

286054

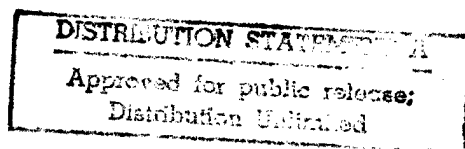
JPRS 84023

2 August 1983

Worldwide Report

EPIDEMIOLOGY

No. 326



DTIC QUALITY INSPECTED 2

19980603 141



FOREIGN BROADCAST INFORMATION SERVICE

5
84
A05

Handwritten text in the bottom right corner, consisting of the number "5", the year "84", and the alphanumeric code "A05".

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.

JPRS REPORTS

Japan Report
Korean Affairs Report
Southeast Asia Report
Mongolia Report

Near East/South Asia Report
Sub-Saharan Africa Report
West Europe Report
West Europe Report: Science and Technology
Latin America Report

USSR

Political and Sociological Affairs
Problems of the Far East
Science and Technology Policy
Sociological Studies
Translations from KOMMUNIST
USA: Economics, Politics, Ideology
World Economy and International Relations
Agriculture
Construction and Related Industries
Consumer Goods and Domestic Trade
Economic Affairs
Energy
Human Resources
International Economic Relations
Transportation

Physics and Mathematics
Space
Space Biology and Aerospace Medicine
Military Affairs
Chemistry
Cybernetics, Computers and Automation Technology
Earth Sciences
Electronics and Electrical Engineering
Engineering and Equipment
Machine Tools and Metal-Working Equipment
Life Sciences: Biomedical and Behavioral Sciences
Life Sciences: Effects of Nonionizing Electromagnetic
Radiation
Materials Science and Metallurgy
Meteorology and Hydrology

EASTERN EUROPE

Political, Sociological and Military Affairs
Scientific Affairs

Economic and Industrial Affairs

CHINA

Political, Sociological and Military Affairs
Economic Affairs
Science and Technology

RED FLAG
Agriculture
Plant and Installation Data

WORLDWIDE

Telecommunications Policy, Research and
Development
Nuclear Development and Proliferation

Environmental Quality
Epidemiology

FBIS DAILY REPORT

China
Soviet Union
South Asia
Asia and Pacific

Eastern Europe
Western Europe
Latin America
Middle East and Africa

To order, see inside front cover

2 August 1983

WORLDWIDE REPORT

EPIDEMIOLOGY

No. 326

CONTENTS

HUMAN DISEASES

BANGLADESH

Briefs

Chittagong Diarrhea, Dysentery	1
Cholera, Rabies Deaths	1
Cholera in Magura	1
Tuberculosis Increase in Narayanganj	1

BRAZIL

Infant Mortality Rate Fourth Highest in Latin America (O ESTADO DE SAO PAULO, 23 Jun 83).....	3
--	---

Briefs

Hepatitis in Belo Horizonte	5
-----------------------------	---

DENMARK

Four Deaths From AIDS Disease Reported (BERLINGSKE TIDENDE, 7 Jul 83).....	6
---	---

EGYPT

Reasons for Continued Incidence of Polio Discussed (H. Jawhar; AL-AKHBAR, 3 May 83).....	7
---	---

GHANA

Briefs

'Strange Disease' Afflicts Prison	11
-----------------------------------	----

INDIA

Briefs

Cholera-Affected Taluka	12
Mystery Disease Reported	12
Amravati Diarrhea Deaths	12
Karnataka Gastroenteritis Deaths	12

INDONESIA

Briefs

Gastroenteritis in Pidie Regency	14
Dengue Fever in Surabaya	14
Dengue Fever in Probolinggo	14
Malaria in North Sulawesi	15
Measles in Tangerang Regency	15
Measles in Blora	15
Sumatra Cholera Deaths	16
Dengue Fever Outbreak	16
West Sumatra Cholera Outbreak	16
Gastroenteritis in East Kalimantan	16
Gastroenteritis in Sorong City	17

JAMAICA

Water, Sewage Improvement Projects Set To Begin (THE DAILY GLEANER, 25 Jun 83).....	18
--	----

KUWAIT

Briefs

More Herpes Cases	19
-------------------	----

MALAWI

Briefs

Mtola Village Rabies Outbreak	20
-------------------------------	----

MALAYSIA

Increase in Dengue, Malaria Cases in Sarawak (BORNEO BULLETIN, 11 Jun 83).....	21
Dengue Situation in Sarawak 'Still Serious' (NATIONAL ECHO, 16 Jun 83).....	22
Cholera Strikes Students in Pahang State (NEW STRAITS TIMES, 26 Jun 83).....	23

New Gonorrhoea Strain Resistant to Medication (NEW STRAITS TIMES, 28 Jun 83).....	24
Briefs	
Dengue Under Control	25
NEW ZEALAND	
Influenza Epidemic Reported Throughout Country (Various sources, various dates).....	26
'Phantom Flu' Philippines Flu Suspected Influenza Strain Identified Epidemic Claims First Victim	
Briefs	
Virus Hits Schools	28
NICARAGUA	
Government's Health Achievements Described (M. Lezama; EL NUEVO DIARIO, 3 Jun 83).....	29
OMAN	
Major Project To Establish Health Facilities Begins (M. Mohammad; TIMES OF OMAN, 16 Jun 83).....	31
PEOPLE'S REPUBLIC OF CHINA	
Enforcement of Food Hygiene Law (RENMIN RIBAO, 1 Jul 83).....	33
Developments in Health of National Minority Groups (JIANKANG BAO, 5 May 83).....	35
Briefs	
Shanxi Farmers Poisoned	36
Huitong Measles Outbreak	36
PERU	
Health Ministry Issues Warning on Spread of Malaria (LA PRENSA, 16 Jun 83).....	38
Leprosy Cases Estimated at 12,000 (EL COMERCIO, 22 Jun 83).....	40

Briefs	
Nutritional Deficiencies in Children	42
Rabies Causes Two Deaths	42
PHILIPPINES	
Anthrax Suspected in San Fernando Deaths (M. Pascua; BULLETIN TODAY, 17 Jun 83).....	43
Typhoid Fever Cases in Manila Increase (BULLETIN TODAY, 13 Jul 83).....	44
Typhoid Fever Incidence Up (BULLETIN TODAY, 17 Jun 83).....	45
Gains in Anti-Malaria Drive Cited (R. Movido; BULLETIN TODAY, 19 Jun 83).....	46
Briefs	
Pneumonia, Other Diseases on the Rise	47
SOUTH AFRICA	
SAIMR Official Says Sex Diseases 'Almost Epidemic' (WEEKEND POST, 18 Jun 83).....	48
Government Housing, Labor Systems Blamed for Spread of Disease (THE CITIZEN, 22 Jun 83).....	49
Briefs	
Measles Death Toll	50
No New AIDS Cases	51
Hepatitis Virus Cultivated	51
Rabies Fear in Natal	51
TANZANIA	
Briefs	
Incidence of Malaria	52
TURKEY	
Chlorine Typhoid Treatment Proves Fatal (TERCUMAN, 28 Jun 83).....	53
VENEZUELA	
Briefs	
Malaria Cases in Carabobo	54

ZAMBIA

Scientists Testing New Means of Schistosomiasis Control (THE SWAZI OBSERVER, 6 Jun 83).....	55
--	----

Briefs

Cholera Vaccinations for Party Delegates	57
--	----

ZIMBABWE

Harare's Hygiene Standards Down Due to Staffing Crisis (THE HERALD, 15 Jun 83).....	58
--	----

Briefs

Vaccine Vans Donated	60
Vapostory Sect Allows Vaccination	60
Sexually Transmitted Diseases	60
Drought Affects Measles Spread	61

ANIMAL DISEASES

BOTSWANA

Briefs

Cattle Released From Quarantines	62
----------------------------------	----

ITALY

Outbreak of Sheep Pox Near Brindisi Confirmed (A. Mantovani; L'UNITA, 25 May 83).....	63
--	----

KENYA

East Coast Fever Drug (DAILY TIMES, 20 Jun 83).....	65
--	----

NIGERIA

Spread of Rinderpest Aggravated by Nomadic Herders (G. Hassan; WEST AFRICA, 11 Jun 83).....	66
--	----

Briefs

Rinderpest Curtails Meat Output	67
---------------------------------	----

SOUTH AFRICA

Briefs

Parvovirus Epidemic	68
---------------------	----

PLANT DISEASES AND INSECT PESTS

BARBADOS

Increase in Cane Smut Disease Causing Concern (SUNDAY ADVOCATE, 19 Jun 83).....	69
--	----

EGYPT

Threat of Disease, Insects to Crops Detailed (I. Nasr; ROSE AL-YUSUF, No 2865, 9 May 83).....	70
--	----

PHILIPPINES

Briefs

Clubroot Disease Hits Cabbage	74
-------------------------------	----

VIETNAM

Briefs

Insecticide, Ducks Eradicate Armyworms	75
Stem Borer Eggs	75

BRIEFS

CHITTAGONG DIARRHEA, DYSENTERY--MAY 10--About 700 people have been attacked by diarrhoea and dysentery at different places of Anwara and Raozan thanas here. The diarrhoea affected areas are Dumuria, Redura, Silaigar, Khasnama of Anwara thana. About 500 persons are said to have been attacked by the diarrhoea. Two hundred more persons are learnt to have been attacked by dysentery in Raojan thana. Impure drinking water and stale food are deemed to have been responsible for the outbreak of the disease. [Dhaka THE NEW NATION in English 11 May 83 p 1]

CHOLERA, RABIES DEATHS--CHANDPUR, May 27--Cholera claimed three lives at Char Ibrahimpur under Chandpur subdivision and 50 others were attacked by the disease, says a telegraphic message. It is learnt that there is an acute scarcity of pure drinking water. The people of the area are drinking impure water from river, canal and ditch. There are 15,000 people in the effected Char area where there are only 10 tubwells and three of them are not functioning. Precautionary measure for sanitary condition are inadequate. One person died of Lydrophobia in Bishundi union under Chandpur than yesterday. The stary dogs are biting people specially the children and women are victims. The dogs have been creating penic in the area. No step has been taken in this regared. [Dhaka THE NEW NATION in English 28 May 83 p 2]

CHOLERA IN MAGURA--MAGURA, May 25--Five persons died and about 50 persons were attacked by cholera in village Chukinagar and other villages under upgraded Salikha thana. When contacted the local Health Department confirmed the death, but they identified the disease as diarrhoea. A team of health department visited the affected villages and effective measure has been taken, the source added. It is learnt from different reliable sources that about 50 persons died and 200 persons were attacked by diarrhoea throughout Magura subdivision during the month of April. RMO of Magura Sadar Hospital told Times that a member of diarrhoea patients were admitted in the hospital. Health Department authority mentioned that due to heavy drought and want of pure drinking water were the main cause of the outbreak of this disease. Vaccination and anti diarrhoea medicine is being distributed in the affected areas. [Dhaka THE BANGLADESH TIMES in English 26 May 83 p 2]

TUBERCULOSIS INCREASE IN NARAYANGANJ--NARAYANGANJ, May 27--High incidence of pulmonary tuberculosis accompanied by inadequate segregation and treatment facilities constitutes a major health hazard to the people of this port town.

Narayanganj has a population of about five lakh, out of which about 25 to 30 thousand have been suffering from TB which is about five per cent of the population. According to an official source, the number of people suffering from TB is increasing alarmingly every year. The closure of 25-bed TB hospital in August 1971 causes sharp rise in the incidence of the disease. It has been closed down due to shortage of funds and other technical difficulties. However, the Narayanganj branch of Bangladesh National Anti-Tuberculosis Association has opened a TB clinic in the premises of the old TB hospital in February, 1975. When contacted Dr. S.M. Shahidul Islam, Secretary, Narayanganj Branch of NATAB, said that they are now rendering free service to the patients every Friday. He further said, no arrangement for conducting surevv and X-ray was made as yet. But the number of TB patients has been on increase, he added. It may be noted that nearly 11 lakh people suffer from TB out of which one lakh die every year all over the country, according to a physician. The physician expressed the view that thousands of undetected cases of TB are moving freely in the society. The sooner the cases are detected and treated the better for the society, he added. [Dhaka THE BANGLADESH OBSERVER in English 28 May 83 p 12]

CSO: 5400/7126

INFANT MORTALITY RATE FOURTH HIGHEST IN LATIN AMERICA

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 23 Jun 83 p 17

[Text] Of every 1,000 live births in Brazil, 92 children die before reaching 1 year of age. This index places Brazil in the fourth place in infant mortality in Latin America. Higher rates are to be found only in Peru (98), Honduras (98.5) and Bolivia, where infant mortality is 168 per 1,000 live births. Deaths of 60 percent of Brazilian infants under 1 year of age are caused by starvation of malnutrition. The lowest indices are in Costa Rica (17), Cuba (18.5) and Panama (20).

In 1980 alone 214,000 children under 1 year of age died in Brazil according to official data. The rate of 92 per 1,000 however, refers to 1979, the last statistics found by the researchers of the German news agency DPA, which conducted a survey of infant mortality in Latin America. This rate is considered even more serious, when the total number of deaths in the country that year--711,742--is taken into account, because infants under 1 year represent 25.5 percent of the total.

However, in Amazonas the situation is worse, probably because of bad sanitary conditions, and infant mortality represented 34.8 percent of total deaths. In Sao Paulo this index reached 25.5 percent and in Porto Alegre, the lowest in the country, the rate was 14.5 percent.

The infant mortality rate had been more serious in Brazil in the past. In 1970, for example, the rate was 108.6. However, this reduction is not very meaningful if it is compared with that in Costa Rica where the rate dropped from 61 in 1973 to 17 recently, or Chile, from 65.2 to 23.4; and finally in Argentina which was able to reduce its infant mortality from 62.4 in 1976 to 32 at the present time. In addition, in some regions of Brazil the rate reaches 113.2 per 1,000, mainly where the majority of the population receives the average minimum wage.

The official data generally attribute the greater part of deaths to enteritis, other intestinal infections and respiratory infections; however, starvation is the real cause in the greater part of the deaths. Dehydration, also caused by hunger, lack of medical assistance and bad sanitary conditions is the cause of 20 percent of the deaths, while respiratory infections are responsible for 12 percent.

Sanitary conditions of the country greatly contribute to the high mortality rate. The sewage network, for example, reaches only 6,949,969 residences, a rate of 26.3 percent, exceeding only that of Honduras where it is 14 percent, while in Costa Rica it is 81 percent and in Panama it is 80 percent. Drinking water is available in 14,073,041 homes--53.2 percent--placing Brazil among the 6 countries with the worst conditions in this sense: Bolivia, Ecuador, Guatemala, Honduras, Nicaragua and Peru. In Chile drinking water is supplied to 99 percent of homes and in Panama to 82 percent.

Costa Rica, Cuba, Chile and Panama have the lowest rates of infant mortality in Latin America, with rates lower than the maximum recommended by the World Health Organization for year 2,000, which is 30 for 1,000 infants. In Argentina the rate is 35.5 per 1,000, which is already being considered as a success and the government hopes to reach year 2,000 within the limits envisaged by the WHO.

