

JPRS-TEP-91-013
17 JUNE 1991



JPRS Report

Epidemiology

DISTRIBUTION STATEMENT A

**Approved for public release
Distribution Unlimited**

19980506 004

DTIC QUALITY INSPECTED 3

REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL INFORMATION SERVICE
SPRINGFIELD, VA. 22161

Epidemiology

JPRS-TEP-91-013

CONTENTS

17 June 1991

[Recent materials on AIDS is being published separately in a later issue.]

SUB-SAHARAN AFRICA

ANGOLA

- UNITA Says 20 People Dead of Cholera in Luanda
[Voice of Resistance of the Black Cockerel, 7 May 91] 1
- Fifty-one Cases of Cholera, 6 Deaths Registered in Cuanza Norte
[Luanda Radio Nacional Network, 17 May 91] 1
- Malaria Main Cause of Infant Mortality in Luanda Wards
[Luanda Radio Nacional Network, 8 May 91] 1

CHAD

- 'Mysterious Disease' Spreads in Capital [Njamena RNT Radio, 14 May 91] 1
- Cholera Breaks Out—250 Die, 20 Cases Registered [Njamena RNT Radio, 17 May 91] 1

GHANA

- Appearance of 'Chronic Fatigue Syndrome' [Dakar PANA, 30 Apr 91] 1

MAURITIUS

- Bilharziasis, Gonorrhea, Malaria Reported
[Vijay Shankar; Port Louis LE MAURICIEN, 10 Apr 91] 2

MOZAMBIQUE

- Reportage on Cholera Epidemic 2
 - Nampula Province [Maputo Domestic Service, 5 May 91] 2
 - Tete Province [Maputo Radio Mozambique Network, 7 May 91] 2
 - Cabo Delgado [Maputo Radio Mozambique Network, 20 Mar 91] 2
 - Namaacha District [Maputo Radio Mozambique Network, 20 May 91] 2
 - Zambezia's Ile District [Maputo Radio Mozambique Network, 22 May 91] 2
 - Alto Molocue District [Maputo Radio Mozambique Network, 22 May 91] 3
 - Boane District [Maputo Radio Mozambique Network, 23 May 91] 3
- Health Ministry Releases Cholera Figures [Maputo Radio Mozambique Network, 27 May 91] 3

NAMIBIA

- Malaria Cases Increasing; Drugs Less Effective [Windhoek THE NAMIBIAN, 30 Apr 91] 3

SENEGAL

- Leprosy Treatment, Findings Discussed [Dakar LE TEMOIN, 19 Feb 91] 3
- Approximately 6,000 Leprosy Cases Reported; More Feared
[Maxime Dessoh; Dakar WAL FADJRI, 22-28 Feb] 4

SOUTH AFRICA

- Health Department Notes Importation of Mosquitos [Johannesburg SAPA, 13 May 91] 4

SWAZILAND

Total of 250 Treated for Malaria in April [Vusie Ginindza; Mbabane THE TIMES OF SWAZILAND, 6 May 91 p 24]	5
Tuberculosis Kills 15 People Between March, April [Vusie Ginindza; Mbabane THE TIMES OF SWAZILAND, 18 May 91]	5
Health Ministry Releases 1990 Disease Statistics [Banele Ginindza; Mbabane THE TIMES OF SWAZILAND, 21 May 91]	6

TANZANIA

Over 1,000 Cases of Cholera, 153 Deaths [Dar es Salaam Radio Tanzania Network, 8 May 91] ..	6
Cholera Deaths Reported in North [Dar es Salaam Radio Tanzania External Service, 18 May 91]	6

ZAMBIA

Situation Report on Cholera Outbreak	6
Over 609 Deaths; 5,944 Cases [Lusaka TIMES OF ZAMBIA, 5 Mar 91]	6
Disease Abates in Lusaka [Lusaka TIMES OF ZAMBIA, 7 Mar 91]	7
Copperbelt—160 Victims [Lusaka TIMES OF ZAMBIA, 13 Mar 91]	7
Chibindi—17 Fatalities [Lusaka TIMES OF ZAMBIA, 16 Mar 91]	8

CHINA

The Discovery of Lyme Disease in Fujian Province [Pan Liang, Yu Enshu, et al.; Beijing ZHONGHUA LIUXINGBINGXUE ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY] Feb]	9
Shanghai Said 'Ripe for Epidemics' [Hong Kong HONGKONG STANDARD, 4 May 91]	9
Nationwide Health Inspections To Be Increased [Zhu Baoxia; Beijing CHINA DAILY, 6 May 91]	9
Hepatitis-B Immunization Program To Expand [Zhu Baoxia; Beijing CHINA DAILY, 7 May 91]	10
Scientists Develop Synthetic Anti-Aftosa Gene [Beijing XINHUA, 18 May 91]	10

EAST ASIA

CAMBODIA

VONADK—People Died of Poison, Not Cholera [Voice of the National Army of Democratic Kampuchea, 23 May 91]	11
--	----

LAOS

Malaria Spreading in Sekong Province [Vientiane KPL, 23 May 91]	11
---	----

THAILAND

Dengue, Encephalitis Outbreak in Trang [Bangkok DAO SIAM, 19 Mar 91]	11
--	----

VIETNAM

Malaria 'Red Alert' in Villages of Southern Province [Hanoi Vietnam Television Network, 25 Apr 91]	11
---	----

LATIN AMERICA

REGIONAL AFFAIRS

Colombian, Ecuadoran Cholera Reports for 26-29 April [Bogota Radio Cadena Nacional, 27 Apr 91]	13
Cholera Reports for 4-7 May [Bogota Radio Cadena Nacional, 4,5,7 May 91]	13
PAHO/WHO Warn of Cholera Importation by Tourists [Bridgetown CANA, 16 May 91]	13

Sanitation Urged as Defense Against Cholera [Bridgetown CANA, 18 May 91]	14
Emergency Conference on Cholera Ends in Trinidad [Bonaire Trans World Radio, 18 May 91] ...	14
Fernandez Departs for Latin America; Cholera Discussed [Hector Arenas; Madrid RNE-1 Radio Network, 19 May 91]	14
BOLIVIA	
Food Imports From Cholera-Affected Countries Banned [La Paz PRESENCIA, 23 Apr 91]	15
Yellow Fever Outbreak Kills 26 in Santa Cruz [La Paz EL DIARIO, 28 Apr 91]	15
Yellow Fever, Cholera Outbreaks Reportedly Controlled [La Paz Radio Fides Network, 14 May 91]	15
BRAZIL	
Commission Chairman Confirms Fifth Cholera Case [Rio de Janeiro O GLOBO, 27 Apr 91]	16
Mato Grosso State Reports First Cholera Case [Rio de Janeiro Rede Globo Television, 18 May 91]	16
Health Minister Reports 11 Confirmed Cases of Cholera [Brasilia Voz do Brasil Network, 22 May 91]	16
Cholera Cases Reported To Total 15 Nationwide [Brasilia Radio Nacional da Amazonia Network, 25 May 91]	16
Government To Purchase Cuban Meningitis Vaccine [Brasilia Voz do Brasil Network, 7 May 91]	16
CHILE	
Health Officials Report 36 Cholera Cases [Santiago Radio Nacional de Chile Network, 3 May 91]	16
Government Confirms 38th Cholera Case in Country [Santiago Television Nacional de Chile Network, 8 May 91]	17
Cholera 'Reportedly Declining'; Minister Cited [Santiago Radio Nacional de Chile Network, GMT 14 May 91]	17
ECUADOR	
Health Ministry Gives Report on Cholera Cases [Quito Voz de los Andes, 25 Apr 91]	17
GUATEMALA	
Outbreak of Shigellosis, 1 Death [Guatemala City PRENSA LIBRE, 5 Apr 91]	17
GUYANA	
Government Seeks Aid To Prevent Cholera Outbreak [Bridgetown CANA, 15 May 91]	17
Health Cooperation Meeting With Suriname Planned [Bridgetown CANA, 21 May 91]	18
HONDURAS	
More Than 700 Cases of Malaria in Olancho [Tegucigalpa LA TRIBUNA, 11 Mar 91]	18
Seventeen Cases of Canine Rabies in Capital [Tegucigalpa EL HERALDO, 16 Mar 91]	18
PANAMA	
Health Minister on Aid Requested To Confront Cholera [Carlos Vargas; Panama City EL PANAMA AMERICA, 30 Apr 91]	19
Health Minister Says Cholera Has Not Been Detected [Panama City LA ESTRELLA DE PANAMA, 1 May 91]	19
PERU	
Cholera Cases at Children's Hospital Drop 50 Percent [Lima RTP Television Network, 30 Apr 91]	19

'Terrorists' Allegedly Die of Cholera in Ancash [Madrid EFE, 10 May 91]	20
Cholera Control Protocol Signed With Brazil [Lima RTP Television Network, 17 May 91]	20
Health Ministry Updates Cholera Statistics [Lima RTP Television Network, 18 May 91]	20

NEAR EAST & SOUTH ASIA

AFGHANISTAN

Twenty-one Soviet POWs Die in Mujahidin Custody [Hong Kong AFP, 7 May 91]	21
Red Cross Doubts Claims of Dead Soviet Prisoners [Hong Kong AFP, 8 May 91]	21

BANGLADESH

Reportage, Comment on Diarrhea Epidemic	21
Health Minister's Report [THE BANGLADESH OBSERVER, 25 Apr 91]	21
Task Force Planned [THE BANGLADESH OBSERVER, 21 Apr 91]	22
Preventive Steps Urged [Dhaka THE NEW NATION, 11 Apr 91]	23
Post-Cyclone Diseases Kill 600 [Hong Kong AFP, 12 May 91]	23

IRAN

Heat, Disease Threatening Iraqi Refugees in Khuzestan [Tehran Voice of the Islamic Republic of Iran First Program Network, 11 May 91]	24
--	----

IRAQ

Ministry of Health Announces 52 Cholera Cases [Baghdad INA, 9 May 91]	24
Health Ministry Announces 39 New Cholera Cases [Bushra Muhammad Shabib, Qasim al-Milki; Baghdad AL-JUMHURIYAH, 16 May 91]	24
New Cholera Cases Reported in Baghdad, Governorates [Baghdad INA, 22 May 91]	25
Health Minister Discusses Sanctions With UNDP Official [Baghdad INA, 22 May 91]	25
Drinking Water in Maysan, Diyala Contaminated [Baghdad INA, 23 May 91]	25
Damage to Hospitals Estimated at 141,902,000 Dinars [Baghdad INA, 24 May 91]	25

JORDAN

Country Reported Free of Bilharzia [Amman JORDAN TIMES, 21 Mar 91]	26
--	----

SOVIET UNION

Smallpox Graveyard To Be Investigated [L. Ivchenko; Moscow IZVESTIYA Union Edition, 14 May 91]	27
---	----

WEST EUROPE

DENMARK

Greenland Reports Drop in Syphilis Cases [Copenhagen BERLINGSKE TIDENDE, 27 Mar 91]	28
Swine Disease Nears Jutland Border	28
In Germany, Holland [Henrik Tuchsén; Copenhagen BERLINGSKE TIDENDE, 27 Mar 91]	28
Veterinarians Cooperate [Copenhagen BERLINGSKE TIDENDE, 28 Mar 91]	28

FINLAND

Influenza Epidemics Having Wide Impact [Helsinki HELSINGIN SANOMAT, 6 Mar 91]	28
Country Declared Free of Rabies [Helsinki HELSINGIN SANOMAT, 19 Feb 91]	29

NORWAY

Hepatitis C Source Sought, 20 Cases Reported [Ole Martin Bjorklid; Oslo AFTENPOSTEN, 23 Apr 91]	29
More Effective Cholera Vaccine Ready [Kerstin Hellbom; Stockholm DAGENS NYHETER, 12 Mar 91]	30

TURKEY

Sivgin Says No Sign of Cholera Among Refugees; Blames UN [Ankara ANATOLIA, 6 May 91] ...	30
--	----

ANGOLA

UNITA Says 20 People Dead of Cholera in Luanda

MB0705122091 (Clandestine) Voice of Resistance of the Black Cockerel in Portuguese to Southern and Central Africa 0500 GMT 7 May 91

[Text] Our correspondent in Luanda revealed yesterday that the cholera epidemic which broke out in Luanda city at the beginning of this year has considerably worsened in recent days. According to him, about 20 people died of cholera in Luanda over the past seven days.

Meanwhile, the cholera epidemic is spreading to other areas at an alarming pace because of poor public health services and untreated drinking water. Many cases of cholera have already been detected outside Luanda city.

Fifty-one Cases of Cholera, 6 Deaths Registered in Cuanza Norte

MB1705171091 Luanda Radio Nacional Network in Portuguese 1200 GMT 17 May 91

[Excerpt] A total of 51 cases of cholera were detected in Dondo, Cambambe District in Cuanza Norte Province this week, said Francisco Vambe, Cambambe deputy district commissar. According to Mr. Vambe, the district hospital does not have the drugs to fight the disease which by yesterday had already killed six people. He said the local government and the district health directorate are currently engaged in a campaign to educate the people on preventive measures. [passage omitted]

Malaria Main Cause of Infant Mortality in Luanda Wards

MB0805133291 Luanda Radio Nacional Network in Portuguese 0600 GMT 8 May 91

[Excerpt] Malaria was the principal cause of infant mortality in three residential quarters of Luanda City last year. It killed 30 percent of the 40,000 people suffering from malaria in Cazenga, Sambizanga, and Quilambaquianje in 1989. These figures are contained in a report issued last month on malaria. [passage omitted]

CHAD

'Mysterious Disease' Spreads in Capital

AB1705213891 Ndjamenan RNT Radio in French 1900 GMT 14 May 91

[Text] A mysterious disease has made itself known in our capital for some days now. The situation is all the more preoccupying since the inhabitants of Ndjamenan cannot prevent themselves from speaking about this ailment. According to the Ministry of Public Health, it is almost an epidemic, and its pathogens are yet to be identified. The Ministry of Health also said that efforts are being

made to eradicate the scourge. This morning, the secretary of state for public health and social affairs, Asta Tone Kossindjar, spoke to us about her ministry's efforts to find the nature of the disease:

[Begin recording] We have adopted the necessary measures that should enable us to identify the cause of this disease. But as of now, all our tests have not enabled us to pinpoint the pathogen in question. But, concerning the spread of the disease, rest assured, conditions are favorable. From 0700 until 1245 today, we have registered far fewer sick people than we did two or three days ago [words indistinct].

Technically speaking, we cannot speak about cholera because there have not yet been other factors to prove that it is a cholera epidemic. I think you have had the opportunity to hear about or even witness cases of a cholera epidemic here. Generally, there are obviously the problems of symptoms—the number of deaths would be much higher if it were cholera and the contagion more widespread.

