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WORLDWIDE REPORT
Epidemiology

No. 302

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HEALTH PROBLEMS, SHORTAGES AFFECT KUANDO-KUBANGO REFUGEES

Luanda JORNAL DE ANGOLA in Portuguese 24 Sep 82 p 6

[Excerpts] The population of Kuando-Kubango is in a constant struggle to solve health problems, which bring with them innumerable concerns, since the well-being of each human being constitutes the progress of the society as a whole.

In Kuando-Kubango Province the problems can be described in two categories: the shortage of medical personnel and the shortage of technical and material means to comply with higher-level directives.

Relying only on a 130-bed regional hospital and some health centers scattered over the province, the health service has 359 workers, 6 of whom are physicians.

For an estimated population of about 175,000, 6 doctors is a very small number, and their load is even greater if one takes into account the extremely difficult conditions under which they work. Hence the only solution to this and other problems in the sector obviously lies in the accelerated training of national cadres, as determined in higher directives.

Antiquated Buildings and Equipment

In a recent meeting in Menongue, Nsumbo Antonio, Kuando-Kubango provincial delegate of the Ministry of Health, informed JORNAL that the agency which he directs is facing serious problems, specifically the lack of water at the hospital, which makes it impossible to run a laundry, the lack of means to conduct biochemical examinations, lack of adequate equipment for normal operations and lack of an isolation ward for patients with contagious diseases.

For a better understanding of the problems, it need only be said that various radiological, dental and other equipment meant for Kuando-Kubango Province, which should have arrived there over a year ago, is still piled up in some warehouses in Luanda, with the risk of being directed to other areas.
Distribution of Medicines Without Clear Knowledge of Real Needs

"We do not lack medicines. The problem is that they send us medicines that we do not need here," the provincial health delegate stated explicitly, adding: "We have large quantities of medicine here which we receive from the central organizations and from other provinces, but they are not the ones most needed and used in our province. At the moment," he said, "we are still struggling with the shortage of sera; we have received a small amount, which we had to request from our comrades in Huambo Province.

"Moreover, it should be noted that most of the medicines (even those much needed in the province) cannot be used because they are no longer effective, since they have taken so long to arrive, either from the exporting countries or from our warehouses in Luanda or other provinces."

6362
CSO: 5400/18
BRIEFS

CHOLERA IN BRAHMANBARIA—KURIGRAM, Oct 13—More than 37 people died of 'strong diarrhoea' and about 450 others were attacked in Ulipur, Chilmari, Rowmari, Fullbari, Nageswari, Bhurungamari, Rajarhat and Kurigram Police stations in last four weeks. The concerned authorities were allegedly not taking any preventing measures to combat the alarming situation arising out of, 'diarrhoea'. Consequently, diarrhoea has been raging in every village of this subdivision. It is gathered from the villagers' sources that the people of rural areas have not yet been inoculated. Few cases of Cholera are also reported from different villages till writing these reports. New cases of diarrhoea are also being reported from other areas. [Excerpt] [Dhaka THE BANGLADESH TIMES in English 13 Oct 82 p 8]

CHOLERA DEATH REPORTS—BRAHMANBARIA, Oct 12—At least 25 persons died of cholera and 128 were attacked till now throughout the subdivision. Cholera broke out in an epidemic form in 13 villages of the Brahmanbaria, Nasirnagar and Sarail thana. Nasirnagar thana is the worst affected area where out of 71 cholera-attacked 11 died. The Deputy Civil Surgeon has confirmed the death toll and according to him medical a team has been sent to the affected areas with necessary medicine. Allegations against some health visitors were reported for negligence in performing their duties in different cholera-affected areas. [Dhaka THE NEW NATION in English 14 Oct 82 p 1]

ENCEPHALITIS IN BENGAL—CALCUTTA, October 11 (UNI)—The dreaded disease of encephalitis—'inflammation in the brain'—has broken out in an epidemic form for the fourth time since 1973, in four districts of West Bengal and has already taken a toll of 132 lives. The disease is now raging in Burdwan, Bankura, Birbhum and Midnapur. Official sources said studies by medical scientists revealed that the disease was seasonal, occurring usually between June and October. The morality rate was as high as 42 per cent and that teenagers were the major victims of the dreaded disease for which there was no specific treatment. Epidemiological investigation in the affected areas showed that the rate of infection was much higher among those who were closely associated with pig-rearing. The Centre has established a cell in the national malaria eradication programme directorate to co-ordinate the work for containing the disease. [Excerpt] [Bombay THE TIMES OF INDIA in English 12 Oct 82 p 14]

STUDENTS FLEE ENCEPHALITIS—KCHARAGPUR, Oct. 7—About 60% of the students of the Indian Institute of Technology here have left the campus over the past
three days because of the spread of encephalitis in and around the town. Fifteen people have died of the disease in Kharagpur during the past few days. The IIT authorities, in a statement issued today, appealed to the students to return. The institute was kept open as no case was reported from within the campus. Moreover, the Health Department had undertaken a special anti-mosquito drive in the campus area, the authorities said. Meanwhile, three more encephalitis deaths were reported in the district today. Two deaths occurred at Jhargram hospital, while another person died at Midnapore district hospital. Fresh cases of encephalitis attack were reported from the Narayangar, Pingla and Sankrail areas. About 60 persons were treated in different hospitals. Congress (I) sources alleged that the anti-mosquito drive had not been stepped up by the Health Department in full-scale in the affected areas. [Calcutta THE STATESMAN in English 8 Oct 82 p 1]

CSO: 5400/7029
BRIEFS

Aedes aegypti campaign--Safety measures to wipe out the potentially lethal Aedes Aegypti mosquito have been stepped up and the Health Department has now set traps in St. George's. Chief Medical Officer Dr John Gourlay said the St George's traps have been laid "purely as a safety precaution because mosquitoes can fly quite a bit." The move follows a fresh discovery of mosquito eggs in traps in the main concourse of the Civil Air Terminal this week. Health Department officers are maintaining their blitz of the airport, fogging freight containers and sheds with insecticides. Department traps have also been set in the U.S. Naval Air Station and Ferry Reach. The Aedes Aegypti mosquito is a potential carrier of yellow and dengue fevers. [Text] [Hamilton THE ROYAL GAZETTE in English 9 Oct 82 p 2]

CSO: 5400/7512
MALARIA CASES REPORTED IN FIRST HALF OF 1982

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 2 Oct 82 p 12

[Text] According to slide samples made by the Superintendency for Public Health Campaigns [SUCAM] which showed positive results, there were 105,793 cases of malaria in Brazil in the first 6 months of 1982. In 1981, they had recorded 197,149 cases throughout the year, while in 1980, there were 169,000 positive tests recorded. According to explanations given by the SUCAM superintendent, Jose Fiuza Lima, the anticipated increase in cases is viewed as somewhat normal, especially if one considers the migratory influx into malaria prone regions, particularly in the Amazon, the region with the greatest endemic disease center. He therefore agreed with the statement by Celso Ferreira Ramos Filho, secretary general of the Rio de Janeiro Society of Infectious Disease, at the First Brazilian Congress of Medical Associations, that from 1974 to 1981 the incidence of malaria in Brazil has increased 305 percent.

However, the data recorded in SUCAM, based on positive slide samples, indicate a smaller increase in the disease in that period: 66,481 cases recorded for 1974 and 197,149 for last year, an increase of 196.5 percent. The SUCAM superintendent is not denying the large number of cases, but is emphasizing that malaria today is mostly restricted to the Amazon, Mato Grosso do Sul, Parana and Santa Catarina, where, according to Jose Fiuza Lima, this year the last cases of the disease are appearing.

The SUCAM superintendent does not see any possibility of wiping out malaria in a short time, especially because of the operational difficulties in controlling the disease, beginning with the impossibility, at times, of spraying the houses with insecticide (the only way of destroying the carrier mosquito), as many dwellings do not have walls.

