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16 March 1993

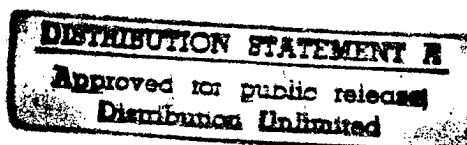


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# ***JPRS Report***

# **Epidemiology**

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# Epidemiology

JPRS-TEP-93-006

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## REGIONAL AFFAIRS

### Epidemiological Reports 25-31 January

*MB0102070393 Various Sources in English and Portuguese 25-31 Jan 93*

[Editorial Report] Following is a compilation of reports monitored by FBIS Mbabane Bureau from 25-31 January concerning outbreaks of and reports on various diseases. Items are listed by country and disease. Source follows each item.

#### LESOTHO

Diarrhea/Scabies—The Berea government hospital has reported 18 diarrhea cases, in which five children died, and more than 50 scabies cases from last month. The district medical officer explained the diseases are caused by drinking dirty water. However, sterilizing and other equipment donated to the hospital by the German Government has arrived "at the opportune time." (Maseru Radio Lesotho in English 1600 GMT 28 Jan 93)

#### MOZAMBIQUE

Cholera in Caia District—A diarrhea-type epidemic, believed to be cholera, claimed the lives of 34 people in Caia District, Sofala Province, in less than three weeks. More than 700 people have been affected by the epidemic, and in view of the number of serious cases it is feared that more fatalities will be reported over the next few days. (Maputo Radio Mozambique Network in Portuguese 0500 GMT 28 Jan 93)

Cholera in Eight Provinces—Romao Mondlane, head of the Health Ministry's Community Services Department, says cholera claimed 587 lives in eight provinces between September 1992 and 5 January 1993. Mondlane said the reported cholera cases indicates the seriousness of health conditions in Mozambique. (Maputo Radio Mozambique Network in Portuguese 1730 GMT 28 Jan 93)

Cholera in Tete—Eleven people died of cholera at Tete Provincial Hospital last week. The hospital also registered 175 cases of cholera. (Maputo Radio Mozambique Network in Portuguese 0800 GMT 29 Jan 93)

Cholera in Manje—In Manje, the capital of Chiuta District, Tete Province, cholera killed 35 people during December 1992 and January 1993. A source with the Belgian Doctors Without Borders organization says the epidemic is under control. (Maputo Radio Mozambique Network in Portuguese 1030 GMT 30 Jan 93)

#### SOUTH AFRICA

Malaria in Venda—An outbreak of malaria in Venda has claimed the lives of four people, health and community development director general Dr. John McCutcheon said on 25 January. He said figures released last week indicated that 250 people were suffering from the disease. (Johannesburg SAPA in English at 0908 GMT 25 Jan 93)

#### SWAZILAND

Diarrhea Deaths Reported—Diarrhea in Swaziland has killed "seven people in the northern and eastern parts of the country in the past month, bringing the death toll to 14 since the disease broke out two months ago. More than 2,000 people" have been treated for the disease in clinics and

hospitals since the epidemic began in the Mozambican refugee settlement at Ndzevane in northern Swaziland. (Johannesburg Channel Africa Radio in English 1100 GMT 30 Jan 93)

#### ZIMBABWE

Cholera in Harare—Zimbabwe Health and Child Welfare Minister Timothy Stamps said on 25 January that three people have been infected with cholera in Harare. These are the first to be reported among people who have not travelled to infected areas. (Johannesburg SAPA English 2348 GMT 25 Jan 93)

### Epidemiological Reports 1-7 February

*MB0802052393 Various Sources in English, Portuguese, and Afrikaans 1-7 Feb 93*

[Editorial Report] Following is a compilation of reports monitored by FBIS Mbabane Bureau from 1 to 7 February concerning outbreaks of and reports on various diseases. Items are listed by country and disease. Source follows each item.

#### MOZAMBIQUE

Cholera in Maputo—An "average of 30 cholera patients are admitted to the Maputo Central Hospital every day." The epidemic has been spreading because people fail to observe rules of hygiene. (Maputo Radio Mozambique Network in Portuguese 0500 GMT 2 Feb 93)

Cholera in Manica Province—Over the last two days, "20 cholera cases were recorded in the Manica Provincial Hospital in Chimoio." Radio Mozambique's correspondent in Manica Province reports a lack of sewers in Chimoio has contributed toward the spread of the epidemic. (Maputo Radio Mozambique Network in Portuguese 1030 GMT 4 Feb 93)

Cholera in Tete Province—Cholera has "killed five people in the city of Tete over the past week." Radio Mozambique's Tete Province correspondent also reports that "147 cases were diagnosed during that period. It should be noted that cholera has killed more than 600 people in this country during the past two years." (Maputo Radio Mozambique Network in Portuguese 1030 GMT 5 Feb 93)

Cholera Countrywide—Cholera "claimed 620 lives in Mozambique during the past two years." Citing Dr. Avertino Barreto, head of the Department of Epidemiology, AIM says "more than 30,000 people were diagnosed as having contracted the disease during the same period." He said those figures could be higher because the country's hospital network is too small to record every case. The city of Maputo recorded the largest number of deaths, followed by the city of Manica with 96 cases. (Maputo Radio Mozambique Network in Portuguese 1730 GMT 4 Feb 93)

Cholera in Gondola—From January to the first week of February, "92 cases of cholera, including 29 deaths, were registered at the Gondola town health center, Manica Province." (Maputo Radio Mozambique Network in Portuguese 1030 GMT 6 Feb 93)

#### SOUTH AFRICA

Pulmonary Tuberculosis—Frightening new statistics have been released on the incidence of pulmonary tuberculosis in

the western Cape, indicating that the disease is continuing to spread. Over 11,500 new cases were reported to the Cape Town municipal and western Cape Regional Services Council [RSC] health authorities last year. RSC Medical Officer of Health Dr Stuart Fisher said last year's six percent increase in notifications in his area, from 6,242 cases to 6,613, was "very frightening because already we (in the western Cape) are sitting with the highest incidence rate in the country and possibly the world." Figures release on Monday [1 February] by the Cape Town City Council show that in its municipal area there were 4,919 cases reported in 1992, nine percent up on the previous year." [Johannesburg SAPA in English 1100 GMT 2 Feb 93]

### ZIMBAWE

**Cholera Deaths Updated**—"Another 22 people were killed by the disease last week and 438 more cases of the illness reported, Health Minister Dr. Timothy Stamps said on 2 February." He told a press briefing the lower number of deaths—down from 30 the week before—was not because the disease was on the wane, but because "we are able to identify and treat cases more quickly now." It brings the "total number of deaths to 219 since the disease broke out in Mozambican refugee camps along the eastern border with Mozambique on November 26, with a total of 4,610 cases confirmed." Zimbabwe is regarded as probably the least affected by an epidemic sweeping most of southern Africa—with over 800 deaths in Zambia alone—because of the "relatively higher standard" of health care and infrastructure. (Johannesburg SAPA in English at 2130 GMT on 2 Feb)

### Epidemiological Reports 15-21 February

*MB2302152593 Various Sources in English and Portuguese 15-21 Feb 93*

[Editorial Report] Following is a compilation of reports monitored by FBIS Mbabane Bureau from 15 to 21 February concerning outbreaks of and reports on various diseases. Items are listed by country and disease. Source follows each item.