In the meantime, we are not speaking about cholera. We are saying, and I repeat, that it is a situation in which people have symptoms of acute gastroenteritis, diarrhea, and vomiting. We cannot in any way speak of cholera for the moment. [end recording]

Cholera Breaks Out—250 Die, 20 Cases Registered

AB1905232391 Ndjamenan RNT Radio in French 1900 GMT 17 May 91

[Excerpt] A cholera outbreak has been announced in our country. Yesterday, 250 people died, and about 20 more cases were registered by the health services in the capital. The news was made public by the government after its weekly Cabinet meeting. The news was confirmed later in the night, and directives were given by the health department in a press communique. [passage omitted]

GHANA

Appearance of 'Chronic Fatigue Syndrome'

AB3004215091 Dakar PANA in English 1527 GMT 30 Apr 91

[Excerpts] Accra, 30 April (GNA/PANA)—People showing symptoms similar to AIDS but testing seronegative for the AIDS virus may be suffering from Chronic Fatigue Syndrome (CFS), a medical scientist in Ghana has said.

Dr. N.K. Ayisi, research scientist at the virology unit of the Noguchi Memorial Institute for Medical Research (UMIMR), told the GHANA NEWS AGENCY (GNA) in an interview that virus isolation done by the unit had confirmed fears that CFS may now be in Ghana.

It is the belief of this unit that CFS may now be in this country," he said. We are aggressively or actively investigating this". [passage omitted]

The unit, he said, has been able to isolate virus-like agents from four individuals suspected to have CFS. We are aggressively trying to determine what these agents are".

Viral tests carried out on some people suspected to have CFS has shown that they are either HIV-negative or indeterminate, he said.

He hinted that some Ghanaians returning from overseas have been stricken by CFS. These are people who were doing highly manual work or who were in active employment but have been rendered useless in terms of any ability to do any kind of job".

Ayisi quickly pointed out, however, that virus-like agents causing CFS had also been isolated from individuals who had not travelled outside the country at all.

MAURITIUS

Bilharziasis, Gonorrhea, Malaria Reported

91WE0316A Port Louis LE MAURICIEN in French
10 Apr 91 p 7

[Article by Vijay Shankar: "39 Cases of Gonorrhea, 23 Cases of Bilharziasis, and 14 Cases of Malaria Reported"]

[Text] Thirty-nine cases of gonorrhea were reported in the island's various hospitals and health centers during February. During that month, 23 cases of bilharziasis (an illness transmitted by water-dwelling mollusks) and 14 cases of malaria were also reported.

When questioned, a high-ranking Health Ministry official explained to LE MAURICIEN that although the number of gonorrhea sufferers is fairly high, the disease is not on the rise in Mauritius.

As for the increase in the number of bilharziasis victims, the official told us that the upswing was due to the torrential rains that have lately pelted the island. Those who were forced to wash their laundry or even take baths in the river were highly vulnerable to the disease, which is symptomized by blood in the victim's urine.

The high-ranking Health Ministry official assured us that there was no reason to become alarmed about the resurgence of malaria in Mauritius, and that there is currently no risk of an epidemic. The campaign to wipe out malaria is continuing, with DDT being sprayed in houses and streams or rivers.

MOZAMBIQUE

Reportage on Cholera Epidemic

Nampula Province

MB0505132491 Maputo Domestic Service in Portuguese
1730 GMT 5 May 91

[Text] A total of 40 people died of cholera in Namialo, Nampula Province's Meconta District in the last two months. The head of Namialo health post said the situation has been brought under control.

Health personnel have collected garbage from residential areas and public places. They have also built latrines, and evacuated sick people to the Namialo health center.

The health official said cholera has been caused by contaminated drinking water, lack of latrines, and uncollected garbage.

Tete Province

MB0705144591 Maputo Radio Mozambique Network
in Portuguese 1400 GMT 7 May 91

[Text] Six cholera cases, including four fatal ones, have been reported in Tete Province's Changara District. A health team has arrived in Changara District in an effort to prevent the epidemic from spreading.

Cabo Delgado

MB2005123691 Maputo Radio Mozambique Network
in Portuguese 1030 GMT 20 Mar 91

[Text] The number of confirmed cholera cases in Pemba city and in the Mieve greenbelt has risen to 37. Our Pemba correspondent says that two people have died of cholera in Mieve village.

There are 380 suspected cholera cases since the outbreak of the disease in Pemba city and Mieve village.

Namaacha District

MB2005123291 Maputo Radio Mozambique Network
in Portuguese 1030 GMT 20 May 91

[Text] Eight people died of cholera recently in the Changalane Administrative Region of Maputo Province's Namaacha District. At least 10 cholera cases were reported in Changalane recently.

The Namaacha District Health Directorate has taken measures aimed at preventing the spread of the disease to other parts of the district.

Zambezia's Ile District

MB2205123091 Maputo Radio Mozambique Network
in Portuguese 0800 GMT 22 May 91

[Text] A total of 100 people have died of cholera in Molavale location of Zambezia Province's Ile District. The Ile District health director said as soon as the first

cholera cases were detected, the patients were taken to Quelimane Provincial Hospital because the district lacks the means to control the disease. The Zambezia Province Health Directorate has sent a team to Molavale, thus avoiding the spread of the disease.

Alto Molocue District

MB2205173291 Maputo Radio Mozambique Network in Portuguese 1030 GMT 22 May 91

[Excerpt] A total of 800 cases of cholera, including 19 deaths, have been registered in the capital of Alto Molocue District, in Zambezia Province. The Alto Molocue District administrator said the cholera epidemic that broke out last November was only brought under control this February because the district lacked the means to control the disease. [passage omitted]

Boane District

MB2305181491 Maputo Radio Mozambique Network in Portuguese 1030 GMT 23 May 91

[Text] Three people have died in Maputo Province's Boane District since the outbreak of cholera in the capital of that district in early May. It is believed that the outbreak was caused by the intake of unpurified water from Umbeluzi River. Water supplies to the district capital were recently disrupted due to a burst pipe.

The residents are currently being briefed on measures aimed at preventing the spread of the disease.

Health Ministry Releases Cholera Figures

MB2705155791 Maputo Radio Mozambique Network in Portuguese 1030 GMT 27 May 91

[Text] The cholera epidemic that broke out in April last year had killed 352 people by 21 May. More than 8,800 cases of cholera were registered during this period. This was revealed by the NOTICIAS newspaper, citing Health Ministry sources.

Of the eight affected provinces, Zambezia has registered the largest number of deaths and a high number of cases: 136 deaths and 4,779 cases. It is followed by Nampula Province with 81 deaths and 19 cases of cholera.

According to health authorities, efforts are under way throughout the country to fight the disease, particularly in the affected provinces.

NAMIBIA

Malaria Cases Increasing; Drugs Less Effective

MB0405205091 Windhoek THE NAMIBIAN in English 30 Apr 91 p 2

[Unattributed report: "Malaria Figures Rising"]

[Text] Large numbers of malaria cases have already been clinically diagnosed in the north as Namibia approaches

its highest transmission peak for the disease from the end of April until the end of May.

Though laboratory confirmation of the figures has not been received, it seems that while the number of cases is just as high as last year, the disease is less 'progressive' (develops less rapidly).

Senior Health Inspector for the Central Region Phillip Els said yesterday [29 Apr] that laboratory tests were essential if accurate records were to be drawn up and high risk areas were to be identified.

"The figures we have at the moment show how often a doctor or nurse has diagnosed malaria, but some of the figures are very confusing."

He explained that while some figures corresponded to the expected pattern of malaria incidence—rising in accordance with rainy seasons and mosquito numbers—others were totally baffling.

For example, the graph of the central region's malaria figures last year rose and fell predictably (from 88 in August up to 247 in January and rising to 519 in March).

But in Oshakati figures were doing strange somersaults, dropping from 1,042 in October down to around 650 in November and December, when one would have expected them to rise.

At Rundu a jump from 3,009 to an incredible 17,000 had been recorded, supporting the Health Ministry's call for more laboratory confirmation.

"There are no lab facilities out in rural areas, so it is impossible to check out every diagnosed case. But each regional hospital has the appropriate facilities and will be carrying out as many tests as they can."

All kinds of factors could influence the impression of how well or badly Namibia was coping with its malaria problem, Els said. Staff changes, the cyclic occurrence of the disease and the development of drug-resistance by the mosquitoes all played a part.

"The figures tend to rise according to a five to seven year cycle," Els said. "We have been observing this since 1963. Last year the malaria toll was at the top of the cycle; this year the problem appears less severe."

SENEGAL

Leprosy Treatment, Findings Discussed

91WE0334B Dakar LE TEMOIN in French 19 Feb 91 p 3

[Article entitled: "A Fearsome, But Hunted, Disease"]

[Text] There were only 5,087 still in treatment last year, while some 3,900 others were already cured but still being monitored. In 1995, there will be only 1,500 lepers still in treatment in Senegal, while 6,200 others, though

cured by that time, will be under observation. Medical progress combined with programs to educate, treat, and socially reintegrate lepers have chased the fearsome disease into its last retrenchments. Suffice it to say that there were 40,000 officially reported lepers in Senegal in 1960, at the time of independence.

There are still 10 reclassification villages where 723 patients in treatment and 250 cured lepers live. Paradoxically, the villages of Mballing, Peykoug, Koutal, Sowane, Fadiga, Tabi, Djibelor, Kolda, Bambadinka, and Diambo count a total of 4,200 inhabitants. The explanation: over half of those villages' population is composed of healthy people. Only 10 percent of lepers live in reclassification villages, for leprosy has been shown to be an ordinary illness, and the notion that patients should be treated in their home towns is accepted. In Dakar last November, there were only 1,262 leprosy patients, and only 50 percent of them were active lepers undergoing chemotherapy. Most of the patients had lived in the capital for a very long time. Contrary to another misapprehension, only 150 to 200 of these lepers stretch out their hand (so to speak) or begging bowl to passers-by.

Enormous efforts have been made over the last 10 years by all those (ministries, NGOs [non-governmental organizations], individuals) involved in the fight against leprosy in Senegal. Those efforts have made it possible to achieve substantial results. On the front lines of the struggle is DAHW (German Association to Aid Lepers), which was founded in 1957 and that is currently working in over 650 projects scattered among 70 countries. The association provides medical, technical, social, and financial assistance for the treatment and social integration of lepers.

Twenty-five other national antileprosy associations from around the world joined with DAHW to found ILEP (International Federation of Anti-Leprosy Associations). Members of the association include, notably, the Raoul Follereau Association, the Order of Malta, Emmaus Switzerland, Amici dei Lebbrosi, and so on. Since 1989, a special partnership with ASAL (Senegalese Association for Social Action and Assistance to Lepers) has made it possible to develop a number of joint projects. ASAL, which came into being at the time of independence, was responsible for creating the social reclassification villages and for carrying out many programs to reintegrate former lepers. It also works to educate the public. Its current president is Mr. Ben Mady Cisse, and it organized a program in 1990 to provide care for 700 people. DAHW and ILEP have channeled a great deal of money into Senegal—129,500,000 for the 1989 medical program alone and 97 million for social assistance for the same year [currency not indicated]. They gave ASAL 14 million. For the current year, the Association and the Federation are expected to disburse a total of some 335 million CFA [African Financial Community] francs. The money was spent to help villagers develop economic activities, improve their living, sanitation, and health

conditions, school their young, teach the adults to read, hire support services for certain Dakar patients, make small loans to patients, etc.

Dakar also boasts an Institute of Applied Leper House (ILAD), which is a hospital built in 1973 by the Order of Malta.

Approximately 6,000 Leprosy Cases Reported; More Feared

*91WE0334A Dakar WAL FADJRI in French
22-28 Feb 91 p 5*

[Excerpts from an article by Maxime Dessoh: "Conquering the Scourge"; first paragraph is WAL FADJRI introduction]

[Excerpts] Without being either a doctor or a nurse, you can still be of use to any leper or suspected leper by suggesting that he immediately seek help from a medical center.

In 1960 40,000 lepers were reported to be under medical treatment in Senegal. Today that number has dropped sharply and is no higher than 6,000 or so. But make no mistake about it: It would be wrong to believe that there are now no more than 6,000 lepers in Senegal. To approach the real figure, that number may have to be multiplied by three or at least two, according to World Health Organization recommendations. [passages omitted]

With the introduction of polychemotherapy (Pct) in the eighties, length of treatment was considerably reduced to six months in most cases, and two years in the others. Specialists even foresee total medical control of the endemic disease by 1995. In addition, they aim to reduce to 1,500 the 6,000 patients still under treatment. [passages omitted]

SOUTH AFRICA

Health Department Notes Importation of Mosquitos

*MB1305174091 Johannesburg SAPA in English
1659 GMT 13 May 91*

[Text] Parliament May 13 SAPA—Mosquitos able to carry tropical diseases, hitherto unknown in South Africa, had entered the country in imported used motor tyres, the Department of Health said in its 1990 annual report tabled on Monday [13 May].

The report said the Eastern mosquito *Aedes albopictus*, which was able to transmit dengue, an infectious tropical fever causing acute pains in the joints, and other virus diseases, had entered the Republic by means of the tyres.

"Live eggs, larvae and pupae which developed into adults, were found in water in the casings. There is no evidence that this mosquito has already become established in the RSA [Republic of South Africa]."

The department monitored imported tyres and insisted on importation of dry, "vector-free" tyres and that these tyres were transported and stored in a dry state.

Tyres which contained water were treated with a soap concentrate.

SWAZILAND

Total of 250 Treated for Malaria in April

MB0605091191 Mbabane THE TIMES OF
SWAZILAND in English 6 May 91 p 24

[Report by Vusie Ginindza: "Malaria Struck 250 in April"]

[Text] A total of 250 people were treated for malaria last month, the highest figure recorded so far this year.

Of the cases, 100 were diagnosed by the Malaria Control Unit and the rest were recorded by hospitals and clinics around the country.

The cases are almost double those recorded in March 1991, where 138 were treated.

Malaria Control Manager, Mr. Simon Kunene, said the April figures are low, compared to those of the previous years.

He said in 1989 in the same period 1,500 figures were recorded. In 1990, 450 cases were diagnosed.

"Though the 250 still seems a large figure since the aim is total eradication of the disease, the improvement is quite remarkable.

"We are also happy that no deaths have been recorded this month," he said.

Since the beginning of this year only two deaths have been recorded. Last year seven deaths were recorded between January and May.

Kunene is positive that through his team's efforts malaria is fading away.

He said the World Health Organisation has assisted them with a Land Cruiser van which will enable them to travel the worst roads in the country where malaria is most rampant.

"The car came at the right time when we were in a move to strengthen our field exercise, a car was the most important instrument required," he said.

Kunene warned the public to always consult medical personnel if they suspect anything about their health, particularly those residing in mosquito infested areas.

Tuberculosis Kills 15 People Between March, April

MB1805125691 Mbabane THE TIMES OF
SWAZILAND in English 18 May pp 1,24

[Report by Vusie Ginindza: "TB Tolls Rises to 22"]

[Text] Fifteen people have died from tuberculosis (TB) between March and April this year.

This brings the number of TB deaths to 22 since the beginning of this year.

According to statistics from the TB office in Manzini, 104 cases were recorded in January and 183 in February.

March and April together recorded 287 new cases.

This brings the figure of TB cases recorded since the beginning of 1991 to 469.