8870
CSO: 5400/2004
MALARIA INCIDENCE MAY DOUBLE IN AMAZON REGION BY 1984

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 7 Oct 82 p 14

[Text] Belem—If the government does not take urgent and severe measures, the malaria incidence may double or even triple within the next 2 years. Jose Joao Ferraroni, a scientific researcher from INPA (National Institute of Amazon Research), conveyed this warning in Belem during the first day of discussions at the Fifth Medical Congress of the Amazon.

The region's image abroad, the scientists also said, because of the numerous cases of malaria recorded in the Amazon is keeping away tourists and investigators who are afraid even to stop over in Manaus and Belem but continue their trip directly toward the South of the country.

Their main concern is a fresh outbreak of the disease in the region—where malaria is endemic—and its spread throughout the country. Agostinho Cruz Marques pointed out that in five Amazon microregions the positive index is more than 10 percent, a situation explained by the fact that the Amazon is the only Brazilian region which has shown rural growth in the 1970's and 1980's. In Cacoal, a municipality of Rondonia, the increase was more than 5.5 percent when it was 333 percent in the entire state. Jose Taquarassu Fiuza de Melo attributed these high indices to the "total clash of opinions between the institutions which deal with human registrations and those who are concerned with health." As an example, he gave the case of the Grande Carajas Program, within which the health sector would require, at the very least, 500 million cruzeiros for a preventive plan. Paulo Xavier, from SUCAM [Superintendency for Public Health Campaigns], said that the objective of these enormous enterprises in the region "is only profit," and therefore to deal with labor, they utilize contractors and subcontractors "who take no interest in the people's health."

According to Xavier, the SUCAM resources are dwindling year by year, "while the area is increasing and we are losing our technical staffs." Jose Fiuza de Melo, the organization's superintendent, said that the problem can be solved, "but so long as there are sufficient financial resources, information is necessary on population registration and the problem should be considered a social question in order to involve other agencies and groups."

8870
CSO: 5400/2004
BRIEFS

BUBONIC PLAGUE IN BAHIA--Joao Batista Vieira, director of the Ministry of Health Disease Division, yesterday reported that eight more cases of bubonic plague had been detected in the Bahia hinterland; five previously considered suspect were confirmed in Pocoes municipality. New cases also appeared in Pocoes--two--and in Riachao do Jacuipe--six--municipalities near each other. Vieira explained that every carrier of the disease has already been cured or is recovering. At the same time, he warned that strong signs of plague contamination among rats had been noted in the inspected areas, particularly in the Vitoria da Conquista elevated areas and in the sisal-growing area of eastern plateau. The Ministry of Health technician said that it is possible that other cases, proportionate to the environmental conditions of a harvest crop like the present one, may begin to appear by the end of the year. [Text] [Rio de Janeiro 0 GLOBO in Portuguese 25 Sep 82 p 7] 8870

CSO: 5400/2004
BRIEFS

MEASLES EPIDEMIC—"Two or three children are dying daily in the pediatric ward of the Praia hospital as a result of the measles epidemic that has affected the island of Santiago for some months," nurse Fernanda Cruz, chief of this ward, told our reporter. Dr Vera Cruz, the hospital director, stated that "the serious problem in the pediatric ward is the high infant morbidity incidence in the island of Santiago." According to him, the high morality rate is caused by the very bad sanitary conditions among the population, the low level of health education and, finally, to the nutritional problems deriving from the prolonged drought that has afflicted the country for a number of years. [Excerpts] [Praia VOZ DI POVO in Portuguese 18 Oct 82 p 8]

CSO: 5400/45
ATLANTICO POLIO, GASTROENTERITIS CASES

Bogota EL SIGLO in Spanish Oct 82 p 17

[Article by Yadira Ferrer: "Sixty-three Cases of Polio in Atlantico"]

[Text] Barranquilla, 10 October—Sixty-three cases of polio were reported to the Atlantico Health Service this year, but the epidemic was checked this month, the most recent case having been reported at the end of September.

Efrain Genesse, chief of the Health Service's Department of Epidemiology, confirmed that there has been an increase in the number of cases of gastro-enteritis in recent days, as a result of abundant rainfall in the area.

The chief of the Health Service's Department of Epidemiology said that, following the guidelines outlined by the executive officials of the department, the organization at the beginning of this year planned a campaign to prevent this infectious-contagious disease that afflicts children.

The program consists of sending vaccinator teams to the sectors where cases of polio have been detected, for the purpose of vaccinating the children of the area and of thus isolating the source of infection.

Previously vaccinations were administered at the health centers, but it generally happened that the heads of families took their children there for a first dose, or even a second, and then did not return. Because of this, the health services equipped a vaccinator team from the nursing schools of the department, who now perform this task on a door to door basis.

The Cases

Polio cases began to appear this year in the month of February when the first case was reported; then in the month of March 2 appeared; in April, 5; in May, 10; in June, the greatest number of cases, 21, appeared; in July, the epidemic started to diminish, to 14; in August there were 6 cases; and the most recent cases, 4, appeared in September.

Compared with last year, when several children died and more than 100 were afflicted with this disease, the situation this year has been more favorable, in particular because of the application in part of preventive medicine and
because of the vaccinations provided by the Department of Health.

There are enough vaccinations for this department, according to Efrain Genesse, chief of Epidemiology.

Gastroenteritis

In spite of the fact that polio has been checked, the children of this capital are beginning to suffer the consequences of the unclean environment especially in the poorer districts.

Carlos Tache Zambrano, director of the pediatrics hospital, reported that as of last week an increase in the cases of gastroenteritis was noted. This disease appears in Barranquilla when there is an increase in rainfall and sources of infection develop in connection with garbage and stagnant water.

The situation would be just as controllable as is polio if the health authorities were to take necessary steps, such as the collection of garbage, hygienic handling of food and fruit, and especially a supply of uncontaminated water through public municipal agencies.

8255
CSO: 5400/2014
GUYANA

NATIONAL PROGRAM TO IMPROVE PUBLIC HEALTH MAPPED

Georgetown GUYANA CHRONICLE in English 12 Oct 82 p 1

[Text]

GUYANA's Environmental Health Officers have been charged by Minister of Health, Environment and Water Supply, Richard Van West Charles, with the responsibility of formulating a national programme to improve public health.

This programme should include proposals for the eradication of Aedes Egypti mosquitoes, a more effective method of cleaning drains, and the designing of proper latrines for use in various parts of the country.

The Aedes Egypti mosquito is responsible for spreading the virus which causes yellow fever, an infectious tropical disease.

In addition, by the end of the next three months, they are to print and distribute health cards to schools, establish environmental health clubs in schools and ensure that all schools lavatory facilities are straightened out.

Cde Van West Charles made these charges yesterday morning while delivering the feature address at the 12th annual conference of the Guyana Association of Environmental Health Officers (GAEHQ) held at City Hall.

The theme was "A Healthier Environment Through Community Participation."

The Minister insisted that more members of the community should become involved in public health. The officers, on the other hand should identify themselves with the religious and political leaders of the communities and be prepared to make sacrifices in the execution of their duties.

He recommended that the GAEHQ should set up its own code of conduct so that it could exercise disciplinary measures on its members, a function carried out by the Ministry of Health.

In his hour-long address, Cde Charles told the health officers that they must see themselves in the framework of the country. He made reference to Guyana not having enough money to spend in case of a grave outbreak of dengue fever.

As such, he added, it is the duty of the officers to effect proper drainage and oversee the cutting of overgrown grass both of which are related to the control of mosquitoes.

The association, he said, should not wait on the Ministry for instructions. It should meet regularly, analyse health problems and come up with suitable solutions so that it could advise the Ministry on certain matters.

