

R

191101

JPRS-TEP-86-012

29 MAY 1986

Worldwide Report

EPIDEMIOLOGY

19981202 107

DTIC QUALITY INSPECTED

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

6
65
A04

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

29 MAY 1986

WORLDWIDE REPORT

EPIDEMIOLOGY

CONTENTS

HUMAN DISEASES

BANGLADESH

- Bagerhat Diarrhea Epidemic Reported Spreading
(Dhaka THE NEW NATION, 15 Apr 86) 1

BRAZIL

- Incidences of Diseases Prevalent in Amazon Region
(Rio de Janeiro O GLOBO, 10 Apr 86) 2

Briefs

- New AIDS Cases Reported 7
- More AIDS Cases 7
- Malaria in Fortaleza 7
- Sao Paulo Combats Mosquitoes 7
- Yellow Fever Mosquitoes Combated 7
- Dengue Fever Outbreak 8
- Dengue Epidemic 8
- Purpuric Fever Deaths 8
- Total AIDS Cases Number 625 8
- Polio Epidemic in Northeast 9
- Meningitis Alert in Bahia 9
- Malaria Precautions in Amazonia 9
- Yellow Fever Immunizations 9

CANADA

- British Columbia Funding for Cancer Research Reported
(Anne Mullens; Vancouver THE WEEKEND SUN, 5 Apr 86) 11

CUBA

- First Confirmed AIDS Death Reported
(Havana Radio Progreso Network, 26 Apr 86) 12

EGYPT

- Dehydration Incidence Decreases
(Cairo THE EGYPTIAN GAZETTE, 13 Mar 86) 13

GHANA

- Briefs
Clinics for AIDS Identification 14

INDIA

- Delhi Urged To Declare City Endemic to Goiter
(New Delhi PATRIOT, 7 Apr 86) 15

- Briefs
Malaria, Kala-Azar Cases 16
Meningitis in Calcutta 16
Meningitis Kills Nine 16

INDONESIA

- Briefs
Malaria in Southeast Sulawesi 17

IRELAND

- 25,000 Not Yet Covered by Measles Immunization Campaign
(Stephen McGrath; Dublin IRISH INDEPENDENT, 31 Mar 86) ... 18

ISRAEL

- Moroccans Carry Tay-Sachs Disease
(Judy Siegel; Jerusalem THE JERUSALEM POST, 2 Apr 86) 19

ITALY

- Increase in AIDS Cases Reported
(C. Me; Rome IL MESSAGGERO, 14 Mar 86) 20

MALAYSIA

- Dengue Outbreak Expected
(Penang THE STAR, 21 Apr 86) 21

MOZAMBIQUE

Beira Anti-Malaria Campaign Underway (Beira DIARIO DE MOCAMBIQUE, 28 Feb 86)	22
---	----

NICARAGUA

Polio, DPT Vaccination Campaign Opens in Managua (Managua BARRICADA, 3 Mar 86)	23
Briefs	
Infant Mortality Rate	25

NIGERIA

Briefs	
Meningitis Claims Lives in Daura	26

PEOPLE'S REPUBLIC OF CHINA

Medical Briefs on Leprosy Control Efforts (Beijing XINHUA, 29 Apr 86)	27
Kang Keqing Helps With Immunization Program (Beijing XINHUA, 26 Apr 86)	28
Late Stage Septic Shock Treated (Yuan Man, et al.; Shanghai ZHONGHUA CHUANRANBING ZAZHI, No 4, 15 Nov 85)	29
Serological Classification, Clinical Aspects of Hepatitis Reported (Wu Caiyang, et al.; Shanghai ZHONGHUA CHUANRANBING ZAZHI, No 4, 15 Nov 85)	30
Former Amebiasis Patients Observed (Chen Yatang, et al.; Shanghai ZHONGHUA CHUANRANBING ZAZHI, No 4, 15 Nov 85)	31
Epidemic Hemorrhagic Fever FDP, Lysozyme Determined (Yue Jinsheng, et al.; Shanghai ZHONGHUA CHUANRANBING ZAZHI, No 4, 15 Nov 85)	32
Hepatitis A Monoclonal Antibody Produced by Hybridoma Technique (Meng Qianghua, et al.; Shanghai ZHONGHUA CHUANRANBING ZAZHI, No 1, 15 Feb 86)	33
Hepatitis B Core Antigen Detected (Guo Hengchang, et al.; ZHONGHUA CHUANRANBING ZAZHI, No 1, 15 Feb 86)	34
Briefs	
Heilongjiang Controls Endemic Diseases	35
Youth Anemia Survey	35
Medical Personnel Praised	35

PHILIPPINES

Aquino Orders Drive Against Six Top Diseases
(Quezon City ANG PAHAYAGANG MALAYA, 4 Apr 86) 36

Outbreak of Dengue Fever Reported in Davao
(Manila MANILA BULLETIN, 23 Apr 86) 37

SOUTH AFRICA

Briefs
AIDS Warning Repeated 38

TANZANIA

Briefs
Malaria Kills 300 39
AIDS Deaths in Mwanza 39

TRINIDAD AND TOBAGO

Briefs
Health Research Unit 40

UGANDA

AIDS Reportedly Kills 100 Monthly in Rakai
(Kampala WEEKLY TOPIC, 20 Mar 86) 41

Briefs
Sleeping Sickness Increase 42

UNITED KINGDOM

Briefs
AIDS in Scotland 43

VIETNAM

Conference Reviews 1981-1985 Efforts To Eradicate Malaria
(Hanoi SUC KHOE, 5 Mar 86) 44

ANIMAL DISEASES

CZECHOSLOVAKIA

Battle Against Rabies Continues
(Prague RUDE PRAVO, 4 Feb 86) 47

MOZAMBIQUE

Rat Extermination, Malaria Campaign Underway in Quelimane (Beira DIARIO DE MOCAMBIQUE, 19 Feb 86)	48
Antirabies Campaign Launched in Beira (Maputo NOTICIAS, 11 Feb 86)	50

PLANT DISEASES AND INSECT PESTS

BARBADOS

Anti-Rat Campaign Seeks To Halt Destruction of Sugar Crop (Bridgetown SUNDAY SUN, 30 Mar 86)	51
---	----

CANADA

Ontario Fighting Losing Battle Against Gypsy Moth (Bob Lyons; Toronto THE TORONTO STAR, 18 Apr 86)	52
---	----

MOZAMBIQUE

Changara District Battles Locust Plague (Maputo NOTICIAS, 4 Mar 86)	53
--	----

PAPUA NEW GUINEA

Coffee Rust in Highlands Cause for Quarantine (Port Moresby PAPUA NEW GUINEA POST-COURIER, 2 May 86)	55
--	----

PERU

Pink Bollworm Damages to Piura Cotton Harvest (Lima EL COMERCIO, 25 Mar 86)	56
--	----

SOUTH AFRICA

Briefs	
Poison Spray Against Locusts	58
Locust Swarms	58

/9987

BANGLADESH

BAGERHAT DIAHRREA EPIDEMIC REPORTED SPREADING

Dhaka THE NEW NATION in English 15 Apr 86 p 2

[Text] Diarrhoea that broke out in an epidemic form in last February in the south-eastern part of Bagerhat district comprising Morrelganj, Sarankhola, Rampal and Mongla upazilas has shown a little improvement but it has now spread to new areas of the district.

According to the Civil Surgeon Bagerhat, 7,465 persons were attacked with the disease during the period from February 12 to March 31 and 277 of them died.

Bagerhat Sadar, Kochua, Chitalmari, Mollahat and Fakirhat upazilas are the new areas where diarrhoea spread. In these new areas 706 persons were attacked with the disease and 30 of them died upto March 31, according to the Civil Surgeon.

Measures have already been taken by the concerned department to combat the disease. At present 65 medical teams are working in the affected areas. It is learnt acute scarcity of pure drinking water is attributed to be the main cause

of the disease.

It deserves mention that every year diarrhoea breaks out in these areas taking a heavy toll. But no satisfactory measures are taken to arrest the disease by any quarters, it is alleged.

It is gathered that the number of tubewells sunk in these areas are too meagre to cope with the demand. Moreover, more than 800 tubewell have gone out of order, according to the Public Health Engineering Department. But un-official reports put the number of disordered tubewells at more than that.

Besides, due to the salinity, the water of the remaining tubewells is unfit for drinking so that ponds and tanks remain the main source of drinking water in the areas. Hence, the people drink impure water and become the easy victims of the disease.

When contacted, the easy Civil Surgeon of Bagerhat told this correspondent that he would suggest the concerned authority to dig more reserved tanks in those areas to remove the scarcity of pure drinkinking water.

/13104
CSO: 5450/0132

BRAZIL

INCIDENCES OF DISEASES PREVALENT IN AMAZON REGION

Rio de Janeiro O GLOBO in Portuguese 10 Apr 86 p 11

[Text] With its area of approximately 4 million square kilometers, Amazonia constitutes a serious public health problem for the country. Geographic size, the hot and humid climate, which favors the appearance of various diseases, transportation difficulties--most traveling is done only on the innumerable rivers that intersect the region--and the large flow of migration over the past few years make Amazonia a special region presenting enormous challenges, chiefly as regards health matters.

Besides malaria, which, chiefly because of the situation resulting from occupation of the land and the gold mining areas, is the region's main health problem, there are also other serious problems. One of them is hansenosis, also known as leprosy, of which there is a high incidence in Amazonia. Besides the stigma that has long been attached to this disease, there are the conditions making it difficult to reach those suffering from hansenosis.

Also existing in Amazonia are diseases which, while not presenting as serious a situation there as they do in other parts of the country, are a matter of concern to the Ministry of Health. One example is schistosomiasis. Measles is another very prevalent disease, although the health control service in the region lacks an accurate system for reporting diseases.

Malaria

The malaria situation has grown considerably more complicated in recent years. It is centered basically in Amazonia, where climatic conditions, combined with settlement patterns in the region, are tremendously favorable to the presence of that endemic disease.

The Amazon Region accounts for 96 percent of all malaria cases in Brazil, and if we include cases detected in other regions but originating in Amazonia, the figure rises to 99 percent. The States of Rondonia and Para alone account for 73 percent of the cases.

In 1985, according to data from the Malaria Division, the number of malaria cases in Legal Amazonia (which, in addition to the states in the North Region,

includes the northern areas of the States of Goias and Mato Grosso) totaled 384,603. That figure reflected an increase over 1984, when 365,000 cases were reported. In the State of Rondonia, where the situation is most critical, 113,649 cases were recorded in 1985. In the single municipality of Ariquemes, which is the country's largest producer of cacao, 35,000 cases of malaria were recorded last year, and in 1986 the number of patients is already up to 6,000.

Besides the environmental factors in Amazonia which favor the transmission of malaria, the Superintendency for Public Health Campaigns (SUCAM) is facing serious difficulties, both administrative and operational. One disturbing situation is the danger of importing malaria into other regions, since the mosquito which transmits the disease (*Anopheles*) exists throughout Brazil. That is why foci of this endemic disease can appear in other regions, to which it is brought by people who contract malaria in Amazonia and then return to their place of origin. That is a difficult situation to control.

Among the other problems related to humans are the living conditions brought about by the large migratory movement into the region, which has resulted in precarious housing. Such conditions contribute to outbreaks of the disease. An example of this is Rondonia, which is affected by the problem of land settlement in connection with migration.

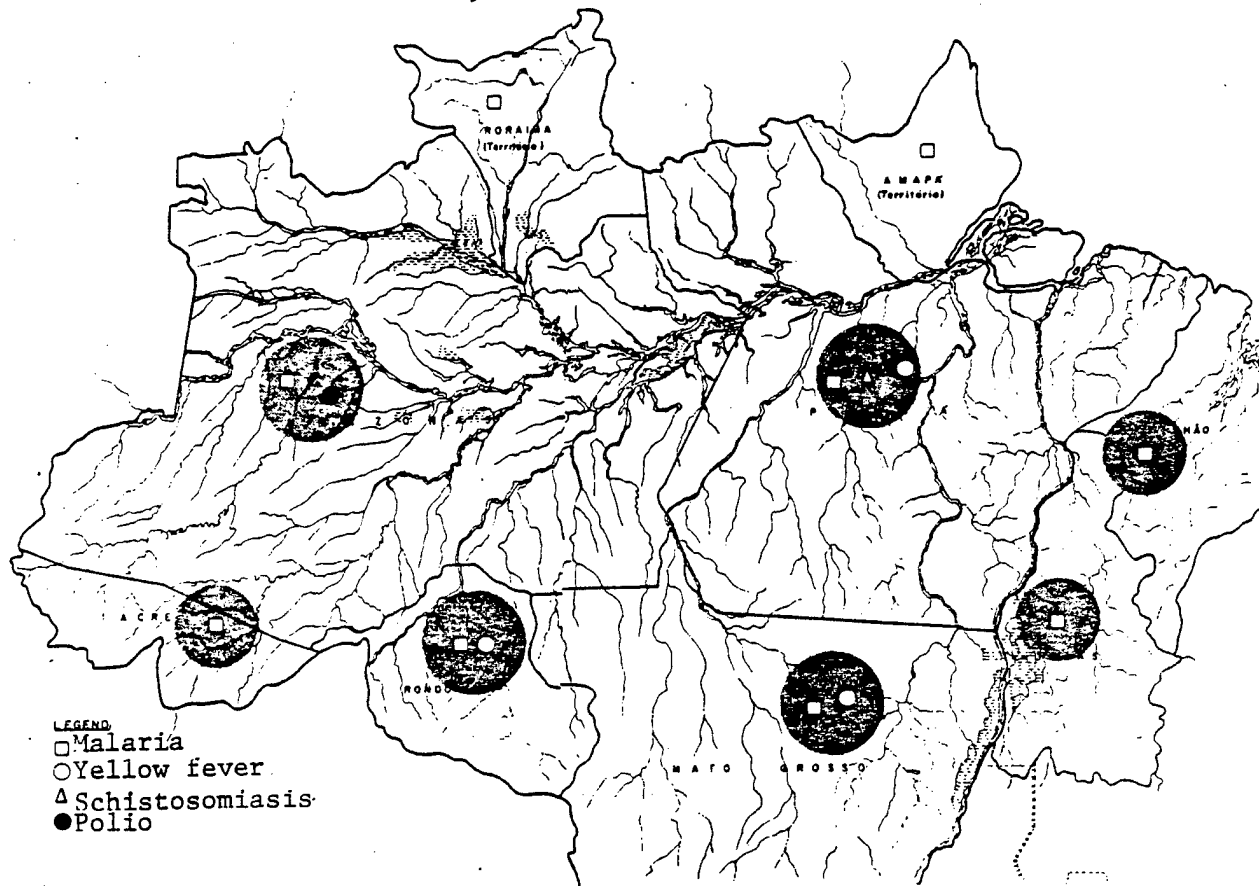
According to Edinaldo Alves Pinheiro, director of SUCAM's Malaria Division, the most serious problem in controlling the disease has to do with the gold fields scattered all over the region, which "have a negative influence on the malaria situation and contribute significantly to the rise in the number of cases of this endemic disease."