Last year TB killed 80 people and 1,000 cases were recorded.

TB controls office clerk, Mr. Richmond Ngwenya said there is still no change in the rise of cases and deaths but expressed hope that since his department has already been granted two cars, the situation might improve.

TB continues to be the most rampant killer disease in the country, killing far more than the dreaded AIDS which has only killed 22 people since it was first reported in the country in 1986.

However, AIDS Epidemiologist, Miss Wazi Dlamini says there is great suspicion that AIDS might be a factor in some of the TB deaths.

As a result, she said, the TB medical staff would soon embark on a survey to verify this possibility in all TB sufferers.

"We hope this will save those next to them in case AIDS is involved. The link between the two diseases is very close but we are still not certain if the TB deaths really result from AIDS and that is what we want to find out," she said.

TB is caused by a bacteria scientifically called, 'Turbecle Bacilli'. It breeds comfortably in dirty conditions.

TB clerk, Mr. Richmond Ngwenya warned that it is highly contagious and can be transmitted through sharing the same environs with the patient.

TB patients are currently facing the problem of limited space in the only TB hospital in Manzini which they share with mental patients.

This forces the administration to discharge the patients after two months of admission, before they have fully recovered, in order to give room to other new cases.

After that, the patient is advised to continue with medication at home.

TB Doctor Mabuza had explained earlier on that the disadvantage of this is, firstly, the patient returns to the same conditions where he caught the disease.

Secondly, the medication is too much. "Image taking 10 tablets three times a day without any supervision, that is highly impossible," she had said.

The Ministry of Health's Principal Secretary, Mr. Chris Mkhonza, said earlier on that the Ministry of Health is presently making means to reallocate the patients in various places around the country.

Health Ministry Releases 1990 Disease Statistics

MB2105124491 Mbabane *THE TIMES OF SWAZILAND* in English 21 May 91 p 24

[Report by Banele Ginindza: "Hospitals Treat a Million Cases"]

[Text] Over a million cases of illness were treated by hospitals and clinics in 1990, according to a report released by the Ministry of Health.

The exact figure is 1,107,785.

According to health officials, a rapid population growth has resulted in an increase of over 60,000 cases compared to 1989 when around 296,000 cases were treated.

"The increase in the number of cases does not necessarily reflect an un-manageability of the diseases, but a population growth," an official said.

In 1990, the infant morbidity (sickness) rate of children around the age of five is still leading with a total of over 200,000 cases in Acute Watery Dysentery.

In 1989, 200,879 cases of Water Dysentery in children were recorded which indicates an improvement by 879 cases.

Skin disorders in all ages came third with a total of 189,527 cases.

Sexually transmitted diseases followed with 74,843. Accidents (Trauma) which involves injuries, stood at 53,234.

The least of all was Neonatal Tetanus with only 5 cases for the whole of 1990.

In the list of complicated dangerous diseases, malaria recorded 10,522, Cardiac (heart) diseases recorded 5,340 cases, Anaemia—3,372 cases, epilepsy—2,765; mental illness—2,414.

TANZANIA

Over 1,000 Cases of Cholera, 153 Deaths

EA0805195491 Dar es Salaam *Radio Tanzania Network* in Swahili 1700 GMT 8 May 91

[Summary] Between January and May this year, 153 people died of cholera in the country. A report by the director of administration and manpower development in the Ministry of Health said more than 1,000 patients suffered from the disease.

On 7 May at 1300 GMT, the same radio reported: "Eight people have died of cholera at Kimambo, Kilosa district in Morogoro region. The Morogoro regional chief medical officer, Comrade Ferdinand Fupi, has said that another 34 patients have been admitted to the Kimambo health centre while 12 others were treated and discharged. Dr. Fupi said that 53 people suffered from the disease following its outbreak in Kimambo in April this year. He said a group of consultants from the regional hospital, led by the regional health officer, Comrade Downish Asichoma, has gone to Kimambo to deal with the disease.

Cholera Deaths Reported in North

EA1905165591 Dar es Salaam *Radio Tanzania External Service* in English 1800 GMT 18 May 91

[Text] Arusha—Three people have died and 12 others admitted in hospital following an outbreak of cholera in the Arusha municipality since April the 27th. The ministry's health officer, Dr. Alfred Nsululu, has reported that until yesterday 12 people had been admitted at the (Daraja Mbili) health center undergoing treatment. Dr. Nsululu said five of the admitted patients were new, three of whom came from Lomero area in the nearby district of Arumeru. Two of the patients were from Sokoni and (words indistinct) in the municipality.

The health officer said appropriate measures were being taken against the spread of the disease to other areas of the municipality whose residents have been advised to abide by health regulations as a preventive measure.

ZAMBIA

Situation Report on Cholera Outbreak

Over 609 Deaths; 5,944 Cases

91WE0338A Lusaka *TIMES OF ZAMBIA* in English 5 Mar 91 p 1

[Text] Britain has donated to Zambia more than £50,000 worth of cholera drugs to fight the spread of the killer disease which has claimed 609 lives since January.

Second secretary at the British high commission Mr. John Hawkes confirmed in Lusaka yesterday that the consignment under the Overseas Development Agency (ODA) was due to arrive last night.

"This is part of the request to the British Government to assist in the campaign and drugs are needed immediately," he said.

The official handover is expected to take place today at Medical Stores.

Meanwhile, Prime Minister General Malimba Masheke yesterday opened a regional meeting on cholera at Lusaka's Hotel Inter-Continental.

The three-day meeting has brought together 11 African countries.

General Masheke said: "The party and its Government are still battling to contain the epidemic and as at 26 February 1991 a total of 5,944 cases and 609 deaths were reported."

The meeting is being attended by delegations from Angola, Malawi, Botswana, Mozambique, Namibia, Sao Tome and Principe, Swaziland, Tanzania, Zaire, Zimbabwe and Zambia.

Cde. Masheke said the present outbreak has affected mostly densely populated squatter township.

Cholera was a relatively new disease in the sub-region having been first reported in West Africa in 1970.

Zambia experienced its first cholera outbreak in 1978 in Mpulungu area on the shores of Lake Tanganyika and the epidemic was finally controlled at the beginning of 1980.

He said in 1988 cases were reported to the World Health Organisation (WHO) by Angola, Burundi, Kenya, Malawi, Mozambique, Tanzania, Zaire, Zambia and Sao Tome and Principe.

Other countries in Africa which reported cholera cases the same year were Algeria, Cameroun, Mauritania, Niger, Nigeria and Rwanda.

The total number of cases reported in Africa in 1988 was 35,606, Cde Masheke said.

"There is therefore need to deal with the cholera situation jointly in our sub-region if we are to eradicate the disease."

For Zambia in December 1981, the disease affected several districts in Luapula Province as well as Mbala in the Northern Province but it was effectively controlled at the end of 1982.

"Since that time sporadic outbreaks have occurred in Mbala during the rainy season," he said.

The 1990 epidemic was the worst.

Cde. Masheke said the movement of people freely across borders, especially fishermen, had played a key role in the failure to completely wipe out the scourge.

Disease Abates in Lusaka

91WE0338B Lusaka TIMES OF ZAMBIA in English
7 Mar 91 p 3

[Excerpts] Cholera cases in Lusaka have reduced with the province recording only three deaths since Monday. Minister of State for Health Cde. Alexis Luhila attributed the reduction to the dry weather.

The dry spell had helped to stem the spread of cholera because the cholera virus could not survive in dry weather.

Cde. Luhila was speaking when he toured cholera centres with minister of health from Zimbabwe and Angola attending a cholera seminar at Hotel Inter-Continental in Lusaka.

Cde. Luhila was optimistic that cholera would be controlled because the Government had embarked on projects to repair sewerage and drainage systems as well as install clean water supply in the shanty townships.

"Projects such as the one going on in George compound now are part of the efforts by Government to prevent the outbreak of the epidemic," he said.

He said the Ministry of Health had received considerable amounts of drugs from the international community to help in combating cholera. [passage omitted]

Countries in the Southern Africa region have been advised to notify their neighbours each time they had an outbreak of cholera.

This was decided at the just-ended regional conference in Lusaka on cholera closed yesterday by Cde. Luhila.

He said the experiences the countries had shared would help them control the disease.

Copperbelt—160 Victims

91WE0338D Lusaka TIMES OF ZAMBIA in English
13 Mar 91 p 3

[Text] The Government has released K6.4 million to help the Copperbelt Province combat the cholera outbreak which has so far claimed more than 160 lives.

Addressing a large crowd at Musa Kasonka stadium in Ndola's main Masala township to mark Youth Week, Copperbelt Member of the Central Committee Cde. Alexander Kamalondo said the money was sent to the province last week.

He said the funds would largely be used to improve sanitary facilities in the closed schools to ensure that they were re-opened soon.

He told the audience, which included Chifubu member of Parliament Cde. Charles Mtewa, Ndola Urban district acting executive secretary Cde Dan Longwe and district

political secretary Cde. Faston Mumba, that he would like to see that the money was used for the purpose it was intended.

Cde. Kamalondo warned Copperbelt residents to guard against vandalism because the Government would not spend any more money on rehabilitating the affected schools as it had other pressing problems to attend to.

Chibindi—17 Fatalities

91WE0338C Lusaka *TIMES OF ZAMBIA* in English
16 Mar 91 p 2

[Text] (Zana/ZIS)—Chief Nabwalya of Luangwa valley in Mpika district has expressed disappointment at the failure by the Ministry of Health to contain the spread of cholera in his area which has claimed 17 people.

The chief wondered if the Government had special interests for some special people only.

The chief who was bitter about non-response to the presence of cholera said all he wanted was a team of health personnel to travel to the area and institute measures to stem the spread of cholera.

In addition to the five people who died in February, another 12 had died at the time he was setting off for Mpika on foot on 8 March.

The disease was concentrated in Chibindi, an area along Luangwa river which is the boundary between Mpika and Chipata districts.

But medical officer in charge at Mpika hospital, Dr. Marinus Danen, said the area was inaccessible.

He said that the valley was unapproachable to motor vehicles during the rainy season and appealed to the party and its Government to employ air transport.

He also said that some drugs had been taken to the area on foot by some health workers.

The Discovery of Lyme Disease in Fujian Province
54004805A Beijing ZHONGHUA LIUXINGBINGXUE
ZAZHI [CHINESE JOURNAL OF EPIDEMIOLOGY]
in Chinese Vol 12 No 1, Feb 91 pp 1-4

[Article by Pan Liang [3382 0081], Yu Enshu [0060 1869 1659], et al.; Fujian Provincial Center of Sanitary and Epidemic Prevention, Fuzhou]

[Abstract] By means of indirect fluorescent antibody assay (IFA), *Borrelia burgdorferi* B31 strain was used for antigen to detect the 2,579 serum specimens from forest areas in nine countries were detected positive, positive rate was 1.82 percent. By epidemiological investigation, we found that people who were infected with Lyme disease, 92.67 percent of them (22 of 24) have been bitten by Ixodes, and six cases suffer typical clinical symptoms of Lyme disease, nine cases have the similar or somewhat typical symptoms.

We found Lyme disease could be a cross-reaction to leptospirosis, in this paper, the serum specimens which showed positive for Lyme disease and leptospirosis, were not considered as Lyme disease for the time being, no matter whether the patients have suffered the double infection or not. The identification of the cross-reaction between Lyme disease and leptospirosis should be further studied.

Shanghai Said 'Ripe for Epidemics'

HK0405025691 Hong Kong HONGKONG STANDARD
in English 4 May 91 p 6

[Text] Shanghai is ripe for epidemics of venereal disease, AIDS, typhoid fever, dysentery and liver diseases.

The director of the disaster prevention office of Shanghai's environmental economic research institute, Lu Yong, warned yesterday of the rise of various epidemic diseases in the city.

"Venereal disease has made a comeback with the number of people affected rising sharply," Mr. Lu said.

Quoting statistics compiled by his office, he said the number of VD patients had increased 400 times during the past decade. He gave no indication of the number of people affected.

AIDS was also a growing problem, he said, but again gave no numbers.

In some counties of Shanghai, typhoid fever and dysentery were also on the rise because of poor sewerage.

There are also reports of an increase of rabies.

A lack of adequate living space and hospitals was making Shanghai vulnerable to disease, Mr. Lu said.

An estimated two million people passed through Shanghai each day, many of them returning from overseas.

Mr. Lu is in charge of a research project on the prevention of epidemic disease in Shanghai.

Nationwide Health Inspections To Be Increased

HK0605025191 Beijing CHINA DAILY in English
6 May 91 p 1

[Article by staff reporter Zhu Baoxia]

[Text] The Ministry of Public Health will further strengthen grassroots health inspection in the coming five years as a part of the country's effort to boost health standards during the Eighth Five-Year Plan period (1991-95), it was announced in Beijing on Saturday.

According to Kan Xuegui, director of the Health Inspection Department under the ministry, a comprehensive inspection of food hygiene will be conducted in food manufacturing and trading units this year, and the results will be made public.

In addition to perfecting the legal system overseeing food hygiene, labour protection and public sanitation, Kan disclosed, some training courses have been scheduled for personnel concerned to help them enhance their own professional qualifications and law enforcement level.

The 1990 Annual Report on Health Inspection was released at a press conference in Beijing on Saturday.

Kan Xuegui quoted the report as saying that food poisoning accidents killed 338 people and affected 47,367 more last year in the country, a decrease of 58 and 1,765, respectively, from the previous year.

Statistics indicate that food hygiene has been improved over the past year since 81.9 percent of the inspected food was up to the State food hygiene standard in 1990, compared with 80.3 percent in 1989.

But individual and collectively-managed restaurants and stalls remain a weak link in the food supply chain, and also a "key point" for future inspection work, he said.

Last year, 1,806 unhygienic food suppliers were closed down by the order of health departments, and over 19 million kilograms of substandard food was confiscated.

Inspection of imported foodstuffs has also been strengthened.

Last year about 230,000 tons of imported food was found to be below State requirements, accounting for 1.95 percent of the total imported.

In the industrial sector, incidence of occupational diseases dropped from 23,757 to 23,562 in Beijing last year.

Pneumoconiosis—mainly reported from coal and non-ferrous metals industries—still poses a major threat to workers. These industries account for 67 percent of the total patients who contracted the occupational disease.

Meanwhile, a national survey of the incidence of the disease, covering 30 provinces, municipalities and autonomous regions, revealed that between 1949 and 1990, 461,964 cases of pneumoconiosis were reported in China, and over 90,000 people died from the disease.

Liaoning and Sichuan are the two provinces with the most serious situation, according to the survey.

Eighteen radiation accidents were reported from 11 provinces across the country. They involved 41 persons.

In 14 cases, radioactive sources had been stolen due to people's ignorance of the danger from the materials and to improper managements.

Some other people were found to be using the materials not in accordance with regulations.

Last year, 380,118 units in 14 provinces were inspected for public sanitation. Of these, 82.7 percent were approved because they had reached State requirements.