In concluding, the Health Minister called on the officers to develop leadership qualities for motivating change in the communities in which they live. And he wondered whether they are setting examples by keeping their yards and surroundings clean, and educating their immediate families on environmental health.

CSO: 5400/7511

12
PAPER REPORTS ON SPREAD OF ENCEPHALITIS

Burdwan Health Officer

Calcutta THE STATESMAN in English 6 Oct 82 p 13

[Text] DURGAPUR, Oct. 5—Encephalitis has taken on an epidemic form in Burdwan, particularly in the urban areas. This year, unlike previous years, Dr P. L. Shome, district health officer, Burdwan, said yesterday that out of the 113 official, 54 died of this disease so far. The incidence of the disease was highest in the colliery areas.

Outlining the steps being taken to check the spread of the disease, Dr Shome said that the cycle of recurrence of encephalitis (in epidemic form) had changed this year and that was causing difficulties. Encephalitis broke out in a virulent form this year after a year instead of two, he said. The incidence of the disease was very low in the rural areas this year, he said.

Since the disease was found to have originated from pigs, a decision was taken at a meeting held here to remove the piggeries to far away places and segregate khatals. Anti-mosquito oil will be sprayed, Dr Shome said the district health authority would assist the managements of different projects and civic bodies to carry out the programme. The meeting was convened by the Durgapur notified Area Authority and attended by the chief medical officers of different undertakings and Asansol Mines Board of Health.

Dr Shome admitted that collection of blood samples for detecting malaria and filaria had become slack, though the number of health service personnel remained the same. Mr S. K. Guha, chairman of the Durgapur notified Area Authority, told reporters that anti-mosquito drives would be continued thought the year in Durgapur. Stricter monitoring would be introduced to check the disease and a fortnightly review made.

Kharagpur Encephalitis Deaths

Calcutta THE STATESMAN in English 6 Oct 82 p 9

[Text] About 30 people have died of encephalitis in Kharagpur, during the past one month. About 50 others are under treatment at different hospitals in the town.
Mr Gyan Singh Sohanpal, the Congress (S) MLA from Kharagpur, said in Calcutta on Monday that the disease had spread almost like an epidemic in Kharagpur, causing panic among the people. He thought that the mushrooming of piggeries and khatals, coupled with bad sanitation had caused the spread of the disease. He said preventive measures taken so far by the State Government had been inadequate.

CSO: 5400/7028
NEW DELHI, Oct. 4.—The Government admitted in the Rajya Sabha today that the present virul fever in the capital was "predominantly due to dengue virus and not malaria". But it claimed that it was on the decline.

The Minister for Health and Family Welfare, Mr. B. Sankaranand, told the House in response to a call-attention motion that there had been no death owing to the fever. "There has been no case of cerebral malaria reported from any health institution in the capital during the last three years," he said.

Mr Sankaranand stated that the Government was concerned about the viral fever. But the fact was that there were cases of fever during the August-September period every year but this year there were more cases. "The Government came to know about the nature of the fever after a survey of three localities—Moti Nagar, Kidwai Nagar and Sarojini Nagar. He told Mr Jagdambshi Prasad Yadav (BJP) that no effective drug had been found for the dengue fever but research was being conducted not only in India but in other countries as well.

According to the Minister, "only symptomatic treatment of the fever is possible". There was no prophylactic drug or vaccine to prevent it. He claimed that as soon as the first reports of the fever came in, steps were taken to advise the public through radio and TV about the kind of symptomatic treatment that was available and about the need to avoid congestion in public places like cinemas and restaurants.

Simultaneously, the National Institute of Communicable Diseases, an expert organisation of the Ministry of Health and Family Welfare for the investigation of outbreaks of viral and other communicable diseases, launched full-scale field studies to ascertain the causative agent for the viral fever. The agency made a rapid community-survey in three localities in the capital and thorough serological examinations found that the exact cause of the viral fever was "dengue virus".

The vector for the dengue virus is the aedes aegypti mosquito. The variety of mosquito normally breeds in stored water in and around houses. The characteristic of this viral fever is that it lasts from five to seven days and is rarely fatal. A patient suffering from it experiences high temperature, accompanied by chill with severe headache, body pain, particularly acute back pain and also, sometimes, coryza-like symptoms.

A series of measures had been taken to check the transmission of virus and to intensify health education, Mr Sankaranand said. The Delhi administration, the Delhi Municipal Corporation, the New Delhi Municipal Committee, the National Institute of Communicable diseases and the National Malaria Eradication Programme Organisation had stepped up their efforts to reduce domestic breeding places.
TETANUS OUTBREAK CREATES PANIC IN CHITTAGONG HOSPITAL

Dhaka THE BANGLADESH OBSERVER in English 13 Oct 82 pp 1, 8

[Text]

CHITTAGONG, Oct. 13—An outbreak of tetanus at the Chittagong Medical College Hospital created panic among patients and all surgical cases remained suspended for the last one week.

According to the hospital sources two female patients of gynae department so far got infected with tetanus at the hospital.

They are Shila Roy and Chemon Ara Begum. Shila Roy was transferred to the infectious diseases hospital at Fausadarhat while Chemon Ara Begum got released from the hospital on her own.

However, the operation of acute cases continued on an emergency basis under extreme precautionary measures.

The Acting Superintendent of Chittagong Medical College Hospital, when contacted, confirmed the outbreak of the disease. He said rush of visitors and unhygienic conditions resulted in the outbreak of this infectious disease at the hospital.

He claimed that all precautionary measures had been taken against it.

He hoped that regular operations would start within a couple of days.

The outbreak of tetanus has created panic among the patients of Chittagong Medical College Hospital. Many of them voluntarily got themselves released from the hospital.

CSO: 5400/7031
UNIDENTIFIED DISEASE IN LOMBOK—Since early August an unidentified disease which causes paralysis has attacked the residents of Mayong Village, Praya Timur Subdistrict, Central Lombok Regency, West Nusatenggara. Twelve of the victims are paralyzed and five others are in serious condition. Blood samples taken from the victims have been sent to a Jakarta laboratory for analysis. Parwoto, regent of Central Lombok, said this new disease came to light when five persons became paralyzed. Dr Karyono, chief of the local health service, said the first case of the new disease was treated on 27 August at the Public Health Center. After examining the victim, it was decided to send the patient to the Praya General Hospital for more intensive treatment. According to this patient, a similar disease had attacked the residents of Selong Semoyo and Batubakah hamlets. After a check was made on 30 August, 21 victims were uncovered. The victims' conditions appeared to improve after they were given vitamins. A team from the province, headed by Dr Suwignyo, visited these hamlets on 4 September to conduct further examinations. After examining and treating 30 local residents, it was deduced that a virus caused the disease. Victims were given electrocardiograph examinations and blood samples were taken for laboratory analysis in Jakarta. Results of these examinations are expected this week. The victims said their bodies ached prior to the onset of paralysis. After 2 to 3 weeks, they could not move most members of their bodies. Dr Kayono claims the victims appeared to be fairly well nourished, but they had no potable water source especially during this dry season. To help solve this problem, the Central Lombok Regent is trying to ship potable water to these villages. [Text] [Jakarta KOMPOS in Indonesian 8 Sep 82 p 8] 6804

MEASLES IN KUNINGAN REGENCY—Sixteen children died and 45 others are being treated by a medical team for what is believed to be measles which ran through the Cikondang Hamlet, Tundagan Village, Ciniru Subdistrict, Kuningan Regency, from 23 to 27 August. When this news was provided, it was also reported that 7 children died and 23 others were in critical condition in Pakembangan Village, Garawangi Subdistrict, Kuningan Regency. According to information received from Kuningan Regency Health Service, the Ciniru Subdistrict Public Health Service had taken positive steps to offer immediate treatment and to take measures to prevent the spread of the disease. Other public health centers in Kuningan Regency were asked to continue to survey their respective areas. [Excerpts] [Jakarta MERDEKA in Indonesian 7 Sep 82 p 4] 6804