Several factors make it difficult to control malaria in the gold fields. Chief among them are the environmental conditions in the prospectors' settlements, followed by the lack of organized health services, the difficulty experienced by SUCAM personnel in subsisting in the gold fields, the large influx of people from areas where there are a great many malaria cases, and the resistance of some people to medication. All those factors combine to create favorable conditions for transmission of the endemic disease and, consequently, its permanent presence in the region.

Concerning the application of insecticide, a measure considered important in controlling the disease, SUCAM's efforts over the past few years have not paid off in the "long-term eradication" area. This is due chiefly to the local type of housing, and the result is that Amazonia continues to play a preponderant role as far as malaria in Brazil and Latin America is concerned.

Yellow Fever

The forests in the Amazon Region and the Center-West are the only place where jungle yellow fever is endemic. They represent the largest area of incidence of that endemic disease on the continent. It is known as jungle yellow fever because the virus lives in animals, but cases of human infection can occur.



This map, showing the distribution of the chief diseases throughout Amazonia, covers Legal Amazonia, which includes Maranhao and part of Goias and Mato Grosso [The names on the map are those of states and territories ("territorio")].

According to data from SUCAM's Yellow Fever Division, 143 cases of the disease have occurred in Brazil since 1979, and over 60 percent of those occurred in states in the North Region.

Vaccination against yellow fever is one of the basic means of controlling the disease. Vaccination must be administered to everyone living in the region as well as persons going there. The latter must be given the vaccine 10 days before starting their trip. The vaccine provides protection for approximately 10 years.

Hansenosis

Hansenosis, long known as leprosy, is another serious health problem in the Amazon Region. The greatest incidence of this disease in the country is found in the states in the North Region. All of them have a large number of cases, with rates considered hyperendemic--that is, more than 1 case per 1,000 inhabitants. The rate in the State of Amazonas alone is 11.79 cases per 1,000 inhabitants, and in Labrea, a municipality on the Purus River, the incidence rises to 40 cases of hansenosis per 1,000 inhabitants.

In the Amazon Region, hansenosis appears mainly in its tuberculoid form, which is benign. In Amazonas and Acre, the incidence is high among children under the age of 14. According to Maria Leide Wand'Del Rey de Oliveira, director of the Ministry of Health's Division of Sanitary Dermatology, those factors show that this endemic disease is on the rise in the region.

To deal with those problems, and in keeping with the current operating philosophy of the Division of Dermatology, a Hansenosis Reference Center is being established in Manaus, the objective being to decentralize activities for controlling the disease, train human resources, and carry out research concerning the behavior of hansenosis in the region.

Measles

The highest death rate due to measles in Brazil is in the North Region, and mortality--that is, the number of children who catch the disease and die--is also high in Amazonia.

One characteristic of measles is that it is an epidemic disease, and to some extent that makes the study of its behavior difficult, especially in Amazonia, where reporting is very inadequate due to the structural conditions proper to the area.

Vaccination coverage is irregular; there is no pattern for the region or even for the states individually. The known incidence of measles is higher in the interior than in the capitals, and there are major signs that the real situation with measles is more serious than indicated in the data available to the Ministry of Health.

Infantile Paralysis

In the State of Amazonas in 1986, two cases of infantile paralysis have been reported in Manaus and two in the municipality of Humaita on the Madeira River in the southern part of the state. There have also been six cases in the State of Rondonia.

The State of Para reported 39 cases of the disease in 1985, and 6 have been confirmed this year, but there are also pending diagnoses. There has been one case of the disease in Maues in Amazonas.

One of the big problems with diseases that can be prevented by immunization is precisely that of getting the vaccine to every locality in the region. This is due in large part to the precarious transportation conditions. On days when there is a nationwide vaccination drive against infantile paralysis, special operations are generally carried out, chiefly in the rubber-extracting areas, along the frontiers, and in Indian areas.

Schistosomiasis

Another problem identified by SUCAM in the North Region is schistosomiasis, a disease caused by *Schistosoma mansoni* and transmitted to man by a snail that lives in places where there is slow-moving water. Schistosomiasis is not endemic in Amazonia, but there are foci in four municipalities in the State of Para: Belem, Primavera, Capanema, and Tucurui.

In 1985 alone, there were 189,905 stool examinations, of which 2,090, or 1.1 percent, showed positive. Of the cases identified, 1,936 were treated. According to Dimas de Paiva Gadelha, director of the Schistosomiasis Division, there were three reasons why not all the patients were treated. The first was that use of the medicine was contraindicated for some reason, examples being the first trimester of pregnancy, alcoholism, and epilepsy. The other two reasons were the patient's refusal to be treated and absence.

Leishmaniasis

A total of 19,172 cases of cutaneous leishmaniasis were reported in the region between 1979 and 1985. In 1985 alone, there were 4,911 reported cases, and of those, 57.65 percent were in the State of Amazonas. Another 29.19 percent were in the State of Para.

All the reported cases were treated using Glucantime supplied by SUCAM. According to experts at SUCAM, only a small number of patients abandon the treatment, which is painful and lengthy.

In the case of visceral leishmaniasis, also known as kala azar, a significant increase in the number of cases occurred in Santarem in the State of Para beginning in 1984. During that period, 99 cases were reported, and following treatment, the number dropped to 47. No cases of the disease have been reported so far this year.

11798

CSO: 5400/2056

BRAZIL

BRIEFS

NEW AIDS CASES REPORTED--Seven new AIDS cases are detected each week in Sao Paulo and three in Rio de Janeiro. According to data furnished by the National Division of Sanitary Dermatology, an organization under the Health Ministry, the AIDS mortality rate in Brazil is 46.7 percent. It also stated that 90.8 percent of the cases have occurred in the southeastern region. [Summary] [Rio de Janeiro O GLOBO in Portuguese 27 Apr 86 p 1 PY] /8918

MORE AIDS CASES--Belo Horizonte (Brazil), 29 Apr (EFE)--An AIDS control committee in Minas Gerais state today reported that 14 new AIDS cases have been confirmed in Brazil, 12 more are "suspected," and 13 other cases "are being assessed" according to the committee, which was created a year ago by seven health institutions, 39 AIDS cases have been "registered" in Minas Gerais State. Approximately 80 percent of the cases involve homosexuals. The rest are haemophilics and unidentified high-risk people. All the cases involve male patients. In terms of numbers, Minas Gerais is ranked fourth in Brazil, after the states of Sao Paulo, Rio de Janeiro, and Rio Grande do Sul. [Excerpt] [Madrid EFE in Spanish 0452 GMT 30 Apr 86 PY] /8918

MALARIA IN FORTALEZA--Fortaleza--Jose de Sa Cavalcanti Junior, the SUCAM (Superintendency for Public Health Campaigns) coordinator in Ceara State, has reported that SUCAM in Ceara has recorded 52 malaria cases in Buturire District (90 Km from Fortaleza) and 3 cases in Capistrano de Abreu, near Baturire. [Excerpt] [Sao Paulo FOLHA DE SAO PAULO in Portuguese 30 Apr 86 p 27 PY] /8918

SAO PAULO COMBATS MOSQUITOES--Sao Paulo Governor Franco Montoro today in Guarulhos started a "mosquito-killing" operation aimed at eliminating mosquitoes that transmit yellow fever and dengue fever. Governor Montoro, however, believes that the Aedes Aegyptis can only be exterminated if fought jointly with Peru and Bolivia, where they are numerous. Montoro has already ordered state health officials to contact their Peruvian and Bolivian counterparts to plan a joint campaign. [Summary] [Sao Paulo Radiô Bandeirantes in Portuguese 1600 GMT 30 Apr 86 PY] /8918

YELLOW FEVER MOSQUITOES COMBATED--An intense campaign to eliminate yellow fever mosquitoes is under way in the Rio de Janeiro suburb of Nova Iguacu. No cases of yellow fever have yet been detected. Thousands of homes have already been sprayed and a vaccination campaign has been started. [Summary] [Brasilia Radio Nacional da Amazonia in Portuguese 1000 GMT 29 Apr 86 PY] /8918

DENGUE FEVER OUTBREAK--A dengue fever outbreak has been reported in Rio de Janeiro, where some 2,000 cases have been detected. The health minister has said that there is no vaccine for the disease. Dengue produces slight effects on people, but it is not fatal. [Summary] [Brasilia Domestic Service in Portuguese 2200 GMT 25 Apr 86 PY] /8918

DENGUE EPIDEMIC--A dengue epidemic is affecting Rocinha, the largest shantytown in the city of Rio de Janeiro. The disease has already been detected in the Santa Teresa, Botafogo and Copacabana neighborhoods. In Rocinha, the neighborhood council believes that about 300 people have already contracted the disease, but the state health secretariat reports that only 98 people are affected. To combat the Aedes Aegypti mosquito, the Rio de Janeiro state government has designated 17 May as the day to fight the dengue fever. There will be a campaign against the fever in 15 Rio de Janeiro neighborhoods. The Belem (Evardo Chagas) Institute, one of the most important in the research of virus transmitted by mosquitoes, confirmed that the dengue fever detected in Rio de Janeiro is benign. [Text] [Brasilia Radio Nacional da Amazonia in Portuguese 1000 GMT 8 May 86 PY] /8918

PURPURIC FEVER DEATHS--Sao Jose do Rio Prieto--Brazilian purpuric fever, which according to Dr Alexandre Vranjac, chief of the Division of Epidemiology at the Secretariat of Health, has already claimed nine other lives in the area of Sao Jose do Rio Prieto (448 kilometers from Sao Paulo), is also thought by the physicians who treated her to have caused the death of a girl named Gislaine Dionisio Souza. She died at 10 a.m. last Wednesday (the 12th) at the city's Basic Hospital, to which she had been admitted the night before. The girl's body was autopsied at the hospital itself, but the report with the results has not yet been made public. The collected material was sent for examination to the Adolpho Lutz Institute in Sao Paulo, which made no prediction as to when the results would be released. On the basis of Gislaine's symptoms, doctors suspect that her death was caused by Brazilian purpuric fever. Those symptoms were a high fever, abdominal pains, changes in skin coloring, and inflammation of the eyes. According to the girl's mother, she had always been in good health until Tuesday, when the fever appeared. Another victim of the disease, a boy named Elenicio Antonio dos Santos, is at the Charity Hospital. He had been released, but has returned to the hospital for plastic surgery on his right hand, which became infected as a result of the disease. [Excerpts] [Sao Paulo FOLHA DE SAO PAULO in Portuguese 16 Mar 86 p 10] 11798

TOTAL AIDS CASES NUMBER 625--Brasilia--A total of 625 AIDS cases have been confirmed in Brazil, and almost 50 percent of the patients (304) have died, according to the latest data released by the Ministry of Health. Sao Paulo State continues to have 74 percent of the carriers of the disease (463), while Rio de Janeiro has 14 percent (93). Most of those infected--a total of 365--are male bisexuals or homosexuals. The state secretariats of health did not say how another 187 had contracted the disease. The bulletin states that 35 people acquired the disease after receiving blood transfusions or by injecting themselves with drugs using needles already used by others. AIDS attacks primarily people between the ages of 20 and 39; that age group accounted for 338 of the cases reported. In addition, the disease has now attacked 13 children under the age of 9 and 16 adolescents whose ages range from 10 to 19. Those in their forties are not immune, either: there are 870 [as published] patients between the ages of 40 and 49 and 29 over the age of 50. [Text] [Rio de Janeiro O GLOBO in Portuguese 5 Mar 86 p 5] 11798

POLIO EPIDEMIC IN NORTHEAST--Yesterday the Ministry of Health confirmed the existence of a polio (infantile paralysis) epidemic in the northeast, with 107 of the 139 suspected cases of the illness registered by yesterday afternoon. As a result, the health authorities are analyzing the possibility of carrying out a vaccination campaign this month throughout the region in order to immunize all children under 4 years. Data from the ministry show that last week the northeast states registered 30 new suspected cases which yesterday were increased by 14 recorded by the secretary of health in Bahia. At this moment there are 30 suspected polio cases in Ceara, 23 in Alagoas, 16 in Bahia, 11 in Pernambuco, 9 in Piaui, and 9 in Rio Grande do Norte. In addition there are six cases under investigation in Sergipe, and three more in Paraiba. The only northeastern state that has registered no cases is Maranhao, which surprises the health authorities. It is known for certain, according to the ministry, that the polio virus is active in the entire area, and its activity is not restricted to specific locales. In Piaui, for example, the illness has already been identified in cities to the south, such as Corrente, and to the north, such as Campos. The same is true of other states. [Text] [Rio de Janeiro 0 GLOBO in Portuguese 1 Apr 86 p 6] 12857/12859

MENINGITIS ALERT IN BAHIA--The Ministry of Health and the State Secretary of Health are on the alert for an outbreak of new cases of meningococcal meningitis in the southern region of Bahia, which could result in the launching of a mass vaccination program, according to what was said yesterday by the minister of health, Roberto Santos; he confirmed an incidence of the illness this year in that region at much higher levels than those registered during the January-March period of 1985. [Text] [Rio de Janeiro 0 GLOBO in Portuguese 30 Mar 86 p 9] 12857/12859