### MALAWI

**Diarrhea Epidemic Spreads**—The Ministry of Health is advising the public that the diarrhea epidemic which broke out in some parts of the country late last year has "now spread to all the districts in the southern and central regions, and some districts in the northern region [words indistinct] speaking in Lilongwe, a spokesman for the ministry said the epidemic has been [words indistinct] throughout the districts [words indistinct] cholera and dysentery [words indistinct] diarrhea." (Blantyre Malawi Broadcasting Corporation Network in English 1600 GMT 16 Feb 93)

### MOZAMBIQUE

**Shigella Dysentery Identified**—NOTICIAS reports that a Spanish laboratory has identified the germ that is causing an outbreak of diarrhea in Tete, Beira, Manica, Lichinga and, more recently, Maputo as Shigella dysentery. The director for Beira Central Hospital has said he regards as factual and irrefutable the results received from that Spanish laboratory, "according to which the germ has developed resistance to all first to third generation antibiotics. The laboratory

advises the use of recently produced antibiotics." (Maputo Radio Mozambique Network in Portuguese 1030 GMT 16 Feb 93)

**Cholera in Guro District**—"Cholera has killed seven people" in (Mandie) administrative area, Guro District, Manica Province, over the last few months. "More than 70 cases of cholera have been recorded in the area." (Maputo Radio Mozambique Network in Portuguese 1730 GMT 16 Feb 93)

### SOUTH AFRICA

**Drug-Resistant TB**—Medical Reporter Paula Fray writes that drug-resistant strains of tuberculosis (TB), which are "spreading like wildfire" throughout the world, are causing concern in South Africa where TB already tops the list as the number one infectious disease. Dr Theo Collins, director of community TB education of the South African National Tuberculosis Association (SANTA), said the drug-resistant strains were not new. "What's happening now is that they are spreading like wildfire." Collins said there had been under-reporting of drug-resistant strains as many centers did not test specifically for them. (Johannesburg THE STAR in English 17 Feb 93 p 3)

### SWAZILAND

**Rabies in Mbabane**—Another case of rabies has been confirmed in Mbabane. Following this finding, the Veterinary Department has declared 10 areas in Mbabane as "rabies-guard" areas. This was reported by Director of Veterinary Services Dr. Robert S. Thwala. The 10 areas which have since been declared "rabies-guard" are: Mpolonjeni, Veni, Fonteyn, Corporation, Msunduza, Sidwashini, Checkers, Makhokholo, Emvakwelitje, Hilltop, and Mbabane City. (Mbabane TIMES OF SWAZILAND in English 16 Feb 93 p 3)

**'Killer' Diarrhoea Outbreak**—Health Minister Dr. Fanny Friedman on 19 February warned the country of an outbreak of "killer" diarrhoea. The new strain of the "offending bacteria," E. Coli 0157, has been reported in the Lubombo region. The water-borne disease is rare in southern Africa and the health minister warned the public not to "waste time by going to traditional healers, because this is a very serious disease." (Mbabane THE SWAZI NEWS in English 20 Feb 93 p 1)

### ZIMBAWE

**Cholera in Gokwe**—The cholera epidemic in Gokwe has been brought under control with more health personnel deployed in the affected areas to curb the spreading of the disease. Midlands Medical Director Dr. Davis Dkhalama told Health and Child Welfare Minister Timothy Stamps on 19 February the death toll due to cholera remained at four with nearly 20 people currently receiving treatment. (Johannesburg SAPA in English 1554 GMT 20 Feb 93)

### Epidemiological Reports 22-28 February

*MB2802193993 Various Sources in Portuguese and English 22-28 Feb 93*

[Editorial Report] Following is a compilation of reports monitored by FBIS Mbabane Bureau from 22-28 February concerning outbreaks of and reports on various diseases. Items are listed by country and disease. Source follows each item.

## MOZAMBIQUE

**Dysentery Deaths Rise**—The number of people that have died from dysentery has risen to 21 at the Beira Central Hospital, Sofala Province. The epidemic was caused by the *Shigella* microorganism and has affected more than 1,000 people. (Maputo Radio Mozambique Network in Portuguese 1030 GMT 23 Feb 93)

**Cholera Countrywide**—The rate of outbreak in the country last year was 211 cases for every 100,000 inhabitants, the highest rate in the history of the disease in Mozambique. These figures are three times greater than those registered in 1991 and eight times more than those registered in 1990. Mozambique registered more than 31,700 cases of cholera, including 780 deaths, last year. In 1983, cholera killed more than 10,447 people, the highest figure registered by the country. Dr. Romao Paulo Monjane of the Ministry of Health told Radio Mozambique in Chimoio that the Provinces of Sofala, Inhambane, Tete, and the city of Maputo are the worst. (Maputo Radio Mozambique Network in Portuguese 1030 GMT 26 Feb 93)

## NAMIBIA

**Malaria Control Methods**—The latest malaria control methods "now being adopted" are moving away from massive spraying with DDT. Instead mosquito nets or cloths impregnated with the "more environmentally-friendly pyrethrum" are being used. (Windhoek THE NAMIBIAN in English 24 Feb 93 p 4)

**Polio, Measles**—Cole Dodge, regional UNICEF director for eastern and southern Africa, says Namibia is "making excellent progress on health and education and could be the first African country declared polio-free." In three years Namibia has gone from immunization rates of one out of every 10 in 1989 to seven out of 10 in 1992. Dodge says "Namibia is 'right on track' in its policies on children including how much of the national budget goes on health care and education." "Measles is another top killer disease Namibia could seriously tackle with what Dodge called 'an added push on the immunisation front' to 90 percent coverage." (Windhoek THE NAMIBIAN in English 24 Feb 93 p 4)

## ZIMBAWE

**Cholera Kills 22**—Twenty-two more people are reported to have died from cholera in Zimbabwe in the last week, raising the death toll to 275 since the epidemic broke out late last year along the Mozambican border. Zimbabwean Health Minister Timothy Stamps said the disease, which has hit the north of the country the worst, had spread to the southern Matabeleland Province. Dr. Stamps said there has been over 6,000 cases of cholera in the country, 316 of them in the past week. (Johannesburg Channel Africa Radio in English 1100 GMT 24 Feb 93)

## Epidemiological Reports 1-7 March

MB0703191593 in English and Portuguese 1-7 Mar 93

[Editorial Report] Following is a compilation of reports monitored by FBIS Mbabane Bureau from 1-7 March concerning outbreaks of and reports on various diseases. Items are listed by country and disease. Source follows each item.

## BOTSWANA

**Malaria**—At least four people have died of malaria at the Kasane primary hospital since the outbreak of the disease in the Chobe district early this year. The deceased were among 57 patients who were admitted last month. (Gaborone Radio Botswana Network in English 1910 GMT 5 Mar 93)

**Malaria-Related Deaths**—Last month at Maputo Central Hospital, "60 children died of malaria-related anemia" according to a source close to the Pediatric Department. The source said 87 children suffering from anemia are at the hospital, but there is currently a shortage of blood. A source close to the Central Hospital blood bank said there is an acute shortage of blood at the hospital because demand far exceeds supply. An "average of 70 people donate blood daily against more than 130 people requiring it." The same source added that this problem has been exacerbated by the outbreak of malaria which has hit Maputo Province. (Maputo Radio Mozambique Network in Portuguese 1400 GMT 1 Mar 93)

**Diarrhea, STDs**—Eight people died of famine in Mangunde and (Nhamusile) in Gondola District Manica Province over the past few days, according to Farias Agostinho, the Mozambique National Resistance delegate in (Motocoma). He said that most of the residents in the area are suffering from diarrhea-related and sexually transmitted diseases [STDs]. (Maputo Radio Mozambique Network in Portuguese 1030 GMT 1 Mar 93)

**Dysentery**—Dysentery killed seven people at a health center in Manica Province's Sussundenga District last month. Fifty-six cases were reported during that period. (Maputo Radio Mozambique Network in Portuguese 1030 GMT 5 Mar 93)

## KENYA

### Moi Urges Cooperation To Combat Yellow Fever

EA0802220993 Nairobi KTN Television in English  
1800 GMT 8 Feb 93

[Excerpt] President Moi today thanked the World Health Organization, WHO, for its medical assistance to help Kenya combat yellow fever in Baringo and Elgeyo Marakwet Districts. Noting that the disease had so far killed over 500 people, the president urged wananchi [citizens] of the two areas to avail themselves for inoculation. He also advised those who frequent the two districts to be inoculated against the killer disease. In a statement issued at State House, Nairobi, President Moi urged residents of the two districts to heed and comply with the advice of the health personnel already sent to the area to combat the disease. Vaccination campaigns against yellow fever in Baringo District start tomorrow. [passage omitted]

### Health Minister Clarifies Yellow Fever Situation

EA1002184093 Nairobi Kenya Broadcasting Corporation  
Network in English 1000 GMT 10 Feb 93

[Text] Nearly 10,000 people have been vaccinated against yellow fever since the launching of the campaign in Baringo and Elgeyo Marakwet Districts yesterday, the minister for health, Joshua Angatia, said today.