DENGUE FEVER IN JAKARTA—Dr Sudarso, chief of the Special Capital Region of Jakarta City Health Service, disclosed that 1,150 persons contracted dengue fever between January and July 1982. Twenty-four of them failed to respond
to treatment and died. Dr Sudarso said hemorrhagic fever is on the rise in the Special Capital Region. In 1979 there were 791 cases with 49 deaths. In 1980 there were 818 cases with 21 deaths, and 1,134 cases with 36 deaths were recorded by the end of 1981. To control the spread of this disease, according to Sudarso, his side together with Tjokropranolo, governor of the Special Capital Region, will conduct a mass "control" program tomorrow, Sunday, calling out 50,000 volunteers who will spray areas considered to be mosquito breeding places, around the homes of residents in 236 wards. In addition to this volunteer control program to curb hemorrhagic fever, Sudarso said, spraying of the Special Capital Region will also be done by air using Pelita Air Service aircraft. [Excerpts] [Jakarta MERDEKA in Indonesian 11 Sep 82 p 3] 6804

GASTROENTERITIS IN NORTH SULAWESI--Dr A. H. Kawatu, chief of the Department of Health regional office for North Sulawesi Province, said gastroenteritis which ran through Manado City and the Minahasa Regency was not a dangerous type of the disease but observation of the disease must continue. Diseases of this type often occur during a long dry season because public potable water supplies for the local residents are lower than usual. According to a health service investigation, there now are only 20 to 30 centimeters of water in most people's wells. Since the eruption of gastroenteritis in July, 12 of the 444 victims were recorded as having died of the disease. This is a morality rate of 2.7 percent. In the Minahasa Regency, 322 cases, with 7 deaths, were recorded while 5 of the 122 victims in Manado City died. In Talawaan Bajo Village, one of the areas of concern, only 1 of the 176 victims died. [Excerpts] [Jakarta MERDEKA in Indonesian 15 Sep 82 pp 1, 2] 6804

GASTROENTERITIS IN SOUTH SUMATRA--In August and September 36 cases of gastroenteritis were recorded. The victims were treated at hospitals in Palembang City but no deaths occurred. Most of the victims were children. Dr Atika Suryadi, chief of the Palembang City Public Health Service (DKR), said the Seberang Ulu I area was the hardest hit by gastroenteritis in Palembang. Therefore, oralit salts were distributed to all of the homes, particularly in the southwestern area of the city, as a first level preventive measure. In other areas of the city, oralit was only rationed to the public health centers, clinics, the DKR office, and similar facilities along with rations of tetracycline capsules and infusion liquids. Homes which are not allocated oralit salts are advised to prepare their own solutions using one glass of clean water mixed with two desert spoons of refined sugar, 1/4 teaspoon of salt, and 1/8 teaspoon of baking soda, or by mixing boiled rice water with 1/4 teaspoon of salt. [Excerpts] [Jakarta SINAR HARAPAN in Indonesian 14 Sep 82 p 3] 6804

CSO: 5400/8404
NUMBER OF DENGUE CASES PASSES 2,800 MARK

Kuala Lumpur NEW STRAITS TIMES in English 23 Sep 82 p 4

[Text]

Kuala Lumpur, Wed. — Eighteen more dengue cases including three dengue haemorrhagic fever cases were reported nation-wide today, bringing the total number of cases to 2,815.

The cases were reported in Perak (three), Penang (four), Selangor (three), Johore (one), Federal Territory (one), Kelantan (two), Malacca (one), Pahang (one), Sarawak (one) and Trengganu (one).

According to the Health Ministry, the three dengue haemorrhagic fever cases were reported in Perak, Kelantan and Pahang.

The death toll remains at 34.

In Kuantan, 141 house owners were fined and 802 others issued warnings for allowing mosquitoes to breed in their homes.

Deputy State Medical and Health Services Director Dr. J.P. Jacobs said today more than 75,400 homes had been inspected since the outbreak.

He said there were only 13 confirmed dengue cases in the State so far, all of whom had been discharged.

Dr. Jacobs added more than 12,200 houses in the State had been fogged.

Bernama.

CSO: 5400/8406
CHOLERA, DENGUE REPORTED IN SARAWAK, SABAH

Kuala Belait BORNEO BULLETIN in English 25 Sep 82 p 60

[Text]

KUCHING. - East Malaysia's dengue fever outbreak has been easing, but the cholera wave continues to be a killer.

Sarawak last week had its fifth death for the year from cholera when a 43-year-old man from Sungai Langgan, in the Sibu District, died the same day he was admitted to hospital.

At the end of last week, the number of cases for the year stood at 65 following the confirmation of four in Sibu and one in Limbang.

There was further alarm in Sabah over the cholera outbreak when the disease reappeared on the West Coast after a long absence.

During the week to last Saturday, seven cases were confirmed in the Kota Kinabalu and Kota Belud Districts, and another two were found on the East Coast.

There have been 227 confirmed cases, with 10 deaths, in the state since the outbreak began in mid-April.

The dengue fever situation, however, seems to be improving.

Sabah reported no new cases from September 7 to Tuesday this week, and Sarawak had only five over the same period.

This year, there have been 18 cases with two deaths scattered around Sabah, and 90 cases with one death in Sarawak, with most coming in Kuching District.

Miri has so far escaped dengue's grip, and the municipal council there is taking steps to keep the disease at bay.

It says that control measures have eliminated the threat posed by Aedes mosquitoes, which carry dengue, in about two-thirds of the homes in the area.

More than 2,000 homes remain uncovered, however, so the council is launching an anti-Aedes clean-up campaign on Sunday next week with the help of 20 local associations and service organisations.

Kota Kinabalu Municipal Council has meanwhile warned the 269 eating establishments under its jurisdiction that those found to be dirty and unhygienic will be closed until they conform with the health regulations.

Council health officers last week ordered eight coffeehouses to close, but they were given a week's grace period to clean up following an appeal on their behalf from the West Coast Coffeehouses Association.

The council began the crackdown because of concern over the cholera and dengue fever threats and because of the many complaints from the public about unhygienic conditions.

CSO:  5400/8406
BRIEFS

INFLUENZA HITS JANAKPUR ZONE--Janakpur town panchayat and places of Dhanusha, Mahotari and Sindhuli districts. Following drought, these places become very cold in the morning and the evening with scorching sun during the time. The disease is attributed to the extreme climate these places have these days. Patients suffering from the disease say that once they are in the grip of the flu here, their bodies become heavy accompanied by heavy coughing. The temperature that they run has debilitating effect. The patients, however, become alright after a rest of about three days.

[Text] [Kathmandu THE RISING NEPAL in English 25 Oct 82 p 3]

CSO: 5400/4326
FEDERAL GOVERNMENT URGED TO ERADICATE MALARIA

Kaduna NEW NIGERIAN in English 13 Sep 82 p 1

[Editorial: "Malaria Scourge"]

MALARIA is still the scourge of this nation. Dr. Okonkon Ekanem, Chairman of the National Malaria Control Committee, said 100,000 persons die of it every year. The danger is real. Malaria is not a new problem, particularly to the countries in the sub-Saharan region. Various malaria control programmes have been on in this country for many years. The disappointment is that despite them, we are not winning the war against malaria. That can only point to two things. The first is that the weapons of war are not yet as devastating as they should be. The other is that the mosquitoes which transmit malaria disease show no signs of extinction. Both underline the challenge.

Dr. Ekanem said the Federal Government had commissioned the Federal Pharmaceutical Manufacturing Laboratory to supply 20 million chloroquine tablets and 20 million milligrams of chloroquine syrup. The government, he also said, had invited tenders for the supply of one million tablets of fansidar this year. These figures are impressive—on paper. Out there in the hospitals, they may not meet the demands. For instance, according to Mr. Michael Babatunde, Ondo State Commissioner for Health, 60,922 tablets of chloroquine are taken by 45,567 malaria patients in the state hospitals every month. This does not take account of self-medication.