MALARIA PRECAUTIONS IN AMAZONIA--In order to prevent the spreading of malaria from an endemic region--such as Amazonia--to others not yet infested with the illness, the minister of health, Roberto Santos, today will initiate the "Health Barriers" project in Rondonia; this project will be implemented at several strategic points around the country in order to prevent the transmission of the illness throughout the national territory. The first health barrier will be installed in the municipality of Vilhena. The president of Sucam, Josedio Fernandes, said that the idea is to prevent people who are carriers of malaria from traveling to other regions where the illness does not exist. Health stations will be established at each barrier, with all of the necessary infrastructure for performing blood tests and treating carriers of the illness. [Text] [Sao Paulo 0 ESTADO DE SAO PAULO in Portuguese 1 Apr 86 p 11] 12857/12859

YELLOW FEVER IMMUNIZATIONS--Yesterday the minister of health, Roberto Santos, initiated a program of vaccination against yellow fever in the towns of Sao Jose do Rio Preto and Olimpia, where two deaths have been caused by the illness. The vaccination will probably be extended later throughout the western region of the state, said the head of Sucam, Joselio Fernandes. Through the use of insecticides, the Minister of Health is also intensifying the battle against aedes aegypti--the mosquito that spreads the illness--in 29 towns that are infested. Sucam has made 700,000 doses of serum available for the initial phase of the immunization. About 300 persons were mobilized to carry out the vaccination in Sao Jose do Rio Preto; this town had been visited for about 3 hours by Eurico Recco, a man who died as a result of yellow fever acquired

last week when he was fishing at the Crixá river in Goiás. The fisherman waited at the bus terminal for the bus to Olímpia, where he lived. As a result, the entire area around the terminal at Rio Preto was sprayed yesterday. The mass vaccination campaign will also be carried out in Aracatuba, Birigui and Mirandópolis. Studies performed in those cities indicate high indices of fever-carrying mosquitos. In a second phase, the vaccination campaign will extend to Guararapes, Penapolis, Andradina, Buritama, Turiuba, Glicerio and Coroados. In Goiânia, around 350,000 doses will be administered, although there has been no outbreak of the illness in that capital. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 27 Mar 86 p 12] 12857/12859

CSO: 5400/2052

CANADA

BRITISH COLUMBIA FUNDING FOR CANCER RESEARCH REPORTED

Vancouver THE WEEKEND SUN in English 5 Apr 86 p A11

[Article by Anne Mullens]

[Text]

The use of vitamins to help prevent cancer and studies to determine why the same types of cancer take such varying forms in different people are two of 27 B.C. cancer research projects that will receive grants from the Canadian Cancer Society.

In all, \$2.5 million will be spent in B.C. on cancer research in 1986, cancer society officials announced Friday at the B.C. launch of the 48th annual April cancer fundraising campaign. Across Canada, the Canadian Cancer Society will spend \$25.7 million on cancer research.

"People have been giving to the Canadian Cancer Society each April for so long now it is important that they see the direct link between what they give and the research that is being done," said Dr. Gwyneth Ballantyne, president-elect of the society and a director of the National Cancer Institute of Canada. The latter coordinates cancer research in Canada and administers the research dollars turned over to it by the cancer society.

One of the largest projects to receive a block grant was a group of blood research projects being carried out by six senior researchers at the Terry Fox Laboratory at the B.C. Cancer Research Centre.

The group, which is headed by the husband and wife team of Drs. Connie and Allen Eaves and has been financed for the last six years by the NCIC, received \$606,748. The grant supports a number of projects involved with growing and identifying primitive blood-forming cells in the lab, particularly to imitate and manipulate the progression of leukemia on a cellular level.

Also associated with the Eaves lab is a project by Dr. Dixie Mager, which involves identifying and studying a family of virus-like sequences of human DNA (deoxyribonucleic acid) found to normally occur in human genes. The work is important because similar virus-like sequences have been found to start the formation of cancer in mice, Mager said Friday.

Other research projects that will receive grants this year are:

- A study to find the properties of normal cells that determine the characteristics of cancer growth.

"There is a tremendous variation in the way cancers behave from one person to the next, even cancers that arise from the same organ such as lung cancer," said Dr. Nellie Auersperg, of the anatomy department of the University of B.C.

"One man's lung cancer may grow very rapidly and another man's doesn't. One may respond to

treatment and the other doesn't."

The group has received a grant of \$121,894 to study the basic characteristics of cells, such as their age or make-up, that lead to cancer growth as well as studying various factors playing on those cells, such as hormones and chemicals that influence the cancer growth.

- A study of the use of Vitamins A and C, carotenoids and folic acid to prevent pre-cancerous cells from becoming malignant cells. Dr. Hans Stich, of the environmental carcinogenesis unit of the B.C. Cancer Research Centre, received a grant of \$249,190 to study the effectiveness of preventing various cancer by using compounds naturally occurring in the human diet. Stich's group will study two different ethnic populations — Canadian Inuit in the Northwest Territories and a population of Hindus in southern India. The two groups are at a high risk of oral cancer because of cultural habits of chewing tobacco. Stich will see whether diet and vitamins can help prevent the growth of cancerous cells.

- A grant of \$92,852 to Dr. Nicholas Bruchovsky to continue studies into the effect of androgens and other hormones on the control of prostate cancer.

On Monday, cancer society volunteers will begin going door-to-door in B.C. to ask for donations toward cancer research.

/9317

CSO: 5420/68

CUBA

FIRST CONFIRMED AIDS DEATH REPORTED

FL261338 Havana Radio Progreso Network in Spanish 1100 GMT 26 Apr 86

/Station Commentary/

/Text/ Our country's first confirmed case of the illness known as AIDS (Acquired Immune Deficiency Syndrome) has just been reported through a note released by the Public Health Ministry published on GRAMMA's front page today. The note says that last Thursday, a Cuban citizen--scenographer by profession--died of AIDS. He caught the illness in New York during a business trip in 1982.

A long time ago, Cuban public health organs received instructions from the commander in chief to study diagnostic techniques, obtain necessary equipment and reagents, and take pertinent measures to detect and isolate the disease as soon as it appeared in our country because it is widespread around the world and it is unavoidable due to our contacts abroad. In the course of investigations cases of positive reaction to analysis have been registered but clinical symptoms of the illness had not appeared in any of the people. Research will continue until the cases at risk are totally identified, including everyone who has had contact abroad in areas where the illness has been confirmed.

The almost exclusive means of transmitting AIDS are sexual intercourse, blood transfusions, or the use of contaminated needles. Measures are being taken to assure that the virus is not transmitted by its potential carriers. Our country's health system is greatly facilitating the struggle against AIDS or any other kind of disease. This allows us to efficiently prevent, combat, and isolate the illness.

/12228

CSO: 5400/2057

EGYPT

DEHYDRATION INCIDENCE DECREASES

Cairo THE EGYPTIAN GAZETTE in English 13 Mar 86 p 2

[Text] A report issued recently by UNICEF revealed that Egypt has successfully carried out more than 50 percent of the five-year plan which aims at using oral solutions to combat dehydration in children, thus saving the lives of 80,000 children who die every year because of dehydration.

The report said that the implementation of the anti-dehydration experimental projects in the Alexandria governorate resulted in a 30 percent drop in the number of children's deaths. In view of this success, similar projects are under way in other governorates, through more than 4,000 clinics established for this purpose, the report indicated.

Since 1982, Egypt has become one of the leading countries throughout the world in the field of treating dehydration in children by oral solutions. The disease is responsible for more than 50 percent of children's deaths in the country.

The US Agency for International Development has granted Egypt the sum of 26 million dollars to finance the anti-dehydration project, which succeeded in increasing the awareness of doctors, nurses and mothers, with respect to the importance of oral solutions for the treatment of dehydration. GSS

/9317
CSO: 5400/4604

GHANA

BRIEFS

CLINICS FOR AIDS IDENTIFICATION--The Ministry of Health is to set up sexually transmitted disease clinics to quickly identify people who have the deadly disease, Acquired Immune Deficiency Syndrome, AIDS. These clinics will also advise patients on what to do. The acting head of the national blood transfusion service, Dr Cecilia Bentsi, made this known at a symposium in Accra as part of activities marking the Red Cross week. /Excerpt/ /Accra Domestic Service in English 0600 GMT 8 May 86 AB/ 12228

CSO: 5400/118

INDIA

DELHI URGED TO DECLARE CITY ENDEMIC TO GOITER

New Delhi PATRIOT in English 7 Apr 86 p 3

[Text]

The Institute of Nuclear Medicine and Allied Sciences (INMAS) has urged the Delhi administration to immediately declare the Capital endemic to goitre, reports UNI.

An exhaustive INMAS survey found that more than 30 per cent of Delhi's school children were suffering from goitre. INMAS director Brig N Lakshmipathi said.

The survey, which started in 1980 and was completed on 31 March, this year, covered more than 25,000 school children.

Brig Lakshmipathi said most of the children suffering from goitre belonged to low-income families.

Girl patients outnumbered boys, he said, and added that among the girls, a majority were from the age group of 10-18.

Area-wise, the maximum incidence of goitre among school children was reported from Pharaganj and the walled city.

"Surprisingly, the incidence of goitre among school children is not as high in trans-Yamuna areas as expected. Perhaps, it is because the residents of this area get good drinking water," Brig Lakshmipathi said.

He said INMAS surveyed school children because they were the "ideal for sampling and because goitre is usually prevalent in that age-group."

According to Brig Lakshmipathi, apart from lack of iodine, many factors were responsible for causing goitre. He listed these as bacterial contamination of water, type of fertilisers used, method of cooking and the nature of the soil.

Brig Lakshmipathi said his institute also found that six common vegetables contain a good measure of goitre-producing substances. These are: phool-gobhi (cauliflower), 'patta-gobhi' (cabbage), 'bhindi' (lady's finger), 'arbi' (taro), 'shalgam' (turnip) and 'mooli' (radish).

Samples of 25 to 30 common vegetables were collected from 50 cities and towns in the country and flown to INMAS here for tests.

Tests revealed that Delhi's 'bhindi' (lady's finger) had the largest concentration of goitre-producing substances among vegetables from all over the country.

Brig Lakshmipathi said to check the spread of goitre, the Government should bring out legislative measures for making the sale of iodised salt mandatory in goitre-prone areas. In such areas, the sale of ordinary salt should be banned, he added.

There are about 120 million people living in the known iodine-deficient regions of Uttar Pradesh, Bihar and Assam.

Goitre is prevalent in the mountainous regions of Jammu and Kashmir, Uttar Pradesh, West Bengal, Punjab, the north-eastern States, and some areas of Maharashtra, Madhya Pradesh and Gujarat.

/9317

CSO: 5450/0130

INDIA

BRIEFS

MALARIA, KALA-AZAR CASES--Mr. Ramnarayan Goswami, the Minister of State for Health, in reply to a question, said in the West Bengal Assembly on Friday that the number of malaria and kala-azar cases in the State in 1984 and 1985 were 84,910 and 8,4672 respectively. The number of deaths were 20 and five respectively. To control the outbreak of these diseases, DDT was being sprayed in the affected areas. He said that areas adjoining Bihar in Malda and West-Dinajpur districts were mainly affected by kala-azar. Though West Bengal and Bihar were the two States worst affected by these two diseases, the Centre had turned down a request to allot special assistance to these two States to control the diseases. [Text] [Calcutta THE STATESMAN in English 12 Apr 86 p 9] /13104

MENINGITIS IN CALCUTTA--The Calcutta Municipal Corporation health officer, Dr Sunil Choudhuri, today said there was no cause for alarm over the reported cases of meningitis in the Burrabazar area. He said 180 patients had been admitted with meningitis at the Marwari Relief Society hospital in the last two months, of which only six had died. The deaths were mainly due to the delay in reporting the cases, he added. The local Congress (I) councillor, claimed that the disease had assumed epidemic proportions. Dr Choudhuri said reports from the hospital had stated that only a few patients were being treated for the disease there. He said the disease was transmitted through droplets in the air and added that the afflicted persons should be isolated. [Text] [Calcutta THE TELEGRAPH in English 10 Apr 86 p 2] /13104

MENINGITIS KILLS NINE --Calcutta, April 4--Nine persons died of meningitis in the Burrabazar area last week, according to the councillor of Ward 42, Mr Om Prakash Poddar. He said several others suffering from the disease have been admitted to the Marwari Relief Society hospital for treatment. The manager of the hospital, Mr Narayan Ojha, however, denied the high incidence of meningitis, but said a number of patients had been admitted over the past few months. He said the death rate was nearly 25 percent as most patients were brought in very late. He said the local councillor, Mr Shantilal Jain's 11-year-old son, Sudip, had been admitted to the hospital this morning with symptoms of meningitis. [Text] [Calcutta THE TELEGRAPH in English 5 Apr 86 p 1] /9317

CSO: 5450/0131

INDONESIA

BRIEFS

MALARIA IN SOUTHEAST SULAWESI--Kendari, April 16 (ANTARA)--As many as 575,986 people of Southeast Sulawesi or about 49.9 percent of the population of the region are still declared contracted by malaria. The head of the regional office of the ministry of health, Dr Efu Aza, told ANTARA Wednesday that the regencies of Muna and Buton are the most sensitive regions of malaria. To curb the spread of the disease he said his office has been spraying DDT in the people's homes and exercising biological control. The regional office of the ministry of health has also given regular medication to the people, he added. [Text] [Jakarta ANTARA NEWS BULLETIN in English 16 Apr 86 p A6] /9317

CSO: 5400/4372

IRELAND

25,000 NOT YET COVERED BY MEASLES IMMUNIZATION CAMPAIGN

Dublin IRISH INDEPENDENT in English 31 Mar 86 p 3

[Article by Stephen McGrath]

[Excerpts]

PARENTS of an estimated 25,000 children aged between 15 months and five years have not availed of the Department of Health measles immunisation scheme, which officially ends this holiday weekend.

The Health Education Bureau has appealed to parents of the still vulnerable children to get them vaccinated.

"If not for your own child, do it for the community as a whole," the bureau's publicity officer Harriet Duffin said.

Ms. Duffin said the bureau was delighted with the success of the campaign, which saw 84 p.c. of the vulnerable children immunised against measles. About 125,000 children got the free vaccine from their doctor.