Mr. Angatia said 600,000 vials out of the 975,000 vials of the vaccine intended for the campaign had arrived in the country, adding that hospitals in the two districts, the Jomo Kenyatta International Airport and Moi Airport, Mombasa, had been supplied with the vaccine for travelers.

The minister said the source of the epidemic remains unknown, but maintained that reported yellow fever-related deaths were 63 and not 500 as reported in the press. The minister said there could have been other causes of death in the two districts, and not necessarily yellow fever. Mr. Angatia was addressing the press in his office moments after holding discussions with the outgoing Chinese ambassador to Kenya, Wu Minglian.

The permanent secretary in the ministry, Daniel Mbiti, said the government had set aside 15 million shillings and mobilised students from the medical training centres for the campaign. He said the UN children education fund, UNICEF, had provided 600,000 vials, the World Health Organisation 75,000 vials and the government 300,000 vials of the vaccine.

#### **Twenty Die Weekly From 'Mysterious Disease' in Isiolo**

*EA2002213593 Nairobi Kenya Broadcasting Corporation Network in English 1000 GMT 20 Feb 93*

[Excerpt] An assistant minister for land reclamation, regional and water development, Mr. Jarsano Mokku, yesterday claimed that 20 people were dying on a weekly basis in Isiolo District following the outbreak of a mysterious disease.

In a statement, Mr. Mokku said it was not clear whether the disease was yellow fever or malaria but said the death rate was quite high. He called on the minister of health to avail transport in order to facilitate the distribution of drugs to the affected areas. He asked Ministry of Health officials in the district to stop arguing about the death rate and instead take urgent measures to diagnose the disease and provide a cure before it goes out of hand. [passage omitted]

### **NAMIBIA**

#### **Ministry Wins Battle Against Armyworms in Caprivi**

*MB1802101993 Windhoek NEW ERA in English 11-17 Feb 93 p 6*

[Unattributed report: "Ministry Defeats Armyworms"]

[Text] The ministry of Agriculture here, has won the battle against armyworms, which have devastated maize fields in the Caprivi.

This assurance was given by the senior agricultural officer, Christopher Joba.

About three weeks ago maize fields in the Caprivi were invaded by the worms.

Local agricultural officers could not control the pests and called for assistance from Windhoek.

Joba said two experts from the Keetmanshoop station arrived to fight the worms—Hendrik Knouds and Boetie Snyman advised local staff to spray the fields with Fenitrothion.

Joba said that although spraying the land proved very successful, white stork birds contributed by eating many of the worms.

### **SOUTH AFRICA**

#### **Agriculture Department Warns of Possible Armyworm Outbreak**

*MB1502091893 Johannesburg SAPA in English 0705 GMT 15 Feb 93*

[SAPA PR Wire Service issued by: SA Communication Service]

[Text] News release by Mr. J.L. (Vossie) Vosloo, director, resource conservation of the Department of Agriculture

#### **Potential Outbreak of Armyworm**

Mr. Vossie Vosloo, director, resource conservation of the Department of Agriculture announced in Pretoria today that an outbreak of worms has been reported in 41 districts of the eastern, central and western Transvaal, Natal, as well as in the northern Cape. These are probably armyworms, but the possibility also exists that they can be small armyworms, boll-worms and/or lucerne caterpillars. At this stage it has been determined that the armyworm and the small armyworm represent the most important outbreaks. The armyworm eats mainly natural pasture, established pastures, maize and grain sorghum. At present mainly pastures and established pastures are infested and maize has already been infested in five districts.

Reports were also received from areas that farmers have already started with combating. According to these reports various chemicals are recommended for combating and are used by farmers. The department wishes to make the farmers aware of the necessity of firstly identifying the specific species in order that the correct and registered chemical can be recommended and used in combating.

From the meeting held among the Directorate of Resource Conservation of the Department of Agriculture, Avcasa, the poison working group, the SAAU (South African Agricultural Union), the Chief Directorate of Nature and Environmental Conservation, Transvaal and a representative of the University of Pretoria it was concluded that it is of the utmost importance for farmers to consult experts for the correct identification before any spraying programme is followed.

It is also essential that the correct chemical is used. It is especially important that a period of abstention, is adhered to. Chemicals with a long breakdown period and a serious impact on the environment must be avoided. The use of cheaper chemicals with a shorter period of abstention and a less detrimental effect on the environment, e.g. Trichlorfon, Carbaril and of the perithroids must definitely receive priority.

Farmers are also requested to be aware of the fact that if the armyworm occurs in kikuyu, the kikuyu will remain poisonous for 45 days for livestock grazing.

Normally the national biological control agents increase by the second generation of the armyworm and an attempt must be made to ensure that the natural enemies are not destroyed by chemical control. Issued by the Division of

Media Services Department of Agriculture Pretoria 12 February 1993 Enquiries: Mr G. (Georg) Schutte Tel: (012) 206-3457 Fax: (012) 329 0499 After hours: Mr J L (Vossie) Vosloo Tel: (012) 73-7271

## ZAMBIA

### Lusaka Cholera Death Toll Reaches 116

93WE0252A Lusaka *TIMES OF ZAMBIA* in English  
29 Dec 92 p 1

[Text] The cholera death toll in Lusaka rose to 116 yesterday as the Ministry of Health invoked the Public Health Act to acquire legal powers usually bestowed on councils to deal with the epidemic.

Cholera spokesman Dr. Matilda Ruwe said the total number of cases had reached 1,527 by 08.00 hours yesterday with 142 still in admission while 75 had been discharged.

She said 1,059 patients had been discharged since the epidemic hit the city early in November and 289 had been admitted.

Health Minister Dr. Boniface Kawimbe said he had reinforced provisions in Statutory instrument 158 of 1978, public Health Act (cholera) which empowered him to delegate duties of cleaning the city to the medical health officer.

The Public Health Act section 31, empowers the minister to declare any part which appeared to be threatened by an epidemic, an "infected area" and may by statutory instrument make regulations.

He was expected to make regulations for the speedy burial of the dead and for preventing any persons from leaving any infected area without undergoing all or any medical examination, disinfection or passing through an observation camp.

Section 7 of the Act empowers the minister to appoint some person to carry out local authority duties in view of the local authorities failure to perform such functions, "and may further order direct the expenses of doing so together with reasonable remuneration to the person so appointed to be paid by the local authority in default."

### Anthrax Outbreak in W. Province 'Contained'

93WE0252B Lusaka *TIMES OF ZAMBIA* in English  
8 Dec 92 p 2

[Text] The outbreak of anthrax which has claimed 31 lives in Western Province has been contained.

The Ministry of Health has pumped in K1.5m for treatment of infected patients.

Provincial Permanent Secretary Mr. Crispin Itwi said medical and veterinary teams were out in the field treating people and vaccinating animals in infected areas.

Mr. Itwi said there had been no reported deaths from the disease. The number of admissions remained at 108.

The veterinary department was faced with a crisis as they were running short of drugs to vaccinate animals when the disease broke out two weeks ago.

The department was using last stocks of emergency drugs which were kept for use in a major outbreak. A senior officer was sent to Lusaka to get fresh drugs.

### Monze Cattle Dying of Corridor, Tick Disease

93WE0252E Lusaka *TIMES OF ZAMBIA* in English  
12 Dec 92 p 2

[Text] The decimation of cattle in Monze has gone unabated because of lack of resources and inadequate manpower.

The cattle was [as published] dying at the rate of 20 each month from corridor disease, and tick borne disease.

This was said by veterinary district officer Dr. Barnabas Chitalu.

The mortality of cattle was fuelled by irregular dipping and prohibitive prices of drugs.

Figures made available showed some 65 cows had died in the last three months. Control over movement of the animals was still elusive making it hard to assess the extent of the diseases.