In any case, these drugs constitute curative measures. Dr. Ekanem said nothing of preventive measures. These are even more important. Preventive measures prevent mosquitoes from spreading the disease. And if people are not infected by the disease, they won’t die of it.

Clearly, the choice before the federal and state governments is greater emphasis on preventive measures. The Federal Government should set up a definite time-table for the eradicating of malaria. And determinedly work towards it.
BAN ON QUACKERY SOON—LAHORE, Oct 26—Complete ban would be imposed on quackery through an Ordinance to be promulgated within a month, said Dr. Naseerud-din Jogezi, Federal Minister for Health and Social Welfare. He, however, did not elaborate what alternative measures the Government would take to accommodate over 40,000 quacks—the number claimed by their association to be functioning in Pakistan. Addressing professors and doctors in the Services Hospital auditorium here today, the Minister explained the salient features of the 6th Five-Year Plan, now on anvil, and the facilities and incentives to be given to doctors in this plan. [Karachi DAWN in English 27 Oct 82 p 10]

ALMOST 200 IMMUNIZATION CENTERS—The Provincial Health Department is running 199 immunization centres to protect children against six communicable diseases throughout Sind. This was stated at a meeting held here yesterday, under the chairmanship of Mr Syed Ahad Yusuf, the Provincial Minister for Health, which was attended, among others, by the Chairman of the Sind Graduates Association, Dr Suleman Shaikh. The meeting discussed accelerated health programme with particular reference to expanded programme on immunization in urban and rural areas of the province. The meeting was informed about the facilities provided by the Government to protect the children up to the age of five years against six communicable diseases like Pertussis, tetanus, diphtheria, polio, tuberculosis and measles. The Chairman of the Sind Graduates Association gave an account of the activities rendered by 54 units of the Association for motivational campaign, and also for running the immunization programme effectively. The meeting emphasised the need for motivating parents and guardians to get their children vaccinated against these diseases at the immunization centres opened by the Government, semi-Government and private agencies at various places all over the province. The parents and guardians have been advised to ensure administration of the required 2nd or 3rd doses to their children in order to immunize them against these communicable diseases. [Karachi MORNING NEWS in English 18 Oct 82 p 3]

CSO: 5400/4320
MEASURES TO PREVENT HEPATITIS IN BEIJING

Beijing JIANKANG BAO in Chinese 11 Jul 82 p 2

[Article by Su Yuanyun [5685 0337 7189]: "Strong Measures to Prevent Hepatitis in Beijing"]

[Text] Beijing is conscientiously handling the work of preventing hepatitis; the propaganda is strong, the measures are solid and the results are noticeable. From January of this year up to the present, there has not been one case of hepatitis in the entire city and in some regions the rate of incidence has declined.

The health, propaganda and education movement has been widespread in the work of preventing hepatitis in Beijing. From bureau heads to college presidents, from specialists to medical workers, many have been out on the street disseminating knowledge on prevention to the masses; some have organized small propaganda units that go from door to door carrying out different forms of propaganda. By 9 April, 150 articles of propaganda were printed and distributed to 5.88 million persons. The majority of the factory workers, school teachers, students and kindergarten children were able to accurately respond to the basic knowledge concerning the prevention of hepatitis.

To handle the key problem, the early diagnosis of hepatitis, many hospitals revised their practice of issuing liver function reports and subsequent visits once a week; some hospitals have changed the system of daily checking on liver function and issuing reports; some hospitals have also developed methods for the rapid determination of ear blood aminotransferase.

According to statistics of clinics for nine hospitals in the Chaoyang District, the rate of the early diagnosis of hepatitis was 73.5 percent last year and this year it rose to 86.5 percent. The levels of improving the prevention of transmitting the disease as well as the "four regulars" and "six separations" were different among the hepatitis clinics in Beijing. Some hospitals were able to make full economical use of instruments, prescriptions, medical records, laboratory test reports and accounts.

On the basis of mobilizing the masses for the prevention of hepatitis, Beijing stressed the prevention work of handling the various levels of hospitals and middle and primary schools, child care organizations and eating
establishments, agricultural trade markets and individual food stands, pro-
hibited the sale of food which did not meet health requirements and banned
various cooked meats at agricultural trade markets. They strengthened health
propaganda in middle and primary schools and child care organizations for
teachers, child care workers, children and students training them in good
health habits; day care workers especially paid attention to early detection
among children such as those that are listless, have no appetite, have yellow
eyes and red in their urine, they were immediately sent to a hospital for an
examination, at the same time complete disinfection was carried out for the
contaminated area. For teams and groups in which hepatitis occurs, the
collective is quarantined for 45 days; an injection of globulin or Chinese
herbal medicine is given to those who came into close contact with them.

To effectively control the source of infections, Beijing has set up 246
hospital beds for hepatitis and 355 hospital beds in households, this is con-
venient for the isolation of hepatitis patients.

9480
CSO: 5400/4008
EDITORIAL CALLS FOR ELIMINATION OF LEPROSY BY END OF CENTURY

Beijing JIANKANG BAO in Chinese 18 Jul 82 p 1

[Article: "Wiping Out Leprosy Is a Major Task in the Building of Spiritual Civilization"]

[Text] "Strive to virtually wipe out leprosy in China by the end of the 20th Century" is a new combat mission proposed by the Ministry of Public Health in summarizing China's more than 30 years of achievements and experiences in the prevention and control of leprosy. It is also a major current task requiring the joint efforts of medical and health departments concerned and of the broad masses of the people to change prevailing habits and customs and to build a socialist spiritual civilization.

How to deal with lepers differs under various social systems. The records show that during the Qin Dynasty, the extremely uncivilized methods of sentencing lepers to be drowned was used. Lepers were dealt with in the same way as criminals. The discrimination and oppression that the feudal ruling class have historically used in dealing with lepers, and the dread of leprosy that the people have is, in the final analysis, the result of science and culture not being developed today. People lack accurate scientific knowledge about leprosy, and mistakenly suppose that leprosy is incurable. Some even erroneously believe that leprosy is inherited. Consequently, the spread of leprosy and the unfortunate treatment of lepers is an indication of a backward society.

During the more than 30 years since Liberation, the Country has built, under the leadership of the party and government, 58 leprosariums and 794 leper villages staffed with nearly 10,000 personnel specialized in the prevention and cure of leprosy. Thanks to active treatment and control of spread, the number of lepers has decreased over the years from the 500,000 of the pre-Liberation period to less than 200,000 as of the end of 1980. As a result of surveys, the areas of incidence and distribution of leprosy have been pretty well charted. Through experience, it has been possible to figure out comprehensive measures for detection, collection, treatment, and management, and to launch publicity about effective prevention and cure experiences for early detection and the spread of treatment. In Guangdong, Shandong, and Jiangsu provinces, where the incidence of leprosy is fairly high, the cumulative total of lepers during the past 30 years has been more than 190,000. Following
treatment, there are less than 20,000 remaining. In the provinces of Fujian, Guangxi, Hunan, Hubei, Liaoning, Jilin, and Shaanxi, the leprosy incidence rate has declined remarkably. Especially noteworthy is that some counties have instituted periodic thoroughgoing inspections to discover lepers and give them chemical treatment at once in their own locales to control the spread of the disease. As a result of active treatment being given to lepers for a short period time in leprosariums, leper villages, or at home, after leper bacilli on the skin subside, the disease is no longer contagious. Out-patient treatment is then continued until full cure has been effected and the patient returns to production and his work position. Countless moving facts have shown that with today's development of science, control of the spread of leprosy, whose communicability is weaker than that of tuberculosis, is possible. Lepers can be completely cured.