Bolivia Has the Highest Rate

Country	Present or Recent Rate	Rate at the Beginning of the 70's
Bolivia	168	158
Honduras	98.5	177.6
Peru	98	109
Brazil	92	108.6
Nicaragua	88.2	108.9
Ecuador	64	70.3
Guatemala	60.1	82.9
Colombia	55	59
Uruguay	33.4	48.6
Argentina	32	62.4
Venezuela	31.7	53.7
Chile	23.4	65.2
Panama	20	32
Cuba	18.5	29.6
Costa Rica	17	61

11635

CSO: 5400/2091

BRIEFS

HEPATITIS IN BELO HORIZONTE--The Minas Gerais Health Secretariat recorded 550 cases of hepatitis in the Belo Horizonte metropolitan area during the first months of this year, 147 last month alone, caused mainly by deficiency in basic sanitation. The illness was registered in the regions affected by the floods at the beginning of the year, and is of A type, for which there is no vaccine. These figures represent merely 5 percent of the total cases because the illness generally is treated on an out-patient basis, which makes it difficult to count the persons affected, according to the coordinator of the Center for Epidemiological Vigilance of the secretariat, Waltercy de Sa. However, the increase in the number of cases is causing concern at the secretariat because last year 868 persons were affected, 358 of them in the first months of the year. In the past 5 years the Center for Epidemiological Vigilance has noted the coincidence between the peak in the number of hepatitis cases and the times when the Arrudas creek floods. Throughout the state the city most affected by the type A hepatitis was Estiva, in the south of Minas Gerais, where up to last month 60 cases were reported in a population of 4,000. In the meantime, the secretariat has no means to fight this outbreak because this type of hepatitis is caused by a social problem due to inefficient water supply, in sewage network and in the houses themselves. [Text]
[Sao Paulo O ESTADO DE SAO PAULO in Portuguese 9 Jun 83 p 13] 11635

CSO: 5400/2091

FOUR DEATHS FROM AIDS DISEASE REPORTED

Copenhagen BERLINGSKE TIDENDE in Danish 7 Jul 83 p 3

[Text] Against the background of four deaths in Denmark and a near-epidemic development in the United States of the new disease, Acquired Immune Deficiency Syndrome--AIDS--the Health Agency has decided to orient doctors on the disease and require them to report it, so that its development in this country can be followed.

The disease has been noted especially in homosexual circles, in which a number of patients have had a reduction in the immune defenses of their organism with respect to infections to such an extent that in many cases they have succumbed to a number of infections that would not otherwise be fatal. A number of cases have been seen in other countries and an effort is now being made to prevent the disease or treat patients suffering from it quickly and more effectively. This means that doctors must be aware that the disease can occur in cases where they are confronted with a number of symptoms for which they can find no other explanation.

Should Not Give Blood

The agent of infection is not known, but the disease seems to spread through blood in the same way as hepatitis and the most important route of infection is assumed to be via sexual contact. Against that background, the Health Agency says that homosexual men should refrain from donating blood for transfusions in the same way as a number of other groups do where a risk of infection exists. At the same time it was pointed out that the risk of infection increases with a frequent change of sexual partners, especially when the partners stem from or have had contacts with homosexual groups in the United States. The general recommendation is due to the fact that so far the disease cannot be detected in a simple laboratory test.

The chairman of the National Association of Gays and Lesbians, Henning Jorgensen, said that such a general ban against the background of the existence of such a rare disease helps to give the false impression that homosexuality is a kind of disease. Instead, homosexuals should be given the opportunity of having a routine check made for the disease. The Health Agency people had not yet read his statement and would therefore not comment.

6578

CSO: 5400/2556

REASONS FOR CONTINUED INCIDENCE OF POLIO DISCUSSED

Cairo AL-AKHBAR in Arabic 3 May 83 p 4

[Article by Hana' Jawhar: "Do Vaccination Campaigns Wipe Out Poliomyelitis? Number of Cases Has Dropped But There Are No Precise Statistics on Victims"]

[Text] A new poliomyelitis vaccination campaign, the fourth of its kind, has started. Still, the disease is threatening thousands of our children. The number of cases has dropped as a result of the repeated campaigns. But poliomyelitis is one of the endemic diseases in Egypt. The Ministry of Health is exerting its utmost efforts, providing the vaccine and spending millions of pounds, but the disease is widely prevalent and has not yet been wiped out.

There are numerous reasons for the endemicity of the disease and for its continued presence in Egypt, the first being environmental pollution, human negligence and widespread ignorance and illiteracy.

AL-AKHBAR looks for the reasons for the spread of poliomyelitis in Egypt and raises the question: When will poliomyelitis disappear from Egypt?

Polio is a contagious disease that is endemic to Egypt. Despite the vaccination campaigns and the efforts exerted by the Ministry of Health in providing the protective vaccine, cases of polio still occur in large numbers. Polio is an incurable disease that twists and paralyzes children's extremities and causes permanent disability. The danger of polio lies in the health, social and economic problems it creates. A polio victim requires a long journey through physical therapy, rehabilitation centers, support equipment and surgical operations.

Ugly Picture

The one place that reflects the truly ugly picture of polio is the Poliomyelitis Institute. The world of this institute is a sad world and the tragedy is reflected clearly in the faces of the mothers carrying their polio-afflicted children. Weakness and feebleness show in the eyes of the children, who cry and scream constantly and whose pale faces are drained by the disease. It is endless pain and lifelong disability. They are the innocent and guiltless souls suffering from the disease that has afflicted them.

The only smile here is on the face of Dr Safiyah Ibrahim, the institute director, who wrote her PhD thesis on polio. She is a bundle of activity who spends all her efforts to alleviate the pain of the children and to console the mothers in their tribulation.

Speaking of the disease, Dr Safiyah says:

Poliomyelitis is a contagious endemic disease. It is some kind of a fever that hits children between the ages of 3 months to 4 years. The fever is caused by a very minute virus that is transmitted via the digestive system to the blood and then to the spinal cord's motion cells, thus creating paralysis. The mildest cases of the disease are those in which the extremities are paralyzed and the most severe are those causing paralysis of the respiratory and digestive system muscles and of the spinal column. The disease begins with a rise in temperature, throat inflammation, diarrhea and vomiting. The paralysis develops when the virus reaches the spinal cord. The infection is transmitted from the patient's spittle and feces by way of flies.

Oldest Disease

Polio is one of the oldest diseases to afflict Egyptians. The picture of a priest whose right leg was afflicted with the disease has been found on the walls of one of the temples. This picture dates back to 1350 B.C. Internationally, the disease was not discovered until the early 19th century. Discovery of the vaccine in 1950 was one of the greatest victories in the world of preventive medicine. Since then, the disease has disappeared in most of the world's advanced countries. In Egypt, sporadic use of the vaccine began in the 1960's. Then vaccination became compulsory in 1962. The disease broke out as an epidemic in 1976, and this is why the Ministry of Health organized the first national campaign for the vaccination of children ranging in age from 4 months to 5 years. This campaign was followed by similar ones in 1979 and 1982 and by the current campaign.

There Are No Statistics

Dr Safiyah adds: The disease occurrence rate has dropped considerably in the wake of these campaigns. However, it is still present. Regrettably, there are no statistics at the national level to determine the incidence precisely. But we can determine how widespread the disease is by the number of people frequenting the center. Figures show that a total of 3,011 severe and chronic cases visited the center in 1981 compared with 5,061 cases in 1975, i.e., prior to the start of the national vaccination campaigns. Even though the number of cases has dropped, the disease is still prevalent.

Dangerous as it is, poliomyelitis is not an invincible disease. Prevention is possible through the vaccine, which provides protection against it. Recounting the story of the poliomyelitis vaccine, Egyptian scientist Dr Imam Zaghlul, chairman of the Public Egyptian Authority for Antibiotics and Vaccines, has said:

Generating Immunity

The vaccine against the disease was discovered by Salk and this vaccine was injected into the body until 1955. Then Sabin discovered the vaccine currently used. This vaccine is taken orally and consists of attenuated strains of poliomyelitis virus with the ability to generate antibodies that resist the disease and produce immunity against it. Initially, the vaccine was used on a limited scale in the United States. In the early 1960's, the Soviet Union used the vaccine in the most daring attempt to wipe out the disease by vaccinating all people from 3 months to 40 years. In fact, the disease did disappear in the Soviet Union in 1961. On the basis of this experiment, the entire world began to use the vaccine and the disease has disappeared completely from Europe and the United States.

If the vaccine provides protection against the disease and if other countries have wiped out poliomyelitis finally, then what is the fate of the Egyptian child who still suffers from the disease and when will polio disappear from Egypt?

Dr Safiyah Ibrahim says:

Method of Storage

The problem lies not only in supplying the vaccine but in the method of storing it and distributing it to the various provinces. The vaccine must be stored at a temperature of 7 degrees below zero, both when stored and when transported, so that it does not lose its effectiveness.

Asking Dr Imam Zaghlul, the official in charge of storage, preservation and distribution of the vaccine in a sound healthy manner, he said [as published].

Dr Husayn Kamil Baha' al-Din, professor of pediatrics at Cairo University and director of the new children's hospital, says:

Vaccination does not consist of simply squeezing the drops into the child's mouth. We must first ascertain that the child is healthy and that he is not suffering from diarrhea, fever or dysentery and that he takes the right number of doses and booster doses at the age of 5 years. To deal with the problem of the presence of other microbes in the child's intestines that render the vaccine ineffective, the Pediatrics Association is conducting a study on dual vaccination, i.e., giving Salk's vaccine through injection and Sabin's vaccine orally, with the aim of overcoming this problem.

In reply to a question, Dr Imam Zaghlul, the official in charge of the vaccine, said:

The vaccine is imported from abroad, along with a WHO [World Health Organization] certificate attesting that the vaccine complies with international standards. Before the vaccine is delivered, we receive a cable from the supplier stating the date of shipment and arrival at the airport. Through agreement with the Customs Authority, the vaccine is released

immediately upon arrival and is delivered to our laboratories to be tested for its fitness for use. It is subjected to three tests and is not used until it is proven that it complies with sound standards. We then begin its distribution in special refrigerator [vehicles].

The question is: If the vaccine is available and is delivered wholesome to all places, what is the problem?

Dr Imam says in reply:

There are other reasons, including the presence of intestinal viruses in the Egyptian child that may render the vaccine taken by the child ineffective, thus preventing it from producing full immunity.

Devoting Attention to Human Element

Dr Husayn Kamil has a different opinion--that the main reason for the spread of the disease is the human element. He says that vaccination is a means but not the only way to fight and wipe out poliomyelitis. The disease will continue to exist in Egypt if we fail to devote attention to the human element, i.e., to the people in charge of storing, transporting and dispensing the vaccine. If we guaranteed that the human element would perform its role ideally, we could wipe out poliomyelitis in Egypt. Control of the human element will bring about the eradication of poliomyelitis. The human element also includes interest on the part of the people in having their children vaccinated. The prevalence of ignorance and illiteracy may curtail the people's interest in vaccination.

Environmental Pollution

Dr Fawzan Muhammad Shaltut, professor of pediatrics at Cairo University, says that environmental pollution is one reason for the spread of the disease. The paralysis-causing virus is a contagious virus found in the intestines' mucous membrane, is secreted by the patient in his feces and is transmitted by flies. This is why it is contagious. This is why it is necessary to have a clean environment and to eradicate flies. This is the reason for the spread of the disease in overcrowded areas and quarters, such as Imbabah and Shubra al-Khaymah. What is needed is cleanliness and the elimination of environmental pollution.

8494

CSO: 5400/4610

GHANA

BRIEFS

'STRANGE DISEASE' AFFLICTS PRISON--A strange disease has hit the Sekondi central prisons, resulting in the death of 34 inmates in less than a month. Another 54 are reported to be in very critical condition. The disease is said to be a combination of pneumonia, cholera, and malnutrition. During an inspection tour of the prison yard with newsmen yesterday, the district secretary for Sekondi-Takoradi, Joe Armah, described the situation as worse than that of a concentration camp. Some of the small cells have as many as three persons with no blankets nor toilet facilities. According to the prison officials, they brought the worsening health situation at the prison to the notice of the deputy regional secretary on 3 June, and requested that a medical officer should be released to examine and treat the sick. However, no serious medical attention has been given to the affected prisoners. [Text] [AB010730 Accra Domestic Service in English 0600 GMT 1 Jul 83]

CSO: 5400/298

BRIEFS

CHOLERA-AFFECTED TALUKA--RAJKOT, May 23 (UNI)--The entire Limbdi taluka of Surendranagar district has been declared cholera-affected, following reports of several cases of the disease in the past few days. According to reports reaching here today, two people have died of cholera at Mojidad village in the taluka and several people have been hospitalised with symptoms of the disease in the last few days. Official sources said cholera cases had been registered with the various health centres in the taluka. Anti-cholera vaccines were being given to the villagers and till yesterday, 1,500 people had been covered under the immunisation programme, the sources added. [Bombay THE TIMES OF INDIA in English 24 May 83 p 13]

MYSTERY DISEASE REPORTED--JAIPUR, May 23--Rajasthan, the land of desert and drought, has become the home of a mysterious disease which regularly strikes children but is unmentioned in medical history. Jejunitis has no definite cure but Prof. K. C. Sogani and his team of paediatric surgeons at Sir Padampat Mother and Child Health Institute here, have been waging a brave battle against it. The disease triggers off acute abdominal pain followed by vomiting and diarrhoea accompanied by discharge of blood. Affecting children between six and 12 years of age, Jejunitis has been found occurring for the last ten years in rural Rajasthan. Since the first case was discovered in 1973, its incidence has been on the increase, touching 40 last year. [Madras THE HINDU in English 24 May 83 p 16]

AMRAVATI DIARRHEA DEATHS--DIARRHOEA DEATHS (PTI)--Six persons, including four children, died of diarrhoea on Wednesday at Warud about 50 km. from Amravati, according to official reports. About a hundred cases of diarrhoea were reported during the last one week. The affected persons were treated at the primary health centre and the general hospital at Warud where the district health officer with his staff have been camping to render medical help, a zilla parishad official said. [Bombay THE TIMES OF INDIA in English 27 May 83 p 21]

KARNATAKA GASTROENTERITIS DEATHS--EPIDEMIC DEATHS--Atleast 177 people have died of gastro-enteritis and seven of dysentery and five of cholera in Karnataka since January last, according to the state directorate of health and family welfare services. Gastro-enteritis has broken out in epidemic form following acute water scarcity and drought conditions in 16 or 19 districts. Lack of protected water supply was the main cause for the spread of the

disease, health directorate sources said. As many as 3,041 cases of gastro-enteritis 651 of dysentery and 418 of cholera have been reported since January. Gastro-enteritis has taken the highest toll of 43 lives in Mysore (rural) district, while Bangalore (urban) accounted for 42 deaths. Since the outbreak of the epidemic, the health department had rushed 1.6 million doses of vaccine to various parts of the state. An additional 400,000 doses were obtained from Bombay and Hyderabad. There is no scarcity of vaccine. [Bombay THE TIMES OF INDIA in English 28 May 83 p 15]

CSO: 5400/7122

BRIEFS

GASTROENTERITIS IN PIDIE REGENCY--Pidie Regency, Special Region of Aceh, is one of the regencies in which the Eltor disease (gastroenteritis) and other types of diarrhea break out annually. According to information received from Dr Rasyidi, chief of the P3M /Control, Prevention and Eradication of Communicable Disease/ Section of the Pidie Regional Health Service, gastroenteritis again struck Pidie Regency in May, averaging daily only four or five gastroenteritis cases at the Sigli General Hospital. As of the first week of May, there were 119 cases of gastroenteritis and diarrhea thus far in 1983. Three of these individuals died. According to 1982 data, 405 cases of gastroenteritis were treated at the Sigli General Hospital and in a number of public health centers. /Some of these individuals/ died. The data show that there were an average of 3 to 7 cases a month from January to March, rising to 24 and 32 cases in April and May, rising further in June to 53 cases and 12 deaths, 141 cases in July with 8 deaths, 60 cases in August, 45 in September, and dropping again slowly from October to December to 13 cases. According to a survey prepared by a team of WHO doctors working with the Republic of Indonesia Department of Health, the source of this contagious disease in Pidie Regency definitely is the residents' drinking water. /Excerpts/ /Jakarta MERDEKA in Indonesian 23 May 83 p 4/ 6804

DENGUE FEVER IN SURABAYA--In the past 3 months, beginning in March to Tuesday, 24 May, 38 children have died of dengue fever which struck the city of Surabaya during this rainy season. According to data for the pediatric section of the Dr Sutomo Central General Hospital in Surabaya, 55 dengue fever victims were treated in the emergency room since March and 12 of them died. In the following month the number of cases involving children rose to 85 and 15 of these died. It was also recorded that through 24 May the number of cases involving children increased further to 145 and 11 of these died. A staff doctor stated that all of them were in a critical condition when they were taken to the hospital so it was very hard to help them. /Excerpt/ /Jakarta MERDEKA in Indonesian 26 May 83 p 9/ 6804