The high mortality of cattle had forced Tongas who in the past rarely sold cattle but kept it for prestigious purposes to ferry them into urban areas for marketing.

Government had set into motion the exercise of free dipping and distribution of drugs to alleviate the problems.

But the exercise has little dividend because drugs were erratically supplied. Only 40 dip tanks catered for the whole of Monze with 18 officers to oversee it.

[Passage omitted]

### Veterinarians Killing Pigs To Contain Swine Fever

MB1802152093 Johannesburg Channel Africa Radio  
in English 1100 GMT 18 Feb 93

[Text] Veterinary officials in Zambia say thousands of pigs in the country are being shot, burned, and buried in an urgent bid to stop the spread of African swine fever. Dr. M. P. Mangani of the State Veterinary Service said in the capital, Lusaka, that at least 6,000 pigs were being killed in an emergency operation against the highly contagious disease. Dr. Mangani said all pigs in a radius of 15 km of Lusaka would be shot. Among the pigs already slaughtered are 1,300 owned by the Zambian agriculture minister, Dr. Guy Scott.

African swine fever is not harmful to people, but it can be transmitted to pigs by people who have handled affected animals, or cooked pork derived from the animals. Pigs infected with the disease develop a high fever and purple spots and usually die within four days. The only way to curb its spread is by slaughtering the animals.

### Army Worms Destroying Crops in Chongwe

93WE0252D Lusaka *TIMES OF ZAMBIA* in English  
18 Dec 92 p 1

[Excerpt] Crop fields at Kanakantapa Resettlement Scheme in Chongwe and other outlying areas have been completely wiped out by rampaging army worms and unless control measures are taken within a week, the area will be condemned.

Agriculture, Food and Fisheries Deputy Minister Ackson Sejane who cut short his leave to tour the ravaged area yesterday described the destruction as "colossal."

That had prompted the ministry to ask the International Red Locust Control (IRLC) for chemicals to spray the devastated fields and halt the spread of the worms.

The worms were destroying crops at an alarming rate and so far Mazabuka Monze and Refunsa had reported an outbreak of the pests.

[Passage omitted]

## ZIMBABWE

### Cholera Spreading in Eastern Districts

93WE0251C Harare THE HERALD in English  
16 Dec 92 p 1

[Text] Cholera is spreading in three of Zimbabwe's Eastern Districts with 25 deaths and 755 cases reported since the disease first surfaced at Tongogara refugee camp in Chipinge district last month.

People have been urged to take care where they get certain foods.

One isolated case has been reported from Mukumbura, a border post in the north-east part of Zimbabwe.

Most of the cases—670—have been in Tongogara and all but one of those who died were refugees in the camp. But another 30 cases have been reported from Chipinge district, 35 from Chimanimani and 15 from Mutare district as the disease spreads north along the border. Many of these were Mozambicans.

Both Mozambicans and Zimbabweans have been hit by eating and drinking food and water contaminated with faecal matter from infected people.

Tongogara camp is now under quarantine, the Minister of Health and Child Welfare, Dr. Timothy Stamps, said yesterday. The ministry believes the disease was brought into the camp in contaminated food sold to the refugees by other Mozambicans.

The first case of cholera was reported in the camp on November 26. Two of the confirmed 755 cases were people from Beira, one of whom died.

### Affected

The ministry had deployed personnel in the affected areas and had the outbreak under control, said Dr. Stamps.

Cholera was easy to prevent if people kept food under hygienic conditions and were careful about what water they drank.

Drought did increase risks, since some rural people did not have access to safe water. There were fears by some that the coming of the rains could help spread the disease by flooding contaminated pools.

Dr. Stamps said people should be careful about where they bought food if the disease was to be contained and eliminated. "Raw food, cooked meat, fats, fish, cheese and milk are good examples of some of the foods people should be careful of."

The ministry did not encourage street vending of food anywhere in Zimbabwe and had warned people from some neighbouring countries not to bring food into Zimbabwe unless this had been bought from a registered outlet.

Wild rumours of the cholera outbreak have been flying, with speculation that it had crossed into Chiredzi district. But these appear to have arisen from cases of infected people crossing from Manicaland seeking treatment.

Chiredzi District Hospital had treated 23 cases by last week. But all, said Dr. Robert Moy, had crossed the Save River from Mutandahwe in southern Chipinge where they were infected. All had been treated and were in stable condition. None had died.

Cholera does break out frequently in Zambia and Mozambique but this is the first time for several years that it has spread to Zimbabwe.

### Minister Warns Cholera Could Spread

93WE0251D Harare THE HERALD in English  
26 Dec 92 p 1

[Excerpt] The outbreak of cholera reported in Manicaland first could spread to other areas if precautionary measures are not observed, the Minister of Health and Child Welfare, Dr. Timothy Stamps, has said.

In an interview, the minister said it was possible the disease could spread as infected people visit other parts of the country. Dr. Stamps also said that visitors from affected countries such as Zambia could also spread the disease.

"For instance, Chiredzi had some cholera cases which had originated in the Tongogara camp for refugees. A patient can travel anywhere in the country and could spread the disease that way," the minister said.

The number of cholera cases diagnosed, he said, now stood at 855, of which 760 cases had been reported in Manicaland. He said that 26 people had died from the disease.

[Passage omitted]

**Official Promises Stricter Quarantine Checks**  
*HK0602064693 Beijing CHINA DAILY in English*  
6 Feb 93 p 1

[Report by staff reporter Wang Yonghong: "Stricter Quarantine Checks Are on the Way"]

[Text] China will tighten up plant and animal quarantine to promote overseas trade, a quarantine official said.

"The rapid increase of imports and exports has imposed greater pressure on the plant and animal quarantine service," the official with China's Administration of Plant and Animal Quarantine said yesterday.

As a result of stricter checks last year, dozens of fatal pests and diseases such as African swine, American termite, Brazil pulse beetle and various viral diseases were found out and rejected admittance, the official said.

"If such fatal pests and diseases enter the country, the destruction and economic losses caused by them would be beyond estimate," he added.

He said the volume of plant and animal goods that underwent quarantine examinations has seen a rapid increase in recent years.

Incomplete statistics show that last year 1 million different sorts of plant and animal goods were examined by quarantine offices around the country.

Among those, 250 million pigs, horses, cattle, sheep and various other animals and 150 million tons of plant and animal products, with a total value of 170 billion yuan (\$28.3 billion), were examined.

According to the official, last year the country saw a remarkable increase in quarantine checks on exports, about three times the volume of 1991.

**Law**

In order to meet the increasing demand, China last April put into effect its first law on importing and exporting animal and plant products.

In addition, the central and local governments have also implemented 19 quarantine rules and regulations as one of the efforts to promote the quarantine service, according to the official.

"All the law and regulations have played an important role in promoting the nation's animal and plant quarantine service and in safeguarding the country's economic development, smooth trade with overseas and people's daily life," said the official.

To offer a better and prompt service to the inland regions which are stepping up their opening, China set up six quarantine customs depots in Lanzhou, Zhengzhou, Wuhan, Hefei, Guiyang and Jiujiang last year.

## CAMBODIA

### Kampong Speu Malaria Work Described

93WE0185A Phnom Penh PRACHEACHON  
in Cambodian 18 Nov 92 p 1

[Text] SPK. This past year, malaria has struck more than 1,000 people of all ages and tuberculosis has struck more than 500, but this has not created a disaster because the provincial infectious disease [office] has cooperated with district hygiene office in a timely manner. According to estimates, at the present time, cases of malaria are fewer than in 1991.

According to investigations and research by the Kompong Speu Infectious Disease Office, malaria most commonly occurs in areas which are close to the foothills of mountains, such as a number of places in the districts of Phnom Sruoch, Thpong Bar Sath, and Kong Pisey.

Factors which cause malaria are areas that do not pay attention to the problem of hygiene and prophylaxis and the fact that a majority of the people work up in the mountains cutting wood and harvesting sandalwood.