Hepatitis-B Immunization Program To Expand

*HK0705053591 Beijing CHINA DAILY in English
7 May 91 p 3*

[Article by staff reporter Zhu Baoxia]

[Text] China, a country with an estimated 120 million hepatitis B virus carriers, is expected soon to expand vaccine immunization among children, a strategy to lower incidence of the disease and protect the health of the children and their own offspring, said Chen Minzhang, minister of Public Health.

Chen spoke yesterday in Beijing at a press conference on the granting of a qualification certificate to the series hepatitis B diagnostic tests of the Academy of Military Medical Sciences under the People's Liberation Army. He said that the Ministry of Public Health was considering including hepatitis B inoculation in the regular expanded epidemic immunization (Epi) programme of the country.

The country started the Epi strategy soon after Liberation in 1949, aiming at giving inoculations to all Chinese children to prevent childhood diseases including measles, diphtheria and whooping cough.

Statistics reveal that each year about 800,000 to one million newborn babies are hepatitis B carriers because they were infected by their mothers.

And of the 120 million people who carry the hepatitis B virus, about one-fourth may develop chronic diseases such as cirrhosis and cancer of the liver.

In order to discover and treat the disease at early stages, said the minister, the quality of hepatitis B diagnostic tests should also be emphasized.

According to Cao Lianzhi, director in charge of research on biological products under the Ministry of Public Health, the ministry will stress inspection of the production of hepatitis B diagnostic tests this year.

All units involved must be examined in line with the State requirements for product quality, manufacturing conditions and techniques.

Certificates will be given to those units up to the State requirements, while substandard ones will be banned from producing such tests, said Cao.

Cao said that 53 such units have been examined so far, and the five diagnostic tests produced by the Biological Engineering Research Institute of the Academy of Military Medical Sciences were the first to be granted certificates by the State.

Scientists Develop Synthetic Anti-Aftosa Gene

*OW1805091091 Beijing XINHUA in English
0527 GMT 18 May 91*

[Text] Xian, May 18 (XINHUA)—Chinese scientists have successfully developed a synthetic anti-aftosa gene, XINHUA learned here today.

Aftosa, or foot-and-mouth disease, also called "AIDS for animals", is one of the most serious infectious diseases harming domestic animals in the world.

The scientists injected the synthetic anti-aftosa gene into the zygotes of a rabbit, and obtained two small rabbits with the gene assimilated in their chromosomes on March 30 this year.

The development of the gene, believed to be the first in the world, is of great importance for using gene projects to wipe out foot-and-mouth disease, the experts said.

CAMBODIA

VONADK—People Died of Poison, Not Cholera

BK2405061091 (Clandestine) Voice of the National
Army of Democratic Kampuchea in Cambodian
2315 GMT 23 May 91

["Report from Kompong Thom Province"]

[Text] Many people have died in Kompong Thom Province. Was this because of cholera or because of poisons used by the Vietnamese enemy aggressors?

The Vietnamese enemy aggressors recently ordered their puppets, traitors to the nation, and lackeys, to shout and deceive others that in Kompong Thom Province there was an outbreak of cholera causing the death of 77 people and that over 400 others are still seriously ill.

Reports from the people in Kompong Thom Province say that in truth, many people died in Kompong Thom Province because of the use of poisons by the Vietnamese enemy aggressors and race exterminators to kill our people. The Vietnamese enemy aggressors and the puppets, traitors to the nation and Vietnam's lackeys, are the ones who directly kill the people.

The trick is to poison pools, small reservoirs, and streams at the height of the dry season. When seriously short of water, the people, unaware of the poisoning, consume this water. Some of the people died instantly on the spot; others fainted. Some people had diarrhea or vomited while others were seriously ill.

The Vietnamese enemy aggressors and race exterminators and puppet ringleaders Hun Sen, Heng Samrin, and Chea Sim, traitors to the nation and Vietnam's lackeys, have not paid any attention to those who died or are being affected. This is a criminal trick of massacring the people through poisons and then using the excuse of cholera to cover it up so that people do not realize the dirty trick.

LAOS

Malaria Spreading in Sekong Province

BK2305131691 Vientiane KPL in English 0911 GMT
23 May 91

[Text] Vientiane, May 23 (KPL)—In May, the rate of malaria affection in Thateng area, Sekong Province, amounts to 34.7 percent. Out of the entire 239 patients in hospital, 72 are affected by malaria.

Lung infection and diarrhoea rank immediately after malaria.

Thateng groups 54 villages accommodating 2,105 families of eight tribes under the care of 13 medical personnel. Since last year, 9 dispensaries have been open at villages.

Simultaneously, the public health service of Attopeu Province dispatched mobile medical teams to launch a vaccination campaign against whooping cough, dysentery, diarrhoea, and measles for 2,920 people at 13 villages in Lakhonisai area.

THAILAND

Dengue, Encephalitis Outbreak in Trang

91WE0311B Bangkok DAO SIAM in Thai 19 Mar 91
pp 14, 11

[Excerpt] Mr. Yongyut Wichaidit, the deputy governor of Trang Province, ordered all public health offices to make preparations to control and prevent outbreaks of dengue. He revealed that during the period June-September last year, there were 2,611 cases of dengue. That is a rate of 505 cases per 100,000 people. Ten people, or 1.94 percent, died.

Mr. Yongyut said that last year the Trang provincial public health office reported that 15 people contracted encephalitis, which is a rate of 2.9 cases per 100,000 people. Two of these people (0.39 percent) died. That is a higher rate of incidence than in previous years. Thus, in order to keep the number of cases of dengue below 85 per 100,000 people and the number of cases of encephalitis below three per 100,000 people and to formulate a plan and control activities properly, Mr. Phinyo Chaloeemnon, the governor of Trang Province, has authorized the provincial public health office to implement a project to control dengue and encephalitis. Seminars will be held for public health officials working in the subdistricts and municipalities and at the public health clinics, community health offices, and district public health offices, with each place allowed to send one official. The first seminar, to be attended by 62 people, will be held on 18 April. [passage omitted]

VIETNAM

Malaria 'Red Alert' in Villages of Southern Province

BK0805140091 Hanoi Vietnam Television Network
in Vietnamese 1200 GMT 25 Apr 91

[Text] In March, a malaria epidemic quickly spread in the three coastal villages—Bao Thuan, An Thuy, and An Hiep—of Ba Tri District, Ben Tre Province. At the peak of the epidemic, the number of victims exceeded 1,500. Thanks to the all-out efforts of and close coordination between the district and provincial public health services, the epidemic was promptly stamped out.

At present, a second round of the epidemic has broken out and the number of people affected has reached an alarming level. In the past seven days alone, the number

of patients rushed to emergency care at the village and district hospitals have passed the 200 mark. According to the statistics of the local epidemic control and prevention unit, the public health office of Ba Tri District, and the public health service of Ben Tre Province, the number of sporozoan parasite carriers has reached the red alert level. In Bao Thuan Village alone, more than 90 percent of its 6,000 residents have been affected.

To check the spreading epidemic, Ba Tri District is concentrating its manpower and material resources on assisting the coastal villages' public health section in containing the disease. The district has urgently appealed to the provincial health service and the Ministry of Public Health to expeditiously send in a malaria treatment unit and increase the supplies of malaria medicines to help Ba Tri protect the lives of its people.

REGIONAL AFFAIRS

Colombian, Ecuadoran Cholera Reports for 26-29 April

PA0405143891 Bogota Radio Cadena Nacional
in Spanish at 1200 GMT 27 Apr 91

[Editorial Report] The following is a compilation of reports on cholera cases and related information in Colombia and Ecuador between 26 and 29 April.

Colombia

Bogota Radio Cadena Nacional in Spanish at 1200 GMT on 27 April in a one-minute report, reports that the Health Ministry confirmed that the number of cholera cases recorded in Colombia had increased to 189, and that five persons had died.

Madrid EFE in Spanish at 2331 GMT on 29 April in a 230-word report, quotes a doctor from Barbacoas, Narino Department who confirmed the death of six more people due to the cholera epidemic which "brings the number of deaths in the country to eight."

Ecuador

Quito Radio Quito in Spanish at 2300 GMT on 25 April in a 3 minute report, quotes Esmeraldas Governor Roque Lopez who said that nine persons had died in Esmeraldas Province due to cholera, "mostly because the people did not go quickly to the health centers for proper treatment."

Meanwhile, in a 2-minute report, Quito Radio Quito in Spanish at 2300 GMT on 26 April reports on statements by Health Minister Plutarco Naranjo that the epidemic has resulted in "137 deaths since it was first detected on 27 February." Naranjo said that up until 22 April, 3,019 patients had been treated of which 1,107 were confirmed to have cholera. He also said that 57 cholera patients had died in hospitals, and 82 had died in other places. The report adds that initially cholera was detected in El Oro Province bordering Peru, but later spread to other regions after late March. Naranjo announced a Spanish government donation of 400 kg of antibiotics valued at \$35,000 to treat cholera patients, Radio Quito concluded.

Quito Radio Quito in Spanish at 2300 GMT on 29 April reports that according to figures provided by the Tungurahua Provincial Health Directorate, "11 cases of cholera have been recorded so far, and 55 cases are unconfirmed." The report adds that "it is believed the virus may be coming from the waters of the Latacunga-Salcedo-Ambato irrigation canals."

Cholera Reports for 4-7 May

PA1105010291 Bogota Radio Cadena Nacional
in Spanish 1200 GMT 4 May 91

[Editorial report] Following is a compilation of reports on cholera cases and related information from Colombia and Ecuador between 4 and 7 May:

Colombia

Bogota Radio Cadena Nacional in Spanish at 1200 GMT on 4 May reports that "seven persons have died of the cholera epidemic that affects the country's pacific region," adding that the "Health Ministry has confirmed death of a boy in Timbiqui, Cauca Department, and a girl in Barbacoas, Narino Department." The information also adds that "16 new cholera cases have recently been reported" so statistics show a total of "434 cases." The report adds that "the Health Institute has analyzed 210 of these cases."

Bogota Radio Cadena Nacional in Spanish at 1200 GMT on 5 May broadcasts a report that "health brigades have been sent to Cauca Department after health authorities confirmed three cholera cases in the region." Official information says that "a red alert has been declared in the municipalities of Timbiqui, Lopez de Micay, and Guapi, where health conditions are deficient and the first cholera cases have been reported."

Ecuador

Madrid EFE in Spanish at 0008 GMT on 7 May reports that "a medical team was sent today to the Galapagos Islands to verify press reports that the first cholera cases have appeared in the archipelago." The information quotes a report from the Ecuadoran newspaper LA HORA, which said that "there are at least 40 cholera cases in the island." EFE also provides "official figures given by the Ecuadoran authorities on 22 April" which say that "3,019 patients have been treated" and "1,107 have been confirmed as cholera cases." Furthermore, "137 persons have died, 55 are in hospitals, and 82 are being treated at home."

PAHO/WHO Warn of Cholera Importation by Tourists

FL1705001491 Bridgetown CANA in English
2147 GMT 16 May 91

[Text] Port of Spain, Trinidad, May 16, CANA—The implications of Latin America's cholera epidemic for tourism in the Caribbean is cause for 'serious concern,' Pan American Health Organisation [PAHO]/World Health Organisation [WHO] representative Paul Ellis said Thursday.

Ellis said at the opening of a two-day meeting in Port of Spain on the cholera outbreak that Caribbean authorities must be vigilant and be in readiness to tackle the epidemic should it reach the area. The cholera situation was 'a cause for some concern, particularly in the light of

the relatively free travel within the region,' Ellis told medical representatives from the English, French, Spanish and Dutch-speaking Caribbean.

'However, the possibility of having to keep travellers away because of the possibility of importing such cases into the region, and the consequential implications this action would have for tourism is also a serious concern,' he added.

The purpose of the meeting which is being held at the Caribbean Epidemiological Centre (Carec) is to make a risk assessment of the Caribbean based on travel patterns, environmental conditions, the state of sanitation, and other factors which could have a bearing on whether cholera could become established in the region. More than 1,300 persons have died of cholera in Latin America, and doctors in the region say they have been treating more than 150,000 cases. Caribbean Community governments have been issuing advisories on how to avoid contracting cholera.

The Guyana Government is seeking the assistance of the Pan American Health Organisation (PAHO) to secure drugs because of the outbreak in Latin America, officials in Georgetown reported.

Sanitation Urged as Defense Against Cholera

*FL2005114691 Bridgetown CANA in English
2014 GMT 18 May 91*

[Text] Port of Spain, Trinidad, May 18, CANA—A two-day meeting that ended here at the weekend has underscored the need for the Caribbean to maintain or improve sanitation facilities to guard against cholera, which has been devastating Latin America. Significant investments in rebuilding and improving water and sanitation services will limit the potential for cholera to spread in the region, said Dr. James Hospedales, an epidemiologist attached to the Caribbean Epidemiology Centre (Carec).

English, Dutch, French, and Spanish speaking Caribbean representatives attended the conference, organised by Carec and the Pan American Health Organisation (PAHO). The meeting was to review the epidemic, assess the risk to the Caribbean, and plan prevention, detection, and control measures.

Cholera, a diarrhoeal illness transmitted through food and water contaminated with vibrio cholerae bacteria, has killed more than 1,000 persons and possibly infected 177,000 others in Peru, the focus of the current epidemic in South America.

"Cholera in all parts of the world is a disease of poverty," Hospedales said. He observed that all Caribbean countries have areas of poverty with inadequate services. He said governments are being urged to develop and implement programmes in keeping with PAHO's national

evaluations of the Latin American and Caribbean water and sanitation sector, covered in a 1990 Declaration of Puerto Rico.

The conference recommended that national committees be set up to assess the risk to each country and to plan accordingly. It also urged strengthening of public education and information campaigns, surveillance, and laboratory capabilities. Additional research was also recommended.

A workshop is planned for July to update laboratory technicians in the Caribbean in cholera diagnosis. A coordinating group, including Carec, PAHO, and the Caribbean Community (Caricom), is also to be set up to boost responses in the Caribbean.

"Education and motivation of the public is the most important component of a cholera control programme," Hospedales said. Contamination occurs when human waste from infected persons comes into contact with food or water or when an infected person prepares or handles food incorrectly.

Dr. Hospedales said that vaccines currently available give a false sense of security and are not recommended; at most only half the number of persons vaccinated will be protected, and protection lasts only four to six months, he explained.

"Cholera will ultimately be brought under control only when water supplies, sanitation, and personal hygiene are safe enough to prevent the transmission of vibrio cholerae," said the epidemiologist.

Emergency Conference on Cholera Ends in Trinidad

*FL1805131691 Bonaire Trans World Radio in English
1230 GMT 18 May 91*

[Text] An emergency conference on cholera has ended in Trinidad and Tobago with major recommendations. Delegates from 17 countries discussed ways to control contamination and spread of the disease which has infected nearly 170,000 people in Latin America.

Caribbean Epidemiological Center official, Dr. James Hospinelas, says the recommendations included a call for national level commissions to assess risks and set a policy to improve water and sanitation systems.