1984 was an epidemic year in Ireland for measles. Each case of the disease cost an average of £50 to treat, while the cost of the vaccine was just £6 per child.

On the success of the campaign, Ms. Duffin said: "We didn't think we would have got such a response. Other countries take three years to reach such a standard."

She added that, if the remaining 25,000 children were vaccinated, Ireland would be practically free of measles. The vaccine was free and safe.

Some parents had obviously got the message but had not done anything about it. "We are very keen to have these remaining 25,000 children done," Ms. Duffin said.

The campaign cost £500,000 and was conducted in the newspapers and on radio and television. About £160,000 was spent on advertising and a further £20,000 on publicity material. The rest was made up of doctors' fees and the cost of the vaccine.

General practitioners and public health nurses played vital roles in getting the message across to parents in a comprehensive campaign which included a broadcast by the Minister for Health.

The scheme is expected to save the State millions of pounds in health bills over the next few years and is being seen as a successful exercise in preventive medicine.

/9317
CSO: 5440/072

ISRAEL

MOROCCANS CARRY TAY-SACHS DISEASE

Jerusalem THE JERUSALEM POST in English 2 Apr 86 p 2

[Article by Judy Siegel]

[Text] Tay-Sachs disease, a genetic disorder thought to be mainly carried by Ashkenazi Jews, has been found among Jews of Moroccan origin, according to a report on Israel TV last night.

Two studies, one at Hadassah University Hospital in Jerusalem and one at Sheba Hospital at Tel Hashomer, have not yet produced conclusive results. Thus the experts will not yet recommend that all couples of Moroccan or mixed Moroccan-Ashkenazi background take a test to determine if they are carriers.

A handful of cases were found, inducing the hospitals to conduct a survey of non-Ashkenazi parents.

Tay-Sachs is a genetically inherited nerve disorder that causes death between the age of 2 and 4. It had hitherto been thought to occur mostly in families of Eastern European Jewish origin.

It is marked by progressive mental and physical retardation. Symptoms first appear at about six months, after which no new skills are learned

and there is progressive loss of those skills already learned.

Convulsions are followed by blindness, with a cherry-red spot on the retina, and then by dementia and paralysis. There is no cure, but treatment is given to relieve some of the symptoms.

The disease can be diagnosed before birth by amniocentesis. Parents can find out if they are carrying the defective gene by a simple blood test, available free at the Health Ministry's district offices.

All couples of Ashkenazi origin who are about to marry, or have children, are urged to take the test.

Prof. Gideon Bach of the genetics laboratory at Hadassah Hospital in Jerusalem says that some cases of the disease have turned up in recent years among Jews of Moroccan origin. His lab began conducting a study, but findings are not yet final.

If a study by Dr. Ruth Navon of Sheba's Hospital's genetics laboratory - due to be completed in two weeks - confirms that Moroccan Jews may be carrying Tay-Sachs, Bach will recommend that Moroccan Jewish couples also take the test.

/13104
CSO: 5400/4513

ITALY

INCREASE IN AIDS CASES REPORTED

Rome IL MESSAGGERO in Italian 14 Mar 86 p 200

[Article by C. Me]

[Text] There are 13 new cases each month and 80 deaths in 4 years. In our country, AIDS, the acquired immune deficiency syndrome, is spreading at a rate which doubles every 3 months. Statistics show that in the first 2 months of 1986 alone 18 persons discovered they had the disease and there were 7 deaths.

A backward look: When AIDS first appeared in Italy 4 years ago in 1982, only one person was diagnosed as having AIDS. And then, slowly, we reached 63 cases between January and June of last year and 86 in the last 6 months. Overall, a total of 190 persons were stricken, and there were 80 deaths.

It is an impressive increase in the disease, which, as the greatest Italian experts (Professors Aiuti, Visco, Verani, and Rossi) explained yesterday at the Superior Institute of Health, should now be combatted only on the prevention front. "If the class of neutralizing antibodies is not found, it is too early to speak of a vaccine," explained professor Giovan Battista Rossi, virologist of the Institute. The sole weapon, then, is correct awareness of the phenomenon. And the view is that the disease is spreading not only among the categories at risk (drug addicts, homosexuals, hemophiliacs) but also in others. In fact, 7 cases in 100 are patients who do not belong to those groups. Professor Francesco Pocchiarri, director of the Institute, explained that, "unlike other countries, in Italy drug addicts continue to be the most affected, with 43 percent."

At the meeting, during which the book "Interview On Why" Beta editious by Luciano Ragno, was presented, Costante Degan, minister of health also participated, stating, "Panic is fruitless. Above all, the local health units, the regional offices, and doctors should become organized in order to know, study, and spread awareness of the aspects of such a new but also such a dreadful disease."

9772/13104
CSO: 5400/2536

MALAYSIA

DENGUE OUTBREAK EXPECTED

Penang THE STAR in English 21 Apr 86 p 6

[Text]

KUALA LUMPUR, Sun. — An outbreak of dengue fever and dengue haemorrhagic fever may occur sooner than expected, in late May or early June said Vector-Borne Disease Control Programme Director Dr Chong Chee Tsun here today.

He said trends indicated that the country might experience a major outbreak as early as the end of next month instead of later in the year as expected.

He said that up to today, there were already 231 notifications of suspected dengue cases compared to the 73 cases the same time last year.

He said that while there were 11 deaths last year, there were already six deaths this year.

"The epidemic appears

to follow a four-year cycle since we started keeping tabs on it from 1974."

The latest statistics show that Selangor (65 cases) and the Federal Territory (55) were the areas worst affected followed by Penang (20), Johore (19), Sarawak (19), Perak (16), Negri Sembilan (16), Pahang (12), Terengganu (6) and Kedah (3).

He also said the Health Ministry was concerned at the increase in the number of cases from rural areas which in the past were rarely hit by the fever.

He said that dengue fever and dengue haemorrhagic fever were considered dangerous because there was no specific treatment available for it.

/9317
CSO: 5400/4369

MOZAMBIQUE

BEIRA ANTI-MALARIA CAMPAIGN UNDERWAY

Beira DIARIO DE MOCAMBIQUE in Portuguese 28 Feb p 2

[Text] The first phase of the antimalaria spraying campaign got underway several days ago in seven of Beira's wards. The aim of the campaign is to kill mosquitos concealed inside people's homes.

Macuti, Macurungo, Matacuane, Esturro, Chipangara, Ponta Gea and Munhava are the areas covered by the campaign. Sixty eight people divided into 13 brigades have been trained to do this work.

A source responsible for coordinating this effort informed us that 50 of those people are involved in the spraying work at the Pungue Textile Plant and the remainder are from the city's wards.

It should be noted that this antimalaria spraying campaign now underway in Beira has the support of the Soviet Union. It sent some equipment and means of transportation as well as a parasitologist.

The same source also said that the campaign, which was promoted by the Provincial Preventive Medicine Service of Sofala in coordination with the city's Health Directorate and Executive Council, received no support from the council. This government body had pledged earlier to assure the availability of transportation and people to do the work.

"The campaign got off to a bad start. There was no support from the Executive Council nor are families being correctly mobilized by the ward political organizations," said one of the campaign workers.

A preventive medicine technician calls upon the ward political and administrative organizations to intensify efforts to mobilize families whose homes have yet to be sprayed so that the fumigators will find furniture out of the way when they arrive.

9935/12951
CSO: 5400/90

NICARAGUA

POLIO, DPT VACCINATION CAMPAIGN OPENS IN MANAGUA

Managua BARRICADA in Spanish 3 Mar 86 p 8

[Text] Yesterday, in various areas of the capital and its suburbs, massive participation of parents could be seen as they took their children to be vaccinated against polio and DPT.

During the morning BARRICADA surveyed various vaccination sites, where members of the people's health brigade and personnel of MINSA [Ministry of Health], as well as of the people's organizations, fought a true battle with children in groups of ten.

Alba Rugama, an ENAVES industrial machine operator from Ciudad Sandino, waiting in line to vaccinate her son Carlos Alberto, age five, said that during Somoza's time they never worried about the children's health.

"I think this is a good measure to avoid our children's getting polio, which is one of the illnesses that produces the greatest damage among children," said the young worker.

Meanwhile, Mrs Nazaria Bravo, member of the health brigade, said that in Zone Four of Ciudad Sandino there are seven vaccination stations in operation. She added that at station number one some 139 infants would be vaccinated.

She also criticized the indifferent attitude to some of the CDS [Sandinist Defense Committee] coordinators who brought in the census figures at the last minute, causing a considerable delay in the vaccinations.

Ciudad Sandino Tried To Surpass Goals

Elsewhere, Dr Xiomara del Palacio, director of the "Heroes y Martires de Ciudad Sandino" Health Center, told BARRICADA that some twelve thousand children are expected to be vaccinated. "In this whole area and its suburbs, some 52 vaccination stations have been set up where 169 members of the people's health brigade and 70 MINSA employees are working," said Dr del Palacio.

She was optimistic about the development of the vaccination program and said that, at the rate that they are going, they expect to surpass their goals. Speaking about the limitations in improving the program, she criticized the fact that certain CDS coordinators did not turn in the census figures on time and estimates based on last year's figures had to be made.

Maria Jarquin, in charge of health in Zone Seven of Ciudad Sandino, noted that at station number two they expected to vaccinate some 550 children.

In San Judas

During BARRICADA's survey, the vaccination program was working satisfactorily in San Judas and downtown in the capital.

Dr Roberto Guillen, director of the Health Center of San Judas, remarked that in his sector 95 vaccination stations had been set up and some 22,000 children were expected to be vaccinated against polio and 12,000 for DPT. He said that some 500 people, members of the brigade and MINSA employees, were involved in this work.

Guillen complained that certain CDS coordinators waited until the last minute to take the census. "They were still turning in census figures at 8 A.M. yesterday," he remarked.

Elsewhere, Maribel Lopez, in charge of vaccination station five in Sierra Maestra, said that their goal is to vaccinate 284 children.

Eva Chavarria, housewife from Sierra Maestra, said that her two children, Hilda Elizabeth and Gustavo Adolfo, were among the first ones vaccinated at that station.

In other neighborhoods, such as Monsenor Lezcano, Bello Horizonte and parts of the highway North, the vaccinations were going so quickly that by about 11 A.M. those areas were out of vaccine and syringes.

Tipitapa Sought Additional Vaccine

BARRICADA went as far as the township of Tipitapa, where 60 urban and 22 rural vaccination stations were set up.

Yolanda Morales Zamora, in charge of the sanitarium at Tipitapa Health Center, assured that some 71,000 children would be immunized in that area, for which they needed 410 brigade members.

Alba Luz Garcia, in charge of vaccination station number four, said that they expected to vaccinate some 200 children. "At 10:30 A.M. we ran out of DPT vaccine and we have requested more from the MINSA regional office," said Garcia.

Carmen Martinez, a housewife who was waiting for her son Carlos Antonio to be vaccinated, told BARRICADA that she had been there since early morning. "These are the little accomplishments that the enemies of the Revolution do not want to acknowledge," she concluded.

12472/5915

CSO: 5400/2051

NICARAGUA

BRIEFS

INFANT MORTALITY RATE—Dr Jorge Orochena, director of the Berta Calderon Hospital, stated that 18 percent of the babies born in that hospital died. He blamed the poor attention provided at the hospital, as well as the lack of medical personnel, medicines, and hospital beds. The hospital handles 45 births every day. [Summary] [Managua LA PRENSA in Spanish 23 Apr 86 pp 1, 2 PA] /9274

CSO: 5400/2059

NIGERIA

BRIEFS

MENINGITIS CLAIMS LIVES IN DAURA--A total of 36 people died following an outbreak of Meningitis in Daura Local Government Area of Kaduna State. A release issued by the Information Officer of the local government, Mallam Bashir Saleh Daura, said this was disclosed by the Head of Health Department of the Local Government, Alhaji Mamman Zango, last weekend. Alhaji Mamman said a total of 408 cases of the disease were reported to his office out of which 124 were from Daura, 120 from Baure, 23 from Sandamu and 141 from various dispensaries located in the Local Government Area. Alhaji Mamman further said 59,650 people were so far immunised against the disease and appealed to members of the public to come out for the immunisation. Alhaji Mamman, however, complained of shortage of drugs and vaccines for both treatment and immunisation and appealed to the state government to come to the local government's aid. [Text] [Kano SUNDAY TRIUMPH in English 6 Apr 86 p 2] /9317

CSO: 5400/116

PEOPLE'S REPUBLIC OF CHINA

MEDICAL BRIEFS ON LEPROSY CONTROL EFFORTS

OW290508 Beijing XINHUA in English 0222 GMT 29 Apr 86

[Text] Beijing, 29 Apr (XINHUA)--Medical news in brief:

(1) Leprosy control: A survey made by the Health Bureau of the Gaungxi Zhuang Autonomous Region indicates that two-thirds of the area's 30,000 lepers have been cured. The annual incidence of leprosy dropped from 0.299 per thousand in 1966 to 0.095 per thousand last year.

(2) Fujian fights leprosy: Fujian Province plans to control leprosy by 1995, five years earlier than the planned nationwide elimination of the disease. The provincial health bureau reported that the annual incidence of leprosy fell to five per million last year, 93 percent less than in 1959. Fujian now has 2,010 lepers.

(3) Medical pillows: The Pucheng Medical Pillow Plant in Shaanxi Province has developed two kinds of medical pillows for children. The "yibei" medical pillow is effective for morbid night crying, inflammation, vomiting and diarrhea of children under five years of age. The "yizhi" medical pillow can treat headaches, enuresis, parasitism, enterogastritis and tonsillitis. Combining traditional prescriptions with modern medical theory, the medical pillow factory stuffs the pillows with over 20 species of medicinal herbs.

(4) Painkiller for cancer patients: The 411 navy hospital has developed a painkiller for patients with advanced cancer. The device is installed in the skull through a small cerebral operation. When a patient feels pain a small amount of morphine is released into the brain.