In dealing with lepers, we should do exactly as we do with patients suffering from other illnesses, giving them maximum sympathy and medical care and making sure of early detection and early treatment so that they will completely recover promptly. Lepers in late stages of the disease whose limbs, bodies, and faces have been deformed should be dealt with in the same way as patients who have been badly burned. They should not be feared, but rather a better job should be done in restoring them to health so that they will not be broken in spirit as in body and will fit in rather well.

But will we be able to virtually wipe out leprosy by the end of the 20th century? The answer is affirmative. When this question was raised at last year's national leprosy prevention and treatment work conference, all delegates were full of confidence and expressed determination to struggle to achieve this goal.

Recently, following a visit to eight countries including Japan and the United States, the Chinese Leprosy Prevention and Research and Observation Team headed by Ministry of Public Health advisor and leprosy expert Ma Haide [7456 3189 1795], also expressed complete confidence. Not long after the founding of New China, we wiped out venerable diseases with one fell swoop. Today we have a superior socialist system in which the people's economic income, nutrition, housing, education, and medical treatment etc. have steadily improved, with many acute contagious diseases and parasitic diseases having been substantially controlled or eliminated. The physical condition of the people has gradually improved. All this creates favorable conditions for the elimination of leprosy. An organization for the prevention and treatment of leprosy has been established, and more than 10,000 specialists who have devoted themselves completely and who have been steeled over a long period of time in prevention and treatment of leprosy are available. Of special importance is that with the rapid development of science, people have a fairly deep understanding of the pathology, the laws governing growth of bacilli, and the characteristics of leprosy. China is able to produce sufficient quantities of medicines effective in the treatment of leprosy and fully supply needs. Medical treatment skills are also being mastered by an increasingly large number of people. In short, the socioeconomic foundation, the medical treatment, the medicines, and the skills for wiping out leprosy are at hand. All that is required is that we make up our minds that the elimination of leprosy, this symbol of social
backwardness, is a major task to be given attention in the building of socialist spiritual civilization, attract the serious attention and support of society as a whole, make the most of advantageous conditions, go all out, do a solid job, strengthen leadership, intensify propaganda and indoctrination, pass on to the people knowledge about the prevention and treatment of leprosy, and fully utilize the role of specialized personnel and of the broad masses of medical personnel in the prevention and treatment of leprosy and this goal can be attained.

Let us rouse efforts to make the needed contributions for joint completion by the end of the 20th century of the virtual elimination of leprosy as a major task in the building of spiritual civilization.

9432
CSO: 4007/602
LEPROSY TREATMENT PROGRAM OUTLINED

Beijing JIANKANG BAO in Chinese 18 Jul 82 p 1

[Article: "Ministry of Health Requires All Jurisdictions to Hasten Pace of Leprosy Prevention and Cure; Determined to Realize Goal of Wiping Out Leprosy By End of 20th Century"]

[Text] On 10 July Minister of Health CUE Yueli [1508 2588 3680] said, after listening to a report from the Leprosy Prevention and Cure and Research and Study Group, that "Given China's superior socialist system, we have confidence in being able to achieve victory by the end of the 20th century in wiping out leprosy." In a recently issued document, the Ministry of Health noted that China is a socialist country with a fairly well developed medical treatment and health network. Treatment is free and the country is able to produce all the pharmaceuticals it requires; therefore, it should hasten the eradication of leprosy, overcome all kinds of difficulties, and take all needed actions.

1. Increase in understanding and strengthening of leadership. Leprosy is a contagious disease with a not very high incidence rate. Health administrative departments and specialized leprosy organizations should rouse their spirit to eliminate erroneous beliefs about leprosy, overcome a psychology of fear and fears of difficulties in the work of prevention and cure, and genuinely place leprosy prevention work on their daily agendas. During the next 1 or 2 years, areas in which it is prevalent should link prevention and cure work to appraisal of the epidemic situation. Places having a well developed treatment network should have specific measures for outpatient treatment when patients are unable to remain in hospital, so that the work of prevention and cure can be put into practice everywhere. Health administration departments should investigate and study, and inspect, supervise, and urge along for prompt solution to problems that appear.

2. Readjustment and reorganization of organizations to improve quality of treatment. All jurisdictions should do unified planning, placing emphasis on one or several hospitals, clinics, or stations as provincial or regional leprosy prevention and cure, training, research, and technical guidance centers. Counties having few lepers can appoint persons responsible for them in county epidemic prevention stations or chronic disease stations, following the general principle of no establishment of any new organizations for the prevention of leprosy.
Management over leper hospitals and villages should be strengthened. Leadership teams should be small in number but highly trained, and attention should be given to strengthening of their political and ideological indoctrination to establish healthy attitudes.

3. Guaranteed production and supply of medicines for treatment of leprosy. China can produce medicines for the treatment of leprosy including sulfonyldianiline, chlorophenazine, rifampin, sulfonylmethoxydianiline, thalidomide, and trypterygine. Attention should be given to keeping open the channels for their production, supply and use so as to have planned organization of production and supply.

4. Intensification of scientific research. Leprosy research departments should research various measures for prevention and cure of leprosy suited to conditions in China. The Skin Disease Prevention and Cure Institute of the Academy of Medical Sciences should organize all jurisdictions in a strengthening of cooperation, an exchange of experiences from within China and from abroad, and a tackling of technical problems.

5. Strengthening of propaganda and education. Use of various forms of propaganda to eradicate the prejudicial fear of leprosy that has been handed down for several thousand years, to spread scientific knowledge so that everyone will be able to deal correctly with lepers and their sons and daughters, and understand some basic facts about prevention and cure of leprosy. There should be active training of various kinds of personnel to treat and cure leprosy for steady improvement in quality of treatment. In areas where the disease is prevalent, both medical institutions of higher learning and vocational medical schools should increase the number of hours devoted to the study of leprosy.

6. Make full advantage of the enthusiasm of personnel specialized in the prevention and cure of leprosy. Health administration departments at all levels are to show concern for leprosy prevention personnel, both politically and in their daily lives, helping them solve some difficulties so that they can carry out leprosy prevention work actively and without worry, and make a contribution in wiping out leprosy.
SANITATION IMPROVEMENTS—Reporter Lin Zongping [0149 1016 2646] reports that Zhejiang Province has built over 3,900 waterworks in agricultural villages and that more than 3.5 million peasants are using running water. The agricultural villages in Zhejiang have always used river and pond water for drinking. The water quality was poor and pollution was serious. The masses pressed for improvements of drinking water. As a result, Governor Li Fengping [2621 6265 1627] and Deputy Governor Liu Uifu [0491 0076 1133] went to agricultural villages several times and gained an understanding of areas where drinking water conditions were poor and the incidence of sickness was high. They mastered the first-hand data and directed the water improvement work. Since last year, many counties and cities such as Ningbo, Jiaxing, Jinhua and Hangzhou have established water improvement groups to handle the personnel, technology, goods and materials and costs. When the Zhejiang agricultural villages set up waterworks and improved drinking water sanitation, the required funds came basically from the collectives and commune members themselves. The use of running water by agricultural villages decreased the occurrences of contagious diseases, changed the environmental sanitation of commune member households and personal hygiene, and improved the physical health of a large number of commune members. [Text] [Beijing RENMIN RIBAO in Chinese 26 Jul 82 p 1] 9480

CSO: 5400/4008
IRRIGATION USED TO STAMP OUT MINDANAO SCHISTOSOMIASIS

Cebu City VISAYAN HERALD in English 22 Oct 82 p 5

[Article by Jaime K. Laking]

[Text] MIDSAYAP, North Cotabato—(DPTHnews)—Irrigation canals may yet help Mindanao stamp out the scourge of schistosomiasis, a highly debilitating disease which can be fatal if not treated on time.