Fernandez Departs for Latin America; Cholera Discussed

*LD2005165991 Madrid RNE-1 Radio Network
in Spanish 1000 GMT 19 May 91*

[Report by correspondent Hector Arenas on Spanish Foreign Minister Francisco Fernandez Ordonez's departure for Ecuador and Bolivia at Madrid's Barajas Airport on 19 May]

[Text] Foreign Minister Fernandez Ordonez is now flying to Ecuador and Bolivia. He said that the Latin American countries, despite European integration, still have a great priority in Spanish foreign policy. Spain maintains an important level of political cooperation with Bolivia and Ecuador, as well as an important level of economic cooperation—over \$450 million—as these countries move from the phase of successive dictatorships to stable democracies. Among the problems Fernandez Ordonez will be discussing with the Bolivian and Ecuadorean authorities is the cholera epidemic and possible aid for it: [Begin Fernandez recording]

Yes, there has already been considerable aid, which we proposed to the EC. There has been a visit to this end—I spoke at the last meeting of the EC Council of Ministers about the necessary aid to these countries—there has been a visit by Commissioner Matutes offering \$25 (?million). [end recording]

The Spanish foreign minister on this occasion expressed the government's satisfaction at the statement by Morocco's King Hassan II to support holding a referendum in the Western Sahara, the former Spanish colony, during his recent tour of that territory.

BOLIVIA

Food Imports From Cholera-Affected Countries Banned

PY3004183691 La Paz PRESENCIA in Spanish
23 Apr 91 p 8

[Text] (ANF)—Due to the worsening of the cholera epidemic and the deadly spread of the disease throughout the continent, the Bolivian Government has decided to definitively ban the import of food that may be at risk from countries affected by cholera.

Products that are brought into the country illegally will be confiscated and burned.

Trade Under Secretary Jorge Paz Navajas, who reported the terms of Interministerial Resolution 24530/91 (Ministry of Industry and Commerce, Ministry of Agriculture, Livestock and Campesino Affairs, and Ministry of Public Health), said a technical commission had been created with members of the three ministries to control the products on the Bolivian market.

The importation of food will be authorized, provided strict commercial and sanitary rules are complied with to guarantee that the food is not infected by the epidemic.

The resolution notes that the epidemic continues to spread over several Latin American countries and that it has appeared in towns very close to the Bolivian border, such as the Peruvian town of Puno.

Following are highlights of the resolution:

1. The ban on the import of food that involves risk from countries affected by cholera is hereby maintained.

2. The import of food in general, either fresh or canned food in any type of container from those countries, will be subject to authorization issued through an administrative interministerial resolution of the Ministries of Industry, Commerce, and Tourism, of Social Security and Public Health, and of Agriculture, Livestock and Campesino Affairs.

3. Foreign trade control agencies (will issue) the corresponding certificates, in keeping with the administrative interministerial resolution referred to in the previous paragraph.

4. The National Police and the General Customs Directorate will be in charge of enforcing the terms of this resolution. Violations of this resolution will be punished with the most severe penalties provided for by the law. Any smuggled food, either fresh or canned in any type of container, or any food items lacking the corresponding interministerial authorization, will be confiscated and burned.

Yellow Fever Outbreak Kills 26 in Santa Cruz

PY0205171891 La Paz EL DIARIO in Spanish
28 Apr 91 p 1

[Summary] According to Raul Escolari, director of Santa Cruz Department Health Unit, 26 people have died of yellow fever in Santa Cruz Department so far.

Yellow Fever, Cholera Outbreaks Reportedly Controlled

PY1405193791 La Paz Radio Fides Network in Spanish
1700 GMT 14 May 91

[Text] National Epidemiology Director Dr. Roberto Vargas has reported that the yellow fever outbreak in our country has been controlled.

[Begin Vargas recording] The outbreak began in February and it has now completely ended. It has completed its cycle, so to speak, indeed the last two cases were reported on 5 May. It has ended. We are now seeing the so-called tail of the outbreak.

The outbreak basically affected the Andres Banez Province where most of the cases were reported. One or two cases, very few, were reported in six other provinces.

The epidemic was clearly caused by the entry of settlers in these sectors. Nevertheless, people who are not settlers—and not even from these sectors—have also suffered from this disease. Every reported case involved people who were not vaccinated. [end recording]

Dr. Vargas also emphasized that outbreaks are caused by people who are not vaccinated and who enter these tropical zones.

With respect to cholera, Dr. Vargas reported the following:

[Begin Vargas recording] Five cholera cases have been reported in Puerto Maldonado [in Peru] on the Tambo-pata River and near the Madre de Dios River, about 35 km from the Bolivian border.

One of these five has subsequently died. The outbreak has been completely contained. It has been contained by Peruvian doctors. We went there. We were there. We took some aid, such as medicines, serum, etc.

The objective of this type of aid is to control the outbreaks outside our national territory. [end recording]

BRAZIL

Commission Chairman Confirms Fifth Cholera Case

PY3004165091 Rio de Janeiro O GLOBO in Portuguese 27 Apr 91 p 5

[Excerpt] Baldur Schubert, chairman of the National Anticholera Commission, yesterday confirmed that Peruvian Navy Officer Segundo Cardenas Burgas, 33, is infected with cholera. Cardenas was admitted to the Tabatinga Garrison hospital on 21 April. The results of the test were ready one week after the material was submitted to a laboratory. So far five cholera cases have been reported in Brazil. [passage omitted]

Mato Grosso State Reports First Cholera Case

PY1905004091 Rio de Janeiro Rede Globo Television in Portuguese 1600 GMT 18 May 91

[Text] Health officials have confirmed the first cholera case in Mato Grosso State. The case was reported in Pontes e Lacerda, 460 km west of the capital Cuiaba, near the Bolivian border. The victim is a teacher who was treated in a local hospital and has already returned home. A laboratory test confirmed the disease, and a team of doctors from the Mato Grosso Health Secretariat is in Pontes e Lacerda to follow the case.

Health Minister Reports 11 Confirmed Cases of Cholera

PY2305024091 Brasilia Voz do Brasil Network in Portuguese 2200 GMT 22 May 91

[Excerpts] Health Minister Alcení Guerra disclosed 22 May that there are 11 confirmed cases of cholera throughout Brazil so far. The minister briefed representatives of the Chamber of Deputies for the defense of consumers, the environment, and minors on measures being adopted by the government to fight and prevent the further spread of cholera in Brazil.

Minister Guerra admitted that the vibrio cholerae agent was found in the sewage system of Cumbica airport in Sao Paulo and that so far the carrier has contacted neither the Health Ministry nor the Sao Paulo Health Secretariat.

[Begin Guerra recording] Our main concern now is focused on the carrier of this disease. He has obviously not fallen ill because he has not contacted us. He is somewhere in Brazil but all local authorities are immediately alerted when a cholera carrier is detected in their city or district. [end recording] [passage omitted]

Today Minister Guerra disclosed that 11 cases of cholera have been confirmed in Brazil. Eight cases were detected in Tabatinga, two in Benjamin Constant, one in [name indistinct] Amazon which is also on the border with Peru. The most recent cholera case was confirmed in Fonte Agraciada, Mato Grosso State.

Cholera Cases Reported To Total 15 Nationwide

PY2505221491 Brasilia Radio Nacional da Amazonia Network in Portuguese 1000 GMT 25 May 91

[Summary] The Health Ministry has confirmed four more cholera cases in Brazil, three in Tabatinga and one in Pontes e Lacerda. Three patients are asymptomatic carriers, while only one is actually ill. According to the Health Ministry, so far 15 cases of cholera have been reported in Brazil, 11 in Tabatinga, two in Bejanamin Constant, and two others in Pontes e Lacerda.

Government To Purchase Cuban Meningitis Vaccine

PY0905031091 Brasilia Voz do Brasil Network in Portuguese 2200 GMT 7 May 91

[Text] Brazil will purchase 15 million doses of vaccine against meningitis type-B from the Cuban Government. The first lot of three million doses must arrive in the country this month. Acting Health Minister Luiz Romero Farias said the government purchased the Cuban vaccines to be prepared in case there is an outbreak during the winter.

[Begin Romero recording] The three million doses are just a strategic stock to be prepared in case there is an outbreak of meningitis during the winter. [end recording]

Brazil will pay Cuba with products such as soybean, chicken, spare parts, and chemical products.

CHILE

Health Officials Report 36 Cholera Cases

PY0305155891 Santiago Radio Nacional de Chile Network in Spanish 1100 GMT 3 May 91

[Summary] Despite the fact that the cholera outbreak seems to be receding in Chile, health officials have recommended caution and the observance of measures to prevent the disease. Health Ministry officials have confirmed a new cholera case in Santiago, noting that 36 cases have been reported in Chile thus far. Health authorities said the number of cases is small because of

people's compliance with measures that were adopted to control this dangerous disease. Observance of these measures should continue despite the downward trend in the number of cases that are detected daily.

Government Confirms 38th Cholera Case in Country

PY0905030091 Santiago Television Nacional de Chile Network in Spanish 0000 GMT 8 May 91

[Summary] The first cholera case registered in southern Chile, the 38th in the country, was confirmed today. Doctors have declared the patient out of danger. According to doctors, although some cholera cases are still being registered in the country, they are isolated cases and the situation is under control.

Cholera 'Reportedly Declining'; Minister Cited

PY1505135491 Santiago Radio Nacional de Chile Network in Spanish 1100 GMT 14 May 91

[Text] Cholera is reportedly declining in the country thanks to the people's compliance with measures recommended by health officials. Reporter Veronica Munoz gives us further details:

[Begin Munoz recording] The number of people affected by cholera in Chile is the same— 39. Health Minister Jorge Jimenez has reported that no new cases were registered over the past weekend. The minister added that the satisfactory results achieved by Chile in its struggle against cholera will help neighboring countries such as Argentina, Uruguay, and Paraguay, where the cholera epidemic that began in Peru in January 1991 has not yet arrived.

Jimenez said Southern Cone health ministers will hold a special meeting in Brasilia in two months and that cholera will be one of the main topics of discussions on the agenda. He added that countries of the continent must make a better effort to improve their basic structures and sanitation, including drinking water and sewerage systems, to prevent cholera outbreaks. [end recording]

ECUADOR

Health Ministry Gives Report on Cholera Cases

PA0405161991 Quito Voz de los Andes in Spanish 2300 GMT 25 Apr 91

[Summary] Public Health Minister Doctor Plutarco Naranjo has appeared before the Congress to report on the government's policy to combat the cholera epidemic, in view of the possibility the lawmakers may submit him to a political trial for the way he has handled this situation.

Dr. Naranjo noted, "We are determined to develop a health awareness among the people so that they can help in preventing this disease that is unfortunately affecting

Ecuador. There are no real indications that the disease is caused by faulty pipes or by the pollution in the ocean and rivers. What has been learned is that the majority of cholera cases are caused by contaminated food products."

To refute a statement by Deputy Jorge Bustamante that there have been 12,000 cholera cases and 190 deaths in Loja Province, Dr. Naranjo states: "I am also going to give to congress statistical data, broken down by province, on the number of hospitalized patients, as well as on the number of people who have died in and out of hospitals."

GUATEMALA

Outbreak of Shigellosis, 1 Death

91WE0321A Guatemala City PRENSA LIBRE in Spanish 5 Apr 91 p 22

[Excerpt] An outbreak of shigellosis in Rabinal, resulting in the death of one young child, has been detected and brought under control, Dr. Zoel Leonardo, director of the Baja Verapaz health district, reported yesterday.

Dr. Leonardo confirmed the outbreak of this disease, reporting that there have been 500 cases. The first death to occur was that of a nine-month-old girl.

He said there was an outbreak (110,000 cases) of this illness in Guatemala in 1969, in which 9,000 children died. That shigellosis epidemic lasted for two years, according to a report issued by the conferences and round tables of the third Peruvian microbiological and parasitological congress held in Lima, Peru.

Such an outbreak has not occurred in Guatemala for 20 years. The microorganism causing this illness has been identified as *Shigella dysenteriae*, type 1.

Dr. Leonardo said he does not believe the disease is confined to Rabinal, adding: "There is probably another primary outbreak somewhere in the country. The disease was imported from somewhere else in Guatemala; we believe it did not arrive from outside."

He indicated that fortunately when the outbreak was detected in Rabinal, the ministry of health and the local authorities gave their support. "This effort was conducted during Holy Week." [passage omitted]

GUYANA

Government Seeks Aid To Prevent Cholera Outbreak

FL1505142191 Bridgetown CANA in English 1147 GMT 15 May 91

[Text] Georgetown, Guyana, May 15, CANA—The Guyana Government is seeking the assistance of the Pan American Health Organisation (PAHO) to secure drugs

because of a cholera outbreak in Latin America, officials here reported. Health Ministry said they would be making formal requests to other international agencies for assistance.

The Health Ministry is seeking to acquire drugs such as tetracyclin and co-trimoxazole and chlorine tablets. These and other related drugs cost U.S. 50,000 dollars, the officials calculated.

More than 1,300 persons have died of cholera in Latin America, and doctors are treating more than 150,000 cases.

The Health Ministry here has been issuing guidelines for the prevention, recognition, and treatment of the disease. It warned against the use of untreated water and the eating of raw or partly cooked vegetables or meat.

Health Cooperation Meeting With Suriname Planned

*FL2205003291 Bridgetown CANA in English
2140 GMT 21 May 91*

[Text] Georgetown, Guyana, May 21, CANA—Senior health officials of Guyana and Suriname are to meet Thursday at the Guyana border town of Corriverton.

Officials here said the two sides were expected to discuss issues including possible cooperation on cholera, sexually transmitted diseases, and tuberculosis. The killer disease AIDS (Acquired Immune Deficiency Syndrome) is expected to be discussed.

Cholera has been devastating Latin American countries.

HONDURAS

More Than 700 Cases of Malaria in Olancho

*91WE0332B Tegucigalpa LA TRIBUNA in Spanish
11 Mar 91 p 2*

[Text] Juticalpa, Olancho—More than 700 cases of malaria have been detected in different areas of the Department of Olancho. This was stated by the Directorate of Public Health of Region 7, whose headquarters are in Juticalpa.

Ubence Calix Solis, the director of health, confirmed to LA TRIBUNA that cases of malaria have been detected in Area 2 in Catacamas, Area 1 in Juticalpa, and the area covering all of the Department of Patuca.

The latest sampling, conducted two weeks ago, showed 714 cases of malaria, with Catacamas the area most affected.

Calix Solis said that this is a reason for concern, "because we do not have the necessary resources to deal with this outbreak of malaria."

Then he commented that the situation requires treatment which is "very special, and extraordinary help" is needed from the central government to assist in wiping out the disease.

The variety of malaria which now affects the people of the Department of Olancho is known as "Vivax." Calix Solis said that this variety is considered the most benign and the easiest to control, "if adequate action is taken in time."

He said that there is another type of malaria, known as "Falciparun," which is deadly. He commented: "Fortunately, no cases of this kind of malaria have been identified."

The official considered the situation "a serious one," if action is not taken immediately and if the infrastructure is not changed in the areas affected, which are considered to be mosquito breeding grounds.