/12858

CSO: 5400/4111

PEOPLE'S REPUBLIC OF CHINA

KANG KEQING HELPS WITH IMMUNIZATION PROGRAM

OW260846 Beijing XINHUA in English 0743 GMT 26 Apr 86

[Text] Beijing, 26 Apr (XINHUA)--April 25 each year has been designated as a special day for China to carry out different vaccination activities, according to a decision of the Chinese State Council.

On "vaccination day", medical workers and local authorities are required to do more publicity work and vaccinate a certain number of children. A national coordination group has been set up in Beijing to make sure all Chinese children receive the required vaccinations.

China's new target is to ensure that 85 percent of all children are vaccinated at the province level before 1988 and the same percentage at the county level before 1990. Remarkable progress has been made in vaccination work, with 214 cities and counties having already reached the 1990 goal.

Infectious diseases like plague, cholera and smallpox, rampant in the country before 1949, were drastically reduced in the early 1950's following the new sanitation measures and free vaccination programs.

The year 1985 saw a marked decrease in whooping cough by 31.8 percent, measles by 32.5 percent, diphtheria by 58.3 percent and poliomyelitis by 5.5 percent compared with the previous year. Four kinds of vaccination are being used to eliminate these common diseases which are still threatening children.

Kang Keqing, vice chairwoman of the National Committee of the Chinese People's Political Consultative Conference, visited the Beijing No 5 kindergarten yesterday and administered oral vaccinations.

Officials from the Chinese Ministry of Public Health and the United Nations also joined the activities yesterday.

/12858
CSO: 5400/4111

PEOPLE'S REPUBLIC OF CHINA

LATE STAGE SEPTIC SHOCK TREATED

Shanghai ZHONGHUA CHUANRANBING ZAZHI [CHINESE JOURNAL OF INFECTIOUS DISEASES] in Chinese Vol 3 No 4, 15 Nov 85 pp 201-204, 211

[Article by Yuan Man [5913 2581], et al., of the Department of Infectious Diseases, Huashan Hospital, Shanghai First Medical College: "Anisodamine or Scopolamine in the Treatment of Late Stage Septic Shock in Adults"]

[Summary] Anisodamine or scopolamine and other comprehensive measures were applied in 37 cases of late stage septic shock who had not improved following conventional treatment, including restoration of blood volume, correction of acidosis as well as administration of dopamine and aramine, etc. Seventeen patients recovered completely from the shock and, among them, 14 survived. Six improved to varying degrees and 14 failed. Of the patients who suffered severe disturbance of naili microcirculation, two-thirds showed alleviation. Marked decrease in serum lactate and an increase in urine output were observed in those who recovered.

REFERENCES

- [1] 祝寿河等: 山莨菪碱在暴发性流脑治疗中的作用及机理探讨, 中华医学杂志, 1983; 63 (5): 257.
- [2] 童华华等: 感染性休克微循环变化的实验研究, 中华医学杂志, 1982; 62 (11): 672.
- [3] 修瑞娟等: 山莨菪碱抑制血栓素合成, 抑制粒细胞聚集, 抑制血小板聚集; 中华医学杂志 1982; 62(6):375.
- [4] 袁曼等: 5年来所见的成人感染性休克, 中华传染病学杂志, 1983; 1(4): 199.
- [5] Shoemaker WC, Hauser CJ: Critique of crystalloid verses colloid therapy in shock and shock lung; crit Care Med, 1979; 7: 117.
- [6] Yao T et al: Effect of anisodamine on cardiovascular activities in endotoxin-shocked dogs, Chinese Med J, 1984; 97(12): 871.
- [7] 孙仁宇等: 山莨菪碱对休克狗肺循环和肺功能变化的影响, 中华医学杂志 1982; 62 (8): 458.
- [8] Yuan XQ et al: Nature Course of Septic Shock in a Canine model, Chinese Med J, 1984; 97 (3): 197.

9717
CSO: 5400/4108

PEOPLE'S REPUBLIC OF CHINA

SEROLOGICAL CLASSIFICATION, CLINICAL ASPECTS OF HEPATITIS REPORTED

Shanghai ZHONGHUA CHUANRANBING ZAZHI [CHINESE JOURNAL OF INFECTIOUS DISEASES]
in Chinese Vol 3 No 4, 15 Nov 85 pp 216-219

[Article by Wu Caiyang [0702 2088 0111], et al., of the Military Medical
Institution, Fuzhou Military Area: "The Relationship Between Serological
Classification and Clinical Aspects of Acute Sporadic Viral Hepatitis"]

[Summary] A serological survey of 352 cases of acute sporadic viral hepatitis was carried out. Serum specimens were tested by ELISA for specific IgM antibodies against HAV, HBc, EBV and CMV. Hepatitis A (HA) was diagnosed in 114 cases (32.4 percent), hepatitis B (HB) in 108 cases (30.7 percent), HA and HB mixed infection in 34 (9.7 percent), hepatitis CMV in one (0.3 percent) and hepatitis non-A non-B (HNANB) in 95 cases (27.05 percent). The age distribution of the patients showed that HA had a significantly younger median age (21 years old) than did HB (27 years old) or HNANB (29 years old) ($P < 0.01$ in both). HA and HB mixed infection also had a younger median age (19 years old) than HB or HNANB ($P < 0.05$ in both).

As for the epidemiological data, there were some significant differences between the different forms of hepatitis in clinical aspects. In order to differentiate HA, HB and HNANB, however, the epidemiological, clinical and biochemical findings are often of little help in individual cases, and serological study is the only reliable method.

REFERENCES

- 4-B [4] Alter MJ et al: Sporadic non-A, non-B hepatitis: frequency and epidemiology in an urban U.S. population, *J Infect Dis.* 1982, 146(5): 886.
- [5] 康来仪等: 国内肝炎研究近况, *中华传染病杂志*, 1984; 2(1): 56.
- [6] 张毓华等: EB 病毒和巨细胞病毒抗体 IgG 和 IgM 检测在各类肝炎病例中的诊断意义, *中国医学科学院学报*, 1982; 4(3): 189.
- [7] Tabor E et al: Chronic non-A, non-B hepatitis carrier state, *N Engl J Med*, 1980; 303: 140.
- [8] Balayan MS et al: Evidence for a virus in non-A, non-B hepatitis transmitted via the fecal-oral route, *Intervirology*, 1983; 20: 23.

9717

CSO: 5400/4108

PEOPLE'S REPUBLIC OF CHINA

FORMER AMEBIASIS PATIENTS OBSERVED

Shanghai ZHONGHUA CHUANRANBING ZAZHI [CHINESE JOURNAL OF INFECTIOUS DISEASES]
in Chinese Vol 3 No 4, 15 Nov 85 pp 220-224

[Article by Chen Yatang [7115 7161 2768], et al., of the Department of
Infectious Diseases, First Hospital, Chongqing Medical College: "Follow-up
Observation of Specific Antibody in Sera from Patients with Amebiasis"]

[Summary] The specific antibody in sera from patients after effective
treatment of amebiasis was assayed simultaneously by the indirect fluorescence
antibody test (IFA) and enzyme-linked immuno-sorbent assay (ELISA). In 28
follow-up patients with treated amebic dysentery, the positive rates of IFA
and ELISA were 32.14 percent and 35.71 percent respectively; in 93 follow-up
patients with treated amebic liver abscess, the positive rates were 72.04 per-
cent and 41.94 percent respectively. In some amebic dysentery patients, lower
or miderate titers of IFA and ELISA antibodies still persisted even eight years
after effective treatment. The same was true for some amebic liver abscess
patients 20 years after effective treatment.

REFERENCES

- [1] 贾杰等: 间接荧光抗体试验诊断阿米巴肝脓肿. 中华
内科杂志, 1983; 22: 162.
- [2] 郭增柱等: 酶联免疫吸附试验在诊断和调查阿米巴病
上的价值. 中华医学杂志, 1984; 64: 71.
- [3] Ambrose-Thomas P et al: Fluorescent antibody test
in amebiasis. Am J Trop Med Hyg, 1972; 21: 907.
- [4] Bos HJ et al: A seroepidemiological study of
amebiasis in Surinam by the enzyme-linked
immunosorbent assay (ELISA), Am J Trop Med
Hyg, 1980; 29: 358.
- [5] Knobloch J et al: Development and persistence of
antibodies to *Entamoeba histolytica* in patients with
amebic liver abscess, Am J Trop Med Hyg, 1983;
32: 727.
- [6] Kessel J et al: Indirect hemagglutination and
complement fixation tests in amebiasis, Am J Trop
Med Hyg, 1965; 14: 540.
- [7] Yang J et al: Evaluation of enzyme-linked immuno-
sorbent assay for the serodiagnosis of amebiasis, J
Clin Microbiol, 1979; 10: 778.

PEOPLE'S REPUBLIC OF CHINA

EPIDEMIC HEMORRHAGIC FEVER FDP, LYSOZYME DETERMINED

Shanghai ZHONGHUA CHUANRANBING ZAZHI [CHINESE JOURNAL OF INFECTIOUS DISEASES]
in Chinese Vol 3 No 4, 15 Nov 85 pp 225-227

[Article by Yue Jinsheng [1471 6855 5116], et al., of the Department of Infectious Diseases, First Affiliated Hospital, Xi'an Medical College:
"Determination of Fibrin/Fibrinogen Degradation Products and Lysozyme in Serum and Urine in Epidemic Hemorrhagic Fever"]

[Summary] Determination of fibrin/fibrinogen degradation products (FDP) and lysozyme in blood and urine of patients with epidemic hemorrhagic fever is reported. Urinary FDP began to increase in the early febrile stage and the increase in the level was parallel to the severity of the disease. Urinary FDP reached peak values twice during the 5th-6th day and 9th-10th day after the onset of the disease. Blood FDP reached its peak during the febrile period. If the blood FDP increases and platelets decrease, the prognosis of the disease will be poor. Urinary lysozyme increase was evident in severe cases. The increasing levels of the blood lysozyme were closely related to low blood pressure oliguria. As the urinary FDP became parallel with the urinary lysozyme, it was shown that the immunologic complex deposits were on the glomerular basement membrane and are responsible for kidney lesions.

REFERENCES

- [1] 于丹萍: 关于进一步降低流行性出血热病死率问题, 中华内科杂志, 1981; 20(12) 765.
- [2] 汪钟等: 红细胞凝集抑制试验测定血清、尿纤维蛋白(原)裂解产物, 中华内科杂志, 1979; 18(5) 339.
- [3] 毛良等: 血、尿溶菌酶和淀粉酶测定及其肾小球滤过率比较, 中华医学检验杂志, 1982; 4: 193.
- [4] Clarkson AR et al: Serum and Urinary Fibrin/Fibrinogen Degradation Products in Glomerulonephritis, Brit Medical J, 1971; 21: 447.
- [5] 北京医学院附属第一医院内科肾炎研究室: 纤维蛋白降解产物的测定在肾脏病工作中的意义, 中华内科杂志, 1978; 17(2) 95.
- [6] 薛遵孟等: 血和尿纤维蛋白(原)裂解产物测定对流行性出血热的临床意义, 中华医学杂志, 1981; 4: 222.
- [7] 王嘉瑞等: 流行性出血热发病机理研究, 上海医学, 1981; 4(2) 5.
- [8] 王道钦等: 补体经典途径激活在流行性出血热发病机理中的作用, 中华内科杂志, 1981; 20(12): 707.
- [9] 骆秉铨等: 流行性出血热并发弥漫性血管内凝血 50 例临床分析, 中华内科杂志, 1979; 18(4): 286.
- [10] 王心禾等: 流行性出血热各期血管紧张素 II 动态变化观察, 中华传染病杂志, 1984; 2(4) 252.
- [11] Prockop J et al: A study of Urinary and Serum Lysozyme in Patient with renal disease. New Eng J Med, 1964; 270: 269.
- [12] Heyslett JP et al: Muramidase and Renal disease, New Eng J Med, 1968; 279: 506.
- [13] Smolens P et al: Pathophysiology of acute renal failure. Am J Med, 1981; 70: 478.

PEOPLE'S REPUBLIC OF CHINA

HEPATITIS A MONOCLONAL ANTIBODY PRODUCED BY HYBRIDOMA TECHNIQUE

Shanghai ZHONGHUA CHUANRANBING ZAZHI [CHINESE JOURNAL OF INFECTIOUS DISEASES]
in Chinese Vol 4 No 1, 15 Feb 86 pp 5-8

[Article by Meng Qianghua [1322 1730 7520], et al., of the Center of Liver Diseases, Beijing Army General Hospital: "Monoclonal Antibody Against Hepatitis A Virus Produced by Hybridoma Technique"]

[Summary] A cell line of hybridoma A614 secreting antibody (IgG3) against hepatitis A virus (HAV) was established by fusing the SP2/O-Ag14 myeloma cells with the spleen cells of BALB/c mice which were immunized with HAV antigen purified by precipitation with PEG6000 according to a schedule of repeated inoculation over long intervals. Using ELISA, A614 antibody showed positive responses to the HAV antigen in stools from different provinces of China, HAV isolated from tissue culture, HAV in Abbott's Kits and the HAV HML75 strain from Australia. The A614 antibody showed no response to the suspension of normal adult's and fetal stools. Blocking tests with positive sera from patients who had recovered from hepatitis A and absorbing tests with HAV purified by CsCl density gradient centrifugation further confirmed its specificity. A large quantity of HAV immune complexes could be observed when the A614 antibody was used in the immune electromicroscope technique to identify HAV in stool suspension. The antibody bridges were clearly shown.