Feverish construction of the canals is now going on in the provinces of Sultan Kudarat, North Cotabato, South Cotabato, South Cotabato and Maguindanao where the disease is endemic.

The canals drain water-logged areas where the Japanese snails, carriers of the disease, thrive. Construction of the canals is a preventive measure deemed more economical than treating the disease.

"We cannot always be giving them (the disease sufferers) medicine because it is very expensive," says Dr. Imelda Soriano, chief of the health ministry's schistosomiasis control center based in this town.

Areas hardest hit by the disease are the towns of Midsayap, Pigmawayan and Libungan in North Cotabato; several towns in Sultan Kudarat; communities surrounding the Liguasan Marsh, and the Kapatagan Valley in the two Lanao provinces.

Dr. Soriano rates the schistosomiasis incidence in Mindanao as high. She cites a sample survey conducted last year which found 2,391 people positively afflicted in an area of only 8,219 hectares.

CSO: 5400/4321
BRIEFS

MALARIA CASES NOTED--Notes: Some 60 malaria cases have been confirmed in Hinobaan and Sipalay, Negros Occidental. The disease has affected 36 communities. [Excerpt] [Manila PHILIPPINES DAILY EXPRESS in English 30 Oct 82 p 4]

MALARIA PROBLEM GROWING--Malaria is still one of the world's most serious and challenging health problems which may be a barrier toward the attainment of health for all by the year 2000. Dr Hiroshi Nakajima, regional director of the World Health Organization (WHO) for Western Pacific, said malaria epidemics have recurred in some parts of the world. He said that following some initial successes, several malaria eradication and control programs in the region have practically come to a standstill and, in recent years, a recurrence of the disease in some countries has been reported, sometimes in severe epidemic form. The director called on governments and communities to support and strengthen anti-malaria work. In the early 70s the number of recorded malaria cases increased significantly in southeast Asia but started to decline in 1977 when countries resorted to residual insecticide spraying and administration of anti-malaria drugs, the WHO said. Lately, however, the residual spraying method appears to be losing its impact on malaria transmission by important vectors species in the region, it was reported. [Text] [Manila BULLETIN TODAY in English 4 Nov 82 p 28]

CSO: 5400/4325
SRI LANKA

BRIEFS

CHOLERA CASES IN EASTERN SRI LANKA--Two cholera deaths were reported in Mullipottana in the Seruvila electorate, 17 miles off Trincomalee. Fifteen persons including women and children have been admitted to the Trincomalee base hospital and a special ward allocated for cholera patients. Public health officials have already launched preventive measures in the village by chlorinating wells and closing down eating houses. According to Health Department sources, the outbreak of cholera might be due to the villagers using water from a drainage channel for consumption because of the drought. [0034] [Text] [Colombo SUN in English 26 Oct 82 p 13]

CSO: 5400/4322
DEATHS FROM PULMONARY TUBERCULOSIS REPORTED IN NEW HALFA

London AL-DUSTUR in Arabic No 256, 18 Oct 82 p 66

[Text] More than 10 deaths a week are occurring in the New Halfa area because of pulmonary tuberculosis which has spread at a frightful rate among citizens. It is feared that the decline of health services, which has become the distinguishing characteristic of the Sudan and the lack of preventive means will lead to the spread of this deadly disease to other areas. It is well-known that this disease was completely eradicated through exhausting worldwide efforts during the national [National Unionist] era when it was widespread in the Old Halfa area.

CSO: 5400/4601
BILHARZIA RIFE IN SOUTH

Harare THE HERALD in English 13 Oct 82 p 5

[Text] Bulawayo. The National bilharzia survey has shown that the incidence of the disease is as high in Matabeleland as in Mashonaland, the Provincial Medical Officer of Health, Dr A. O. Pugh, said yesterday.

Although only a few schools in Matabeleland had so far been covered in the survey, health workers had found bilharzia to be prevalent among young schoolchildren, he said.

To combat the disease, the Ministry of Health was sending health workers into the districts to find sources of infection and make them "safe" by treatment with chemicals or the construction of wells so people did not need to go to dams.

In the second phase of the anti-bilharzia programme parents and children were taught about bilharzia, how it could be avoided and the damage it could do to people if not treated in time.

The third and final stage was to treat children who were found to have bilharzia.

The treatment, a course of tablets, "was very effective but it was no good treating people if they cannot be stopped from catching the disease," he said.

Trying to change people's behaviour patterns was difficult and children usually picked up the disease while fishing, washing or swimming in dams.

The first symptom of bilharzia was a feeling of fatigue and listlessness which meant that children did not perform well at school.

Bilharzia could cause permanent damage to the kidneys, ureter and bladder and if not treated, could affect every organ in the body.

Although it was rare in Zimbabwwe, bilharzia was known to lead to death if a person was severely affected.
It was "an insidious disease" which killed slowly. "You don't see people drop dead in the street from bilharzia, but it can kill," said Dr. Pugh.

It was still too early to tell whether health education was having an effect on the numbers of people suffering from the disease.

CSO:  5400/31
KOTA KINABALU — The foot and mouth scare in Sabah ended this week when laboratory results from England showed that sick animals on a pig farm did not have the disease.

But state veterinary authorities are still awaiting further test results that are expected to reveal the exact nature of the mystery disease.

The alarm came on September 9 when pigs were discovered suffering from symptoms similar to those of foot and mouth, on a farm at Kiansom, about 13 kilometres (eight miles) from here.

Within a week, 29 animals were sick; 14 died.

Because foot and mouth is highly contagious, veterinary authorities took no chances and quarantined the farm.

Veterinary staff were put on guard round the clock to ensure, among other things, pigs were not smuggled out for sale.

Specimens from the sick animals were sent to the Animal Virus Research Institute in England but preliminary results were negative.

The director of the state Veterinary Services Department, Dr Vincent Lee, said further tests were being done in England to determine what disease had struck the pigs.

Word that a mystery pig disease had appeared in Kiansom, near the town of Inanan, led to a sharp drop in pork sales in the district despite public assurances from Dr Lee that humans could not be affected.

One butcher who bought 40 katis (24 kilograms) from a Kiansom farmer told of not being able to sell any of it at Inanan market, even after reducing the price by 40c a kati.

Many Inanan residents instead went to the Kota Kinabalu central market to buy their pork from butchers known to get their supplies from the sole government-supervised slaughterhouse.

But even central market butchers reported a drop in business, and restaurant and eating stall operators found that few customers ordered pork.

Pork sales were affected in Brunei as well, because the state banned the import of all livestock from East Malaysia after the scare.

Brunei imports between 400-500 live pigs a month from Sarawak. When the test results from England confirmed the foot and mouth alarm was a false one, Brunei lifted its ban on livestock from Sarawak, but will not do so for Sabah until the nature of the pig disease there is clarified.
BRIEFS

BOVINE TUBERCULOSIS--Important tuberculin tests made by technicians from the Veterinary Department of the Ministry of Agriculture on livestock belonging to a number of breeders have all turned out to be negative. Health authorities are now confident that the beginning of a bovine tuberculosis epidemic detected in the herd in Constance S. E. in August has been stamped out. The tests have been made since early September and will continue until the beginning of December. They will cover all herds on the island. Results obtained to date show that herds already examined by the veterinarians are healthy. In Constance S. E., between 15 and 20 head of infected cattle are being slaughtered each week. By the end of the month, all animals with a positive tuberculin test in Constance will have been put down. Authorities emphasize that it is always the lowest grade portions of the diseased animals that are unfit for consumption and that are therefore carefully destroyed. It will be recalled that 153 out of the 500 head in the Constance herd had a positive tuberculin test and that the rest of the animals were separated from them. As soon as the infected cattle have been slaughtered, the veterinary services will make new and thorough tests to determine whether other cattle in Constance are suffering from the disease. [Text] [Port Louis L'EXPRESS in French 13 Oct 82 p 6] 11,464

CSO: 5400/24
BRIEFS

WAR ON SNAILS--THE Department of Agriculture has stepped up its war on a common garden pest. Young green snails are a serious threat to market gardens and broadacre crops. They are already big enough to be seen on plants around the metropolitan area and are particularly active in the early morning. The department's campaign will be the second baiting programme this year. It is aimed at eradicating new infestations of the snails. Funds for a three-year baiting programme have been provided by the State and Commonwealth Governments. Anyone seeing the snails--which are usually brown to olive green with an unmarked shell and white flesh--is asked to contact the department on 367 0111. [Perth THE WEST AUSTRALIAN in English 18 Sep 82 p 23]

CSO: 5400/7510
RENEWED OUTBREAK OF STOMAX NIGRA REPORTED

Port Louis L'EXPRESS in French 13 Oct 82 p 7

[Text] A renewed outbreak of the stinging fly Stomoxis nigra has been reported this year by the Ministry of Agriculture's Entomology Department. The plague, amounting to hundreds of millions of flies, has been spurred on by the humid weather of the season. In preceding years, propagation was hindered by the drought.