The situation is difficult in Catacamas, as the index of infection is perhaps the highest. Up to the present about 449 cases have been confirmed, resulting from the infrastructure of the city and its nearness to burning piles of rubbish. Furthermore, the river which runs through it provides good breeding grounds for the mosquitoes which transmit malaria. In the Patuca area 265 cases have been recorded, while an undetermined number has been recorded in Juticalpa.

Calix Solis explained that he recently met with Armando Montes Zapata, the mayor of Juticalpa, to find an adequate way of eliminating the mosquito breeding grounds which have been formed in the low lying areas of the city.

All of this situation requires immediate action in which the health authorities must participate as a group, as well as the mayors of the towns affected. They must take action to help to control this scourge.

On another subject the director of health in Olancho stated that all preventive measures are being taken in this region to deal with a possible outbreak of cholera.

He commented: "We are increasing our vigilance to deal with a possible epidemic throughout the region. All of the health personnel are alerted. Furthermore, we are organizing a special cholera brigade which will be in a position to provide any help needed in case this terrible disease appears."

Seventeen Cases of Canine Rabies in Capital

*91WE0332C Tegucigalpa EL HERALDO in Spanish
16 Mar 91 p 4*

[Excerpt] An outbreak of canine rabies has been detected in several areas of the country. As a result of the spread of this disease the authorities of the Ministry of Public Health ordered 1,718 dogs to be destroyed in January and February 1991.

In Tegucigalpa alone 17 cases of canine rabies and two cases of porcine rabies have been detected. The diseased animals have already been destroyed, but they bit 222 people. This was reported by Heladio Ucles, chief of the Metropolitan Health Region, who stated that the persons concerned will have no problems because they have received attention in time.

Due to the present situation the Metropolitan Health Region announced on 15 March that from 18 to 22 April there will be a massive program to vaccinate dogs in Tegucigalpa. It is planned to immunize 37,764 animals against rabies.

The vaccination stations will be located in health centers in outlying areas, such as the residential zones of Monterrey, Las Crucitas, El Manchen, and El Chile, among others.

The first indications of canine rabies in the capital area were reported in the village of La Canada, where six cases were identified. Later, the presence of the disease was reported in the Villanueva area, where three cases were identified. The disease spread to the El Chile area, where two cases were reported, and to La Cuesta, where four cases were reported.

Heladio Ucles pointed out that canine rabies has been identified throughout the city of Tegucigalpa and that outbreaks have even been reported in the center of the capital.

To carry out the vaccination of dogs in Tegucigalpa, 60 health brigades per day will work in 180 neighborhoods and residential areas. The first brigades will be made up of supervisors, vaccinators, note takers, and drivers.

Heladio Ucles stated that there is enough vaccine to immunize the animals. Some 1,300 flasks of vaccine with 25 doses each have been earmarked for the program and there are 4,000 needles and syringes, 10,000 certificates, and 40,000 dog collars on hand. [passage omitted]

PANAMA

Health Minister on Aid Requested To Confront Cholera

PA0305135991 Panama City EL PANAMA AMERICA
in Spanish 30 Apr 91 p 1

[Article by Carlos Vargas]

[Text] Health Minister Guillermo Rolla Pimentel stated on 29 April that Panama had requested 6.3 million balboas from international health organizations to confront any possible cholera epidemic that may be spreading from Colombia.

He added that Deputy Health Minister Carlos Abadia will head a delegation of Central American countries to

Geneva, Switzerland, to present to the WHO a request for 63 million balboas in aid to help prevent a cholera epidemic in the region.

The Central American countries would use these resources to set up a cholera prevention and control campaign, Rolla Pimentel asserted.

He also stated that Panama would be entitled to 6.3 million of the 63 million balboas, and would use it to prevent cholera from entering the Central American region through the border with Colombia.

The health ministers of the region agreed to request the aid from the WHO during the health summit held in Panama recently.

Health Minister Says Cholera Has Not Been Detected

PA0105203991 Panama City LA ESTRELLA DE
PANAMA in Spanish 1 May 91 pp 1, A-2

[Communique issued by the Health Ministry in Panama City on 30 April]

[Text] The Health Ministry reiterates to the nation that cholera has not been detected within the country's borders, and urges the community to adhere to the hygienic measures established by the Health Ministry to prevent the disease.

This confirmation has been brought to the public's attention to prevent a general state of alarm in response to the report concerning an alleged center of infection detected in the Vacamonte fishing port.

To be notified and published

Dr. Guillermo Rolla Pimentel

Minister of Health

Panama, 30 April 1991

PERU

Cholera Cases at Children's Hospital Drop 50 Percent

PY0105011291 Lima RTP Television Network
in Spanish 1800 GMT 30 Apr 91

[Summary] Children's Hospital Director Felix Armas has reported that cholera cases at that hospital have dropped by over 50 percent. Only one cholera emergency ward out of two remains open in the hospital. Most of the children got sick by eating food from street vendors.

'Terrorists' Allegedly Die of Cholera in Ancash

*PY1005140491 Madrid EFE in Spanish 0355 GMT
10 May 91*

[Text] Huaraz (Peru), 9 May (EFE)—It has been reported in Huaraz, capital of Ancash department, that at least 15 terrorists have died as a result of the cholera epidemic that is affecting groups of the Shining Path terrorist organization in the mountain range of the Ancash Department, north of Lima. Pedro Maquina, a government official of Ancash department, has said that the deaths occurred during the past few days in sectors of Pomabamba and Huari, in the area known as Callejon de los Conchucos.

Maguina explained that local residents have reported that the cholera epidemic is affecting the Shining Path organization and that at least 15 terrorists have died. He said that he was told that the subversive gangs have been pressuring officials from Pomabamba and Huari to make the Health Ministry open health posts in these locations so that they can receive medical treatment.

The cholera epidemic that started more than three months ago in Peru is affecting the coast and the mountain and jungle sectors of Peru. According to official figures, the disease has already killed 1,300 people and infected other 177,103.

Cholera Control Protocol Signed With Brazil

*PY1905033891 Lima RTP Television Network
in Spanish 1800 GMT 17 May 91*

[Summary] Peruvian Health Minister Victor Yamamoto and his Brazilian counterpart Alcení Guerra on 16 May signed a protocol to supplement a health agreement on fighting cholera. The protocol, which will facilitate the adoption of measures for fighting cholera in the Amazon region, provides for the exchange of information, the adoption of health control measures along the border, and the provision of material support such as medicine.

Health Ministry Updates Cholera Statistics

*PY1905033691 Lima RTP Television Network
in Spanish 0230 GMT 18 May 91*

[Text] The cholera epidemic is practically under control in the country, with the sole exception of the jungle region. The Health Ministry today released the latest nationwide figures on the disease.

Statistics on cholera: Total cases: 187,734;

People treated in hospitals: 72,705;

Dead: 1,528.

These figures have not changed in several days.

AFGHANISTAN

Twenty-one Soviet POWs Die in Mujahidin Custody

BK0705095791 Hong Kong AFP in English 0952 GMT 7 May 91

[Text] Peshawar, Pakistan, May 7 (AFP)—Twenty-one Soviet prisoners of war (POWs) have died recently in Afghan mujahidin custody as a hepatitis epidemic lashed their camps, informed sources said here Tuesday.

The sources said the 21 POWs died over the past four months. "They were all suffering from jaundice," a reliable source who did not wish to be named said.

Another informed resistance source, confirming the hepatitis epidemic, said the exact casualty figure could not be immediately confirmed as "the Soviets are lodged in different camps" at secret resistance hideouts.

An unspecified number of Red Army troops were captured by the mujahidin guerrillas during the 10-year Soviet Army deployment in Afghanistan in support of the pro-Moscow regime in Kabul.

After the Soviet Union ended the withdrawal of its estimated 112,000 troops from Afghanistan in February 1989, Moscow said some 13,000 of its soldiers and officers had been killed in the past decade of fighting.

The Soviet Union has listed more than 300 soldiers as missing but the resistance sources, without giving exact figures, said the number of prisoners could be higher.

Several groups are holding the Soviet POWs but a majority of them are said to be in the custody of the Hezb-e Eslami faction led by fundamentalist resistance leader Gulbuddin Hekmatyar.

A local daily, THE FRONTIER POST, said other POWs were suffering from hepatitis, a sometimes fatal inflammation of the liver, but had been provided with necessary medical care.

But the report said the Soviets, disturbed by the deaths of their comrades, were refusing the food and medicine given them by mujahidin doctors. Resistance sources were unwilling to comment.

Since the Soviet withdrawal, a private delegation representing the POWs' mothers and Soviet intellectuals has twice visited Pakistan for talks with resistance leaders. But the release of the POWs has been pending Moscow's acceptance of certain mujahidin demands.

Among its conditions, the Pakistan-based seven-party resistance has demanded the release of thousands of mujahidin guerrillas captured by Soviet and Afghan Government troops during the war.

Red Cross Doubts Claims of Dead Soviet Prisoners

BK0805141591 Hong Kong AFP in English 1403 GMT 8 May 91

[Text] Islamabad, May 8 (AFP)—The International Committee of the Red Cross (ICRC) cast doubt Wednesday on Afghan rebel claims that 21 Soviet prisoners have died in captivity in a hepatitis epidemic.

"We have no information on this subject," Marco Altherr, head of the ICRC branch in Pakistan, said in an interview.

Western diplomats here were also sceptical of the reports released Tuesday in Peshawar by sources close to Afghan fundamentalist guerrillas.

The figure of 21 dead seems "abnormally high," one diplomat said, adding that he doubted the epidemic had caused "so many deaths in so little time."

Afghan rebel sources said the Soviet prisoners had died in captivity during the past four months, especially in the camps of the Hezb-e Eslami party of Gulbuddin Hekmatyar.

About 300 Soviet soldiers were reported missing after the Soviet military withdrawal from Afghanistan two years ago, according to Moscow's official figures. About 100 were being held by guerrillas, Western sources in Pakistan said.

BANGLADESH

Reportage, Comment on Diarrhea Epidemic

Health Minister's Report

91WD0773A Dhaka THE BANGLADESH OBSERVER in English 25 Apr 91 pp 1, 8

[Text] Health Minister, Chowdhury Kamal Ibne Yusuf on Monday informed the Jatiya Sangsad that diarrhoeal diseases had so far claimed 430 lives in the country during the last four months beginning January, reports BSS.

Replying to a call attention notice moved on Sunday by Mr. Nurul Islam Moni (Ind- Borguna) the minister said that so far 27,223 persons had been affected by the disease in 15 districts of the country including nine in the south.

Mr. Yusuf said the disease had spread to 265 unions in 73 upazilas of the said districts.

He said during the last 24 hours the disease claimed 25 lives while 2,080 were affected in those areas.

The Health Minister informed the House that he had visited the southern districts to see for himself the situation there. He said in the meantime, diarrhoea had broken out in Rajshahi, Chandpur, Luxmipur, Bogra,

Netrokona, Mymensingh, Sythet, Naogaon, Magura, Nilphamari and Satkhira districts.

He said the main cause of the spreading of the disease was lack of adequate pure drinking water. He said due to constant drought the water level had gone down and as a result water could not be had from even deep tubewells. The people are therefore, using and drinking contaminated water from canals, rivers, ponds and stagnant pools.

The Health Minister further told the House that the disease was also spreading fast due to environment at imbalance during the dry season.

He said the people in the southern parts of the country are habituated in taking stale rice with contaminated water.

Giving a district-wise break-up, the Health Minister said that 2,694 persons had been attacked by the disease in Barisal district of which 89 died, in Patuakhali district, 1,666 people had been affected and 60 died while in Jhalakathi 2,296 had been attacked and 33 died, he said.

Mr. Yusuf said that in Pirojpur 740 people had been attacked while 13 had died, in Barguna 6,456 attacked and 45 died. Continuing he said the death toll in Bhola was 85 while 4,007 were attacked, in Bagerhat there were 11 victims while 2,080 persons were attacked.

He said in Noakhali 23 people had died and 965 attacked by the disease while in Satkhira four people died and 149 had been attacked.

The Health Minister said in Rajshahi district, some 758 persons were attacked and 14 died while in Bogra 3,448 had been attacked and 20 died. He said 1,043 and 655 persons had been attacked by the disease in Pabna and Jessore districts while 24 persons and 8 persons died respectively in those areas.

Mr. Yusuf mentioned that in Natore 130 persons had been attacked and none died while one person died in Kushtia out of 136 attacked.

As asked by the Speaker, the Health Minister, Chowdhury Kamal Ibne Yusuf made a statement on the diarrhoeal situation in the country in reply to a call attention notice moved on Sunday by independent member from Barguna, Mr. Nurul Islam Moni.

The Health Minister said that diarrhoea has broken out in Rajshahi, Chandpur, Luxmipur, Bogra, Netrokona, Mymensingh, Sythet, Naogaon, Magura, Nilphamari and Satkhira districts of the country. He said he had already visited some of the affected areas to see for himself the situation there.

Mr. Yusuf gave a district-wise break-up of the death toll and said that since January 1, 1991, 430 people died.

The Health Minister said that necessary steps had been taken by the government to combat the situation. He

informed the House that 1,016 medical teams have been working in the affected areas where 59 temporary hospitals had been set up.

He described the situation as a national problem and called upon the members irrespective of party affiliations to help the government in solving the crisis.

Task Forces Set Up

The Health Minister further said that task forces had been set up in every affected district under the supervision of the member of parliament.

He described the situation in the affected areas as a national problem and sought cooperation of all irrespective of party affiliation to combat the disease... "It is a problem to be tackled by us all," he concluded.

PHE Emergency Plan

The Public Health Engineering Department of the local government division has undertaken emergency measures to sink more tubewells in those districts for ensuring supply of pure drinking water where diarrhoeal diseases have broken out.

Under the emergency arrangements, 1,601 tubewells are being sunk in Barisal, Jhalakathi, Pirojpur, Bhola, Patuakhali and Barguna in addition to the existing 30,560 tubewells in the area. Of these additional tubewells, more than eleven hundred have already been sunk and the remaining ones are expected to be sunk by the end of this month, a PID handout said.

Besides, emergency control rooms have been set up in the district and upazila headquarters in the areas to monitor the developments in the Public Health Sector. DPHE personnel in those districts have been put on emergency alert to face the situation and to ensure prompt repairs of the inoperative tubewells.

A central control room is operating round-the-clock in Dhaka with the following telephones: 233103, 258881 and 404948.

Task Force Planned

91WD0773A Dhaka THE BANGLADESH OBSERVER in English 21 Apr 91 pp 1, 8

[Text] An emergency review meeting on diarrhoea, which broke out in an epidemic form in six southern districts, held at the Health Ministry's Conference Room Saturday decided to form a Task Force in each affected district under the overall supervision of the local M.Ps, reports BSS.

The meeting, held with Health Minister Chowdhury Kamal Ibne Yusuf in the chair, worked out detailed measures to be taken to contain the disease.

According to the decisions, the respective Deputy Commissioner will work as coordinator of the Task Force. The other members of the Task Force will be the Civil

Surgeon, the Superintendent of Police, the deputy Director (Family Planning), the Deputy Director (Ansar and VDP), the Executive Engineer (Public Health Engineering), the District, Information Officer, Senior Health Education Officer, the local elite and the head of the local private organisations.