REFERENCES

- [1] Kohler G, et al. Continuous culture of fused cells secreting antibody of predefined specificity. *Nature* 1975; 256: 495.
- [2] Wands JR, et al. High affinity monoclonal antibodies to hepatitis B surface antigen (HBsAg) produced by somatic cell hybrids. *Gastroenterol* 1981; 80: 226.
- [3] Imai M, et al. Demonstration of two distinct antigenic determinants on hepatitis B antigen by monoclonal antibodies. *J Immunol* 1982; 128:69.
- [4] Tedder RS, et al. Production of monoclonal antibodies to hepatitis B surface and core antigens, and use in the detection of viral antigen in liver biopsies. *J Hyg (Lond)* 1983; 90:135.
- [5] 井上正保, 他. B型肝炎ウイルス抗体. 臨床免疫 1981; 13: 929.
- [6] Wands JR, et al. Immunodiagnosis of hepatitis B with high-affinity IgM monoclonal antibodies. *Proc Natl Acad Sci USA* 1981; 78: 1214.
- [7] 北京部队总医院肝病组. 甲、乙型肝炎病毒的快速免疫电泳检查. *中华内科杂志*, 1981; 20:608.
- [8] Zukerman AJ. Introduction to the virology of human hepatitis. *J Virol Meth* 1980; 2: 7.
- [9] Mac Gregor A, et al. Monoclonal antibodies against hepatitis A virus. *J Clin Micro* 1983; 18: 1237.
- [10] Dawson GJ, et al. Monoclonal antibodies to hepatitis A virus. *J Med Virol*, 1984; 14: 1.

PEOPLE'S REPUBLIC OF CHINA

HEPATITIS B CORE ANTIGEN DETECTED

Shanghai ZHONGHUA CHUANRANBING ZAZHI [CHINESE JOURNAL OF INFECTIOUS DISEASES]
in Chinese Vol 4 No 1, 15 Feb 86 pp 13-16

[Article by Guo Hengchang [6753 1854 2490], et al., of the Central Hospital,
Zhabei District, Shanghai: "Detection of Antibody Against Hepatitis B Core
Antigen by Passive Hemagglutination Inhibition Test"]

[Summary] This paper reports the detection of an antibody against
hepatitis B core antigen by the passive hemagglutination inhibition (PHAI)
test and by radioimmunoassay (RIA) with Abbott's agent in 65 serum specimens
obtained from patients with hepatitis B. The results are compared. It is
shown that of 40 specimens with positive RIA, 34 were positive and 6 negative;
while all of the 25 RIA negative specimens were PHAI negative. In addition,
10 serum specimens with positive anti-HBc antibodies were tested by PHAI and
ELISA simultaneously. This showed that the two methods coincided with each
other only when the titers of the anti-HBc antibodies were at low levels;
PHAI was found more sensitive (10-50 times) than ELISA when the levels were
high.

REFERENCES

- [1] Hoofnagle JH, et al. Antibody to hepatitis B core antigen; A sensitive indicator of hepatitis B virus replication. *J Engl Med* 1974; 290: 1336.
- [2] Tsuda F, et al. Determination of antibody to hepatitis B core antigen by means of immune adherence hemagglutination. *J Immunol* 1975; 115: 834.
- [3] Takahashi T, et al. Large-scale isolation of Dane particles from plasma containing hepatitis B antigen and demonstration of A circular double-stranded DNA molecule extruding directly from their cores. *J Immunol* 1976; 117: 1392.
- [4] Cohen BJ, et al. Comparison of radioimmunoassay and counter-immunoelectrophoresis for the detection of antibody to hepatitis B core antigen. *J Virol Method* 1981; 2: 181.
- [5] Irwin GR, et al. Serodiagnosis of hepatitis B virus infection by antibody to core antigen. *J Infect Dis* 1977; 136: 31.
- [6] 蒋伟伦, 等. 酶联免疫吸附试验检测乙型肝炎核心抗体的研究. *中华消化杂志* 1982; 2: 144.

9717

CSO: 5400/4109

PEOPLE'S REPUBLIC OF CHINA

BRIEFS

HEILONGJIANG CONTROLS ENDEMIC DISEASES--Harbin, 1 Mar (XINHUA)--Heilongjiang, China's northernmost province, has brought under control endemic diseases including the plague, brucellosis, keshan (a cardiac muscle disease) and goiter, according to the local public health office today. Local doctors treat two million endemic patients with combination of Western and traditional Chinese methods and prevent new incidences by improving the environment and food quality, as well as distributing medicines. Last year, the provincial office gave 30,000 women injections to prevent cretinism, an endemic disease in the province, which retards mental development. [Text] [Beijing XINHUA in English 0855 GMT 1 Mar 86 OW] /12858

YOUTH ANEMIA SURVEY--Beijing, 15 Mar (XINHUA)--A doctor here has developed a new medicinal syrup based on the principles of traditional Chinese medicine which is effective for iron-deficiency anemia in children, a common disorder, according to the "Health News". Chronic iron-deficiency anemia affects the disease-resistant capacity, physical growth and intellectual development of children. A survey in 16 provinces and municipalities shows that 40 percent of children suffer from the disease. In some rural areas, the incidence is as high as 80 percent. Wen Zhenying, a doctor at the Beijing Hospital of Traditional Chinese Medicine, and her colleagues began an investigation among 3,074 children in the Dongcheng District of Beijing and found 967 children with the disorder. The syrup won a prize from the Ministry of Public Health in 1985. [Text] [Beijing XINHUA in English 1312 GMT 15 Mar 86 OW] /12858

MEDICAL PERSONNEL PRAISED--Beijing, 29 APR (XINHUA)--Nine representatives of China's outstanding medical personnel were highly praised by party and government leaders here today. Among them are ordinary doctors and nurses as well as the world-renowned experts who have made extraordinary achievements in their work. On behalf of the Central Committee of the Chinese Communist Party, Hu Qili, member of both the Political Bureau and the Secretariat of the CPC Central Committee, expressed thanks to them and called on all doctors and nurses across the country to keep fit, so as to serve the people still better. Deng Liqun, also a CPC Central Committee member, and Song Jian, a new state councillor, were present at the meeting. [Text] [Beijing XINHUA in English 1042 GMT 29 Apr 86 OW] /12858

CSO: 5400/4111

PHILIPPINES

AQUINO ORDERS DRIVE AGAINST SIX TOP DISEASES

Quezon City ANG PAHAYAGANG MALAYA in English 4 Apr 86 pp 1, 6

[Text]

The mother in President Aquino has a way of emerging even in the midst of a political crisis.

Yesterday even as she was in the eye of a political storm, with the Unido's impending mutiny over the dissolution of the Batasan, Mrs. Aquino set aside politics to issue Proclamation No. 6, directing the health and social services ministries to mobilize their network for the immunization of every Filipino child from six diseases which have been identified as the major causes of childhood deaths.

The diseases are polio, measles, diphtheria, pertussis, tetanus and tuberculosis. It is estimated that some 40,000 children in developing countries succumb to these diseases yearly.

Issuing the proclamation before officials of the United Nations International Children's Emergency Fund (UNICEF), President Aquino said, "Our children are our most valuable resources, we

must conserve and develop them."

Admitting the sad plight of underprivileged children, she said, "My government, unlike the previous regime, is not ashamed or afraid to admit the extent of malnourishment that afflicts our nation."

"We will not suppress the statistics but rather endeavor to uncover the full extent of the suffering and damage inflicted on our nation's children," she added.

Addressing the 40th anniversary celebration of the UNICEF held at Malacanang Maharlika Hall, she recalled her years as wife of the late former Sen. Benigno Aquino Jr. and declared that "my proudest accomplishment is to have brought him up five happy, healthy children."

"Compared to the struggle I waged and the work that I do in Malacanang, the rearing of children might seem light as a mundane task but in retrospect, I would say that it has its own special difficulties and challenges, and that meeting them well evokes in me some pride," the President said.

She said that in many countries in the world and throughout the Philippines, "there are children who

have not been as fortunate as my own."

She said she is "haunted by the sad faces of our children in Negros."

Their tragedy reminds us of how much the previous government failed the Filipino people," she said.

In her proclamation, the President declared the country's support to the international goal of the UNICEF's child immunization program.

She likewise called on all sectors of Philippine society to help in the immunization drive against the six deadly diseases.

The Catholic Bishops Conference of the Philippines through Ricardo Cardinal Vidal, the Islamic Dawah Council of the Philippines through its president Professor Abdul Rashid Sayedi and the National Council of Churches in the Philippines through Bishop Laverne Mercado, issued statements of commitment supporting the immunization drive.

UNICEF executive board chairman Anwar Wulkarim Chaudry lauded the President's motherly concern.

She said by attacking the social menace, President Aquino "has chosen the more farsighted course, for no amount of economic growth can be achieved or sustained if the people are cramped in social inertia."

/9317

CSO: 5400/4366

PHILIPPINES

OUTBREAK OF DENGUE FEVER REPORTED IN DAVAO

HK240341 Manila MANILA BULLETIN in English 23 Apr 86 pp 1, 13

/Text/ Davao City--A tropical disease team from the Ministry of Health (MOH) in Manila is expected to arrive in Digos, Davao del Sur, early this week on an emergency mission to fight a reported outbreak of dengue fever which has so far caused 50 fatalities and hospitalized some 100 other patients.

The outbreak of the disease was reported to Minister of Health Alfredo Bengzon by Deputy Minister of Local Government Douglas Cagas, a former assemblyman representing Davao del Sur in the abolished Batasang Pambansa.

According to Cagas' report to the MOH, the tropical disease has been claiming victims for the last 3 weeks and has caused alarm among residents of the province and nearby areas.

Dengue fever, according to medical authorities here, is usually transmitted by bites of unusually large mosquitos which allegedly originated from Africa.

According to one theory, the presence of the dengue fever-carrying mosquitos in Davao del Sur was due to the docking of foreign oceangoing vessels at the Malalag port of the province, which could have brought the African mosquitos.

The said mosquitos, it is further claimed, must have bred in the stagnant waters of the coastal towns and later spread to other municipalities, bringing their deadly disease.

Patients suffering from dengue fever have been reported in the towns of Padala, Malalag, Magsasay, Matanao, and the capital town of Digos, where most of the victims are hospitalized.

Local MOH teams are trying to destroy the breeding places of the African mosquitos by spraying stagnant waters and draining canals in large coconut and banana plantations here.

/12228
CSO: 5400/4368

SOUTH AFRICA

BRIEFS

AIDS WARNING REPEATED--Twenty of the 27 cases of Aids confirmed in South Africa since 1982 have died, Professor J Metz, chairman of the Advisory Group on Aids said yesterday. Prof Metz said in a statement yesterday although only one new case of Aids had been reported this year there was no reason for complacency. He warned: "On the basis of experience in other countries, we expect at least 30 new cases of Aids this year, but so far only one new South African case had been diagnosed while two others have been referred to us from outside the country." He said of the 27 cases mentioned 23 were South Africans and the rest patients referred from states to the north of South Africa for investigation and treatment. [Text] [Johannesburg THE CITIZEN in English 26 Apr 86 p 5]/12828

CSO: 5400/47

TANZANIA

BRIEFS

MALARIA KILLS 300--More than 300 people died from malaria in Arusha Region during the last two years, the Regional Medical Officer, Dr. Frank Kimboi, said yesterday. He said 288 people died in 1985 while 42 died in 1984. Kimboi said while there were over 84,000 cases of malaria reported in 1985, there were more than 61,000 cases the previous year. [Text] [Dar es Salaam DAILY NEWS in English 23 Apr 86 p 3] /12828

AIDS DEATHS IN MWANZA--Fifteen people have died of the Acquired Immune Defficiency Syndrome (AIDS) disease in the last 18 months in Mwanza Region, a Shihata dispatch said yesterday. Two more AIDS victims are hospitalised at the Bugando Medical Centre. The Regional Medical Officer, Dr. Prosper Mtey, also said that during the first quarter of this year, Mwanza Region had 328 patients of cholera and 56 of them died. He said the figures were very high compared to those of the whole of 1984 when there were 148 patients with 33 deaths recorded. He said among the reasons for the increasing cholera cases were consumption of dirty and unsafe water, lack of latrines and big gatherings of people at funerals of cholera victims. [Text] [Dar es Salaam DAILY NEWS in English 16 Apr 86 p 3]/12828

CSO: 5400/47

TRINIDAD AND TOBAGO

BRIEFS

HEALTH RESEARCH UNIT--Cabinet has agreed to the establishment of a National Health Research Committee, Health Minister Senator John Eckstein said yesterday in delivering the welcome address to the Commonwealth Caribbean Medical Research Council (CCMRC) at the Trinidad Hilton. He said this reflected the Ministry of Health and Environment's concern that very little health services research was being done. He added that the establishment of such a committee would serve to stimulate such research. The Committee, which will replace the previously existing informal Ministry of Health and Environment Committee, will embrace relevant ministries and research institutions in order to reflect the multi-sectoral nature of health research. [Text] [Port-of-Spain DAILY EXPRESS in English 18 Apr 86 p 1] /13104

CSO: 5440/074

UGANDA

AIDS REPORTEDLY KILLS 100 MONTHLY IN RAKAI

Kampala WEEKLY TOPIC in English 20 Mar 86 pp 1, 16

[Excerpt] A VERY large number of people are reported to be dying daily in Rakai and Masaka districts as a result of contracting Acquired Immune Deficiency Syndrome (AIDS) disease popularly known in the area as 'slim'. Most of the victims are said to have sexually contracted the disease which has assumed an 'epidemic' proportion particularly in Rakai district.

According to unofficial reports reaching *Weekly Topic* from alarmed residents, on average "about 100 people" could be dying monthly of AIDS in the two districts. A resident of Kyotera who talked to our reporter in Kampala said that burial of AIDS victims (mostly people between the ages of 17 and 40) in Rakai has become "a daily activity for us". "And I tell you we are scared and totally despondent", he added.

When *Weekly Topic* approached the Minister of Health, Dr. Ruhakana-Rugunda for his comment on the alarming reports from Rakai, he said he had already visited the area himself and "although the situation is serious, your figure of 100 people is too exaggerated".

He said that according to information he had received from Dr. Rwegaba, District Medical Officer Rakai, between 20 and 30 people are dying from AIDS in the district monthly.

"However, the question of numbers is not important, even 25 is still very bad" said the Minister.

"We are sending a team of doctors from Makerere University Medical School and the Ministry of Health headquarters to the area to assess the situation and to launch a campaign against the disease", said the minister adding, "government is very concerned with the question of AIDS in the country".

All the same AIDS is still not the "top killer disease" in Uganda as some foreign media have reported. From medical reports, measles, diarrhoea, and malaria are still the top killer diseases in the coun-

try, especially amongst children.

The Minister, however, warned Ugandans against promiscuity which is the main way through which the killer AIDS virus is thought to be transmitted in the country. "People should be more careful and reduce the number of their sexual partners to a minimum of one if they want to avoid the deadly disease", he cautioned.

