals, among whom are Dr Gonzalez, the chief veterinarian of the area of Aroa, and three veterinary assistants named Andres Campero, Abel Morillo and Eligio Perez, started getting the vaccine yesterday.

The canine population of neighboring settlements is being vaccinated against the disease as a means of preventing the possible spread of the
virus over that important agricultural and livestock-raising area. Health and Social Welfare (SAS) and MAC officials averred that the situation is under control and there is no danger that the virus of paralytic rabies could spread to other areas.

HEALTH OFFICIALS DENY CASES OF EQUINE ENCEPHALITIS

Caracas EL UNIVERSAL in Spanish 17 Jun 77 p 2-24

[Text] Health officials in El Tigre and Barcelona are unaware of any cases of equine encephalitis in the Pueblo a Juro district of El Tigre.

This was announced by Dr Rafael Travieso, chief of the Department of Epidemiological Preparedness of the Ministry of Health and Social Service, who said that reports of deaths caused by equine encephalitis had been investigated, and in that area no instances had been found of deaths among donkeys and horses, which normally precede the appearance of the disease in humans.

Regarding the death of a young girl, reportedly from equine encephalitis, health officials established that she had died of meningitis. Efforts are now being made to learn its source. Dr Travieso pointed out that cases of meningitis appear throughout the year in various regions of the country.
III. PLANT DISEASES AND INSECT PESTS

BRAZIL

FOCI OF Aedes Aegypti MOSQUITO REPORTED IN SALVADOR

Rio de Janeiro O GLOBO in Portuguese 26 May 77 p 10

[Text] Salvador—Despite the secrecy which the regional office of the Superintendency of Public Health Campaigns (SUCAM) has maintained regarding the fact, Rodolfo dos Santos Teixeira, professor of tropical medicine of the Federal University of Bahia, yesterday confirmed to O GLOBO the existence of foci of the Aedes aegypti mosquito in Salvador. The professor, however, considers that the possibility of the mosquitoes discovered in Rio being the originators of those of Bahia is remote.

According to Prof Rodolfo Teixeira, foci were initially located in the Lower City last year, and in other areas of Salvador later on, but none of them has reached alarming proportions to date. Recalling how the first foci were uncovered in Belem of Para in 1966—probably coming from Guiana in ships which smuggled coffee—the professor attributes the return of the mosquito to "a slackening of sanitary vigilance" as a result of the authorities' belief that they had been eradicated.

In addition to the transmitter of yellow fever, several other kinds of disease-transmitting mosquitoes which were considered extinct in the country have been uncovered of late in Salvador, averred the doctor. As an illustration, he cited the recent discovery of a source of filariae (filariasis) in one of the sections of the Lower City. These tropical disease-transmitting mosquitoes supposedly came from Africa, where they still have not been eradicated.
SWARM OF BEES ATTACKS RESIDENTS, INJURES 24

Sao Paulo 0 ESTADO DE SAO PAULO in Portuguese 14 Jul 77 p 22

[Text] A swarm of bees, probably African, attacked the residents of Jardim Sao Rafael, in Parelheiros, yesterday morning, stinging adults and children who had to be treated at the Municipal First Aid Clinic of Santo Amaro and, subsequently, at the Vital Brasil Hospital of the Butanta Institute. Only the 1-year-old girl Leila Silva remained hospitalized. The rest of the victims were dismissed at the latter institution, but they left with swellings all over the body and will continue to receive medication.

According to employees of the first aid clinic, 24 persons were treated by the doctors on duty, but up to 1700 hours, 7 hours after the attack, the 25th Police District had identified only 22 victims: their very remote place of residence hindered the contact with the two hospitals and the police headquarters.

The staff on duty at the Butanta Institute, used to taking care of isolated cases of diverse stings, had to work at a fast pace for several hours administering antiallergenics, pulling out stingers and applying salves.

Although the type of bee could not be identified by the stingers pulled out from the patients, the doctor on duty said that they were common bees because "if they were African, the results of the attack would be more serious."

To the residents of the trailers and wooden shacks of Jardim Sao Rafael, however, the bees were really African. They came out of a hive which has been located at the home of Adenilde Barbosa for 3 years and swiftly held sway over Sixth and Eleventh streets, where they furiously stung all persons inside the homes and outdoors.

Panic spread among the inhabitants, who screamed and wept in desperation, until Elias Gomes, with one eye shut from the swelling produced by the stings, ran out to Parelheiros Highway and located a radio patrol car. A short time later, more than 10 Military Police vehicles arrived at the place to transport the victims to the first aid clinic. The firemen were also summoned, but by the time they arrived, the bees had returned to their hive and the firemen decided not to rouse them again.
In order to destroy the insects which have ravaged rice plants belonging to the commune of Sithantai, district of Hatsaifong, province of Vientiane, on 16 and 17 of this month the exchange labor teams of this commune together with the teams of the Directorate of Domains and Crops of the Ministry of Agriculture, Forests and Water Power actively dusted insecticides over more than 30 ha of irrigated rice fields. They are now continuing their labor on more than 100 ha of irrigated rice fields.