DENGUE FEVER IN PROBOLINGGO--In Probolinggo Municipality, East Java, many children under the age of 12 were stricken with dengue fever. Dr Nurachmad, chief of the Probolinggo Municipality Health Service, clarified that of the

24 children treated at the general hospital, 20 of them could not be confirmed as having dengue fever because laboratory tests for them have not been completed in Surabaya. Thus far the 20 children are only suspected of having dengue fever. After the blood tests for four of the victims were completed in the laboratory, they were diagnosed as having dengue fever. One who died was brought too late to the hospital. The others have now been released from the hospital. /Excerpts/ /Jakarta MERDEKA in Indonesian 31 May p 4/ 6804

MALARIA IN NORTH SULAWESI--In the past 6 months 11 residents of the Tarun Resettlement Project, Lirung Subdistrict, Sangir Talaud Regency, North Sulawesi, died of malaria. Several local residents recounted to a MERDEKA assistant reporter, who toured this area recently, that the lack of health personnel at that site and the difficulty in obtaining effective medication were responsible for the daily increase in the number of victims. Those critically ill had to be taken to Lirung or Tahuna. A major obstacle for the local residents is the problem of obtaining speedy health service perhaps from health personnel in the nearest village. "We only produce various types of potatoes which are hard to sell for cash while we must pay between 2,000 and 3,000 rupiahs for each injection," they said. Although it was late afternoon when the MERDEKA assistant reporter arrived at the site, it was still possible to see that the resettlement area is surrounded by swamps. /Excerpt/ /Jakarta MERDEKA in Indonesian 30 May 83 p 4/ 6804

MEASLES IN TANGERANG REGENCY--The Tangerang Regency Health Service, which checked on Telaga Village, Cikupa Subdistrict, Tangerang, last Saturday /21 May/ discovered that children under the age of 5 were stricken with the "tampek" disease (measles). In the past month 7 children died of the disease while 12 children also stricken with the disease were treated at the Tangerang General Hospital from January to May. /Excerpt/ /Jakarta MERDEKA in Indonesian 26 May 83 p 3/ 6804

MEASLES IN BLORA--Since early March, 4 of the 17 villages in the Kedungtuban Subdistrict, Blora (Central Java), have suffered from a measles epidemic. The Kedungtuban Subdistrict has a population of about 24,000. Meanwhile a KOMPAS reporter who visited the villages stricken by the epidemic, noted that there were 42 deaths, respectively, 26 in Dukuh Wadung, 8 in Klegen Village and 8 in the Galuk Village. Information was obtained that many victims were not given assistance in the latter three villages because the villages are located far from existing public health centers; the roads are impassable even for two-wheeled vehicles and are more difficult to climb during the rainy season. Another factor is the parents' lack of knowledge about an attack of measles. Further many parents just elect to use traditional medicines and go to the dukun /shaman/ for help. /Excerpts/ /Jakarta KOMPAS in Indonesian 16 May 83 p 8/ 6804

SUMATRA CHOLERA DEATHS--Jakarta, Fri.--At least 25 people died within a week during a sudden outbreak of cholera which created panic in 13 villages in West Sumatra from May 31 to June 6, a local report said yesterday. Local health centres reported 447 cases, with the village of Cubadak, Pasaman Regency, the worst hit, when 12 people died on June 1, it said. Medical officers initially suspected river water used for drinking and bathing purposes as source of outbreak, as well as foodstuffs sold at market. The report said another possibility, still under investigation, is the spreading of the disease from the provincial capital Padang, 250 km away, where it is known more than 400 cases have occurred, three of them fatal. [Text] [Kuala Lumpur NATIONAL ECHO 18 Jun 83 p 4]

DENGUE FEVER OUTBREAK--Jakarta, June 7 (AFP)--At least fourteen people have died in less than three weeks from a dengue hemorrhage fever outbreak in the Jatinegara District of east Jakarta, reports said today. Worst hit is the Cipinang Besar sub-district where the first death was reported on May 20, Jakarta newspapers reported. To stem the outbreak, the East Jakarta health service has launched a massive anti-mosquito spraying and fumigation campaign in the affected area. [Text] [BK100653 Hong Kong AFP in English 0845 GMT 7 Jun 83]

WEST SUMATRA CHOLERA OUTBREAK--Jakarta, June 16 (AFP)--At least 25 people died within a week during a sudden outbreak of cholera which created panic in 13 villages in West Sumatra from May 31 to June 6, the daily KOMPAS reported today. Local health centers (Puskesmas) reported 447 cases, with the village of Cubadak, Pasaman Regency, the worst hit, when 12 people died on June 1, the paper said. Medical officers initially suspected river water used for drinking and bathing purposes as source of outbreak, as well as foodstuffs sold at market. The daily said another possibility, still under investigation, is the spreading of the disease from the provincial capital, Padang, 250 kms (15.5 miles) away, where it is known more than 400 cases have occurred, three of them fatal. Cases of cholera in Padang have not been published so as not to worry delegations to the 13th National Koran Reading Competition, the paper said. [Text] [BK160644 Hong Kong AFP in English 0505 GMT 16 Jun 83]

GASTROENTERITIS IN EAST KALIMANTAN--Acute gastroenteritis is again raging in East Kalimantan, due to protracted drought in certain areas. In Samarinda the number of sufferers increased markedly during March and April. Dr H. Supangat, chief of Samarinda City Health Service told KOMPAS Monday, that 1,305 cases were reported throughout East Kalimantan during March, of whom 777 sufferers were admitted into the hospital, while the remainder were treated as outpatients. According to records, 21 persons in Samarinda died of acute gastroenteritis in April. Eleven others had succumbed to the epidemic during the January-March period. This brought the total number of deaths to 32 in four months. A total of 486 people fell victim to the disease, of whom 199 required hospitalization and 287 others were given medical treatment as outpatients. The inpatients were put up at Samarinda General Hospital, Dirgahayu Hospital and some polyclinics located in Samarinda area. The general hospital is full of gastroenteritis victims, mainly children which has required a nurses' training classroom to be transformed into a ward. A source in the public health service said the actual figures of gastroenteritis sufferers and casualties may be higher than those recorded by the authorities. [Excerpts] [Jakarta KOMPAS in Indonesian 5 May 83 pp 8, 9] 9300

GASTROENTERITIS IN SORONG CITY--Acute gastroenteritis has been rampant in Sorong City, Irian Jaya since November 1982. One person died of the Ogawa-type cholera last week. This week (April) 29 people were down with acute gastroenteritis, and it was confirmed that 7 of them were suffering from cholera. However, they all recovered after prompt and correct treatment. The above fact was divulged by Samsudin Oramahe, an official of the local health service, District II, Sorong, Irian Jaya, ANTARA reported. [Excerpt]
[Jakarta MERDEKA in Indonesian 4 May 83 p 4] 9300

5400/8427

WATER, SEWAGE IMPROVEMENT PROJECTS SET TO BEGIN

Kingston THE DAILY GLEANER in English 25 Jun 83 p 16

[Text] Two contracts valued at \$7.4 million were signed yesterday for work to start on the Greater Mandeville Water Supply Project and the installation of sewer mains in Washington Gardens. The signing took place at the offices of the National Water Commission in New Kingston.

The Minister of Public Utilities, the Hon. Pearnel Charles, signed on behalf of the Ministry while the chairman of the National Water Commission, Mr. Cecil Charlton, signed on behalf of the Commission.

The Greater Mandeville Water Supply Project is to begin within the next two weeks and will supply some 104,000 consumers in Mandeville and its environs with water.

Construction of the scheme is expected to last 15 months and cost \$5.2 million. Contractors are Consolidated Engineers Ltd, who were represented at the signing by Mr. T. Clarke and Mr. G. Williams.

According to the Minister, the project, which is jointly sponsored by the Jamaican Government and the Inter-American Development Bank, includes the construction of four reinforced concrete reservoirs, a 50,000-gallon steel tank, modification to another tank, and the construction of four re-lift stations, including all ancillary and appurtenance structures.

The National Water Commission is to have full responsibility for the implementation of the project.

Construction of the Coleyville Sewer Mains in Washington Gardens is part of Phase 1 of the Kingston and St. Andrew Sewage Scheme, and it is being undertaken by Edwards Construction Company, Ltd., at a cost of \$2.2 million. Construction work is expected to last 32 weeks.

The scheme involves the installation of sewerage collection systems, mains, laterals, manholes and associated works in Washington Gardens, St. Andrew. Two representatives from the company, Miss D. Edwards and Mr. E. Christie, were present at the signing. Also present were Mr. A. Namis, a representative of the I.D.B., Mr. V. Hemmings, Mr. S. Small and Mr. D. Twatchman, all of the N.W.C.

CSO: 5400/7589

KUWAIT

BRIEFS

MORE HERPES CASES--In a health seminar held yesterday on herpes which was attended by a number of doctors at the Health Ministry, Health Minister Dr 'Abd al-Rahman al-'Awadi said the number of cases of this disease has reached 500 and that there are 15 new cases discovered monthly. [Excerpt] [GF041505 Kuwait AL-QABAS in Arabic 3 Jul 83 p 1]

CSO: 5400/4523

BRIEFS

MTOLA VILLAGE RABIES OUTBREAK--Twelve cattle and two pigs were reported to have died in a rabies outbreak in Mtola village, near Theweleketete dip tank in the area of Inkosi ya Makosi M'belwa Three in Mzimba District recently. A spokesman for the District Veterinary Office in Mzimba told Mana that a rabid dog belonging to a man in that village caused the outbreak. The spokesman said the dog which was not noticed by the owner to have rabies died a few days after biting the animals and was buried ignorantly. Veterinary officials estimated that about 200 people might have eaten or come in contact with the meat of the rabid animals before the outbreak was confirmed. They advised the public there to go at Manyamula Health Centre for anti-rabies vaccination. [Text] [Lilongwe DAILY TIMES in English 8 Jul 83 p 1]

CSO: 5400/307

INCREASE IN DENGUE, MALARIA CASES IN SARAWAK

Kuala Belait BORNEO BULLETIN in English 11 Jun 83 p 2

[Text]

KUCHING. — Dengue fever returned with a vengeance in Sarawak last month after a four month lull in the disease.

There were 22 suspected cases during May, compared with 10 or so for the average month last year when there were 101 dengue fever victims.

The resurgence of the disease has led the state Medical Department and local councils to step-up their campaign against aedes mosquitoes, which carry dengue from the sick to the healthy.

The measures used against the mosquitoes include fogging with insecticides and destroying their breeding places in water-filled containers and small pools.

The Medical Department has reminded the public that failure to keep house compounds free of aedes breeding places can lead to fines of \$100.

Water stored in drums and tanks can also be treated with the chemical Abate, which kills the wriggling mosquito larvae.

Most of last month's cases came from around Kuching, Sibu and Lawas.

The Kuching District accounted for half the total, with dengue's range extending from Kilometre 27 (Mile 17) Kuching-Serian Road, into Kuching town, and to the coastal villages of Nonok and Bako.

Mosquito surveys show that the aedes population is very high in the affected areas.

Similar high aedes densities have been noted in various Sabah towns now that drought-ending rains have provided the mosquitoes with plenty of breeding places.

There were three den-

gue cases in Sabah early this year, and the Medical Department has warned that the disease could reappear in the state unless the public co-operates in the fight against aedes.

Malaria, another disease carried by mosquitoes, is also causing concern in Sarawak.

There were 327 cases recorded from the start of the year to May 7, compared to 262 during the same period last year.

The Sarawak Medical Department has responded by intensifying its malaria control campaign, particularly in the border areas where the disease is usually found. Most cases are believed to originate in Kalimantan where little is done in the way of malaria control.

The Medical Department has resumed spraying the insecticide DDT on houses and farm huts

in border areas.

This method of controlling anopheles mosquitoes, which carry malaria, was stopped some years ago after the disease was brought well under control.

The department is also supplying anti-malaria drugs to people intending to work in timber camps in Sarawak, Sabah and Kalimantan, as well as to village headmen to give to suspected malaria victims (anyone who comes down with a fever) and visitors from Kalimantan.

◆ Cholera remains a serious health problem in Sabah, but appears to be on a downward trend.

During the week ending last Saturday, 29 cases were recorded, compared with 42 cases the previous week. The total for the year stood at 1,253 on the Saturday.

CSO-5400/8431

MALAYSIA

DENGUE SITUATION IN SARAWAK 'STILL SERIOUS'

Kuala Lumpur NATIONAL ECHO in English 16 Jun 83 p 3

[Text] Kuching, Wed.--The dengue situation in the Lawas District in Sarawak Fifth Division is still serious with 23 cases reported since January including four dengue haemorrhagic fever cases.

A statement issued by Medical Department yesterday said about 40 per cent of the total cases were reported this month and the number was increasing.

More cases are expected to be detected in the next one or two months.

The affected areas are Kampong Seberang, Kampong Banting, Sekolah Menengah Kerajaan Lawas, Kampong Lumut, Trusan and Kampong Gaya.

An operation room has been set up at the Lawas District Hospital to monitor the dengue situation and coordinate control measures.

The statement said health inspectors would be sent to the district to assist in the anti-dengue operation such as thermal spraying of infected areas to destroy breeding grounds.

Members of the public are also advised to take all necessary precautionary measures to stop the aedes mosquitoes from breeding in their homes. They should keep all storage containers well covered or apply abate larvicide to large containers.

The statement also advised members of the public not to travel to the infected areas to prevent the spread of the disease.

Those who have symptoms of fever, muscle ache, joint pain and rashes should seek immediate medical treatment.

CSO: 5400/4432

CHOLERA STRIKES STUDENTS IN PAHANG STATE

Kuala Lumpur NEW STRAITS TIMES in English 26 Jun 83 p 2

[Text]

KUANTAN, Sat. — Cholera, and not food-poisoning, may have caused 41 hostel students of Sekolah Menengah Kebangsaan Alur Akar here to take ill after they broke fast on Monday night.

This conclusion was reached after medical authorities found that seven of them, including a girl, had cholera.

All seven have been admitted to the Kuantan General Hospital and their condition is reported to be not serious.

It was earlier reported that 13 boys and 28 girls had come down with fever, diarrhoea and vomiting on Monday night.

They were given medical treatment and one, whose condition was bad, was admitted to the hospital.

The boy has since been discharged.

Medical teams, seeking to pin-point the source of the illness, have since discovered that the students could have been suffering from cholera.

Hygiene

Meanwhile, precautionary measures are being taken at the hostel to arrest the spread of the disease.

There are about 300 students staying at the hostel.

Pahang, which was free of cholera for the past four years, has been affected this year.

One person, a 78-year-old pensioner from Tanah Putih, died from the disease.

Two cases have been reported in Tanjung Lumpur here and one in Pekan since May.

Preventive measures are being taken and numerous health talks on the disease have been given at the village and Tanah Putih.

People have been advised to drink only boiled water and observe strict hygiene.

CSO: 5400/8431

NEW GONORRHOEA STRAIN RESISTANT TO MEDICATION

Kuala Lumpur NEW STRAITS TIMES in English 28 Jun 83 p 11

[Text]

KOTA BAHARU, Mon.

— Doctors in Pasir Mas and other towns in Kelantan are baffled by a gonorrhoea strain which has proved resistant to all known medication.

The "super" gonorrhoea strain came to light when a private practitioner in Pasir Mas, eight km from Sungai Golok, was approached for treatment by several men suffering from it a few months ago.

The doctor discovered that despite treating the gonorrhoea victims with all known medicine, the disease could not be cured.

The doctor, who de-

clined to be named, said the gonorrhoea victims saw him separately but tests showed that they were definitely suffering from gonorrhoea, a sexually transmitted disease or VD.