He pointed out that AIDS has so far got no effective treatment anywhere in the world to cure it. This means that once someone is hit by the disease today, then one is a sure case to die. However, the disease is preventable if only "the people can be mobilised and educated about the dangers, cause, manifestation and prevention of AIDS", said Dr. Rugunda. "Some of our people even think wrongly that AIDS is caused by witchcraft" lamented the minister. Masaka and Kitovu hospitals and Kalisizo Health Centre have many AIDS patients, while Mulago Hospital in Kampala is now reported to admitting at least one AIDS case daily. According to a report issued recently by a group of Mulago Medical School doctors, Rakai-Masaka-Kampala zone could have about 53 percent AIDS cases in the country. This makes the area unsafe for those with several sexual partners.

Private doctors say they think that a figure of about 100 deaths from AIDS per month in Rakai district alone "could be more realistic."

Journalists returning from Rakai allege that there is such a scare that some girls in their teenage ages and early thirties are being "arrested" and "deposed" from the area for fear they are AIDS carriers. This is especially so in the case of girls new to the area.

Pathetic cases are also reported where once people learn from the hospitals and health centres that they have AIDS, they return to their homes dejected to wait for death.

UGANDA

BRIEFS

SLEEPING SICKNESS INCREASE--Kampala--Deaths from sleeping sickness are soaring in eastern Uganda and could climb still further if preventive measures are not taken urgently, medical sources said. The epidemic results partly from the suspension in 1983 of a government programme to curb the disease due to the deteriorating security situation in the country, they added. Known cases had soared from 1,922 in 1984 to 8,431 last year but the disease often went unreported because it was widely believed to be caused by witchcraft, they said. Mr Daudi Waiswa, a 78-year-old former chief, said sleeping sickness had wiped out 75 percent of the population of his area in the 1940s, when the British colonial authorities sealed off the region to control the epidemic. A doctor at Iganga Hospital, about 100 km east of Kampala, said: "There are firm indications that the present sleeping sickness epidemic. . . is bound to get out of hand and allow history to repeat itself unless the sleeping sickness control programme . . . is vigorously reactivated as a matter of urgency." [By Sapa Reuter] [Text] [Johannesburg THE CITIZEN in English 1 Apr 86 p 5] /12851

CSO: 5400/104

UNITED KINGDOM

BRIEFS

AIDS IN SCOTLAND--More than half the heroin addicts in Edinburgh could be carrying the AIDS virus, according to a survey. The survey of 164 heroin users in the city found that 51 per cent were carrying the virus, fuelling worries that Edinburgh is facing a drugs-related epidemic of the Acquired Immune Deficiency Syndrome. Leading scientists and doctors have dubbed the city the AIDS capital of Europe, and the convicted killer, Mr. Jimmy Boyle, who now runs a drug help centre in Edinburgh, said its problems were second only to New York. Unofficial estimates put the number of intravenous heroin addicts in the city at more than 2,000 and it was previously believed that around 300 were AIDS carriers, but the latest survey suggests that the problem is even more serious. The near-epidemic scale of the problem in the capital is high-lighted by new figures for Glasgow, where the total number of heroin addicts carrying the virus is estimated to be less than three per cent, and Dundee, where the figure is thought to be five per cent. [Text] [Leeds YORKSHIRE POST in English 12 Apr 86 p 15] /13104

CSO: 5440/075

VIETNAM

CONFERENCE REVIEWS 1981-1985 EFFORTS TO ERADICATE MALARIA

Hanoi SUC KHOE in Vietnamese 5 Mar 86 p 7

[Article by H.N.: "Conference To Review Nationwide Efforts in 1981-1985 To Eradicate Malaria"]

[Text] In mid-December 1985, the conference organized by the Ministry of Public Health to review the 5-year (1981-1985) national task of eradicating malaria was held in the Municipality of Nha Trang in Phu Khanh Province. Representatives of the Central Institute of Malaria, Parasite, and Insect Studies and its Quy Nhon and Ho Chi Minh City branches, and 36 delegations from different provinces and special zones throughout the country attended the conference.

In the last 5 years, the task of preventing, controlling, and eradicating malaria was stepped up everywhere. About 600 metric tons of DDT 75 percent were sprayed by different localities, four-fifths being sprayed in the South and one-fifth, in the North. As the result of epidemiological zoning and good work execution, in 1985 many localities were able to reduce the sprayed areas while still ensuring good quality and results (for instance, in Trung Bo the quantity of DDT used was 60 tons less than in 1984, but the incidence of malaria decreased by 10.9 percent).

The detection of malaria in blood smears by the disease-treating installations found an average of 2 million new cases per year (about 1 million in the North and more than 1 million in the South), with the number of positive smears taken by the disease-treating installations accounting for about 20-30 percent and the number of smears taken for epidemiological purposes up to 40-50 percent in some localities.

Each year the country as a whole provided treatment of malaria to about 6 million patients (in the South 5.6 and the North 1.6 million), with the parasite being identified in about from 40,000 to 60,000 patients.

The prevention and control of the epidemic in a number of localities in the northern highlands and the new economic zones in the South still remained weak because the local public health organs had not been consolidated and the movement of people to new economic zones was too great; consequently, the malaria epidemic still existed in those localities.

The conference was unanimous in presenting the following evaluation of the prevalence of malaria in the country from 1981 to 1985:

In the last 5 years, the incidence of malaria continued to decrease but very slowly, unevenly, and in a very difficult manner.

--In the South, malaria incidence continued to decrease, but compared to the preceding 5 years the decrease was much slower.

--In the last 10 years specifically, mostly since 1979, the prevalence of malaria in the North got worse, with the percentage of people identified as carriers of the parasite increasing every year and always remaining unstable. Some malaria public health stations were too weak to be able to fulfill their task.

--A noteworthy fact was that in the great majority of the former eastern Nam Bo provinces, where the prevalence of malaria had allegedly been excessive and hard to reduce, the incidence of malaria continued to decrease thanks to concentrated efforts to eradicate the disease.

--In the coastal Trung Bo provinces, such as Nghia Binh, Binh Tri Thien, Phu Khanh, Thuan Hai, etc., the disease was still declining and remained relatively stable.

--In Dac Lac and Gia Lai-Kon Tum Provinces, there was some decrease but a slow one. In Lam Dong Province, as the number of new cases increased, the epidemic occurred in the new economic zones of Da Oai, Bao Loc, Duc Trong, etc.

The mortality caused by pernicious malaria in the Central Highland provinces remained high (about 40-50 percent) because the network of public health installations was still poor and the disease-treating installations had not yet reached a large capacity.

However, as a general assessment of the 5 years (1981-1985), the workers in the specialized malaria-fighting field succeeded in overcoming many difficulties in the face of a changing situation and reduced the rate of detection of the parasite in the South from 11.78 percent in 1976 to 3.58 in 1981 and 3.29 in 1985. In the North, they were also able to stop and limit the incidence of malaria in the highland and border provinces, thus effectively serving the production and combat tasks of the people and army in the border areas.

Many delegates of central and local organs expressed their opinion, evaluated the situation, and described their own experiences in preventing and controlling malaria in their localities.

The conference devoted a full specialized discussion session to pernicious malaria and the ways to reduce mortality caused by it, such as treatment, especially with intravenous quinine; injection of fluid; prevention of lack of urination; early and timely detection, prevention, and treatment of pernicious malaria, and so on.

The overall direction to be taken in the 5 years of 1986-1990 to eradicate malaria is to continue the efforts aimed at quickly reducing the incidence of malaria throughout the country so as to reach the lowest level in the late 1990's and to improve the people's health.

The goals of these efforts in the 5 years (1986-1990) are:

--The northern provinces must maintain and improve the results of eradicating malaria, try not to let malaria return, and reduce the incidence of malaria between 1985 and 1990 down to about .5 percent, the rate of detection of the malaria parasite compared to the number of blood smears taken.

--The southern provinces must continue the offensive aimed at reducing malaria incidence and the rate of mortality from malaria, and strive to bring the rate of detection of the malaria parasite from 3 percent in 1985 to about 1.5 in 1990.

To draft malaria eradication plans is a key task in the local prevention and control of the epidemic; efforts must be concentrated on controlling and extinguishing the old epidemic occurrences, actively reducing the size of the old pockets of infection, and detecting in time the new pockets so as actively to prevent spread of the epidemic.

--Concentrate leadership on very strongly consolidating the basic-level public health network and raising the working capacity of district preventive hygiene and malaria units.

--Link the efforts to step up the district-building movement aimed at eradicating malaria with carrying out the public health sector's five goals.

--Improve and perfect the synchronized specialized measures, such as destroying mosquitoes, avoiding being bitten by mosquitoes, treating the disease, destroying the causes of the disease, protecting healthy people, improving the environment, and so on.

Step up scientific research and international cooperation, and concentrate on these subjects: studying the application of epidemiological zoning and organizing execution of plans; studying measures to prevent and control mosquito biting and to destroy disease-transmitting mosquitoes outside of homes, with attention being paid to a number of mosquito species resistant to DDT; and studying the species of malaria parasite resistant to DDT. Organize management, and study and build district malaria eradication models.

--Further step up propaganda and training, both elementary and advanced, of cadres in order to raise their knowledge and to encourage their voluntary participation in the prevention and control of malaria for the benefit of the people.

5598

CSO: 5400/4365

CZECHOSLOVAKIA

BATTLE AGAINST RABIES CONTINUES

Prague RUDE PRAVO in Czech 4 Feb 86 p 3

[Text] Notwithstanding the numerous measures taken by the Czechoslovak authorities have had great problems during the past 5 years with stopping one of the most dangerous infectious diseases, rabies. The reduction of the number of foxes, the main carriers of the disease, was a prime target of this struggle.

The originally applied measures, such as killing the foxes and gassing their lairs brought only limited success. Reduced numbers of these beasts were achieved in some districts only, primarily in the Southern Bohemian Kraj. As the hunting preserves users approached the task only conventionally, the number of killed animals infected with rabies grew steadily. In 1984 in the CSR alone, there were more than 2,000 such cases, twice as many as at the beginning of the eighties.

The Central Committee of the Czech Hunting and Gamekeeping Association, in cooperation with the National Veterinary Administration, issued therefore another ordinance, allowing foxes to be shot even during the night or to be poisoned by artificial bait. Thus, in the first 6 months of the past year, the number of rabies-infected foxes killed was over 300 lower compared with the previous year.

The hunters plan to continue applying this procedure to fox hunting. However, a complete extermination of this species, which occupies an irreplaceable position in our nature, is not the objective. What matters is to regulate its numbers; in an area of 1,000 hectares, only one pair of foxes should live. Today, as many as five pairs live on the same acreage.

12707/13045
CSO: 5400/3012

MOZAMBIQUE

RAT EXTERMINATION, MALARIA CAMPAIGN UNDERWAY IN QUELIMANE

Beira DIARIO DE MOCAMBIQUE in Portuguese 19 Feb 86 p 5

[Excerpt] Maputo--DIARIO DE MOCAMBIQUE has learned that rat extermination and malaria control campaigns will be undertaken simultaneously this year in Quelimane, Zambezia Province, by the Mozambican Fumigation Company, CAFUM.

CAFUM, a company specializing in all types of fumigations, is headed by Rui Manuel Matias who told our newspaper that all arrangements have been made for the start of the campaigns. All that remains is to "finalize some points with the United Nations organization that is providing the financing so the products can be purchased abroad." These campaigns will cost tens of thousands of dollars.

What Will Be Done

The campaigns will involve a team of 52 men, some from CAFUM's Beira staff. They will work for 10 days and spread an anticoagulant rat poison. The Quelimane rat extermination and malaria control operations will be carried out in two phases. The first phase involves a vast clean up operation. Water drains will be cleaned and trash picked up at sites throughout the city. This phase is aimed at preventing the poisoned rats from finding refuge in the trash heaps for this would jeopardize any kind of campaign. "The second phase is one of control. After the rat poison has been administered, its effects last 6 months and we at CAFUM will follow the evolution of the situation," explained Rui Matias. He also added that the Executive Council has been very receptive to the campaigns.

Collection of Data

Last week a three man team made up of representatives from Bayer (Portugal and Mozambique) and CAFUM traveled to Zambezia to collect information, set up the scheduling and determine the cost of the upcoming Quelimane campaigns. Rui Matias explained that one of the things which hit him immediately was the urgent need to clean the drainage ditches and pick up the trash (which is the Quelimane city government's responsibility).

"Leonardo Simao, the health director, also showed a great deal of interest in having the campaigns begin as soon as possible because they would solve a number of current public health problems," added Matias.

"CAFUM is currently writing up all the purely technical specifications as well as the information program that must be developed to both inform and protect the public."

Rui Matias added that before the campaign begins, informational meetings will be held in Quelimane's districts to discuss the measures that must be followed to avoid poisoning people. The city's Health Directorate has pledged to acquire a certain number of antidotes to administer to anyone who may be affected by the rat extermination campaign.

9935/12951
CSO: 5400/90

MOZAMBIQUE

ANTIRABIES CAMPAIGN LAUNCHED IN BEIRA

Maputo NOTICIAS in Portuguese 11 Feb 86 p 3

[Text] Beira's veterinary officials are taking measures to combat rabies. A campaign to vaccinate dogs is expected to be launched soon. Although the situation has not reached alarming proportions, a child died after being bitten by a rabid dog.

This fatal disease was detected after a detailed examination was made of the dead dog in the Maputo laboratory using the Sellers method. The results of the examination were made known officially at the end of last year in Sofala.

In view of this situation and according to Pinto Ribeiro, head of the Veterinary Department of the Provincial Agriculture Directorate of Sofala, vaccines for rabies and other diseases, which are expected to arrive soon from Maputo, will be given to dogs in newly created vaccination posts so as to reduce the spread of this disease.

In order to assure the campaign's success, information sessions will be held for the public. According to Pinto Ribeiro, a schedule will be prepared in order to accomplish these tasks in an organized fashion.

Pinto Ribeiro told our reporters that it was not possible to vaccinate the stray dogs that very frequently appear in this city. He also added it would only be possible to treat the growing traffic of stray dogs by picking them up.