In order to keep malaria from spreading widely, the infectious disease office along with special district health centers, and sub-district clinics began an education campaign to get the people to follow the Three-Step Hygiene Manual of the Ministry of Health and to explain to the people that they must send their wives, children and husbands who suffer from malaria and other infectious diseases to the hospital in order to make their cures easier. As a result of careful attention by the doctors, every place has made the investigation and cure of infectious diseases more and more effective. The results in the 10 months of 1992 show that our doctors have cured more than 9,000 people who have malaria and 500 people with tuberculosis.

## INDONESIA

### Seriousness of Rabies in Central Kalimantan

93WE0222A Jakarta ANGKATAN BERSENJATA  
in Indonesian 6 Jan 93 p 11

[Text] Rabies has become a serious disease in Central Kalimantan because many cases have been found there in recent years.

The disease is especially difficult to conquer in the interior because being bitten by a rabid domestic animal always results in death, especially for those who are far from health services.

Rabies is classified as a dangerous disease of domestic animals because it can spread and because being bitten by a rabid domestic animal almost always results in death. That is why the central and provincial governments are cooperating with relevant government agencies in efforts to wipe out this disease.

In the past, rabies was not present in Central Kalimantan. There are many domestic dogs and cats in the province.

In 1978, however, rabies entered the province through Barito Utara District and from there it spread to other parts of the province.

Rabies has been spreading through Central Kalimantan, which has an area of 153,560 km<sup>2</sup> and a population of 1.4 million people in six districts, which consist of 82 subdistricts and 1,153 villages.

Every year rabies spreads on the average to 10 subdistricts. An average of 143 people a year are bitten by domestic animals suspected of having rabies, and there is an average of two deaths a year.

At the All-Kalimantan Integrated Rabies Coordinating Meeting held in Palangka Raya in the middle of December, Governor Drs. Soeparmanto said that as of the fourth year of PELITA V [Fifth Five-Year Development Plan], rabies had spread to 482 villages (41.8 percent of the villages) in 40 subdistricts (48.8 percent of the subdistricts).

There were 123 cases of bites by rabid domestic animals in 1984, 140 cases in 1986, 214 cases in 1988, only 196 cases in 1989, 139 cases in 1990 and 83 cases in 1991; 89 cases were recorded from January to November of 1992.

### Beginning To Decrease

In Governor Soeparmanto's opinion, efforts made up to this point have not been able to reduce the number of cases to nothing; the trend has just been a reduction in the number of deaths and the number of rabid domestic animals.

In his opinion, the problem in dealing with and in preventing the spread of rabies is the uncoordinated and unintegrated approach on the part of several sectors of the government as well as differences in the way the problem is perceived.

He admits that carrying out operations in the field is not always easy due to such factors as the fact that the population is dispersed and difficult to reach.

Another problem unique to the province is that dogs have an economic value for watching houses and for hunting wild boars, so that it is not surprising to find a single village with scores of domestic dogs.

That is why it is not surprising that the villagers are reluctant to give information to officials about animals for vaccination.

There is a belief in the province that vaccinated dogs are less fierce and therefore not as useful for hunting; the governor said that he hopes that people will learn that vaccinating a dog will not make it less fierce.

### Free of Rabies

In Soeparmanto's opinion, efforts to vaccinate animals have fallen short up to this point; this is proved by the fact that from January to November 1992, 61,154 domestic dogs were registered but only 6,774 dogs and 458 cats had been vaccinated.

The government is planning to achieve a rabies-free Java and Kalimantan, including Central Kalimantan, by the end of PELITA V, and within three years after that to achieve total freedom from rabies.

It is hoped that all provincial government agencies will carry out the program set up at the All-Kalimantan Integrated Freedom from Rabies Coordinating Meeting recently held in Palangka Raya.

South Kalimantan and East Kalimantan, as well as Central Kalimantan, have also failed to carry out the program to eliminate rabies by the end of this PELITA.

Records show that there were 16 cases of rabies in South Kalimantan in 1991 and 360 cases in East Kalimantan. On the other hand, there have been no cases of rabies in West Kalimantan in the last two years.

## SOUTH KOREA

### Woman Hospitalized With Cholera After Southeast Asia Trip

SK0503013993 Seoul YONHAP in English  
0054 GMT 5 Mar 93

[Text] Seoul, March 5 (YONHAP)—A 48-year-old woman has been hospitalized with cholera after a trip to Southeast Asia, the Health and Social Affairs Ministry said on Friday.

The woman returned to Korea on Feb. 20 and was found to be infected with vibrio cholera eltor-ogawa, a ministry spokesman said.

## MALAYSIA

### City Hall Declares Seven Dengue Epidemic Areas

BK1402132693 Kuala Lumpur NEW STRAITS TIMES  
in English 12 Feb 93 p 45

[Excerpt] Kuala Lumpur, Thurs—Fourty-five cases of dengue were reported in the city during the past week, including five dengue hemorrhagic fever (DHF) cases.

This brings the total for last month to 189.

City Hall press officer Rita Ahmad said of the total, 16 cases were reported in the Cheras area while nine were from the Jalan Klang Lama area.

There were five cases from the city center, including a DHF case in Sentul market.

Three DHF cases were reported in the Setapak area and one in Cheras.

City Hall has declared seven epidemic areas: Taman Koperasi Police (second phase), Jalan Pegawai Ampang Hilir, Kampong Datuk Keramat, Desa Setapak, Taman Mutiara, Salak South Baru and Taman Overseas Union Garden.

Seven cases were reported in Desa Setapak while another four cases were reported in Salak South Baru. [passage omitted].

## NEW ZEALAND

### Cook Islands: Study—Sex Disease Present in Nearly Half of Women

BK0802023693 Hong Kong AFP in English  
0106 GMT 8 Feb 93

[Article by Barbara Dreaver]

[Text] Rarotonga, Feb 8 (AFP)—A German medical researcher's claim that nearly half of all women here have a sexually transmitted disease (STD) has provoked a strong outcry among local medical experts.

Former health minister Joe Williams said the study was biased and unsubstantiated: "It is an indictment of the women in the Cook Islands."

Cook Islands Women's Health study author Michael Runge claims 44 percent of the up to 3,000 women, or 60 percent of all females on this island, tested in a two year period had an STD.

He found no cases of Human immune-deficiency Virus (HIV) or Acquired Immune Deficiency Syndrome (AIDS) but warned the high level of other sex diseases "will be the major contributing factor for the spreading of this disease five to tenfold faster."

Runge, a gynaecologist, initially released his health survey Tuesday at a public meeting but the STD statistics were withheld. The report itself had been given to a behind-closed-doors regional United Nations meeting in December.

Following Tuesday's meeting here however other medical experts released the figures and a number dismissed the report as "absolute nonsense" and a slur on Cook Islands women.

Part of the row revolves around what an STD is. Runge said the main STDs here included hepatitis b, chlamydia trachomatis, Gardnerella vaginitis and candida.

A visiting U.S. expert said Gardnerella vaginitis and fungal vaginitis were not STDs. They account for nine percent of the infections in women here.

And Williams said hepatitis B should not be classified as an STD because it can be transmitted in other ways.

"To say that 50 percent of the women in the Cook Islands have a sexually transmitted disease is a lot of nonsense, absolute nonsense," he said.

But the daily Cook Islands News obtained Rarotonga Hospital laboratory results over the period covered by the health survey and found they closely match Runge's separate study. They show STDs here at the same high rate Runge found.

Former prime minister Sir Tom Davis, a practising doctor here, said there was nothing wrong with Runge's research.

He said the only aspect that could have gone wrong is if laboratories made mistakes, but as thousands of women had been tested this was unlikely.

Runge presented his report to the Cook Islands Business and Professional Women's Association but was told by health board chairman Hugh Henry not to comment on or release some of the key statistics.

Henry said health professionals had already read the report and now wanted only to debate the procedures for handling STDs.

"As far as the board is concerned we are here to support what he wants to do," Henry said.

Runge said following discussions a five year plan had been drawn up to prevent the further spread of STDs and to generally improve women's health.

The three main recommendations include improving facilities at Rarotonga Hospital and upgrading facilities in the outer islands with screening for STDs and cervical cancer.