The doctor who prescribed the strain as "strange," said he prescribed several tubes of medicines which were known to be effective against the disease but the medicines failed to cure the patients despite repeated attempts.

He said he was positive that several other doctors in the State had also come across similar cases recently.

An NST report earlier this month said several

types of sexually transmitted diseases among Thais were found to be immune to known medical treatment.

Another doctor in town said the number of gonorrhoea cases in the State had increased.

The doctor said that one reason for the increase was probably the closeness of the State to the border town of Sungai Golok where the "flesh market" is doing "brisk

business."

On syphilis, both doctors said it was more difficult to detect because patients who went for treatment often discontinued it mid-way.

"It normally takes several months to determine whether a person is suffering from syphilis because the symptoms can only be recognised after the germs have attacked the victim for some time," the doctors said.

CSO: 5400/8431

MALAYSIA

BRIEFS

DENGUE UNDER CONTROL--Kuala Lumpur, Sun.--The dengue situation in Sarawak is under control as all necessary steps have been taken to contain the disease, the Health Ministry said yesterday. The Ministry's Director of the vector-borne disease control programme, Dr. Mehar Singh Gill, said that Health authorities in the State were now carrying out gotong-royong campaigns in the Lawas district to eradicate aedes mosquito breeding grounds. Forty-two cases--34 dengue and eight dengue haemorrhagic fever cases--had been reported in the Lawas area to date. [Text] [Kuala Lumpur NATIONAL ECHO in English 20 Jun 83 p 3]

CSO: 5400/4432

INFLUENZA EPIDEMIC REPORTED THROUGHOUT COUNTRY

'Phantom Flu'

Wellington THE EVENING POST in English 21 Jun 83 p 32

[Text]

A VIRUS that feels a lot like flu, but isn't, is keeping a lot of New Zealanders away from work.

The Health Department, which monitors influenza cases each winter, has been discovering more cases of phantom flu than anything else.

Dr Campbell Begg, director of health promotion, said in the past week schools and employers were reporting high levels of absenteeism. The cause was a respiratory virus that, along with a cough, had similar symptoms to flu.

But the department cannot quote numbers who have gone down with the virus because most people just go to bed and do not see a doctor.

As for the flu itself, so far the National Health Institute in Wellington has isolated about 10 cases from different parts of the country.

A number of varieties have been found but so far none of the new A-Philippines strain that was expected this winter.

Philippines Flu Suspected

Christchurch THE PRESS in English 23 Jun 83 p 8

[Text]

The influenza going through Christchurch schools and workplaces may turn out to be Philippines flu, vaccine for which is not available in New Zealand.

The Christchurch Medical Officer of Health, Dr W. A. Malpress, said throat swab tests had identified the strain as Influenza A. The Philippines flu, expected to arrive in New Zealand sometime this winter, belongs to the same general group.

"There is a good chance it is that sort of virus that has been flying round in Australia, the United Kingdom, and North America," he said. "It has probably arrived now."

Virologists at Christ-

church Hospital would take a further one to two weeks to identify the exact virus.

Dr Malpress said most sufferers had a "fairly mild" dose which lasted a few days, but a few also developed a secondary infection.

The Health Department's director of the health promotion division, Dr Campbell Begg, was more skeptical about the arrival of the Philippines flu.

He said most cultures isolated so far had proved to be an Influenza A strain which had been going round New Zealand since last year. Two cultures still being processed would go to the United States for further tests to determine if they

were the Philippines virus.

"But it is suggestive only," Dr Begg said.

It was not possible to attribute a high rate of absenteeism in New Zealand only to influenza.

The influenza strains already identified reacted to existing vaccine. However, Dr Begg said a vaccine being developed overseas for Philippines flu was unlikely to arrive in New Zealand this winter.

In Auckland, primary school principals say the flu epidemic there is the worst for 15 years.

Some family doctors in Auckland are treating as many as 60 cases a week of the flu, which is hitting young people the hardest.

Influenza Strain Identified

Christchurch THE PRESS in English 24 Jun 83 p 5

[Text]

The influenza epidemic sweeping Christchurch is now likely to peter out, according to Christchurch Hospital virologists.

They identified yesterday the virus as Influenza H1N1, a relation to the Russian flu. The virus was not the Philippines strain earlier thought to be a possibility, although it belonged to the same general group.

The hospital's chief virologist, Dr L. C. Jennings, said the H1N1 strain had mostly affected schoolchildren. It

was now spreading to adults in their families who were more likely to have some resistance to the virus from earlier contact.

"I think it will slowly peter out from now on," he said.

The Russian strain swept through the world in 1977 after a 30-year disappearance. There was an Auckland epidemic in 1979 with a number of related deaths, but few outbreaks were reported in the South Island.

Dr Jennings said it was

interesting to note that some cases had been isolated in Wellington involving a Hong Kong flu-type virus. That was more closely related to the Philippines flu, expected to arrive in New Zealand this winter.

At least one school in Dunedin has had to postpone its sixth-form and seventh-form mid-year examinations. One high school had 375 out of 990 pupils away yesterday and another had 40.2 per cent of its 290 pupils absent.

Epidemic Claims First Victim

Wellington THE EVENING POST in English 30 Jun 83 p 26

[Text]

An 18-year-old Christchurch university student has died as the result of complications from the flu.

The young woman, a first-year student from Wanganui, is the first victim of the influenza epidemic that has been recorded in all parts of the country.

The University of Canterbury registrar, Mr William Hansen, said the woman was living in the University Hall — one of the student halls of residence — with 300 other students.

Complications

Along with many others she contracted the flu, but her condition developed complications and turned into pneumonia.

"The doctor was called to her and she was admitted to hospital," Mr

Hansen said. "It was one of those dreadful unfortunate circumstances."

She died on Saturday and a memorial service, attended by her parents, was held in Christchurch on Monday.

No 2?

The Health Department in Wellington has been advised of the death and officials are also seeking information on another South Island death, involving a young person, which might also be the result of the flu.

Most health districts are reporting high levels of influenza and hospitals are reporting that some patients with flu have been admitted.

"We have got an epidemic and it is influenza," said the Health Department's director of health promotion, Dr Campbell Begg.

When reports first started coming in it had appeared that what people were catching might have been more of a flu-like virus than the flu itself.

But tests have confirmed that the virus is A/England influenza, a strain that has been present in New Zealand for a number of years but not to any great extent.

"We haven't had much of this over the last three years. That allows the number of susceptible people to increase. That is why so many people are getting it," Dr Begg said.

He said what people usually called flu was not really flu. If they get this "real A/England flu" they could expect to feel ill.

Sudden

Dr Begg said it was hitting people of all ages and it was characterised by how suddenly it could appear.

"You are well; then you are suddenly ill."

The symptoms were the usual ones of aches and pains, headaches, high temperature, sore throat, cough and generally feeling ill.

CSO: 5400/4442

BRIEFS

VIRUS HITS SCHOOLS--An influenza epidemic has hit many Dunedin schools and large numbers of pupils have stayed at home this week because of the illness which first appeared in the city about a week ago. Classes have been depleted by up to 50 percent in many cases. Kaiforai Valley High School has had more than 400 pupils out of a roll of 990 absent. The principal, Mr D. Rathbone, said the situation was so serious that sixth and seventh form examinations due to start this week had been postponed until next month. A Health Department spokeswoman in Auckland said yesterday that the department had not noticed any abnormal rise in the incidence of influenza-type illness this winter. [Text] [Auckland THE NEW ZEALAND HERALD in English 22 Jun 83 p 3]

CSO: 5400/4442

GOVERNMENT'S HEALTH ACHIEVEMENTS DESCRIBED

Managua EL NUEVO DIARIO in Spanish 3 Jun 83 p 7

[Article by Maria Auxiliadora Lezama: "Enormous Achievements"]

[Text] (ANN)--Nearly four years after the Revolutionary Government took power, the infant mortality rate in Nicaragua has fallen by 2.99 percent as a result of health programs implemented nationally.

According to Ministry of Health sources, this has made it possible to reduce the number of infants dying from 120 to 90 for every 1,000 live births. Life expectancy at birth has also risen from 55 to 57 years between 1978 and 1982.

Despite the serious economic difficulties afflicting the country, the result of financial blockades and military aggression, there were no cases of polio or dengue reported this past year. The rate of malaria has also been reduced by 80 percent and there were only two cases of diphtheria.

While recent months have seen a drop in the level of malnutrition among babies, the problem of gastroenteritis still persists, a problem recognized by health authorities as the main problem for Nicaraguan children.

Preventive Medicine

Development of the new health system in Nicaragua has been based on the implementation of programs of primary care and preventive medicine, actively supported by the population through the People's Health Days. These projects, begun in 1981, are held periodically throughout the country.

The program, in which the various mass organizations participate in the study, training for and execution of health plans, has made it possible in the past 2 years to give 6 million vaccinations for polio, whooping cough, measles, diphtheria and tetanus.

At the same time, the number of consultations at hospitals and clinics increased from 2.4 million in 1977 to 6.3 million in 1982, which represents an average of 2.1 medical visits per person.

Training of Doctors

Through the Ministry of Health and the National University of Nicaragua (UNAN), the Sandinist Government is going ahead with programs to train doctors through theoretical study in their area of specialization with direct practice, basically in the rural areas of the country.

Some 2,130 Nicaraguan doctors are working in rural areas, taking care of traditionally deprived regions, while another 2,000 students pursue their course of study. The country has postgraduate courses for doctors and dentists and specialization in 15 different surgical, Health Administration and epidemiological clinics.

Since July 1979, over 3,000 technicians and assistants have been trained and are now working in the rural areas of Nicaragua. This figure constitutes 42 percent of the number trained in the last 50 years.

Nevertheless, according to information from the Pan American Health Organization (PAHA), Nicaragua is still short of human resources in medicine. It has 5.5 doctors for every 10,000 inhabitants. The average required is 8.

\$118 Million

In 1982, the Nicaraguan Government devoted the equivalent of \$118.3 million of its national budget to the health sector. That amount increased to \$152.8 million this year, 16 percent of the total and thereby exceeding figures for the rest of Latin America, which does not exceed 10 percent.

In health care programs, to which the Somoza regime gave approximately \$18 a person, while the figure is at least \$50 today, health units have been expanded throughout the country. There are now 31 hospitals, 98 health centers, 366 out-patient clinics and 4,700 hospital beds. This infrastructure represents a cost of \$100 a day per patient.

This health program has enabled Nicaragua to become president of the Executive Committee of the Pan American Health Organization (PAHA), in recognition of the work done over the past 4 years. It has also been chosen by the World Health Organization (WHO) and UNICEF, along with eight other countries, as a pilot nation for health strategies to be developed throughout the world for the year 2000.

11,464
5400/2093

MAJOR PROJECT TO ESTABLISH HEALTH FACILITIES BEGINS

Muscat TIMES OF OMAN in English 16 Jun 83 p 1

[Article by Muzaffar Mohammad]

[Text] The Ministry of Health has embarked upon a big programme for setting up health facilities at major urban and rural centres in the country.

The programme which includes the construction of 24 health establishments at a cost of R.O. 6,450,000 is aimed at providing modern health facilities to people in remote areas.

This was stated by Dr. Murthadha Jaffar, Director of Planning, Statistics and Follow Up at the Ministry of Health this week.

He said the programme includes building five mini-health centres at Wadi Mastal, Wadi Bani Kharous, Wadi Bani Auf and Wadi al Haimli in Rustaq Wilayat and at Wadi al Hawasna in Wilayat Khaboura.

Four dispensaries will be constructed at al Sininah and Wadi Fida in Wilayat Ibri; Al Fiyaz in Wilayat Buraimi and Ghina in Wilayat Bilad Bani Bu Hassan.

Five primary care units have been planned for Yeti in the Capital; Wadi Wahlam in Wilayat Sur; Al Mashaiq in Wilayat Suwaiq; Al Hailshi in Wilayat Khaboura and Al Qabil in Wilayat Buraimi.

Three malaria control units will be constructed at Jalan, Ibra and Bani Rawah in Wilayat Sumail.

Sur and Ibri will get two public health compounds while Bukha in Musandam and Khaboura and Seeb will be provided with mother-and-child health care centres.

Two medical stores will be built in Salalah and Musandam.

The development plan has provisions for the expansion of certain health facilities. Accordingly health centres at Bilad Bani Bu Ali and Bilad Bani Bu Hassan will be expanded to cater for the increased health needs in the areas.

Blood banks in Sur and Salalah will be equipped with more modern facilities to facilitate investigation and analysis of blood.

The health programme which is due to be implemented shortly envisages an extension to Rustaq Hospital to add more beds and increase facilities for treatment.

Dr. Murthadha Jaffar said that the Ministry has approved the preliminary designs of the new health establishments and land has been obtained for the projects.

CSO: 5400/4522

ENFORCEMENT OF FOOD HYGIENE LAW

HK050839 Beijing RENMIN RIBAO in Chinese 1 Jul 83 p 4

[Commentator's article: "Seriously Enforce the 'Food Hygiene Law'"]

[Text] China's first "food hygiene law" goes into effect from 1 July this year. "The people regard food as the most important thing." The enforcement of this law is an important state policy decision to guarantee the people's health, and a great event in the people's daily life. The "food hygiene law" provides an important basis for struggling against the conduct of jeopardizing the people's health. The food production and sales units at all localities, especially the commercial and health workers and market management personnel, must conscientiously implement this law and supervise its implementation.

Over the past 30-odd years since the founding of the state, the party and the government have always paid great attention to public health. However, due to the low level of economic development in the past, the people considered it more important to have enough food to eat rather than consider the hygienic requirement of the food. Since the 3d Plenary Session of the 11th CPC Central Committee, great progress has been achieved in our economic work. Now the people must not only have enough food but must also have hygienic food to eat. Moreover, the development of foreign trade over the past year or so also requires a great improvement in food hygiene so that our export food can enjoy high international prestige. The "food hygiene law" was enacted under this new situation in light of the concrete conditions of our country. It shows that the food hygiene work in our country has entered a new stage.

Generally speaking, the food hygiene situation in our country has been relatively good over the past year or so. However, there are also many problems. The equipment of some food enterprises and catering trade departments is outmoded. Some workshops are simple and crude. The technological level is low and the sanitary equipment is backward. In addition, some cadres in charge of food hygiene work have not attached due importance to this work. As a result, some jobs have not been done as well as they should have been. Although conditions are similar for some enterprises, there are still great differences in their food hygiene situations. This must be changed as soon as possible so that various kinds of food can meet the demands of the "food hygiene law."

The commercial departments play an important role in the implementation of the "food hygiene law." At present, more than 1/2 of the social food products are produced and managed by the commercial departments themselves. Besides this, they also produce and manage some related products such as food additives, food strengthening agents, food containers, and packing materials. In commercial departments, there are more staff members and workers who are directly or indirectly engaged in food production and management. Therefore, whether a good job is done by the commercial departments has an important bearing on the implementation of "food hygiene law" and on the improvement of the off hygiene situation in our country. The broad masses of commercial workers are expected to conscientiously fulfill this mission.

At present, it is a pressing task for the commercial departments to establish and perfect the food hygiene management and supervision organs and provide them with professional management personnel and inspection equipment. It is necessary to strengthen the legal sense of the commercial workers through education in business morality so that everyone can understand the law, conscientiously implement and abide by it, and supervise one other in the implementation. It is necessary to take resolute preventive measures against food poisoning and lay stress on reorganizing those enterprises in which production conditions and food hygiene facilities are poor, and whose products often cause food poisoning. A deadline must be set for the improvement of the hygiene situation in these enterprises. The production in some of these enterprises must cease and their products must not be sold.

It is an important job to inspect the food hygiene of individual traders. Since these traders are doing business separately, selling all kinds of food, it is more difficult to conduct management over their commodities. Moreover, a small number of peddlers and traders who put profitmaking first have sacrificed the interests of the consumers in seeking their private gains. This can never be allowed. The administrative and management departments for industry and commerce must work hard to discharge their responsibilities in this respect. They must adopt legal measures and rely on all the social forces to fundamentally improve the situation of food hygiene.