The task force will send a daily report to the Health Ministry regarding the measures to be taken to cope with the situation.

Among others, the Task Force will take decision and action to ensure adequate supply and distribution of emergency medicines in the affected areas, identify exact problems, install required number of tubewells and slab latrines. Besides, the Task Force will organise proper publicity in villages and haats and bazars to create awareness and educate people about various aspects of the disease through making poster and field publicity.

Meanwhile, massive measures to cope with the situation have already been taken in each affected district following recent visits of the Health Minister in all the six districts.

It was informed at the meeting that at present 405 medical teams are working in six districts. Of them 117 teams are working in Barguna, 30 in Jhalakathi, 65 in Patuakhali, 62 in Pirojpur, 35 in Bhola and 95 in Barisal.

The local administration have arranged publicity through exhibition of cinema slides and other mass media to motivate people to take precautionary measures against the disease.

Besides, efforts are being taken to demolish un-hygienic latrines and set up slab latrines prohibit, selling of stale and unhygienic food.

The ministry so far distributed, among the affected people, 40,000 bags of cholera saline, 21 lakh packets of oral saline and a huge quantity of medicines to combat the disease.

Preventive Steps Urged

91WD0773A Dhaka THE NEW NATION in English
11 Apr 91 p 5

[Editorial: "Eradicating Diarrhoea"]

[Text] Diarrhoea has been reportedly taking its heavy toll as it usually does every year. The figure of the dead and affected, undercut though, is quite alarming. The cases of diarrhoea are the highest in the tropical humid coastal regions and recently hundreds of people living in the coastal and adjoining areas of Patuakhali, Barisal, Bhola, Jhalokati, Khulna, Madaripur districts had been affected. A large number of them had died. It is spreading rapidly and the preventive measures appear inadequate to meet with the situation.

It is a baffling experience that whenever diarrhoea or any other epidemic breaks out the concerned administration

is often caught unprepared. Life saving drugs like saline are often unavailable though the epidemic is a regular visitor every year. It is feared that the shortage will lead to further deterioration of the situation.

As found in the past the normal causes for the outbreak of this fatal disease are the paucity of drinking water, unsanitary conditions. Delay in reaching medical aid just aggravates the situation. The obvious then happens with the epidemic claiming hundreds of lives. Negligence on the part of the administration to eliminate the causes and to provide the poor ignorant people with the necessary information pay heavily and dearly. No concerted effort appeared to have been made in imparting training to the rural population about the upkeep of sanitation nor were they given the required medicare support to combat the epidemic.

Unless the rural population, who are the major victims, are taught preventive steps and made familiar with their applications it will be nothing short of a farcical exercise to think of eradicating diarrhoea from the country.

Rushing of medical teams to the affected spots with medicine will not do anything to prevent the disease. The latest world health strategy attaches great importance to preventive measures specially in such instance as the outbreak of diarrhoea. We would do well to bear in mind the well known medical maxim: prevention is better than cure.

Post-Cyclone Diseases Kill 600

BK1205064491 Hong Kong AFP in English 0638 GMT
12 May 91

[Text] Dhaka, May 12 (AFP)—Some 600 people have died in Chittagong from diseases triggered by last month's killer cyclone which hit Bangladesh's southeast and destroyed its food and water supplies, press reports said Sunday.

THE BANGLADESH OBSERVER, quoting a local official report in Chittagong late Saturday, said 600 people died of diarrhoea and other diseases raging in the area where up to 80,000 people died in the savage April 29 cyclone.

The report said up to 300 diarrhoeal deaths were reported from the delta island of Sandwip, where some 30,000 people died in the disaster, adding that another 100 deaths occurred in the sub-district of Patiya.

Some 100 disease-linked casualties have occurred in the ravaged island of Kutubdia, THE OBSERVER said, adding that the remaining deaths were from Chittagong's Banskhali and Anwara.

The reports followed government assessments of reports by domestic and international aid agencies that an epidemic of diarrhoea has flared in several cyclone-hit districts amid shortages of food and clean water.

Newspapers Sunday warned that mass cases of diarrhoea, triggered by contaminated food and water, could lead to a cholera epidemic and kill thousands more.

"Of the half a million people affected by diarrhoeal diseases, 60 percent may contract cholera and 20 percent blood dysentery," the observer quoted top aid organisations as saying.

The Bangladesh chapter of the Red Crescent Sunday rejected several press reports that the killer disease has already spread in affected regions, but admitted that tests to confirm cholera among diarrhoeal patients were not foolproof. Dhaka has also denied previous reports that cholera was spreading and has already killed several hundred.

Some 10 million people were affected in 16 of Bangladesh's 64 districts in the cyclone and an accompanying tidal wave which has killed nearly 139,000 people by the latest official count disclosed Saturday night.

IRAN

Heat, Disease Threatening Iraqi Refugees in Khuzestan

LD1105101791 Tehran Voice of the Islamic Republic of Iran First Program Network in Persian 0930 GMT 11 May 91

[Text] As the hot season approaches in Khuzestan Province, the transfer of over 40,000 Muslim Iraq refugees from that province to cooler regions is vital. According to the Central News Unit, the official in charge of refugee affairs in Khuzestan Province announced the above news and added: Currently over 40,000 of the 68,000 Iraqi refugees who arrived in Khuzestan Province via the southern border crossings, are going through very harsh and worrying living conditions. Considering the extreme heat in Khuzestan Province, the need for cooling instruments and the danger of diseases from the heat, it is vital that preventative measures are taken. He added: The presence of the vast Hawr al-Huwayzah [marshlands between Iraq and Iran] in the southern border regions, which is always full of disease-carrying insects, has put the health of the refugees in real danger.

IRAQ

Ministry of Health Announces 52 Cholera Cases

JN0905162891 Baghdad INA in Arabic 1525 GMT 9 May 91

[Text] Baghdad, 9 May (INA)—The Ministry of Health today announced that 52 citizens were afflicted by cholera in some Iraqi governorates adjacent to Turkey and Iran during the past three days. The Ministry of Health said in a statement that health departments had registered during this period 13 cases in the Maysan Governorate, two in al-Basrah, 15 in Wasit, three in Diyala, 11 in Ninawa, three in Dahuk, and five in

al-Sulaymaniyah. The statement notes that no deaths were registered among these cases and that the condition of the sick was good and reassuring. The statement adds that medical treatment and necessary precautions were taken to control the disease and prevent it from spreading.

The Ministry of Health said these casualties are the result of the aggression by the 30 countries against Iraq, which aimed at destroying Iraq's infrastructure that provides services to citizens, including running water reservoirs stations, electric power stations, and also sewage stations. This caused damage to environmental hygiene [al-ishah al-bi'i], to waste dumps, and to others. The aggression caused a large-scale movement of the population inside and outside the border, particularly in the border governorates.

Dr. 'Abd-al-Amir Khudayr al-Thamiri, director general of the Health and Environmental Protection Directorate at the Ministry of Health, said in a statement to INA that the ministry has taken all measures to control this disease completely and to prevent it from spreading.

He appealed to the WHO, other international bodies, and all countries to work earnestly to give support and assistance to control this disease by offering medicines, liquid preparations, and other requirements to diagnose and confront this disease.

Health Ministry Announces 39 New Cholera Cases

JN1905142791 Baghdad AL-JUMHURIYAH in Arabic 16 May 91 pp 8, 6

[Article by Bushra Muhammad Shabib and Qasim al-Milki from Baghdad; all figures as published]

[Excerpt] The Ministry of Health has revealed that its agencies registered 39 new cholera cases over the past five days. A Health Ministry source told AL-JUMHURIYAH correspondent Bushra Muhammad Shabib that nine of the cholera cases were in Baghdad, seven in Maysan, three in Karbala', three in Wasit, two in al-Anbar, one in Salah al-Din, one in al-Najaf, and one in Dhi Qar. No deaths have been reported among these cholera cases.

The Ministry of Health on 9 May reported 52 cholera cases. In a statement to the AL-JUMHURIYAH correspondent, the director general of the Preventive Medicine and Environmental Health Department attributed the emergence of this epidemic to the breakdown of the sewer systems, caused when the planes of the 30-state aggression destroyed power stations. This means that sewage leaked into water pumping stations, thus affecting the environment, he added. He went on to say: Another reason is the movement of refugees, especially those people who went to reside in border cities outside Iraq during the riots and sabotage carried out by mobs and then returned to the country. The director general of the Preventive Medicine Department denied that

cholera cases exceed the number the Health Ministry officially announced. He added: The reports that have circulated to the effect that the number of cholera cases is large are rumors whose objectives and authors are well known. [passage omitted on procedures to avoid cholera]

New Cholera Cases Reported in Baghdad, Governorates

*JN2205172391 Baghdad INA in Arabic 1215 GMT
22 May 91*

[Text] Baghdad, 22 May (INA)—The Iraqi health authorities have registered 17 new cholera cases over the past six days.

In a statement to INA today, the director general of the Preventive Medicine and Environment Protection Department said that four of the cholera cases were in Baghdad, two in Maysan, two in Diyala, two in Wasit, one in the governorate of al-Muthanna, one in the governorate of Karbala', one in the governorate of Dhi Qar, one in the governorate of Salah al-Din, one in the governorate of Irbil, one in the governorate of al-Najaf, and one in the governorate of Dahuk.

The director general of the Preventive Medicine and Environment Health Department indicated that there have no reported deaths among the cholera cases. He added that these cases are currently receiving intensive treatment at hospitals and health centers.

The Health Ministry earlier announced that 91 cholera cases had been registered in Baghdad and the governorates.

Health Minister Discusses Sanctions With UNDP Official

*JN2205172791 Baghdad INA in Arabic 1120 GMT
22 May 91*

[Text] Baghdad, 22 May (INA)—Health Minister Dr. 'Abd-al-Salam Muhammad Sa'id today discussed with Dr. Muhammad 'Abdallah Nur, assistant secretary general of the United Nations Development Program [UNDP], the possibility of lifting the food and medical blockade enforced on Iraq.

The health minister urged the United Nations to contribute to the reconstruction of hospitals and health centers damaged by the U.S.- Atlantic-Zionist aggression and the acts of rioting and sabotage.

The minister added that the aggression targeted Iraq's infrastructure. He went on to say: Water plants, sewers, and piping systems were destroyed. This caused the spread of numerous epidemics and diseases, including cholera.

The minister said that more than 4 million Iraqi children under five are currently suffering from a lack of baby milk, medicine, and other necessary requirements.

'Abd-al-Salam Muhammad Sa'id asked the UN Security Council Sanctions Committee to allow Iraq to use its assets frozen abroad to purchase medicine, laboratory equipment and solutions, and necessary medical requirements.

Drinking Water in Maysan, Diyala Contaminated

*JN2305193791 Baghdad INA in Arabic 1820 GMT
23 May 91*

[Text] Baghdad, 23 May (INA)—Medical teams at the Environment Protection Center affiliated with the Ministry of Health have registered cases of bacterial contamination in drinking water in the Governorates of Maysan and Diyala. In a statement to INA, the chief of the Environment Protection Center said that laboratory tests showed the drinking water in the two governorates has been contaminated by colonic bacteria and that the percentage of chlorine is below the international limit of 0.05 per million. Meanwhile, no contamination cases were registered in Baghdad or other governorates.

He noted that the reasons for the contamination are the lack of health safety conditions in the drinking water in these two governorates, the citizens' use of water from rivers and streams, and the frequent stoppage of running water.

Damage to Hospitals Estimated at 141,902,000 Dinars

*JN2405102091 Baghdad INA in Arabic 0920 GMT
24 May 91*

[Text] Baghdad, 24 May (INA)—The damage inflicted on health institutions and medicines and medical equipment as a result of the U.S. aggression against Iraq and the mobs' riots has been estimated at 141,902,000 Iraqi dinars. One Iraqi dinar is equivalent to \$3.2.

The head of the Health Ministry's Projects Department told INA that damage to the buildings has been estimated at 25,600,000 dinars, while damage to medicines and medical equipment has been estimated at 116,302,000 dinars.

He pointed out that extensive damage was inflicted on the buildings of five hospitals in al-Basrah Governorate; two hospitals in each of Maysan, Dhi Qar, and Wasit in southern Iraq, Karbala' in Central Iraq, and al-Sulaymaniyah in northern Iraq; three hospitals in each of Babil, al-Najaf, al-Ta'mim, Irbil, and Dahuk governorates; and four hospitals in Ninawa. Extensive damage was also inflicted on 15 health centers and 5 preventive medicine centers in the mentioned governorates.

JORDAN**Country Reported Free of Bilharzia**

91WE0339A Amman JORDAN TIMES in English
21 Mar 91 p 3

[Text] Amman (J.T.)—Jordan is free of bilharzia and the 1,539 persons infected by the disease over the past years have all been cured, according to Mr. Muhammad Rida Tawfiq, head of the Malaria and Bilharzia department at the Ministry of Health.

Dr. Tawfiq said that health workers had been active at water locations, springs, and canals, including the King

'Abdallah Canal in the Jordan Valley and the King Talal and Wadi Shu'ayb dams among other places, conducting inspection, collecting blood samples and pursuing efforts to rid the country of the disease.

A total of 37,324 samples were taken from non-Jordanian workers arriving in the country in the past year, and the Ministry of Health offered treatment to those infected free of charge in a bid to eradicate the disease, he said.

All non-Jordanians arriving to work here are subjected to medical examination to determine that they are not infected.

Smallpox Graveyard To Be Investigated

PM1405095591 Moscow IZVESTIYA Union Edition
in Russian 14 May 91 p 8

[Interview, date and place unspecified, with G. Onishchenko, deputy chief of the USSR Ministry of Health Main Epidemiological Administration, by L. Ivchenko under the "Rumors and Facts" rubric: "Could Smallpox Stage A Comeback?"]

[Text] Reports have recently appeared in the press about the threat of black smallpox. Is it really possible that this most dangerous of diseases could stage a comeback after the WHO declared victory over it in May 1980? After all, that makes 10 years in which there have been no vaccinations against smallpox...

Our interviewee is G. Onishchenko, deputy chief of the USSR Ministry of Health Main Epidemiological Administration.

Ivchenko: Gennadiy Grigoryevich, what does the statement that "the disease has been wiped out" mean? Does it mean that the virus has been destroyed and that no outbreaks of smallpox will ever recur, or does it mean that there is no risk of an epidemic?

Onishchenko: It means that there is no naturally occurring virus which could hypothetically cause the disease. The smallpox pathogen is stored in just two laboratory virus "banks" in the United States and the USSR. They are stored in order to produce a vaccine in the event of an outbreak of the disease and to develop different methods of fighting it. Why are scientists so confident about stating that the naturally occurring virus has been wiped out? Because smallpox only affects humans and is only transmitted by contact between individuals. There are no other living biological carriers of this pathogen. And if humans are not being affected, there is no virus. This is a tremendous victory for the world medical community over a terrible scourge which had formerly decimated entire populations.