He further added that this task, which comes under the authority of the Executive Council, faces great difficulties. In order to pick up these dogs, transportation and other resources are needed.

9935/12951
CSO: 5400/90

BARBADOS

ANTI-RAT CAMPAIGN SEEKS TO HALT DESTRUCTION OF SUGAR CROP

Bridgetown SUNDAY SUN in English 30 Mar 86 p 1

[Text]

COME MAY 19 Barbados will declare war on the rat population which, according to a conservative estimate, is costing this nation about \$3 million a year.

A group of concerned citizens and organisations have banded themselves together and are planning what will be the first National Rat Week, which, according to Keith Laurie:

"Although it is termed a 'week' we will not be satisfied until we kill every rat. So it will continue until we achieve our objective.

The suggestion for the campaign came from the Barbados Sugar Technologists Association while Laurie was its president. He is now a council member and will coordinate the rat campaign.

"We feel that everybody in the island must do it together. The timing is very critical. We must do it at a time when there is the least food available for the rats. And that is right after the sugar cane reaping. So we have chosen May 19 as the beginning of the campaign.

"We would really like a two to three—week period of intensive baiting by everybody — on the sugar estates, in the livestock farms, in Government buildings and parks and so on, around

garbage dumps in Bridgetown; in the warehouses and then of course in the households," Laurie said.

He added that the campaign was starting as a private sector venture but they would be going to Government for assistance. "I have got that kind of feedback that if the private sector showed some initiative Government would support it but we have not actually had the first meeting with the Government departments."

In looking at the damage caused by rats, Laurie said: "I have done quite a bit of research on this. The biggest loss has been in the sugar industry. We are saying very conservatively that the losses amount to about \$2 million a year. From various surveys which were done, it looks as though the overall losses could be about \$4 to \$5 million but we want to be conservative.

"We are saying that there are about 50,000 households and the loss through rats and mice, even if conservatively placed at \$5 a household, still comes to \$250,000 a year. To livestock you could say another \$50,000, then commercially in warehouses, damage to foodstuffs, to packages, to animal feeds and so on bring up the total to about \$3 million," explained Laurie.

/9274

CSO: 5440/073

CANADA

ONTARIO FIGHTING LOSING BATTLE AGAINST GYPSY MOTH

Toronto THE TORONTO STAR in English 18 Apr 86 p F19

[Article by Bob Lyons]

[Text]

The ministry of natural resources is racing to install a \$5-million plan to combat the gypsy moth in a war officials say they can't win.

It may be too late to contain the voracious pest which has already attacked most of Eastern Ontario and threatens to spread to the rest of the province within the next few years.

Pockets of infestation have been found in London, Sarnia and Niagara Falls.

Officials admit they are fighting a losing battle. The objective is to protect the best lumber, the provincial parks and some farms and home yards. The rest will be weakened in the onslaught of the greatest insect pest ever to get a footing in this Province.

"We're just kidding ourselves if we think the infestation is not going to come," said Alec Denys, who is co-ordinating the plan in eastern Ontario.

Denys travelled to Pennsylvania last summer, where he saw 36,423 hectares (90,000 acres) of oak forest completely killed by the gypsy moth.

Officials from the province and the federal ministries of agriculture admit they have considered

imposing a quarantine road-block, on major highways out of eastern Ontario to check for the pest. A similar program is in place in California and Oregon, and Queen's Park is establishing "voluntary" check-points at three provincial parks this summer.

Denys' office in Tweed, 36 kilometres (22 miles) north of Belleville, looks like a command headquarters with maps and charts. He's throwing everything modern technology has got into a two-week battle against millions of hungry caterpillars.

Airstrips used

Two military bases are being drafted into the aerial spray plan: the Canadian Forces Base at Trenton and an old National Defence airstrip at Taylor, just north of Gananoque.

The ministry also is constructing two new runways in the bush and enlarging another at a cost of over \$350,000 — specifically to fight the gypsy moth.

The new runway system is needed to service over 100 planes contracted to spray millions of gallons of *Bacillus Thuringiensis* (BT) which is believed to kill only caterpillars.

BT will be sprayed over forests, cottages and some municipalities by crop-dusters skimming less than 30 metres (100 feet) overhead.

Timing the spray is extremely critical. More than a dozen en-

tomologists from the Canadian Forestry Service will be watching the woods for millions of eggs to hatch. Then the entire program will take place in a two- to three-week period in late May or early June, depending on the weather.

The ministry has agreed to spray private property, with each landowner paying a nominal fee per hectare. In addition, foresters have earmarked 53,000 hectares (130,961 acres) of Crown Land to be protected.

According to Denys, the planes will be concentrating on "hot spots" where the insect population has grown to 40,000 eggs per acre. One such spot near Marmora, northeast of Peterborough, began last year when the caterpillars denuded an 81-hectare (200-acre) swath of bush.

Patch expanded

The patch expanded to 6,880 hectares (17,000 acres) this year.

The rapid spread of the gypsy moth is alarming to foresters and homeowners.

The larva are easily carried by the wind. In only a few days last May, the tornado winds that levelled houses in central Ontario also carried gypsy moth larvae a further 96 kilometres (60 miles.)

Worse, the gypsy moth can "high-hike" long distances by laying eggs on cars and camping equipment.

/9317

CSO: 5420/69

MOZAMBIQUE

CHANGARA DISTRICT BATTLES LOCUST PLAGUE

Maputo NOTICIAS in Portuguese 4 Mar 86 p 1

[Text] Farmers in the Changara District of Tete Province are involved in the eradication of an outbreak of locusts that has been spreading since 1983. This work began as the growing season got underway under the sponsorship of agriculture officials who provide general information to family and cooperative farmers.

The first secretary and acting administrator of Changara District, Candido Zagua, told our reporters that the sorghum crop, the region's major crop, is almost ready and it is not being attacked by the locusts yet.

When the campaign began, many farmers were troubled by the outbreak of the locust plague because they believed it would engulf large tracts of productive land. However, it did not occur as predicted. Those who planted corn in that part of Tete Province have already begun to consume it. This means that the harvest could produce high yields.

According to its egg-laying cycle, the "Dvicomba" locust plague will last 5 years. In Changara District, a concrete plan that gives families a role to play in this process was laid out to fight the locusts.

The pesticide and the machinery have already been prepared for all areas. There is now a campaign underway in the fields. In reality, the work being done does not assure that the locusts will be completely eradicated. Only aerial spraying would achieve this and it is not possible at the moment.

The Changara District farmers are hopeful that this year's crop will be better than the previous one. This is to say that the district's locust plague will not lay waste to the fields as was initially predicted. It is the weather that is causing the hunger we see in that region.

Changara, N'Temangau, Mazoe, Mufa-Kakonde and Cioco were marked as the localities most affected by the plague and it is for this reason that the eradication work has concentrated in these areas.

As for the peanut crop that many farmers planted this year, it is expected to be a success despite the worms that are eating the underground roots in some areas. An eradication effort is already underway.

A majority of the people raised corn along the banks and the lowlands of the Luenha, Mazoe, Luia, Mufa and Zambeze rivers in the Boroma area.

The acting administrator of Changara District said that an intense effort was made to mobilize the farmers as they began preparations for the 1985-86 growing season so that each family farmer would work a minimum of 2 hectares. It is true that some people own smaller parcels of land but the majority of the population increased its acreage.

9935/12951

CSO: 5400/90

PAPUA NEW GUINEA

COFFEE RUST IN HIGHLANDS CAUSE FOR QUARANTINE

Port Moresby PAPUA NEW GUINEA POST-COURIER 2 May 86 p 1

[Text] **The dreaded, destructive coffee rust disease has been discovered in the Highlands.**

The country's K200 million a year coffee industry is in jeopardy.

A quarantine has been imposed on the entire Highlands region for the next three days.

And a State of Emergency is being considered to stop the movement of people from the Highlands region.

Papua New Guinea's economy could be thrown into despair if the coffee rust disease is not stamped out quickly, Prime Minister Mr Wingti, said last night.

The destructive fungus was found on village coffee trees in the Baiyer River area of Western Highlands Wednesday and the Government will today throw all its resources into the "quarantine the Highlands" campaign.

"Our economy really depends on coffee," said a worried Prime Minister. "We have been basing our Budget planning on coffee."

"If the outbreak of rust cannot be controlled, PNG stands to lose its coffee industry, currently worth at least K200 million a year," a Government spokesman said.

Mr Wingti and Primary Industry Minister Mr Okuk conferred with agriculture experts late yesterday and decided to impose the quarantine until Sunday.

Police and Government officers will help agriculture staff to control the movement of people in the five Highlands provinces, checking for coffee and other plant materials.

The quarantine order, gazetted especially last night, gives far-reaching powers to Primary Industry Secretary Noreo Beangke.

His officers will be able to go on to private property, uproot and burn infected trees.

The rust was spotted in small clusters over an area of several kilometres 45 minutes drive from Mount Hagen.

DPI officers said more than 3000 hectares of coffee trees, valued at least K1 million, would have to be destroyed. All the trees would have to be burned and then the area sprayed with fungicide chemicals.

Mr Wingti said last night: "I won't talk about compensation at this stage, until we know the extent of the disease."

PNG has asked the Australian government to transport chemicals to combat the fungus, with PNG paying the chemical bill.

The Royal Australian Air Force might be asked to fly the chemicals to PNG.

The fungus clings to clothing and footwear and people in the affected areas would have to have theirs burnt, said DPI officials.

Trucks going into the Highlands from the coastal areas will be cleaned rigorously before leaving again. Mr Wingti said he had been told that the disease might have already spread to other coffee-growing parts of the country.

The man who handled the 1965 rust outbreak at Sogeri is still living in PNG and will be called back to duty to help. He is Dr Greg Graham.

A DPI spokesman said last night there was no way of funding out how the fungus got into the Highlands.

Rust had been detected in Indonesia, but not Irian Jaya.

/12828

CSO: 5400/4373

PERU

PINK BOLLWORM DAMAGES TO PIURA COTTON HARVEST

Lima EL COMERCIO in Spanish 25 Mar p A-12

[Excerpts] Ica, 24 March (By Mail)--The damage caused by pink bollworms during the current crop year in Piura is estimated at 73,989,000 intis.

For this reason appropriate precautions have had to be taken to prevent this kind of catastrophe from happening in the valleys of the Department of Ica. One of these precautions is reportedly the establishment of a roadblock south of Pisco to stop the movement of plant material of whatever origin.

These statements were made by Engr Juan Gonzales Machini, a FUNDEAL expert, at a meeting in Ica sponsored by CIPA-ICA.

Engineer Gonzales provided details on the damage caused by this insect in the Alto Piura, San Lorenzo, Bajo Piura, and Chira areas.

Gonzales revealed that in the northernmost department chemicals were being used against the pink bollworm and efforts were being made to trap them.

He pointed out that in Piura there are 54,000 hectares planted to cotton and that 9 adult worms have been caught in traps per week; in Lambayeque, 4,000 hectares of cotton and 31 worms caught; in Santa, 1,200 hectares of cotton and 11 worms caught; in Casma, 2,600 hectares of cotton and 16 worms caught; in Huarney, 400 hectares of cotton and 10 worms caught; and in Chincha, 13,141 hectares of cotton and 12 worms caught. He said that the pink bollworm requires a warm climate, with temperatures averaging 30 degrees Celsius.

He said that in Brazil, where the pink bollworm was identified 20 years ago, from six to nine applications of insecticide are applied each season, especially in Sao Paulo.

In Colombia the pink bollworm has been known for the past 40 years. The growing season is 6 months long, whereas it is 9 months long in Peru, requiring a substantial investment in applying insecticide.

He said that the most important thing to do is to conduct research to deal with these pink bollworm infestations. Up to the present experiments in all areas in eradicating the insect have involved the use of chemicals.

He reported that FUNDEAL has called for research on measures to eradicate the Indian pink bollworm, but no completed work has been presented as yet.

The most effective applications of chemicals should be undertaken during the period of hibernation, which is the state of rest of the pink bollworm when faced with adverse conditions.

Gonzales also spoke of the host plants in Piura, which include domestic cotton, okra, and rose bushes.

He stated that the modified Albary trap is very effective in catching the pink bollworm.

He indicated that Doctors Hulber and Winston, two well-known cotton experts from the United States, have reported that in Piura ecological conditions for the Indian rose bollworm are better than those in Arizona.

He stated that in Piura farmers work for 6 months and rest for another 6 months, which is a luxury. He suggested a change in agricultural practices to include growing fruit and rice. He noted that rice requires up to 30 centimeters of standing water in the fields, which is out of the question in Ica, where the shortage of water is worsening.

5170

CSO: 5400/2054

SOUTH AFRICA

BRIEFS

POISON SPRAY AGAINST LOCUSTS--Three Defence Force members may have been made ill by the poison BHC, used against the locust plague. A ban was placed on the making of BHC in 1981, but the Government used a strategic supply kept in stock since 1974. The Minister of Agriculture, Mr Greyling Wentzel, confirmed yesterday that about 4,000 tons of BHC had been used in recent weeks. Replying to questions by Mr Roger Hulley (PFP), Mr Wentzel said labourers applying the poison were issued with masks and dust goggles. He said stocks of BHC were now virtually exhausted. Other products had become available and were being phased in. General Magnus Malan, the Defence Minister, said no special protective equipment was issued to SADF personnel helping in the fight against locusts, but they did have protective overalls. General Malan said: "Three members showed symptoms of stomach cramps, coughing and headache, similar to fly, which may possibly have been caused by the poison." [Text] [Johannesburg THE STAR in English 16 Apr 86 p 4] /12851

LOCUST SWARMS--Fraserburg--Hundreds of swarms of locusts are wreaking havoc in Fraserburg. The western parts of the district that escaped the outbreak two months ago are the worst affected. There are 12 pest control units in the area and it is expected these will be increased to 16 in the coming week. The swarms are moving eastward and now penetrating previously affected areas as well. Prospects for winter grazing are not good because of extensive damage and poor rains. [Text] [Johannesburg THE CITIZEN in English 15 Apr 86 p 13] /12851

CSO: 5450/102

END