CSO: 5400/4153

DEVELOPMENTS IN HEALTH OF NATIONAL MINORITY GROUPS

Beijing JIANKANG BAO in Chinese 5 May 83 p 1

[Text] Our reporter has learned the following news from the arrangements group for the upcoming National Minorities Health Work Conference: Under the kind care of the party Central Committee and the State Council and with the active support of coastal and inland people and various concerned departments, health services for our national minorities have developed considerably in the past few years and the work of disease prevention and treatment has met great success.

According to statistics, by the end of 1982, medical, pharmacological and health organizations in national minority areas have grown from just more than 1,100 in 1952 to more than 28,200, a 23-fold increase. Specialized health technicians have increased from more than 17,800 in 1952 to more than 368,800, a 19-fold increase. Within this group, there are more than 80,500 national minority specialized health technicians (including 3,402 doctors). In addition, the great majority of rural and pastoral areas have set up health organizations, and trained barefoot doctors, production team health personnel and midwives. A medical treatment and health network has already begun to take shape in the national minority areas in both town and countryside. Disease treatment and prevention work has achieved great results. As early as the end of the 1950's, smallpox had already been stamped out, the plague, venereal disease, relapsing fever and other diseases had been basically eliminated, widespread epidemics of malaria have been controlled, and other diseases have markedly decreased. Profound changes have taken place in the outlook for health, and the health standard of the masses have clearly improved, fundamentally changing the situation as it was in the old China, when national minority areas were without doctors or medicine, epidemic disease ran rampant and the population decreased sharply. In recent years, the work of exploring, systematizing, carrying on and developing the medical and pharmacological work of the Zang, Mongol, Uighur, Dai and other nationalities has received a high degree of attention, made heartening progress and been well received by the various nationalities.

12452

CSO: 5400/4148

BRIEFS

SHANXI FARMERS POISONED--Our local reporter Zhang Zhiqiang [1728 1807/1730] reports that on 21 April in Dazhang Production Brigade, Yangyu Commune, Wenxi County, Shanxi, 49 commune members were severely poisoned by drinking contaminated water. One died and 48 were critically ill. Hospital laboratory tests confirmed it to be acetamide fluoride poisoning. They urgently needed an antidote for acetamide, but because Wenxi County did not have this antidote, they immediately dispatched people and sent telegrams to find it. At this critical juncture, the leaders of Wenxi County telephoned that very night to the Shaanxi Provincial Medicine Company. Early in the morning on 22 April, the person in charge of the Shaanxi Provincial Medicine Company immediately organized people to verify and prepare the necessary drugs. In order to seize this rescue opportunity, the Shaanxi Provincial CPC Committee asked an air force unit to send the drugs by plane. A specially assigned person sent by the Shaanxi Provincial Medicine Company also went to the plane. At 0900 on the 22d, a "Yun-5" model aircraft landed at Shanxi's Houma Airfield. The drugs were rapidly sent to the rescue scene. The 48 poisoned members were saved, and quickly recovered and took part in production. [Excerpts] [Beijing JIANKANG BAO in Chinese 8 May 83 p 1] 12452

HUITONG MEASLES OUTBREAK--Measles outbreaks have continually increased in Huitong County since 1982. For example, there are more than 370 people in the Xiushan Production Brigade of Yantou Commune, within 1 month of the first case at the beginning of the year, 64 people developed measles, a disease incidence of 17.2 percent. From survey analysis, it was found that the disease incidence was 16.6 percent in the under 4 age group, 40.6 percent in the 4 through 7 age group, and 64.6 percent in the 8 through 11 age group. The vast majority of children who fell ill had a history of measles vaccination. In my understanding, this brigade's recent "measles vaccine" inoculation task was basically complete. But because there was little vaccine, year by year they inoculated only the lower age group, and the higher age group was unable to be revaccinated. Their immunity gradually decreased and with the sudden appearance of a contagious source, it was hard to avoid touching off an epidemic outbreak. I believe that a major reason for the appearance of such a state of affairs is that in the past, the plan for measles vaccine distribution and inoculation was not handled well. The nation has no unified revaccination plan. Certain areas only stress inoculating lower age groups. (In distribution, vaccine is only supplied to the lower age groups.) When an epidemic suddenly arises in the higher age

groups, it is very difficult to find vaccine. Consequently, I appeal to the concerned departments to increase the amount of vaccine production and to hammer out a practical, rational vaccination plan. At the same time, I propose that children under 15 be revaccinated every 3 to 5 years in order to increase the immunity of those in the susceptible age group, to control measles epidemics and to protect children's health. [Text] [Beijing JIANKANG BAO in Chinese 24 Apr 83 p 3] 12452

CSO: 5400/4148

HEALTH MINISTRY ISSUES WARNING ON SPREAD OF MALARIA

Lima LA PRENSA in Spanish 16 Jun 83 p 7

[Text] There will be 120,000 cases of malaria in Peru this year, according to estimates made by Leopoldo Cuzquen, director for communicable diseases in the Health Ministry. He said that \$10 million is needed to carry out a program against this disease that broke out again in zones where it had been eradicated.

Cuzquen stated that the area of the country affected by the disease, which was 950,000 square km in 1957 and 180,000 in 1981, has spread to 700,000 square km. He judged that if health measures are not taken the malaria will spread throughout the national territory within a minimum of 2 years.

"It also could happen that the parasite 'plasmodium falciparum' that exists in Colombia and Brazil and kills 30 percent of those persons attacked may spread to Peru and aggravate the problem," he indicated.

Cuzquen revealed that this disease is found most frequently in the northern zones of the country, Alto Amazonas and Loreto, where 13 percent of the people suffer from malaria.

He explained that the transmitters of this disease are now immune to insecticides and therefore there is a need to study new means of control. These mosquitos have been detected along the Jequetepeque River and in Piura.

Cuzquen, also secretary general of the Epidemiological Society, indicated that since 1981 the budget has not been sufficient to eradicate malaria and also the organization of the program was not effective.

Dr Carlos Quiros, president of the mentioned association, was of the opinion that despite the fact that the Social Welfare Fund Law was not repealed, the money intended for the health sector has gone into the public treasury, so that that ministry has seen reduced funding.

Quiros, in taking up other matters, warned of possible outbreaks of malaria, equine encephalomyelitis and bubonic plague in the north of the country due to the rains and flooding.

He explained that epidemics may break out when the waters fall and the rains stop because of the increase in vectors and the unhealthy conditions under which the population lives.

He said that the Epidemiological Society has presented a letter to the Health Ministry offering the technical services of 40 associates to establish suitable sanitary measures and to prevent the misspending of funds destined for those emergency zones.

In addition, Dr Quiros indicated that epidemiology is a neglected discipline in Peru, although it is important in preventing diseases as well as accidents and disasters.

9746

CSO: 5400/2092

LEPROSY CASES ESTIMATED AT 12,000

Lima EL COMERCIO in Spanish 22 Jun 83 p A 10

[Text] The Health Ministry has registered 4,000 leprosy victims, but the number could rise to 12,000 because the disease is hidden for social reasons and there are 100 new cases annually, 80 percent of which are registered in the Amazon region.

The greatest incidence of leprosy is in Loreto, San Martin and Madre de Dios. In Lima, about 200 persons are receiving outpatient treatment, Jose Neyra Ramirez, president of the Advisory Committee for Hansen's Disease, reported yesterday.

Resistance of the Microbe

He also said that the microbe associated with the disease is showing resistance to the sulfa drugs, the classic remedy for leprosy.

He added that it has been demonstrated that Rifampicina, a medicine used in treating tuberculosis, is quite effective in curing leprosy. He noted that the ministry has sufficient stocks and that they have now begun to use this new drug.

On the other hand, he pointed out that leprosy is not highly contagious and contagion occurs only when there is permanent and intimate contact and also when the person is predisposed to the microbe.

He made these statements during the ceremony at the beginning of the Second National Seminar on Hansen's Disease, an act that was presided over by Assistant Minister of Health Carlos Bazan Zender.

The purpose of the gathering is to coordinate the activities for control of leprosy. In addition to responsible officials with the ministry's Hansen's disease program, participating are specialists from the Peruvian Social Security Institute, the universities, the armed forces and private organizations.

Also, the representative of area five of the Pan American Health Organization [PAHO] pointed out the determination of the Peruvian Government to eradicate this disease, explaining that over many centuries and in different countries it has always been sidestepped.

He said that 3 million cases of leprosy are registered in the world, but as in Peru, the true figure is three times greater than that.

In regard to the prevalence of the disease, he said that it was 1.3 per 1,000 inhabitants in regions where it is considered endemic.

9746

CSO: 5400/2092

PERU

BRIEFS

NUTRITIONAL DEFICIENCIES IN CHILDREN--Dr Juan Franco Ponce, minister of health, affirmed yesterday that the malnutrition being suffered by almost 40 percent of the children of Peru is not due to a lack of food but to nutritional deficiencies of the foods that are ingested. He made his statements after inaugurating a nutrition clinic on the third floor of Daniel Alcides Carrion del Callao Hospital for the investigation, prevention and curing of malnutrition, especially in children. The head of the Health Ministry explained that many mothers lack knowledge in preparing food for children. At the same time, he announced that in June there will be a program on sanitary literacy to impart standards on how to provide a good diet for the child. The clinic inaugurated by Franco Ponce is under the Center for the Investigation of Nutrition and Food Control, which is headed by Dr Orestes Botto Rada. The department has a hospitalization room with 18 beds, a laboratory with equipment from the National Higher University of San Marcos and an outpatient consulting room for the small patients. [Text] [Lima EL OBSERVADOR in Spanish 25 May 83 p 8] 9746

RABIES CAUSES TWO DEATHS--Trujillo, 5 Jul. (LA PRENSA)--An adult and a young boy from the Chicama and Viru countryside died from rabies in Regional Hospital in this city. Dr Eduardo Montalban Amaya, director of Epidemiology in Health Region IV, said that the fatal cases were due to the lack of a timely vaccination after the victims had been bitten by dogs suspected of being bearers of the terrible malady. He recalled that in 1982 there was only one case of human rabies, which resulted in the death of an afflicted person from Otuzco. He appealed to dog owners to have their dogs vaccinated. [Excerpt] Lima LA PRENSA in Spanish 6 July 83 p 17] 8255

CSO: 5400/2099

PHILIPPINES

ANTHRAX SUSPECTED IN SAN FERNANDO DEATHS

Manila BULLETIN TODAY in English 17 Jun 83 p 5

[Article by Milton Pascua]

[Text] San Fernando, La Union, June 16--Four persons died early this morning while 439 others were hospitalized after eating carabao meat suspected to be infected with anthrax, an animal disease.

The victims who ate the carabeef four days ago are from barangays Cabaroan, Santiago Norte, Mameltac, and Dallangayan, all of this capital town.

Reports showed that the carabao was illegally slaughtered by the barangay folks four days ago, then distributed and sold to various families in the four barangays.

The fatalities were identified as Jose Dumaguin, Manuel Casuga, Clemente Gacayan, and Ben Marquez.

Rodolfo C. Catbagan, chief of clinic of the La Union provincial hospital, said that anthrax is caused by the presence of bacillus in the blood and tissues of the animal which can be transmitted to human beings when eaten.

The disease has an incubation period of four to five days after which the victim complains of severe headache and chills.

Catbagan said various medical units in La Union have been mobilized to administer the necessary medicine to the patients.

A sample of the carabeef has been sent to the Ministry of Health for laboratory test and analysis.

The Bureau of Animal Industry dispatched a group of veterinarians to investigate the outbreak of anthrax in the municipality.

CSO: 5400/4430

TYPHOID FEVER CASES IN MANILA INCREASE

Manila BULLETIN TODAY 13 Jul 83 pp 1, 10

[Text] The Ministry of Health reported yesterday increased incidence of typhoid fever in Metro Manila.

The disease intelligence center (DIC) reported 14 typhoid fever cases recorded by the San Lazaro Hospital June 26-July 2. This number of cases is higher by three than the total number of cases reported in the first three weeks of June. It is also higher than the five-year median which stands at 11 cases.

The DIC said all the cases were from Metro Manila. They came from Caloocan City, Manila, Pasay City, Navotas, Makati, Valenzuela, and Paranaque.

Incidence of measles, on the other hand, registered a slight increase. The ministry noted 45 cases admitted at the San Lazaro Hospital. This is higher than the previous week's 33 cases. Except for two, all were Metro Manila residents.

Last week's incidence of six whooping cough cases is higher by three than the five-year weekly median of three cases.

The DIC said the incidence of diarrhea has notably decreased. It reported that there were about 116 cases admitted at the San Lazaro during the week under review. This is lower than the previous week's 129 cases and much lower than the five-year median of 253. (W. Yamzon)

CSO: 5400/4445

TYPHOID FEVER INCIDENCE UP

Manila BULLETIN TODAY in English 17 Jun 83 p 40

[Text]

More and more residents of Metro Manila and neighboring provinces and cities have been downed by communicable diseases in the past week, the disease intelligence center of the Ministry of Health reported yesterday.

Cases of diarrhea, typhoid fever, and chicken pox have reportedly increased while the incidence of measles, a summer disease, has continued to decline.

According to the DIC, 74 cases of diarrhea were admitted at the San Lazaro Hospital during the past week. The incidence is four cases higher than the previous week but still much lower than the five-year median of 232.

Sixty-six cases were residents of Metro Manila while the rest from the neighboring provinces and cities.

It was also reported that typhoid fever increased to 15 cases last week which is higher than the five-year median of 11.

Except for one case which came from Quezon province, the rest of typhoid fever cases came from Metro Manila, particularly Manila with 6, Caloocan City with 3, Quezon City, Pateros, and Las Piñas.

Records of the SLH showed that six cases of chicken pox were admitted last week, which is three cases more than the previous week and two cases above the five-year median.

The incidence of measles decreased by 10 cases and was observed to be continually declining. A total of 55 cases of measles came from Metro Manila while the rest were from neighboring provinces and cities.

CSO: 5400/4430

GAINS IN ANTI-MALARIA DRIVE CITED

Manila BULLETIN TODAY in English 19 Jun 83 p 23

[Article by Romeo S. Movido]

[Text]

ZAMBOANGA CITY. A big decrease in malaria cases has been registered in Western Mindanao through the efforts of the regional office of the Ministry of Health which launched an intensive campaign against the disease.

The regional office harnessed the services of some 13,000 volunteer village health workers in the anti-malaria campaign. They sprayed some 42,176 houses with pesticides and distributed information materials to residents on how to eradicate mosquitoes.

Health Regional Director Hilarion Ramiro, Jr., and Mila Fernandez, acting assistant director, who personally supervised the drive in five provinces and four cities of Region 9 with a total population of 2.5 million risked their lives and are

now afflicted by the disease.

The regional official is a TOYM and Lingkod Bayan awardee, said to be a health administrator one must be prepared to undertake hazardous missions in order to be effective in serving the people.

Ramiro also utilized the support of the Bureau of Fisheries and Aquatic Resources (BFAR) by seeding lakes and other bodies of water with fish to eat the mosquito larvae.

Within a period of six months, the incidence of malaria cases dropped from an all-time high of 23 to 10 per cent per 100 blood samples taken from persons suspected to be positive with the disease.

The regional director said the disease is endemic in Sulu, Tawi-Tawi and Basilan and everything is being done by the MOH to eradicate totally malaria in these areas.