He also wants improved outpatient facilities and better ongoing data collecting.

Runge said he wants women here to get a smear test every two years.

He said he believes improvements will take place because it is economical to do so and the board is made up of some business people. He added that everyone wants to see women's health improve.

## THAILAND

### Malaria Incidence in North

93WE0213D Bangkok NAO NA PHU YING in Thai  
2 Dec 92 p 6

[Text] Dr. Chanchai Buraphangkun, the deputy director-general of the Department of Communicable Disease Control, talked with NAO NA following the ceremony to open the conference for malaria leaders in the north. He said that the malaria situation in Thailand has improved, particularly in the 13 northern provinces, which are in the area of responsibility of Malaria Center 2, Chiang Mai. This year, blood tests were given to 1,366,993 people living in localities where malaria poses a threat. A total of 16,667 were found to have the disease.

The deputy director-general of the Department of Communicable Disease Control said that most of the cases of malaria were found in the three upper northern provinces, that is, Mae Hong Son, Chiang Rai, and Chiang Mai, where malaria is endemic. This is because many of the localities are located along the Burmese border, which is a remote jungle area. Many minority groups have migrated across the border. They are very poor and so they are at great risk of contracting malaria. Moreover, it is difficult for malaria officials to carry on activities in those localities because of the danger posed by the fighting among the minority groups along the border. This is why malaria is so prevalent in those areas.

Dr. Chanchai added that in order to achieve even better results in preventing malaria, this year the Department of Communicable Disease Control has thought of a new way to control malaria. Villagers will be asked to use mosquito nets that have been soaked in a solution containing "thermethy," which remains effective for six months. After the nets have dried, the smell will disappear. When mosquitoes, and small insects, land on the net, they will die immediately. Officials from malaria units will soak the mosquito nets of villagers in this chemical free of charge.

### Rabies Infection Rate Still High

93WE0246B Bangkok THE SUNDAY POST in English  
13 Dec 92 p 18

[Article: "Rabies Virus—the Rate of Infection Is Still High in Thailand"]

[Excerpt] [Passage omitted]

Thirteen years have already passed since Thailand undertook a nationwide programme to eradicate rabies from its territories, but according to several indicators, still much more needs to be done to achieve total eradication.

According to statistics from the Queen Saovabh Memorial Institute (QSMI), the Thai Red Cross Society, there has been no improvement in the control of canine rabies in spite of the various immunization programmes by the Ministry of Public Health, the Bangkok Metropolitan Administration, and non-governmental organisations over the past six years.

Some 5,000 dog brains are sent to the institute each year for testing, and a constant half, or some 2,500, tested positive for the rabies virus, each year over the past six years.

Of course, this does not necessarily mean that half of the dog population in Bangkok is infected with the rabies virus.

Still, the figures are worrisome.

And even more worrisome is that nine percent of the 2,500 dog brains which tested positive for rabies, had a history of rabies immunization within the previous two years.

The institute came across three cases whereby people died from rabies contracted from their own immunised dogs: all started treatment too late, because they believed they were safe.

It is not known whether various other medical institutions also came across such cases.

While researchers continue their work to conclude the cause of what appears to be vaccine failure, it is recommended that pet dogs receive rabies shots twice in their first year, and one each following year.

They also recommend that owners be especially careful during the months of November to January, which is the mating season, when dogs wander out and run a high risk of contracting the rabies virus.

Most people think that they have to be careful with rabies only during the hot season, when they take their dogs for immunization.

The incubation period in dogs is about six months and symptoms will begin to show in the hot season. By then, it may be too late.

Also, children and adults who may come into contact with dogs, at home or in public places, should be immunised.

Treatment is recommended in all cases where there is high incidence of canine rabies.

Meanwhile, rabies in Thailand, is not only a health issue, but also a social, economic, political, as well as a religious issue—today's rabies situation is only the end product of the many facets of the issue.

Thirteen years ago, when the Rabies Act was promulgated, it was done so, under the sponsorship of the Ministry of Public Health.

The reasoning was that people's health is affected through infection with rabies from dogs, and treatment depended on the dogs involved.

So doctors' responsibility did not stop with human beings safe from the rabies virus, but also dogs.

While the Health Ministry did a good job to reduce human death from rabies, it understandably ran into some difficulties with canine immunization.

Back in 1988, when the ministry undertook "an intensive rabies campaign" in Bangkok, it claimed that 62 percent of the dog population in Bangkok had received "adequate vaccination."

But statistics obtained from the Queen Saovabha Memorial Institute that year, still indicated that about half of the 5,000 dog brains tested, were positive for the rabies virus.

Finally, under the Anand Panyarachun I Administration, the responsibility to control rabies in the estimated 10 million dogs in the country was transferred from the Ministry of Public Health to the Department of Livestock Development, Ministry of Agriculture and Cooperatives.

The Department of Livestock Development will next year implement a five-year programme with a budget of 1,811.1 million baht and pick up the pieces in public relations, vaccine procurement, dog immunization, dog population control, and expansion of diagnostic laboratories.

Both the vaccine procurement and the expansion of diagnostic laboratories, are expected to go smoothly. A factory to locally produce rabies vaccine will be built. It will also be used to produce other animal vaccines.

So far, the majority of animal vaccines are imported, or produced manually by the Livestock Development Department.

The expansion of laboratories has long been needed—as of 1992 after years of medical progress in Thailand, there are only 22 laboratories in the country which can diagnose the rabies virus.

However, the issues of dog immunization and dog population control, some difficulties may arise.

According to statistics from the Ministry of Public Health's General Communicable Disease Division, there are ten million dogs in the country, slightly over 7.2 million of which have owners, the rest are strays.

Ms. Watana Srisongmuang, director of the Rabies Center said "that has been a major problem since forever, we are still planning how to handle it."

A system of dog registration is the answer, but so far, there is no sign it will materialise—with dog registration, owners will automatically share the load to ensure immunization and population control.

"But none is seriously interested in pushing for law to register dogs, not even the MPs," said Ms. Watana.

So as part of the five-year programme, the Department of Livestock Development plans to gradually castrate some 63,666 male dogs in 1993 up to 300,000 by 1997, and also conduct hormonal treatment for some 200,000 female dogs in 1993 up to one million by 1997.

As for the "depopulation option" where dogs are captured and exterminated after five days if not claimed by their owners, is very difficult for Thailand.

"We can't just go around killings dogs, the issue is not so simple," said Ms. Watana.

It is not only a religious issue, but a pilot project undertaken in the Bangkok metropolis indicate unsatisfactory results:

surveys after each extermination project still result in approximately the same number of dogs.

The answer rather is neutering.

When SUNDAY PERSPECTIVE interviewed an official of the Ministry of Public Health for this report, we were asked, "why are you interested in rabies, it's been almost eradicated."

Indeed official statements from the ministry proudly state that human rabies will be eradicated from Thailand by 1995.

As part of the eradication policy of the MOPH, groups of 24 provinces will be declared "rabies free provinces" every year until 1995.

As explained, eradication of human rabies in Thailand cannot be separated from eradication of canine rabies, both are closely linked because dogs still serve as the most dangerous source of rabies in the country.

There are over two million stray dogs in Thailand.

And unless there are no more stray dogs in the entire kingdom, and unless all dog owners strictly follow immunization guidelines for their pets, the 55 million or so Thais will not be 100 percent safe from rabies.

Rabies immunization is not compulsory in Thailand.

Ms. Watana said "total eradication of canine rabies will take at least ten years, we must be realistic."

### Prevalence of Japanese Encephalitis

93WE0213C Bangkok DAO SIAM in Thai 19 Dec 92 p 2

[Excerpt] The 13th international conference on tropical diseases and malaria was held at the Ambassador City Hotel in Pathaya during the period 29 November-4 December 1992. Following the conference, Dr. Nathirat Sangchawipha, an adviser to the Department of Medical Sciences, Ministry of Public Health, talked to reporters about [Japanese] encephalitis, which is a tropical disease. She said that there is a vaccine to prevent this disease. The Department of Medical Sciences has the capabilities to produce an effective vaccine to prevent [Japanese] encephalitis. It is just as effective and safe as those vaccines produced abroad. But we haven't been able to produce enough and so it has been necessary to import this vaccine. In the next few years, we should be able to produce enough to meet demand and reduce imports from Japan.