Moreover, the world has not just abandoned vaccination—which is in itself a very major and responsible decision—but has also raised the question of destroying the smallpox virus stored in the laboratory. After all, as long as the pathogen exists, a threat exists too—who knows what could happen! That is why last December a

special WHO committee set scientists the task of deciphering by 1993 the genetic code making up the smallpox virus, following which the virus will be destroyed as a living entity. The USSR and the United States—specifically, scientists from the Moscow Virus Specimen Scientific Research Institute and the "Vektor" Science and Production Association—will take part in deciphering the code.

Ivchenko: But now there has suddenly been an article in a Kolymskiy Rayon newspaper stating that in the village of Pokhodsk on the lower reaches of the Kolyma River an old cemetery from the early part of the last century in which hundreds of people who died from black smallpox were buried is being destroyed and is on the point of being swept away by flood waters. The waters could sweep corpses preserved by the permafrost into the East Siberian Sea, from where the virus could "spread" right along the Arctic coastline. So is there a real threat of a resurgence of this dangerous illness?

Onishchenko: I think that this would be to whip up feelings. There are no grounds for panic, even if 150 years ago the people did indeed die from smallpox. After all, it is a purely human disease transmitted by close contact, by airborne droplets. How can one become infected from a corpse—even one preserved in permafrost and hypothetically retaining the virus in its organism? After all, it is not cholera, which is transmitted by water. Even if the cemetery were to be washed into the ocean there would be no natural means for the virus to be transmitted. And, moreover, people don't swim in the Kolyma River—it's not like the Black Sea coast. Why get people worried and sow panic? I am convinced that it would be quite sufficient to strengthen the riverbank and prevent the cemetery being washed away, if only out of a sense of humanity.

Ivchenko: Nonetheless, the question has arisen. Is anything being done to dispel people's doubts?

Onishchenko: Of course. An expedition has been set up to comprehensively investigate the burial site. It is also of scientific interest to the researchers: Did the people really die of smallpox, has the virus been preserved in their remains, and is it still viable? And so forth. Scientists from the Moscow Virus Specimen Scientific Research Institute have been instructed to take part in the research alongside representatives from the scientific establishments of Yakutia and Siberia. The expedition has set off. When it completes its work we will be prepared to tell IZVESTIYA readers about the results of the research.

DENMARK**Greenland Reports Drop in Syphilis Cases***91WE0331B Copenhagen BERLINGSKE TIDENDE
in Danish 27 Mar 91 p 3*

[Unattributed article: "Syphilis Cases in Greenland Decline"]

[Text] There has been a sharp decline in the number of syphilis cases in Greenland. There were 190 cases of the disease in 1990, a decline of almost one-fourth compared with the year before, according to Greenland Radio.

Swine Disease Nears Jutland Border**In Germany, Holland***91WE0326A Copenhagen BERLINGSKE TIDENDE
in Danish Sec II p 4*

[Article by Henrik Tuchsén: "Mysterious Swine Disease South of Border"—first paragraph is BERLINGSKE TIDENDE introduction]

[Text] A mysterious swine disease has started ravaging areas south of the border. The Danish Slaughterhouse Association is following the development closely.

A mysterious new swine disease has turned up in Holland and Germany and German researchers in particular are working at top speed to find the cause of the disease. Slaughterhouses in this country are following the situation very closely.

"We are following the situation intently because the disease might spread. But there is not much fear of that because the disease is thought to spread through contact—in other words not through the air," said veterinarian Steffen Holst of the Danish Slaughterhouse Association.

The swine disease—which is known as the "mystery disease"—showed up in Germany last November and then in Holland in January 1991. In Germany there are reports of over 1,500 infected herds out of 120,000. The outbreak has occurred in a limited area in northern Nordrhein-Westfalen and southern Niedersachsen. In Holland the disease is concentrated in the southeastern part of the country along the German border.

In the latest issue of the Slaughterhouse Association periodical DS-NYT Steffen Holst lists a number of symptoms. So far the disease has shown up only in groups of sows where it causes abortion problems. In connection with casting/farrowing the sows have a fever and suffer loss of appetite, among other things.

No real program has been introduced to combat the disease in Germany and Holland. This is partly because the infectious agent is unknown and partly because they are not certain whether the disease spreads via contact or is an air-borne infection.

"But an intense research effort is under way, especially in Germany," said Steffen Holst.

Following pressure from member countries the EC Commission has introduced a ban on imports of live swine to member countries from the affected areas.

Veterinarians Cooperate*91WE0326B Copenhagen BERLINGSKE TIDENDE
in Danish 28 Mar 91 p 2*

[Ritzaus News Bureau (RB) report: "New Swine Disease Close to Denmark"]

[Text] Sonderborg (RB)—A new and previously unknown swine disease has apparently broken out only 4 kilometers south of the Danish-German border. For the time being both Danish and German veterinary authorities are urging caution, as the symptoms are similar to those of a number of other swine diseases. However the director of the Veterinary Directorate, Erik Stodgaard, confirmed that three herds are currently being examined in Neukirchen, 4 kilometers south of the border with Tønder. These herds have been isolated after showing symptoms of the unknown disease which experts have so far failed to identify.

FINLAND**Influenza Epidemics Having Wide Impact***91WE0277D Helsinki HELSINGIN SANOMAT
in Finnish 6 Mar 91 p A 5*

[Text] Common colds and two influenza viruses are emptying school classrooms and day-care centers. The A-type Singapore virus arrived in Finland late last year and is now getting weaker, but the B-type Yamagata virus is spreading across the country. Both diseases have the early symptoms of muscular pain and rapidly rising high fever that lasts several days.

The Singapore virus that has lost its sharpest sting is a familiar visitor in Finland, as this is already its fourth visit. Its previous attacks have, in fact, left Finns with a fairly high level of resistance.

But the Yamagata virus, first detected in Japan in 1988, is a new pest, and only those who had been vaccinated last fall have developed resistance. The vaccination gives fairly good protection against both viruses. However, falling ill with the Singapore flu gives no protection against the other type, so some unlucky people may catch one flu after the other.

Whereas the Singapore virus is caught easiest by children and young adults, the Yamagata virus does not choose its victims but affects all of the population equally. So far a pest only in Southern Finland, the virus is now spreading to the rest of the country.

Prof. Reijo Pyhala from the Institute of National Health says he believes that not even the Japanese virus will

create a huge epidemic comparable to the Hong Kong flu. However, one or the other of the viruses is expected to infect 10 percent of Finns this year.

Same Treatment Effective for Both

According to Professor Pyhala, the symptoms and the care of influenza patients are almost the same regardless of which virus caused it. The old remedies apply: lots of rest, plenty to drink, and medicine, as needed, for alleviating symptoms.

Especially when infected by the Japanese virus, the patient knows for sure that he has fallen ill. The temperature rises abruptly and stays high up to three days. In addition to muscular pain, the majority of patients have a dry cough, and about half of those infected also have runny noses.

Professor Pyhala warns the infected patients not to take the disease lightly because the most common complication is pneumonia. If a high fever persists longer than four days, it is advisable to visit a doctor to make sure one has not developed it. For elderly patients in weak physical condition, pneumonia can be life-threatening.

Even an adult in good physical condition is wise to avoid undue exertion if he feels the symptoms of flu. It is possible that, because of strenuous physical activity, the infection will not stop at the respiratory system but will continue to the heart muscle.

High Absence Rate in Day-Care Centers and Schools

Attendance in Uusimaa schools and day-care homes had already gone down before the skiing holiday week, and the absence rate persists as the viruses hold children in bed at home. Some school classes have had up to a third of the student body absent at the same time.

For example, during the afternoon snack, only four children out of a group of 12 students were present at the Kannuskuja day-care home in Hakunila of Vantaa. Four of the regular children were sick, three were absent for other reasons, and one had already left to go home. Six of another group of 12 children were sick at home.

Day-care teacher Helena Fagerstrom said that the situation is already much better than during the previous week, when a large portion of the personnel were on sick leave.

Country Declared Free of Rabies

91WE0277B Helsinki HELSINGIN SANOMAT
in Finnish 19 Feb 91 p 15

[Text] Finland is officially free of rabies as of last Saturday. For the time being, however, the completion of the two-year infection-free period will not have an effect on the regulations concerning the transport of animals—dogs, in particular. "New regulations will be issued all in good time, and they will be announced through the media," said veterinary council Saara

Renius from the Department of Agriculture and Forestry. After decisions on the new regulations are made, there will be a sufficiently long period of transition, Renius promised. According to the current regulations, a dog can be taken from a country into another provided that it has been vaccinated against rabies. Some countries also require a certificate of health. England, Norway, and Sweden do not permit dogs from other countries.

NORWAY

Hepatitis C Source Sought, 20 Cases Reported

Oslo AFTENPOSTEN in Norwegian 23 Apr 91 p 6

[Article by Ole Martin Bjorklid: "Testing Blood for Mortally Dangerous Virus"—first paragraph is AFTENPOSTEN introduction]

[Text] The serious liver inflammation hepatitis C has been detected in a further 20 Norwegians. Several have been infected by blood transfusions. By the end of May the blood banks will have tested all blood. The virus can be fatal.

The source of infection for the majority of those who have gotten the virus is unknown. It is unclear whether the virus is transmitted by sexual contact, but there is much to indicate that this is the case. Chief physician Robert Jordal of the county hospital in Gentofte in Denmark tells the newspaper BERLINGSKE TIDENDE that half of those who are infected die of the disease. Norwegian experts with whom AFTENPOSTEN has been in contact maintain that this figure is too high.

Until now, hepatitis C antibodies have been detected in 710 persons in this country. Of these, three percent have become seriously sick, figures from the State Institute for Public Health show. Half of those who have been infected risk developing chronic liver diseases. The problem is that the symptoms first appear after 10 to 15 years. Chronic cirrhosis of the liver, acute liver inflammation, or liver cancer are the most usual illnesses that result from the virus.

The Health Directorate sounded the alarm already last year and directed the blood banks to test all their blood donors. Several cases of infection have been found at the Norwegian Red Cross Blood Center and the National Hospital.

"The testing system has until now been too poor," says Blood Center chief Harald Orjaseter. "New tests have already been put into use, and in the course of a short time they will be available at all blood banks."

"There are grounds to view the occurrence of hepatitis C seriously, without our creating any atmosphere of panic. Still, the virus is not very contagious compared with hepatitis B and HIV," says chief physician Hans Erik Heier of the blood bank at Uleval hospital.

Calculations show that testing of Norway's around 200,000 blood donors for hepatitis C will cost between five and ten million kroner.

More Effective Cholera Vaccine Ready

91WE0318A Stockholm DAGENS NYHETER
in Swedish 12 Mar 91 p 15

[Article by Kerstin Hellbom: "New Vaccine Against Cholera"—first paragraph is DAGENS NYHETER introduction]

[Text] The Swedish vaccine against cholera will be ready this year, after five years of testing, for mass production and sales on the world market. The vaccine is significantly more effective than the old one and does not have side effects.

Sweden, or more accurately, the Institute for Medical Microbiology at the University of Goteborg will be the first to come out with a vaccine against cholera. The old vaccine, in use today, is not adequate; it offers barely 50 percent protection, provides immunity for at most half a year, and has side effects.

What the Goteborg team, led by Profesor Jan Holmgren, found out was that the vaccine needed to be ingested orally rather than injected into the bloodstream. Because the cholera bacterium resides in the mucous membranes of the intestine, it needs to be fought with an antidote which triggers the immune response of the mucous membranes. This type of remedy has a maximum effect when it is ingested. The same principle is being increasingly applied to other diseases of the mucous membranes as well, as for example, sexually-transmitted diseases.

Local Immunity

Besides creating local immunity in the intestine against bacteria, the Goteborg vaccine has an additional component. Cholera bacteria secrete a toxin which tricks the intestine into secreting salt and water with incredible speed and in great quantities. The symptom is the dreaded diarrhea, which can be so violent that the body dries out in a few hours. The new vaccine contains a component which protects against the bacteria's toxin.

"The vaccine must be ingested in two doses with a few weeks interim. Tests have now shown that it provides 70-80 percent immunity, is long-lasting, and without side effects," said Jan Holmgren.

The tests are the reason that the vaccine has been so long in being introduced. In order to ascertain with certainty its long-term immunity, the vaccine had to be tested three years. The tests were administered in Sweden, North American, and Bangladesh. Now it is virtually certain that the vaccine will be produced on a large scale by SBL (National Bacteriological Laboratory).

The vaccine even protects against the closely related bacteria that produce symptoms similar to cholera, although in a milder form, as for example, the tourist

diarrhea common in the Mediterranean countries, the "Pharoahs' Curse" in Cairo, or "Montezuma's Revenge" in Mexico. The Thailand variant is called "Buddha's Belch." Every year approximately 150,000 people die of cholera, primarily in South East Asia and in Africa, despite the fact the disease is easily treated by the prompt administering of fluids and salt.

Reporting on the outbreak in South America, WHO states that there is no risk of contagion for tourists, even when travelling to the most affected regions. Nevertheless, it is recommended that tourists follow conventional precautionary advice, that is, drink only boiled water, refrain from eating raw shellfish, peel fruit, and wash hands frequently.

Can Give False Security

WHO does not recommend vaccination for travellers to cholera-infected regions, since the vaccine is not foolproof and can give a false security. Nor is there any necessity, according to WHO, for special entry restrictions for protection against people or goods from infected countries.

TURKEY

Sivgin Says No Sign of Cholera Among Refugees; Blames UN

TA0605104791 Ankara ANATOLIA in English
0900 GMT 6 May 91

[Text] Ankara (A.A)—Health Minister Halil Sivgin said on Sunday relief material and help sent by western countries and international organizations to the Iraqi refugees massed near the Turkish-Iraqi border were insufficient.

Speaking at the general assembly of a reporters association, Sivgin gave information about health services brought by Health Ministry teams to refugees at the border and its problems.

He said Turkey had spent millions of dollars and there was no serious international help for the refugees.

Sivgin said they had appealed to World Health Organization (WHO) before the Gulf war started and warned them a wave of migration from Iraq would follow its end. He said the wrong decision had been taken and camps had been set up in Syria and Jordan and they had been of no use to the refugees.

Sivgin said while Turkish health teams brought their services to the Iraqi refugees massed up at Turkey's southeastern border without discrimination, the western teams discriminated on the basis of race, religion, and language.

He said the refugees had been checked up for infectious diseases, and although no definitive results had been obtained yet, there is no sign of a cholera spread as claimed by western countries.

On the area of health relief, Sivgin said the western health organizations did not send any considerable help to the refugees and contented itself by criticising and exaggerating organizational mistakes.

"The United Nations is responsible for all the tragic incidents that will happen in the region. They have decided the war, now they must take decisions to solve the problems of these unfortunate people. The secretary general must come to the region and see the situation on the spot." he said.

Sivgin said a booklet is being prepared in English to be distributed during the meeting of the World Health Assembly to be held in Geneva. It will give detailed information about Turkey's efforts for helping refugees and appeal for an increase of western help.

He said a short informative film on Turkey's aid to the refugees will also be shown at the Assembly.