CSO: 5400/4430

BRIEFS

PNEUMONIA, OTHER DISEASES ON THE RISE---The Disease Intelligence Center of the Ministry of Health reported an increase in the incidence of pneumonia, diarrhea, diphtheria, and typhoid fever last week. A total of 140 cases of pneumonia were reportedly admitted at the San Lazaro Hospital (SLH), 129 of whom came from Metro Manila while the rest were from neighboring provinces and cities. Dr. Julio Valera, chief of the DIC, said the figure was seven cases higher than the previous week and was fast approaching the five-year median of 142. Cases of diarrhea increased by as much as 38 from the previous week, Valera said. He noted, however, that the level was still lower than the five-year median of 253. Most cases came from Metro Manila. Admissions at the SLH showed that 32 cases of diphtheria were admitted during the week which is higher than the previous week's 27 cases and the five year median of 53. All but six came from Metro Manila. Valera also reported that 12 cases admitted at the hospital were from Metro Manila--Manila, Caloocan City, Malabon, Makati, Mandaluyong, Las Pinas, Valenzuela, and Quezon City. The incidence of measles, based on admissions at the SLH, continued to decline in the past few weeks. Only 33 cases were admitted last week, 29 of whom were from Metro Manila while the rest were from neighboring provinces and cities. [Text] [Manila BULLETIN TODAY in English 3 Jul 83 p 4]

CSO: 5400/4439

SAIMR OFFICIAL SAYS SEX DISEASES 'ALMOST EPIDEMIC'

Port Elizabeth WEEKEND POST in English 18 Jun 83 p 15

[Text]

THE incidence of sexually transmitted diseases (STDs) in South Africa is probably about 10 times higher than in Western Europe and the United States.

Dr Ron Ballard, chief scientific officer of the South African Institute of Medical Research, says these diseases are now reaching epidemic proportions, with high social and economic costs.

Last year 500 000 people, representing 4% of South Africa's adult population, were treated for STDs at municipal clinics alone.

And he says the figures from municipal clinics are conservative.

"Between 13% and 15% of the total adult population would be a more realistic estimate," he says. "However, it is impossible to ascertain accurate figures because of the fragmentation of the medical services provided for these diseases.

"There was a well-documented, massive increase in STDs at the time of the Industrial Revolution in Western Europe. South Africa is experiencing this only now.

"The reasons are industrialisation, the urbanisation process and the mass movement to cities. South Africa's laws and the migrant labour system don't help matters. STDs are an enormous problem in developing countries."

One of the reasons for the increase in STDs is the breakdown in traditional values caused by urbanisation.

Muslim countries, with strong sexual taboos, have a much lower incidence of STDs than other countries.

Dr Ballard says South Africa's Asiatic population has the lowest incidence of all groups in the country.

If the number of patients visiting private practitioners is also taken into

account, the incidence of STDs in South Africa has reached "epidemic proportions", says Dr Ballard.

He adds: "One in 100 patients who consulted private practitioners last year was suffering from STD. But if one looks at the adult patient population only, obviously the incidence is much higher.

"Between 1980 and 1981 the number of cases seen at Cape Town's municipal clinics increased by 14% and those seen at Port Elizabeth's by 21%. However, the number of cases seen in Pretoria and Johannesburg remained relatively stable.

"There could be many reasons for this, but we cannot pinpoint them — particularly as STDs are not notifiable diseases."

Ignorance is a factor. For example, research indicates that more males than females are seen at the clinics — a ratio of 2:1 if not more — be-

cause females often do not show symptoms, yet continue being carriers.

Dr Ballard says: "We are lobbying State Health at the moment to put STDs

into perspective in the context of this country.

"I believe that, like sex education, information about diseases should be taught in schools and included in the official curriculum. It is also essential that all doctors are thoroughly educated, particularly about those diseases which do not respond to penicillin treatment.

"About 10% of gonorrhoea cases in Zimbabwe do not respond to penicillin. In SA at present probably less than 1% of cases don't respond.

"But this problem of non-response has spread throughout the rest of Africa and SA could soon be confronted by the same problem. It needs constant monitoring." — Financial Mail

GOVERNMENT HOUSING, LABOR SYSTEMS BLAMED FOR SPREAD OF DISEASE

Johannesburg THE CITIZEN in English 22 Jun 83 p 16

[Text]

CAPE TOWN. — Cape Town's Medical Officer of Health, Dr Reg Coogan, has lashed the Government's housing and labour migratory systems by saying they spread infectious diseases.

His annual report, released on Monday, shows that tuberculosis, a major cause of death among Blacks, is still the greatest infectious-disease problem in Cape Town. And it is likely to remain so unless the migrant labour system is scrapped and something is done about the housing crisis, the report says.

The shortage of houses in the Coloured and Black areas, leading to "gross overcrowding in the housing estates," was the "big remaining factor" in the spreading of diseases such as TB, meningitis and influenza.

"The infectious pool" was continually being renewed by the migrant labour force entering Cape Town from homelands and without the abolition of the system it was "difficult to see how the situation could be improved".

The number of registered cases of TB increased from 2 814 in 1981 to 3 420 in 1982.

The death rate from TB remained low (148 deaths in 1982 compared with 149 in 1981). But it ranked fifth on the "killer list" for Blacks and 15th on the list for Coloured people.

The report also said venereal disease was increasing among Cape Town's White women and teenagers.

It said 28 409 patients attended municipal clinics for treatment of VD in 1982. But that figure represented only the tip of the iceberg because many patients were treated by private doctors and hospitals.

White female clinic attendances rose by 42 percent, from 26 to 37. There were 580 new cases in teenagers in 1982, a rise of nearly 10 percent on the 1981 figure of 529.

Turning to suicides, the report showed that most people who commit suicide in Cape Town are white men aged between 24 and 44.

A total of 59 people committed suicide in the municipal area last year — 41 males and 18 females, of whom 36 were White and 23 Coloured or Black.

In 1982 there were four suicides in the 15-24 age group, 31 in the 25-44 group, 17 in the 45-64 group and seven over 65.

—Sapa.

CSO: 5400/290

BRIEFS

MEASLES DEATH TOLL--Nine African deaths from measles complications were reported to the Port Elizabeth Health Department this week, increasing the death toll for Port Elizabeth for 1983 to 237. The number of measles notifications received for the city this week was 39--32 African, four coloured, two white and one Asiatic--increasing the notification figure for 1983 to 1 703, which is more than five times the number notified for the whole of last year. Dr J.N. Sher, the Medical Officer of Health, said there had been an "optimistic reduction in the incidence of measles" and the two mobile vans were continuing the immunisation programme against the infectious disease in the African townships, which had been most severely hit by the disease. Meanwhile, the latest issue of "Epidemiological Comments," a State Health journal, features a preliminary report, including recommendations and conclusions by Dr J.L. Rawlinson. Dr Rawlinson, national epidemiological service officer of the SA Medical Service, SADF, currently undergoing training at the Department of Health and Welfare in Pretoria, arrived in Port Elizabeth on April 20 for a five-week investigation into the outbreak. According to the report, certain preliminary conclusions and recommendations could be made although not all analyses had been completed: The measles outbreak demonstrated the fact that in developing communities the age group at greatest risk was under five years, particularly children

under one year of age which was the age group hardest hit; The highest mortality rate among the very young re-emphasised the need to vaccinate at an early age and to re-vaccinate to ensure adequate coverage; It was known that malnutrition might worsen the prognosis of a measles case considerably. [Text] [Port Elizabeth EVENING POST in English 24 Jun 83 p 3]

NO NEW AIDS CASES--South Africa has had no further confirmed cases of Acquired Immune Deficiency Syndrome (Aids) since the disease which claimed the lives of two SAA stewards hit the headlines earlier this year. But a spokesman for the Department of Health said although he was not aware of any more cases, the situation was being carefully monitored. Following a meeting of the department on January 7 this year--where representative specialists were called together to formulate a containment strategy--an editorial in the South African Medical Journal urged doctors to be on the alert for further cases. A spokesman for the South African Institute for Medical Research also said no further cases of Aids had been confirmed. The situation in South Africa is vastly different from that in the United States where Aids is now making troubling incursions into the general population. [Excerpt] [Johannesburg THE STAR in English 2 Jul 83 p 4]

HEPATITIS VIRUS CULTIVATED--Pretoria--South African scientists have become the first in the world to cultivate the hepatitis virus under laboratory conditions, creating new opportunities for research on the liver disease. Scientists have discovered that existing water purification techniques eliminate the waterborne virus. This was previously impossible because the virus could not be cultivated in the laboratory. The National Institute of the Council for Scientific and Industrial Research (CSIR) was responsible for the breakthrough. The first information on the effect of chlorination on the virus came from joint research by virologists of the Universities of Munich and Pretoria.--Sapa [Text] [Port Elizabeth WEEKEND POST in English 11 Jun 83 p 1]

RABIES FEAR IN NATAL--Durban.--The fears of an outbreak of rabies in the Wasbank district, Northern Natal, have increased with a second incident of a dog attacking a person within a week. A dog which attacked a Black man in the district on Friday was subsequently shot. The State veterinarian at Dundee, Dr Tony Grace, said yesterday that the dog's brain was sent to Onderstepoort and the result showed that the dog was a rabies carrier. On Tuesday last week a dog was also shot. Dr Grace said the farmers in the area who have tied up their dogs to stop the spread of the disease should not hesitate to shoot dogs found wild and acting in a strange manner. The farmers were asked last week to tie up their dogs. [Text] [Johannesburg THE CITIZEN in English 24 Jun 83 p 10]

CSO: 5400/290

TANZANIA

BRIEFS

INCIDENCE OF MALARIA--Ndugu Gertrude Mongeua, minister of state in the office of the prime minister, has said that malaria, which has persisted in the country, kills more people than cholera. Speaking at Wananyamala Hospital, which is the Kinondoni District hospital, today, Ndugu Mongeua said that during the period 1981-82 over 800,000 people had suffered from malaria. Among them over 900 people died as a result of the disease.
[Excerpt] [EA080116 Dar es Salaam Domestic Service in Swahili 1700 GMT 6 Jul 83 EA]

CSO: 5400/297

CHLORINE TYPHOID TREATMENT PROVES FATAL

Istanbul TERCUMAN in Turkish 28 Jun 83 p 3

[Text] No one died in Sefakoy from the typhoid epidemic but chlorine which was distributed as a measure against typhoid caused the death of two little girls.

After Havva Tanrikulu, who lost her life after drinking the chlorine distributed near fountains by health workers to the population, yesterday 8-year old Sule Zengin also died from the same cause.

Of the two children, who were both 8 years old, Havva was laid to rest, amidst tears, at the Sefakoy cemetery. As for little Sule, whose body was sent for autopsy to the Medical Examiner, she will be buried today. The death by poisoning of the two little girls, who did not catch typhoid but were poisoned by drinking the chlorine which had been sent as a precaution against typhoid, has put into mourning all the youngsters of the Kartaltepe and Tevfikbey neighborhoods.

The Bakirkoy Attorney-General's office of the Republic has sent to the Medical Examiner the liquid which was distributed as a disinfectant, in connection with the events which led to the death of the two children. It has also been learned that a suit will be filed by the Attorney-General against the health workers and the parents of the children. Furthermore, the death of the children who drank the chlorine distributed so that a few drops of it could be added to the water created a new problem with citizens living in that area, who refrained from using the chlorine issued to them, saying that "It is poisonous." While health worker teams attempted to persuade the population to use chlorine, Deputy Mayor Ali Hasan Ozer, Deputy Health Director Nazmi Gucur and Bakirkoy District Administrator Selahettin Tekin came yesterday to the Kartaltepe and Tevfikbey locations where a typhoid epidemic broke out, to make an investigation. On the other hand, it was seen that the fountains from which the municipality forbade water to be taken had not been shut off and that the population continued to draw water from them.

12278

CSO: 5400/2555

VENEZUELA

BRIEFS

MALARIA CASES IN CARABOBO--Valencia, 28 June (Special)--In recent days 15 cases of malaria have been detected among foreigners and Venezuelans who are being treated by the Department of Rural Endemia assigned to Zone 2 of the Department of Malaria and Environmental Health. The report was made by engineer Carlos Balzan, chief of the Carabobo Malaria Zone, who indicated that the cases pertained to persons from states where there is an onset of malaria, such as Barinas, Apure, and Tachira, in the Uribante-Caparo Zone. He explained that persons residing in this area travel to zones where malaria exists. They contract the disease, which is transmitted by the Plasmodium AP-Vivax mosquito and return here. These cases are known in the health department as importers. He also indicated that foreigners, in particular those from Colombia, who reside in Puerto Cabello and south of Valencia, are being treated. Finally, he urged all people traveling to a malarial zone who return with a persistent fever, chills, profuse sweating, and other symptoms of indisposition, to go to the Division of Rural Endemia in Barbula or to the nearest hospital center for an immediate diagnosis. [Text] [Caracas EL NACIONAL in Spanish 29 June 83 c C-3] 8255

CSO: 5400/2101

SCIENTISTS TESTING NEW MEANS OF SCHISTOSOMIASIS CONTROL

Mbane THE SWAZI OBSERVER in English 6 Jun 83 pp 6, 7

[Text]

BRITISH and Zambian scientists are testing a new means of controlling bilharzia, the parasitic disease spread by snails that affects millions of people in Africa. Bilharzia, also known as schistosomiasis, is on the increase because irrigation and hydro-electric power developments provide favourable conditions for the snails.

The new method of control is based on a dissolving glass containing copper, which is liberated at a controlled rate to kill the parasite spreading snails. The glass can be made cheaply from locally available materials.

Earlier tests of the technique, carried out in a pond infested with snails near Lusaka, Zambia, towards the end of 1982, gave good results. It was shown that copper could be released in a carefully regulated fashion to kill

the snails without affecting other living things. The current trials, organised by the Zambian Ministry of Health and carried out in village ponds and other stretches of water, provide the conditions to determine whether dissolving glass can be an effective means of large scale snails control.

The dissolving glass was developed some years ago by Cyril Drake, a research chemist working with Standard Telecommunication Laboratories, which is the research department of Standard Telephones and Cables (STC). This company is primarily an electronic equipment concern, and Mr Drake was trying to develop a new kind of glass for use in switchgear.

The dissolving glass was no use for this purpose, but Mr Drake saw its potential for other applications. He contacted Dr John Jewsbury of the Liverpool School of Tropical Medicine, who carried out laboratory tests of copper im-

pregnated dissolving glass as a snail killing agent. Results were encouraging and small scale field tests were arranged, first in Nigeria and then in Zambia.

Additional research in Britain clearly indicates that snail control is only one of many possible uses for dissolving glass. By altering the chemical composition of the glass, it can be made to release different constituents at a wide range of regulated rates to suit different control tasks.

There are numerous uses in agriculture, and some of them may be only a year or two away from commercial application. Glass, for example, can be impregnated with pesticides and then ploughed into or scattered on soil for long term pest control.

Harmless glass pellets impregnated with trace elements essential in diet can be placed in the rums of farm animals grazing on impoverished pastures and left there for long periods to supplement the feed. Similar pellets could be

used for the long term release of drugs to control parasite worm and other diseases in animals.

In the foreseeable future, once safety has been established and the possibility of side effects ruled out, the glass might be used for the slow release of drugs to treat human complaints. Likely applications are thought to be in illnesses caused by worms or parasites, where reinfestation is likely but there is a local shortage of medical staff to administer repeated treatment. Hormone deficiencies might be rectified in the same way, and the controlled release of sex hormones or other substances for long term contraception is another possibility.

Applications for dissolving glass in surgery are also being explored by Mr Drake

and his colleagues in cooperation with the Bioengineering Institute at the University of Strathclyde in Scotland. One promising idea is to use dissolving glass to rebuild shattered bones. Glass can be made with a dissolving rate that precisely matches the rate of regeneration of bone. Shattered bones could then be replaced with glass bone, which would act as a template for regenerating bone and would disappear as the new bone formed.

Research also suggests that glass tubes might be used as temporary replacements for seriously damaged blood vessels and other tubes and ducts. The glass could be engineered to dissolve at the same rate as the new natural blood vessel or duct regenerated along it.

Perhaps more mun-

dane but equally important are potential uses for dissolving glass in industry. Paints - especially those used on oil rigs and other underwater structures - could be impregnated with glass containing anti-corrosive chemicals, which would be liberated at controlled rates overlong periods.