Dr. Nathirat said that [Japanese] encephalitis has been a public health problem for more than 20 years. It is caused by the Japanese encephalitis virus and is transmitted by mosquito. Pigs serve as a host for the growth of the virus. Most cases are found in the north and northeast. About 75 percent of the patients are children below the age of 14, with most being five to nine years old. Symptoms include high fever, headache, vomiting, loss of consciousness, and death. It has been found that 60 percent of those who recover from the disease will suffer lasting damage to the nervous system, with the result that they may be paralyzed and feeble-minded.

Because the Ministry of Public Health has taken action in accord with the plan to control and prevent encephalitis, since 1987, the number of people contracting this disease

has declined. Today, only about 1,000 people a year contract this disease. Every child one and one-half years to two years old in the 17 northern provinces has been inoculated twice seven-14 days apart. The plan is to expand this program to the entire country. It is also planned to give children a third shot. As a result of the efforts by the Ministry of Public Health to control this disease by giving vaccinations, it is thought that in the next five years, the incidence of this disease will decline 80 percent. The private sector has an important role to play in ensuring that people are vaccinated. [passage omitted]

## VIETNAM

### Malaria, Declining Incidence in Southern Provinces

93WE0196A Hanoi TAP CHI HOAT DONG KHOA HOC in Vietnamese Nov 92 pp 25-56, 33

[Article by Nguyen Long Giang, director, Ho Chi Minh City Malaria-Parasites-Insects Department: "Malaria in Southern Provinces"]

[Text] While in many major malaria-infected areas in our country the disease has recently been on the rise, with increased incidence and mortality resulting from it, in the southern provinces malaria tends to decline gradually, in spite of the fact that eastern Nam Bo remains the country's major malaria-infected area.

The declining trend has resulted from the active contributions of the Ho Chi Minh City Malaria-Parasites-Insects Department, a unit of the public health sector, which has had much experience in combining and developing organizational and technical measures and socializing malaria prevention and control, for the purpose of achieving the goal of controlling malaria by the year 2000.

#### I. Characteristics of Malarial Incidence

Southern Vietnam, located in the monsoonal tropical region, has two distinct seasons: the dry season from December to April, and the rainy season from May to November. Average temperature is 20° C (except in Dalat). Average humidity is 70-90 percent. Rainfall is about 200 centimeters. Forests, hills, mountains, and the coast occupy three-fourths of the land. Because these are very favorable conditions for the Anopheles mosquitoes to multiply and for the malaria parasites to grow inside the mosquitoes, malaria here shows a year-round incidence.

The population of nearly 23 million people of the southern provinces is distributed among 17 provinces and municipalities, 159 wards and districts, and 2,210 villages and subwards. Nearly 9 million people live in the malaria-infected areas. People live in large numbers in cities and their

outskirts and along water and land communication axes. Their main occupations are in agriculture, forestry, fishery and commerce.

*About the malaria parasites:* Many years of basic surveys show that the South has three species of *Plasmodium*: *falciparum* accounting for 70-80 percent; *vivax*, 20-22 percent; and *malariae*, 2 percent. The *Plasmodium ovale* has not been found.

In the past, *P. falciparum* had existed in forested and mountainous areas. In 1971, it began to spread to coastal delta areas where many malarial outbreaks took place. In 1962, signs of resistance to chloroquine began to be seen. Although *P. vivax* prevailed mainly in coastal areas, the appearance of *P. falciparum* there in 1971 changed the distribution patterns of the parasites. *P. malariae*, which had accounted for 4 percent, has now gradually decreased. This species mainly remains in the areas where the ethnic groups live.

Presently, in the entire region, *P. falciparum* accounts for 63 percent of the malaria parasites; in the Mekong delta provinces, it accounts for 41 percent.

*About the malaria insects:* Basic investigation indicated that there were more than 40 Anopheles species capable of conveying malaria to human beings, but the six principal ones are *An. dirus*, *An. minimus*, *An. jeyporiensis* (in forested and mountainous areas), *An. sundaicus*, *hyrcannus* group, and *An. subpictus* (in coastal areas).

*About malarial epidemics:* The region of malarial epidemics can be divided into two areas: mountainous and coastal. In the mountainous area of malarial prevalence, it is again divided into degrees of malarial incidence: low incidence in 425 villages and subwards, with a total population of 4 million people; intermediate incidence, 156 villages, 1.1 million people; and high incidence, 103 villages, 1.5 million people. The coastal area of malarial prevalence includes 245 villages, with 2.5 million people; and the area of scattered and fluctuating malarial prevalence includes 1,281 villages and subwards, with a total population of 15 million people.

*Malarial transmission season:* In the mountainous malaria-prevalent area, transmission of the disease by *An. dirus* takes place mainly in the rainy months. In the area of *An. minimus* and *An. jeyporiensis*, because transmission takes place before and after the rainy season, the disease is transmitted throughout the year.

In the coastal area where transmission is by *An. sundaicus*, *An. subpictus*, and the *hyrcannus* group, malaria appears in the month that starts the rainy season and reaches peak incidence in June, July, and August; it drops to lower levels in October and November.

Malarial epidemics usually break out in new work sites and enterprises, new economic zones, and where ethnic groups live.

## II. Results of Prevention and Control of Malaria in six years, 1986-1991

Statistical Data Showing Incidence of Malaria in 1986-1991 in Nam Bo-Lam Dong Area

Year	Total of malaria patients	Total of malaria parasites	Percent parasites/slides	Total of <i>P. falciparum</i> (F)	Percent F/parasites	Acute malaria	Number of deaths
1986	505828	98694	8.75	39852	40.38	3761	1061
1987	481918	99484	8.95	37244	37.44	3503	830
1988	546965	98395	8.29	46158	46.91	4318	911
1989	383102	64155	7.81	38701	60.32	5019	1069
1990	309214	49281	6.28	30677	62.25	3502	728
5-year average	445405	82001	8.14	38526	46.98	3984	919
1991	316929	66223	7.35	49577	74.86	4821	814

These data show that malaria now tends to decline in the area, in spite of the fact that the decline has not been regular and the declining pace has been slow. Let us take as an example the data of 1991 and compare them to the 5 year (1986-1990) average data: The total number of malaria patients decreased by 28.8 percent; the total number of malaria parasites, by 19.2 percent; the percent of parasites/slides, by 9.7 percent; the number of deaths from malaria, by 11.4 percent (the total number of acute malaria cases showed an increase because Dong Nam Province had used the new report forms and had thus included the cases of serious malarial infection).

There were many reasons behind the malarial decline in the southern provinces. First of all, there was the concern of the party and administrations at different levels and the strict leadership by the public health sector at both central and local levels, which created favorable conditions for the prevention and control of malaria; sufficient supplies of antimalarial medicines helped to strengthen the prevention and control of malaria, with the recent availability of the drugs used to fight resistance to antimalarial medicines and to treat cases of serious malarial infection, such as Artemisinin, mefloquine, and Fansimef [American trade name: Fansidor] (the Cho Ray Hospital and Municipal Malaria-Parasites-Insects Department imported additional quantities of Fansimef and mefloquine). Other reasons: additional conventional measures taken; more locations equipped with microscopes used to discover cases of malaria; use of Permethrin to impregnate mosquito nets; combination of research on insecticides with prevention and control of epidemics, with separate fund given to antiepidemic work; active operations and good-quality work of the basic-level public health network; training of cadres doing antimalarial work to provide them with new malaria control and treatment knowledge; and good coordination of work between army and civilian public health organs in the field of prevention and control of malaria.

However, malaria remained a serious problem in the D and E region having a population of 1.2 million and including a number of villages in Xuyen Moc, Xuan Loc, and Tan Phu Districts in Dong Nai Province; most parts of Lam Dong Province; Bac Dong Phu, Phuoc Long, Bu Dang, Binh Long, and Loc Ninh Districts in Song Be Province; Tan Chau District in Tay Ninh Province; and a number of villages of the Khmer ethnic group in the provinces of Cuu Long, Hau Giang, and so on.