The Stomoxis nigra, which reproduces at an accelerated rate, is affecting herds this year, according to cattle and deer breeders. However, entomologists believe that mortalities registered in Central Plateau herds are not only due to the work of the blood-sucking flies. Tests being conducted have not yet determined a definite cause-and-effect relationship.

Nevertheless, scientists do say that the Stomoxis nigra is a factor limiting the development of livestock raising in Mauritius. At the present time, the Entomology Department is spraying with insecticides, at breeders' request. The fight against the harmful pests must be waged with chemical means, inasmuch as the biological campaign has run up against insurmountable obstacles.

Research into the Stomoxis nigra experienced major development at the beginning of the 1970's. In 1971, it was discovered that the Stomoxis nigra was laying its eggs in cane stalks left in the fields after cutting. Cane stalks also help the development of larva. The Stomoxis nigra can therefore be studied more closely.

Parasites evolving in the same habitat as these stinging flies were imported and introduced into the humid regions of the island. Laboratory studies made it possible to produce the Tachinaephagus stomoxicida locally. The parasites were introduced into the cane fields in 1975 in order that they might attack the Stomoxis nigra larva. Two other species of parasites: the Trichopria and the Spalangia were also introduced to destroy the Stomoxis.

Studies undertaken since 1979 in order to determine with precision the impact of the introduction of parasites on the population of stinging flies in the regions of Sans Souci, Quartier Militaire, Reduit, FUEL, Savannah and Henrietta made it possible to conclude a parasitism rate of 35 to 40 percent for the past three years. Entomologists believe that the action of the parasites introduced is satisfactory. They add that other parasites must be found to
reinforce the action of the *Tachinaephagus stomoxicida*. Work is continuing along this line because means of biological eradication are permanent, less costly and do not pollute.

Another biological method was tried in the hope of eradicating the *Stomoxys nigra*: releasing sterile males.

Laboratory tests have been made in order to learn the necessary rate of radiation for sterilization of the male. The fly population has also been calculated. Because of the large number of flies in Mauritius and the fact that the sterile males must be more numerous than fertile males, releasing sterile males turns out to be costly. The cost-benefit analysis has not yet been made, although preliminary laboratory studies are in an advanced stage.

Financial limitations are therefore standing in the way of the use of sterile males. Furthermore, the impossibility of finding a *Stomoxys* parasite with a growth rate superior to its own means that chemical means must be used if one wants to obtain effective action within a short period of time. In addition, chemical means must come into play to reduce the adult population on which the parasites have no effect.

*Stomoxys Calcitrans*

Despite the difficulties encountered, entomologists believe that in ten years the situation has improved. In 1970, there could be no livestock raising in humid regions such as Saint-Aubin and Curepipe because of the insect. Herds have recently been introduced.

The *Stomoxys nigra*, which is endemic and limited to the African region, is a major problem for Reunion and Mauritius, two islands that produce sugar and therefore an abundance of cane straw during the months from October to January.

On the other hand, entomologists have been able to effectively control the development of *Stomoxys calcitrans*, another variety of stinging fly that prefers dry regions. This stinging fly is more widespread throughout the Southern Hemisphere.

In Mauritius, the *Stomoxys calcitrans* is mainly found on the coast. The action of parasites, which attack the pupa, is 75 to 80 percent effective. Entomologists emphasize that the growth rate of the parasites is approximately the same as that of the flies.

Fruit Flies

Several species of fruit flies exist in Mauritius. The Natal fruit fly is the most harmful because it attacks nearly all local fruits: mangos, peaches, loquats, guava, Chinese guava, jambosa, and so on.

The Natal fruit fly first appeared in Mauritius in 1954. It feeds on fruit throughout the year. Its population is fairly stable.
The biological campaign began in 1958. Millions of parasites were imported from Trinidad, Hawaii, India and France, but without success. The biological fight is out of the question, at least for the time being, in the opinion of entomologists. In the 1970's, the Ministry of Agriculture's Department of Entomology succeeded in producing large quantities of fruit flies in the laboratory. This made it possible to move ahead with the technique of radiating males in order to sterilize them.

The Bureau of Overseas Scientific and Technical Research (ORSTOM) sent expert Claude Hammes to help the government with completion of an ecological study of the Natal fly.

In 1980, Hurricane Claudette and a number of smaller hurricanes reduced the amount of fruit from which the flies could feed. The natural reduction in the number of fruit flies caused entomologists to move ahead with the release of sterile males. Financing of the project was provided by the French Government. The battle was waged on two fronts: areas planted in China guava accessible only by helicopter and the gardens and orchards accessible only by road.

Every month, nearly 10 million sterile males were released. The campaign made it possible to reduce the fly population in the north considerably. This program to eradicate fruit flies by releasing sterile males had to be interrupted following the government helicopter accident. The interruption allowed the propagation to continue.

The only solution left to entomologists is once again insecticides.

Entomologists are now waiting for the fruit fly population to be decimated again by natural means (hurricanes) in order to resume the release of sterile males.
BRIEFS

BLACK SIGATOKA SPREADS—Ramiro Jaramillo C., expert with the Technical Research and Assistance Department of the Union of Banana Exporting Countries, has told CRITICA that "it has been determined that ever since the black sigatoka was detected in Changuinola in early 1981 and in the Armuelles region in September of the same year, the disease has spread widely in the two banana regions." He added that "it is difficult to assess the effects on production so far."

[PA182232 Panama City CRITICA in Spanish 6 Oct 82 p 24]

CSO: 5400/2013
DISEASE THREATENS ABACA CROP IN BICOL

Manila BULLETIN TODAY in English 27 Oct 82 p 8

[Text]

TIGAON, Cam. Sur.—Oct. 26—An estimated P1.5 million is needed to combat the abaca disease that has affected some 600 hectares of abaca plantation in the 12 barangays in the municipalities of Buhi and Sanggay and Iriga city.

Considered a major threat to the abaca industry in the Bicol region, the plant disease identified as "abaca mosaic and bunchy top viruses" are spreading at the rate of 20 percent a year, according to the local Abaca Fiber Development Authority (FIDA).

Initial preventive measures to control the abaca pest was launched by the FIDA in the town of Sanggay which resulted in the reduction of the plant infestation from 216 hectares to only 89 hectares.

FIDA sources said that propagation of the high-yielding abaca variety is also threatened by the disease. These abaca varieties are Musatix 50, 51, and 52, Tinawangan, Pati, and Perlas.

These high-yielding abaca varieties are being propagated in six municipal abaca nurseries in the province of Camarines Sur in order to save the dying abaca industry in the region and continue to support the local cottage industry in the region that are dependent on abaca fiber materials. (Roy Sinfuego)