STC has negotiated contracts with various companies to develop some of these used for Mr Drake's discovery in return for royalties, and is developing others itself. However, the results from its work on bilharzia are being made freely available to African health departments. The Zambian trials are being paid for by the multi-national communications concern ITT, which until recently was the parent company of STC. Now, however STC is British owned and based.

BRIEFS

CHOLERA VACCINATIONS FOR PARTY DELEGATES--Delegates to the Party General Conference at Mulungushi Rock will be required to produce cholera vaccination certificates, Central Province Member of the Central Mr Samuel Mbilishi has said. Speaking when he directed Party leaders to start selecting representatives to talks in Kabwe, Mr Mbilishi said those who would not produce proof of vaccination against the killer disease would be barred from attending. Mr Mbilishi said he would this week request provincial medical officer Dr Victor Chilombo to distribute cholera vaccines to all health centres in the province. [Text] [Lusaka TIMES OF ZAMBIA in English 11 Jul 83 p 5]

CSO: 5400/308

HARARE'S HYGIENE STANDARDS DOWN DUE TO STAFFING CRISIS

Harare THE HERALD in English 15 Jun 83 p 5

[Text]

THERE was a decline in hygiene standards and a rise in reports of suspected food poisoning in Harare last year, mainly due to the shortage of inspecting staff.

In his annual report just released, the Medical Officer of Health, Dr Lovemore Mbengeranwa, said only 11 of the 28 established inspector posts were filled and three of these were occupied by retired members on a temporary basis.

Staff were unable to carry out regular routine inspections of licensed premises when so much time had to be spent investigating increasing numbers of public complaints.

The threat of infectious diseases originated outside the city's borders with more than two-thirds of the investigated cases being imported.

"Of immediate concern in this respect is the densely populated area of the Epworth Mission, contiguous with the city and over which the council has no control.

"This is an area of uncontrolled settlement lacking in safe water supplies and proper sanitary facilities and is a known source of malaria.

"It is therefore most encouraging to learn that Government is to become

actively involved in the control and future development of this area. The expressed intention to restrict further development by influx control is realistic and reactionary, but if successful the end will justify the means," wrote Dr Mbengeranwa.

Adequate control measures against mosquitoes made it less possible for anyone to catch malaria within the city boundary. Last year all but three cases were imported and even those three were of doubtful origin.

A total of 383 cases of typhoid, salmonella and shigella, all intestinal diseases, was an indication of unhygienic conditions and practice and again the number of cases imported into the city was alarming.

Investigations into local typhoid cases were inconclusive but pointed to the presence of symptomless carriers in the city. In one reported case, a vegetable seller and her two children were found to be infected.

Infectious hepatitis, endemic in the world, was now emerging as a major public health problem in Harare with a total of 283 cases recorded last year.

"It is a disease associated with overcrowded living conditions and poor hygiene being spread by the faecal-oral route," said Dr Mbengeranwa.

There could be a pool of undetected infectious cases of pulmonary tuberculosis in the city and the disease is the most prevalent and notifiable infection after malaria.

Trashville, in the light industrial sites, "an area synonymous with poverty, filth and squalor", was finally cleared as a result of intervention by the Minister of Local Government and Town Planning and, at his suggestion, city centre dumps were closed down.

In low-density suburbs there were many cases of nuisances from large numbers of poultry kept at premises, resulting in noise and fly breeding. Some divisions reported pigs and goats being kept and property owners resented the approaches made by members of staff to remedy unsatisfactory conditions.

The provision of people's markets, now finally under way, should, when the programme is completed, allow the control of fruit and vegetable vending in the streets.

After a two-month break, sampling resumed in March last year when a retired official was appointed. All 242 samples of municipal water tested were reported to be satisfactory but nonfaecal organisms were found in 12.4 percent of the samples taken from 16 boreholes, a rise from the 10.6 percent found the previous year.

SAMPLES

However, the percentage of samples containing faecal coliform organisms was 2.7 percent, a considerable drop on the 6.3 percent of 1981.

Almost a third of the water samples taken for bacteriological examination from Government school pools, private school pools and institutional pools were unsatisfactory.

The large number of failures was due to lack of knowledge of pool care, inadequate supervision and periodic shortages of chlorine supplies.

Almost 11 percent of samples from municipal

pools were unsatisfactory and the hand chlorination of paddling pools contributed largely to the failures.

Of the 119 samples of pasteurised milk, coliform organisms were found in eight and one sample seemed to have been contaminated after pasteurisation. Staphylococcal organisms were found in two samples. All samples chemically tested were found to conform to the dairy regulations.

After two cream samples were reported to contain organisms appropriate measures were instituted at the dairy.

Ineffective sterilisation of dispensing machines and poor health education contributed to the high failure rate, 43 percent, of samples of machine-dispensed frozen dairy confectionery. Dr Mbengeranwa said legal action may be necessary in future.

Just 2.9 percent of the pre-packed ice creams, milk ices and ice lollies tested failed bacteriological tests and all were chemically satisfactory.

BRIEFS

VACCINE VANS DONATED--UNICEF yesterday donated eight refrigerator-fitted trucks worth \$50 000 to the Ministry of Health for the transportation of vaccines. Receiving the trucks, the Deputy Minister of Health, Mr Edward Psawarayi said: "My ministry is paying a lot of attention to care of the vaccines used in the immunisation programme to ensure that they fully maintain their potency at all times from the recipients, who are mothers and children. "This will then guarantee that vaccines will be able to provide the necessary protection against the serious but preventable diseases of polio, measles, whooping cough, tetanus and tuberculosis." The Zimbabwe representative of Unicef, Mr Saidi Shomari, said: "The provision of these refrigerated vehicles will fill a crucial gap in the cold chain system in Zimbabwe."--Ziana [Text] [Harare THE HERALD in English 10 Jun 83 p 3]

VAPOSTORY SECT ALLOWS VACCINATION--The Vapostori religious sect of Zimbabwe who normally shun doctors broke their taboo when they allowed hospital staff to attend to some of their members recently. The People's Weekly reported in its latest edition that Ministry of Health staff had descended on a group of Vapostori at the Skyline Motel, 20 km south of Harare. Children ranging from six months to five years, along with their mothers, were vaccinated as part of the ministry's accelerated programme of immunisation. It has been the tradition of the Vapostori, popularly known for their shaven-headed menfolk to shy away from any medical examination whatever, even in times of severe illness. A spokesman for the ministry was quoted as saying that there had been no resistance from the worshippers.--Ziana [Text] [Harare THE HERALD in English 10 Jun 83 p 3]

SEXUALLY TRANSMITTED DISEASES--More than 47 000 patients--equivalent to one in 14 city residents--were treated for sexually transmitted diseases in Harare's four municipal STD clinics last year. In his annual report just released, the city Medical Officer of Health, Dr Lovemore Mbengeranwa, said 47 313 patients had been treated, 11,2 percent of them women. The increase in cases was just 16,1 percent greater than 1981, an encouraging sign when the previous two increases were considered, and it was hoped that the number of patients would soon decrease. The percentage of women seeking treatment rose from 9,2 percent, which health staff see as a disappointing attendance. The Bank Street clinic was closed to STD patients during the year as it was too small to serve as both a primary care and a STD clinic. Gonorrhoea

remained the most prevalent STD with 37,2 percent of the patients treated for this disease. Chancroid accounted for 24,9 percent, non-gonococcal urethritis for 11,3 percent, lymphogranuloma venereum for 8,2 percent and genital herpes for 6,1 percent. Contact tracing was still voluntary, with patients being asked to bring in their partners and Wilkins STD clinic was issuing tracing slips. But the programme was not very successful. Dr Mbengeranwa said his department required the services of properly trained contact tracers. The most important change in the pattern of STD in Harare was the discovery that 11 percent of all gonococcal infections were resistant to penicillin, especially in view of the lack of contact tracing services. "It is quite possible that if an organised contact tracing service, not only within the City of Harare, but also throughout the country is not set up, a very high rate of this resistant infection will soon develop." The second major change was the decrease in chancroid and the possibility that education programmes contributed should not be overlooked. [Text] [Harare THE HERALD in English 15 Jun 83 p 5]

DROUGHT AFFECTS MEASLES SPREAD--The high incidence of measles in Harare this year could be due to the effects of the drought, city health officials said yesterday. At the start of a two-week immunisation campaign in Harare, high density suburbs, the officials blamed the drought which has led to a lot of malnutrition among children and therefore very little resistance to diseases. The drought has also led to rural families drifting into towns where the resultant overcrowding and squatting has spread the disease quickly. The campaign using a mobile van, started in Glen View where within one hour 33 children between the ages of nine months to five years were immunised. The council's Acting Deputy Chief Health visitor Cde Margaret Mehlomakhulu said that this showed that despite the suburb having several clinics in which parents could take their children for vaccination there was some laxity about doing so. [Text] [Bulawayo THE CHRONICLE in English 14 Jun 83 p 3]

CSO: 5400/304

BRIEFS

CATTLE RELEASED FROM QUARANTINES--Gaborone, June 12: Farmers in Kgatleng, Mahalapye (east, south and southeast), Boteti and Francistown district east of Dukwe ordon fence are informed that slaughter cattle from these areas are allowed to enter Dibete, Dukwe and Makoba/Quarantine camps in June and July for marketing in August and September. This has been announced by the Director of Veterinary Services, Mr M. M. Mannathoko in a press release. Mr Mannathoko explains that this was being taken as a further drought-relief measure and in order to allow farmers in these areas to further market livestock to the Botswana Meat Commission (BMC in August and September). The release states that it is hoped that this will maintain the condition of cattle in slaughter condition. "Cattle will then be released from Dukwe and Makoba Quarantines for slaughter in August from Dibete for slaughter in September," says the release. It also advises that application for admission to enter quarantines should be made to the veterinary officers in the relevant districts. Farmers should state the owner, number of cattle post of origin. No permits will be issued to agents. According to the release cattle will be admitted under the following conditions: 1) they originate from drought stricken communal area identified by cattle post. 2) only slaughter cattle be admitted. 3) no cattle can be withdrawn after entry. 4) cattle will be transported direct to by rail (ex Dibete) and by truck and rail (ex Makoba and Dukwe). The other conditions for the admission of the cattle are that the Veterinary Department will not be responsible for any losses during quarantine; and owners will provide herdsmen during the quarantine period who will be responsible for the cattle. The release further advises farmers to contact Mahalapye, Mochudi, Serowe, Francistown and Orapa Veterinary Officers for further details. It explains that the scheme cannot apply to other areas because of lack of similar quarantine facilities. BOPA [Text] [Gaborone DAILY NEWS in English 14 Jun 83 p 1]

CSO: 3400/1622

OUTBREAK OF SHEEP POX NEAR BRINDISI CONFIRMED

Rome L'UNITA in Italian 25 May 83 p 6

[Article by Adriano Mantovani]

[Excerpts] A few months ago in Piedmont we experienced an outbreak of African swine fever, an exotic disease, which was promptly brought under control to the extent that our country is presently free of the disease with the serious exception of Sardinia. Now, in an opposite part of Italy, 30 km from Brindisi, another exotic animal disease (that is, one not native to Italy) has appeared: sheep pox. The presence of the disease was first suspected several days ago. An investigation was set into motion by the Higher Institute of Health in collaboration with the animal health-prevention institute of Foggia (which infected a few sheep experimentally), that of Teramo (which made a culture of the virus) and that of Perugia (which examined the virus under an electronic microscope); and it was unquestionably diagnosed as sheep pox. As mentioned above, this is a disease which is not indigenous to our country.

However, the disease had made its appearance in the past and had caused extensive damage. Many of us have observed numerous cases of the disease. It was completely eradicated in the 1950's through regulations handed down by the health authorities and through vaccinations.

It is not known how sheep pox was brought into Italy. Some observers theorize that infected hides were brought in (the virus is extremely resistant); others think that sheep were clandestinely brought in by a nearby colony of Moroccan workers. However, we must not be content with theories. we must do everything possible to ascertain the source of the virus in this situation as in all epidemics which occur among our animals. And we must also definitely recognize the fact that our country is highly exposed to the introduction of exotic diseases and that we cannot afford to have inadequate veterinary services in all areas of activity: the present inefficient situation is too dangerous and costly.

It appears that the focus of infection was promptly eradicated through the immediate slaughtering of all the 150 sheep of the infested flock. In this connection, an appropriate ministerial decree was required to prevent sheep pox from reappearing among the diseases for which mandatory slaughtering was stipulated.

We must now bear one thing in mind. Sheep raising is on the upswing throughout the country and may be an economic-recovery factor for many areas, especially the mountainous regions. The sector is already paying heavily for diseases which are causing it to lose a third of its potential income. It is essential not to add another disease, and especially a more serious one like sheep pox. Therefore we must institute a surveillance service which will provide for rapid detection and eradication of the disease wherever it is definitely known to exist.

8568

CSO: 5400/2546

EAST COAST FEVER DRUG

Lilongwe DAILY TIMES in English 20 Jun 83 p 11

[Text]

AT LEAST half a million cattle die in East Africa alone from East Coast Fever, which is transmitted by ticks from the wild buffalo.

The only way farmers have been able to fight the disease has been by dipping the cattle to kill the ticks.

But ticks become resistant to the dip and once cattle are infected they usually die within a week.

A new drug produced by the Wellcome Foundation in collaboration with the Kenyan government has been put on the market. This drug can cure an infected animal and better still, the animal, once infected and cured will be immune for life from the disease. The drug is called 'Clexon'.

The drug will be between 85 to 90 per cent effective in curing clinical cases of East Coast Fever. Trials have been carried out in collaboration with the Kenyan authorities, particularly with the veterinary authorities.

The Wellcome Foundation has been delighted at the teamwork that has been

engendered during the development of this novel and exciting drug.

The drug can be used to treat cattle of all ages. Perhaps one of the most exciting areas is the possibility of immunising cattle by actually using the virulent Theileria. (This is the parasite that causes East Coast Fever).

Then subsequently treating it with Clexon, so a natural immunity develops without the clinical signs of disease. Of course, this is best done in the young animal.

However, this research is yet at a very early stage. No-one should go out at the moment and actively infect their animals. But it does open up a completely new aspect to the control of Theileriosis. Everybody knows that the optimum way of controlling the disease would be the development of some sort of vaccine. Many people have been working towards that as the optimal solution. However, they have, in the meantime a tremendously effective drug and one which could be used in combination with a sort of vaccination programme.

SPREAD OF RINDERPEST AGGRAVATED BY NOMADIC HERDERS

London WEST AFRICA in English 11 Jun 83 p 1610

[Article by George Hassan]

[Text] RINDERPEST, the cattle scourge, has resurfaced in Nigeria. Cattle now die in their thousands in the wake of the new attack. Official records indicate that a total of 400,000 cattle have been affected, of which about 100,000 are reported killed by the disease. In Niger State alone, an area within Nigeria's middle-belt region, which affords both dry and rainy season pastures, a total of about 100,000 rinderpest cases were recorded with a corresponding 25,000 deaths.

The sudden resurgence of the disease came as a total surprise especially since as far back as 1963, a vigorous eradication campaign was launched. Until recently, the disease was believed to have been eliminated. The reason for the reappearance, though surprising, is not far-fetched.

Nigeria's neighbouring countries are Chad, Niger and Cameroon, which are equally cattle-rearing through the never-yielding, traditionally nomadic Fulani cattle breeders, who migrate from one place to the other in search of pasture.

The case of Chad is particularly glaring. Lake Chad itself is a feature of dotted islands and islets which afford ample grazing grounds for the Fulani cattle on both sides. Borno State of Nigeria which shares common borders with Chad had long since abolished the cattle tax (popularly known as *jangali*). The Chadian nomads, in a bid to gain richer pastures, or to evade Chadian taxmen, or both, infiltrate into Nigeria in their thousands. This vividly accounts for the new spread of rinderpest in Nigeria.

Hopefully, the government of Nigeria is not lying down to allow Nigeria's cattle to be totally claimed by this scourge. Recently in Niger State, a state fast becoming Nigeria's agricultural bastion, Governor Alhaji Mohammad Awwal Ibrahim launched an impressive "Rinderpest Eradication Campaign" at Tungan Kawo, Wushishi, a town in the state's heartland. He described the outbreak of rinderpest in Nigeria as a "national tragedy [particularly] at a time when both the Federal and State (NPN) Governments were investing huge sums of money and effort in agriculture to make the nation self-sufficient in food production". Alhaji Awwal gave Niger State's cattle population as 1.5 million, adding that the state, had been seriously affected. However, he revealed that the state government had procured 100,000 vaccine doses from Kenya while Nigeria's National Veterinary Research Institute at Vom supplied 150,000 doses. Furthermore, the Federal Government sent 96,000 doses, out of a consignment ordered from India, as a supplement. In addition to a promise of further assistance, Nigeria's Federal Government donated ₦8,000 to Niger State towards its eradication campaign efforts.

Both the Governor and Niger State's Commissioner for Agriculture and Natural Resources, Alhaji Mustapha Arah, appealed to the cattle-rearers to bring their cattle for vaccination, while veterinary vaccination teams were urged to exert all efforts to eradicate the disease completely.

NIGERIA

BRIEFS

RINDERPEST CURTAILS MEAT OUTPUT--The Bauchi Meat Factory has cut its production by half because the outbreak of rinderpest in the state earlier this year has cut the supply of cattle. The factory now processes 150 head of cattle a day, as against 300 a day before the disease outbreak. [Text] [London WEST AFRICA in English 4 Jul 83 p 1579]

CSO: 5400/303

SOUTH AFRICA

BRIEFS

PARVOVIRUS EPIDEMIC--Five hundred dogs have died on the Witwatersrand in the past two months from the killer Parvovirus disease. The disease has reached epidemic proportions, with eight dogs dying from it daily, and many more being treated. The same epidemic was uncontrollable only two years ago. In the last week alone, 40 dogs have died and 120 were being treated at clinics in the area. The epidemic has arisen because dogs have not had their annual boosters and puppies have not been vaccinated properly, a spokesman for the Veterinary Association said yesterday. The outbreak started two months ago and veterinary surgeons on the Witwatersrand have reported many fatalities. A Sandton vet said that 30 dogs had died of the disease whilst under his care in the past two months. A prominent Kempton Park vet said he had lost 18 dogs in the last month and that a Sandton breeder had lost 30. Popular breeds of dogs such as Alsations, Dobermans and Rottweilers appear to be more susceptible to the disease, sometimes referred to as "cat flu." Parvovirus spreads easily as infected dogs shed a great deal of virus in their stools. [Excerpt] [Johannesburg THE CITIZEN in English 5 Jul 83 p 10]

CSO: 5400/302

INCREASE IN CANE SMUT DISEASE CAUSING CONCERN

Bridgetown SUNDAY ADVOCATE in English 19 Jun 83 p 6

[Text]

What appears to be an increase in the occurrence of Sugar Cane Smut, a disease affecting sugar cane, is causing officials of the Ministry of Agriculture and the Sugar Producers Association some concern.

According to Mr. Percy Jeffers, head of the Research Division of the Ministry of Agriculture, several reports have been made by small and large farmers throughout the island of the presence of this disease on their farms.

As a result, personnel of the Ministry of Agriculture and W.I. Central Cane Breeding Station will mount an island-wide survey shortly to determine the extent and distribution of the disease.

Mr. Michael Clarke of the Variety Testing Station said, "Most of the varieties (of cane) grown in the island are smut tolerant or resistant to the disease, but because there are still pockets of susceptible, and very diseased varieties

scattered around the island, these commercial varieties are now showing symptoms of smut.

"This applies also to some of the promising new varieties which we are developing. It is this which is the cause of greatest concern."

In describing the disease, Mr. Clarke said, "It is one of the most early recognised in that the stools of cane possess a grassy look with no well defined primary or secondary tillers, but many small shoots which are all affected.

"In the plants that have been affected by smut at a later stage, you will see a black whiplike structure coming out of the central or apical bud. It is about 1 cm. thick, generally 2½ feet long, and curls back on itself."

All farmers, especially small farmers who have smut affected cane, are asked to call 89125 and report it to Mr. Phillips of the Plant Protection section of the Ministry of Agriculture.

CSO: 5400/7587

THREAT OF DISEASE, INSECTS TO CROPS DETAILED

Cairo ROSE AL-YUSUF in Arabic No 2865, 9 May 83 pp 40-41

[Article by 'Izzat Nasr: "A Difficult Dilemma: Pests and Plant Diseases Eat Up Half the Crops, But Pesticides Cause Illnesses!"]

[Text] 100 million Egyptian pounds worth of crops are lost each year!

All of the mouths of the world are looking for food. This crisis is growing worse, and the number of hungry people throughout the world is increasing dramatically. At the same time, armies of pests and insects are competing with mankind for the little food which mankind has.

According to statistics put out by FAO, pests and plant diseases consume 30 percent of the world's agricultural production before it is harvested, and consume another 10 percent of this agricultural production after it is harvested. What this means is that, every year, the world loses 65 million tons of foodstuffs--which is enough to feed 60 million persons.

In Egypt pests and plant diseases cause an annual loss estimated at more than 100 million Egyptian pounds. This is in addition to its expenditures on pesticides, which are estimated at 120 million Egyptian pounds worth of hard currency every year.

More than 2 million kantars [1 kantar = 43.93 kilograms] of Egypt's cotton crop are lost every year. Other crops also suffer losses. For example, 10 percent of the wheat crop is lost, 15 percent of the corn crop is lost--although [recently] this latter figure has been brought down to 8 percent--5 percent of the broad beans and lentils crops is lost, and 10 percent of the sugar cane crop is lost. Fruit crops suffer losses which range between 10 and 15 percent.

The Negative Side of Pesticides

Last December the Egyptian Entomology Association organized its first entomology conference. At the conference, Dr Salwa Daghim, who works at the Central Laboratory for Means of Extermination in the Ministry of Agriculture, presented a study. The study showed that the utilization of pesticides brings on dangerous consequences, the effects of which are

long-range both in the soil and in the drainage water that comes into contact with the sources of drinking water. She said that this causes harm to fruits and vegetables. She said that, for example, people get diarrhea after eating watermelons in the summertime because the watermelon have been polluted with vestiges of the pesticides left over in the soil.

Dr Daghim called for exercising control over the utilization of pesticides and control over using foodstuffs that have been sprayed in the fields. She said that it was necessary to allow a certain period of time to pass before using them in order that the pesticides reach a state where they are no longer harmful to the health of the public.

Dr 'Abd-al-Fattah al-Mursi, deputy minister of agriculture, said that one of the most important issues concentrated on in the conference was that of proposing and developing means for carrying out a bold program to combat pests and diseases which afflict cotton. This would involve waiting as long as possible before using pesticides, the purpose of this being to allow the natural enemies of these pests and plant diseases which attack cotton to keep on living and doing their work, and to utilize "viruses" to combat insects.

Dr Muhammad Ibrahim, the senior researcher at the Plant Protection Research Institute, said: "The problem is that we have been utilizing pesticides on a basis other than a scientific basis, that is, we have been using them at whatever time we wanted to and in whatever quantities we wanted to. This is not the right thing to do. We should only use pesticides in cases of serious damage and after other means have failed. In other words, we should follow the policy of 'controlling pesticide use!'

"For example, it makes a difference when crops are planted when it comes to combatting pests and plant diseases. When a crop is planted early, this lessens the damage caused by pests and plant diseases. When planting cotton, one must follow the rule which stipulates that berseem [Egyptian clover] must not be irrigated after 10 May because dry ground reduces the emergence of moths.

"There are also other factors which contribute toward the spread of agricultural pests and plant diseases. They include the storage of crops in open areas and the lack of silos which prevent pests from reaching harvested grain crops. This has contributed toward the proliferation of pests such as the birds and rats which we keep on hearing about.

"Cotton which is stored in open areas is exposed to rats which eat cotton seeds. In addition to this, the humidity and sunlight which the cotton is exposed to [negatively] affect the technical characteristics of the cotton fibers which are later used in themaking of textiles at textile plants."

Dr Ibrahim then asked: "Why do we not profit from the experiment which was carried out in al-Fayyum in 1975? This would enable us to save the millions of Egyptian pounds that are spent on pesticides--[a policy which ultimately] causes crop losses. In this experiment, pesticides were used

one time over two-thirds of an area planted with cotton, and the remaining third was not sprayed with pesticides. Then in 1976 and in 1977 the [whole] area was not sprayed at all with pesticides. This area had no crop damage and losses, and the rules for planting cotton were strictly adhered to."

He went on to say: "Why does the Ministry of Agriculture not repeat this experiment and study it in all of its aspects, in order for us to avoid poisoning our crops? This should be done because any sample of olive oil taken from any location has evidences of pesticides present in it, and this means that all citizens in our cities, as well as our farmers, are being exposed to a certain degree of the toxic effects of these pesticides."

Sexual Attraction

Concerning modern trends of combatting pests and insects, Dr Husayn Samir, professor of entomology at the National Research Center, said the following: "There is a new trend in Egypt which deals with having bacterial diseases combat pests and plant diseases which afflict cotton. This is a biological means of combatting them, and it is safer both for people and animals. It involves utilizing bacteria when spraying the crops. The bacteria are put in the water and sprayed on the crops by means of the normal spray apparatuses which are used when irrigating the fields. The insect larvae eat these bacteria, and then they get sick and die.

"Right now studies are being conducted concerning utilizing strains of these bacteria which are effective against various types of pests which afflict cotton. Other studies are being conducted concerning the use of materials which protect the bacilli of these bacteria from the effect of the rays of the sun, and thus enable them to survive longer in the fields. The important thing is that this approach reduces environmental pollution and has no ill effects on the natural enemies of the pests, and it is also safer for both people and animals."

Dr Mahmud Hafiz, Egypt's leading entomologist, president of the Egyptian Entomology Association, and chairman of the conference, said: "One of the most highly regarded of the modern trends in the world today is the utilization of means of sexual attraction to exterminate the pests. In the case of some insects such as moths and cotton worms, the female of the species emits a chemical substance which has a certain smell which attracts the male. One method used in light of this is to take various substances which, when distributed throughout the fields, disorient the males, keep them from finding their way to the females, and consequently prevent mating from taking place.

"It is also possible, by means of this approach, to find out how many insects are in a given area and which insects are coming into the area. Right now an experiment is being conducted over approximately 1,000 feddans in al-Fayyum, with the aid of the Ministry of Agriculture and on the basis of an agreement made between the Ministry of Agriculture,

the Academy of Scientific Research, the universities [in Egypt], and the Overseas Research Center in London. The results have been encouraging. From 40 to 45 percent of the pests have been exterminated in this experiment, and this approach is going to be developed to the point where between 70 and 80 percent of them will be exterminated in the future.

"The world is also becoming increasingly oriented toward utilizing disease-causing agents and parasites. Large-scale studies are being made at the National Research Center and the University of 'Ayn Shams concerning the utilization of bacteria which combat cottonleaf worms and gnats.

"Another new trend has emerged in recent years, and it involves making more use of insect parasites. There is also still another trend which involves the utilization of juvenile hormone analogs which are similar to the hormones secreted by some glands in insects. The composition of these juvenile hormone analogs in the fields results in retarding the growth of the insects and thus keeps them from surviving. These substances are produced by some firms in the U.S. and are being distributed to universities."

Finally I asked Dr 'Abd-al-Mun'im Mahir, professor of entomology at the University of Asyut, about the problems which we face in combatting insects and the factors which help insects to become widespread. He said: "Egypt is in the area of the world which has a moderate or semi-hot climate. This enables pests to multiply in Egypt more than they can in the colder areas of the world. When such pests multiply, this reduces the amount of agricultural land cultivated. This consequently forces us to plant more than one crop in a given area and to plant crops more than once during the course of a given year. This is called 'intensive agriculture.' The methods which we are following are being reviewed every year by the Permanent Committee for Providing Guidelines for Pesticide Use. This system is one that has been followed for more than 20 years and has been utilized in advanced countries such as the U.S. and Canada.

"We have been confronted with problems caused by pests and plant diseases for thousands of years, and the war which is going on between mankind and these pests will continue to go on. Man changes his strategy from time to time, in accordance with changes in weather conditions and economic circumstances. The pests and plant diseases respond to this change in strategy and these challenges by reemerging in the form of strains which are resistant or immune [to the pesticides used against them].

"It is not sufficient to have only those people who are working in the field of agriculture combat these pests and plant diseases. It is necessary for all of our citizens to cooperate, in a sincere manner, in order to eliminate them."

9468

CSO: 5400/4611

BRIEFS

CLUBROOT DISEASE HITS CABBAGE--A fungus that feeds on the root of plants is attacking cabbage and its relative crops in the highland province of Benguet in Northern Luzon. Known to farm scientists as clubroot, the malady has hit 80 out of every 100 cabbage lots in this area. Local agricultural officials, however, say the fungus can be easily destroyed if cabbage growers cooperate in carrying out a few simple control measures. These consist of applying lime and planting other crops on infected soil. A number of fungicides persistently sprayed in the field will also drive off the fungus. Unfortunately, the high price of cabbage forces highland farmers to stick to cabbage planting on the same land each season. There are not enough farms to go around in Benguet. Scientists Elizabeth Versola and Dagmar Roettger noted that what makes the fungus (*Plasmodiophora brassicae*) extremely dangerous is that it sticks to the soil even without its host plants for up to eight years. Then, the fungus, which thrives well in acidic soil with a temperature of 10° to 20° centigrade, is carried from one farm to another via the seedlings and garden tools. [Text] [Manila PHILIPPINES DAILY EXPRESS in English 3 Jul 83 p 8]

CSO: 5400/4439

BRIEFS

INSECTICIDE, DUCKS ERADICATE ARMYWORMS--More than 2,000 hectares of summer-fall rice in 11 villages, mostly in Binh Chanh, Tan Qui, Tay Tan Tao, Tan The, Hung Long, and Binh Tri Dong villages have been ravaged by rice armyworms with a density of 30 per square meter. Binh Chanh District, Ho Chi Minh City, has promptly sent more than 3,500 bottles of insecticide to these villages for distribution to production collectives, production solidarity teams, and the peasants to eradicate the armyworms. For high-yield rice and subsidiary crop areas, the district supplied 2-3 bottles of insecticide for use on each hectare. Various insecticide spraying teams of the district vegetation protection station have coordinated with vegetation protection team in each village to circle and eradicate the armyworms and prevent them from spreading. Various production collectives have concentrated their efforts in spraying insecticide, while mobilizing 100 percent of the work force to the ricefields to fight the insects. Many production collectives and solidarity teams released ducks on the various ricefields to pick up the larvae. Within 8 days, Binh Chanh District eliminated armyworms on more than 2,000 hectares of the summer-fall rice. [Text] [BK130924 Hanoi Domestic Service in Vietnamese 2300 GMT 11 Jul 83]

STEM BORER EGGS--The stem borer egg density is quite great in the area of sown 10th-month rice seedlings in the northern provinces and cities. In the days ahead, the insects may cause heavy damage to the 10th-month rice seedlings, and might spread to the area of early 10th-month rice. The vegetation protection department has sent a cable to localities prompting them to urgently eradicate the pests. If insecticide 666 is in short supply, cooperative members should be mobilized to destroy the eggs, using vofatoks or metaphos chemicals twice within 3 to 5 days to eradicate the newly hatched larvae, or spraz (bacocil) insecticide. Soil should be mixed with insecticide at a ratio of 10 parts of soil to 1 part of insecticide and applied to seedling beds where the water level reaches the feet of the seedlings. The amount should be 95 kg per hectare. [Text] [BK091119 Hanoi Domestic Service in Vietnamese 0400 GMT 8 Jul 83]

CSO: 5400/4435

END