## III. Malaria Control Measures

1. *Organizational measures:* The topmost one is to socialize the prevention and control of malaria, a job consisting of the following: To strengthen the leadership of party committee and administration echelons, for this is a very important link; to step up propaganda and education aimed at promoting good health and combined with the prevention and control of malaria, to make cadres and the people understand the damaging effects of malaria and the preventive and control measures so as to protect themselves while combining this protection with that provided by the state; to closely coordinate the work of all sectors and mass organizations, to make them understand the damages that malaria causes to productive labor in their own sectors and groups so as to be determined to work with the public health sector to achieve good prevention and control of malaria; and to supply enough technical materials, medicines, means, and funds from the state through the ministries and sectors concerned, so as to allow work to be done in time and to keep the rate of progress as prescribed for the local malaria prevention and control programs, which are carried out through the state malaria prevention and control program.

### 2. *Specialized and technical measures:*

For areas of high and intermediate incidence of malaria: To deal with malaria-transmitting vectors by spraying mosquito-destroying chemicals and impregnating mosquito nets with Permethrin, depending on prevailing conditions; to build many more microscope-equipped stations to help detect the disease early, to treat malaria in time in accordance with the projected plan, and to quickly reduce the number of cases of acute malaria so as to reduce the mortality rate; to form many mobile teams sent to remote, mountainous, and ethnic-minority areas to detect and treat the disease. These teams are to be sent out at least twice a year, in April-May and September-October.

For areas of low and scattered incidence: The principal measure is to build a reasonable number of microscope-equipped stations to detect and properly treat malaria cases; to control epidemics outbreaks is important, along with achieving malarial management at home, management of carriers of the malaria parasites, and so on; to deal with vectors mainly by using Permethrin to impregnate mosquito nets in old pockets of contagion or in areas where the parasite percentage is high; to encourage the people to do common things like unclogging sewers and ditches, clearing bushes, filling stagnant ponds and pools, filling with smoke, raising fish, and so on, for the purpose of limiting the reproduction of malaria-transmitting insects.

## BULGARIA

### Health Ministry Announces Influenza Epidemic

AU0902193393 Sofia BTA in English 1825 GMT 9 Feb 93

[Text] Sofia, February 9 (BTA)—The Health Ministry reported today on a flu epidemic and widespread respiratory infections in Plovdiv (southern Bulgaria), Vidin (northwestern Bulgaria), Gabrovo and Pleven (central Bulgaria), and Kurdzhali and Smolyan (southern Bulgaria). The incidence in Montana (northwestern Bulgaria) is near-epidemic. The number of flu cases is growing in Veliko Turnovo and Khaskovo but there is no epidemic there. The Health Ministry has not registered a sharp increase in the number of flu patients in other towns.

Last week 44,454 patients were registered with respiratory infections, of whom 1,573 developed flu symptoms, the Health Ministry said. The incidence is highest in the 8-to-18 age group, where it has reached epidemic level.

Patients have tested positive for Type A and Type B viruses.

## HUNGARY

### Influenza Epidemic Hits Two Counties

LD0502105393 Budapest MTI in English  
1007 GMT 5 Feb 93

[Text] Budapest, February 5 (MTI)—As many as 41,000 flu patients have been registered in Hungary in the past week, and infection is still spreading, Ilona Straub, head of epidemiology at the National Institute for Public Health, told Friday's MAGYAR HIRLAP.

A flu epidemic has emerged in two counties, with 14,000 patients registered in Borsod-Abauj-Zemplen, and 7,300 in Heves.

Komarom, Vas, and Zala counties have so far escaped infection. Elsewhere, the disease is hitting schoolchildren in particular.

Of the 5,000 cases registered in Budapest, 3,000 were under 15 years old, twice as many as a week earlier.

To date, influenza virus B has been isolated in the specimen samples of nine patients living in various parts of the country.

## YUGOSLAVIA

### Food on Black Market in Macedonia

93BA0579X Skopje NOVA MAKEDONIJA in Macedonian  
28 Jan 93 p 3

[Article by B. Dichevska: "Black Market in Food—Poison in a Plate"]

[Text] Greater control of imported food products in the Republic.

*What is happening at the present time with the import of livestock, meat, dried meat products, milk, different milk preparations, and so forth, is nothing other than illicit trading and legalization of the black market in food. Potential danger of expansion of different diseases of animal origin.*

"Macedonia does not need a war. It will eliminate itself by importing food." This statement that the director of "Stoko-promet," Mirko Lekoski, made to an official meeting in the Chamber, refers to a serious condition that exists in the market for food products in the Republic. More precisely, a situation that requires more diligent legal measures on the part of the government and introducing greater monitoring of imported products on the part of its executive agencies.

### Illegal Trading

As Lekoski emphasized in the discussions later, whatever is being done with imports of livestock, meat, dried meat products, different milk preparations, cheese, kashkaval [Bulgarian yellow cheese], and so forth cannot be interpreted as anything other than a mass extension and legalization of the black market in food. He says that you don't have to do a lot of investigation to determine the reliability of this statement, the open air markets in Skopje with heaps of meat pushed out for sale along the counters and along the sidewalk around them, the displayed cakes of kashkaval, cheese molds, milk, large scale sales of livestock at livestock markets, and whatever else are a sufficient illustration of the reliability of this statement. And all this is displayed and sold before the eyes of the inspectors, the police of other executive agencies of the government, literally before the eyes of all of us. In addition, by every indication, nothing is being done to eliminate this illegal trading in the basic food products, so it appears that everyday there is a tendency for this to expand through the other markets in the Republic.

In fact, no one is against imports, and even less, again, against the market placement of more inexpensive food. However, we are for imports that will represent intervention in the shortage of corresponding food products, the implementation of which will be regulated exclusively by previously issued certificates of origin and of the sanitary condition of the imported goods and by other documents issued for import rights. And, what is more important, the imported goods must correspond to the appropriate standards which actually exist on the market in the European community. Unfortunately, in our country, many practical examples have shown that things take place more at random than by the development of legal regulations, which will contain all instructions, standards, and criteria for regular imports in accordance with established standards.

What is happening is not because of ignorance or inability, but, first of all, because of the irresponsible and comfortable relation of the government toward the timely codification and submission of these kinds of legal measures.

### Danger From Infectious Diseases

We do not expect all this to be done overnight. However, the correct application of the already existing Yugoslav standards should be taken into account, especially in the case of a long-term absence of established Macedonian standards for importing goods. As Kiro Dokuzovski emphasized, it cannot be maintained with certainty that no examples of uncontrolled imports will be recorded if the Yugoslav standards are used; however, they would be fairly effective in overcoming the current chaos in the market for meat, milk, livestock, and so forth. Now, everyone imports from wherever they find things and whatever they can find. And the greatest danger is that the bulk of the imports are from Bulgaria, Albania, Hungary, and so forth, that is, from

where it is the fastest and easiest. However, in Bulgaria, for example, rinderpest was prevalent in nine regions. And even in the case of these conditions, and still more in the case of the present imports of livestock from Albania, which is sold on the livestock market in Trubarevo and in other places, "currency has to rule"—the people will eat more cheaply.... Shouldn't we be concerned about the dangers that can occur with the large scale expansion and transmission of diseases from cattle among the population such as the ligavka [disease of mucous membrane], hoof-in-mouth disease, rinderpest, and others. With respect to what is done concerning the basic food products that are consumed everyday, it is not by accident that we insist that measures be taken to do away with the present so-called illicit trading and black market in food as soon as possible. What is more, we are for complete monitoring of every shipment which is brought into the Republic, irrespective of the country from which it is imported.

#### **What Is Wrong Is Thrown Away**

While employees from the market complex point out the weaknesses of the uncontrolled imports and insist that standards be confirmed as soon as possible and in general insist on complete legal regulation in this regard, the responsible authorities have opposite ideas and statements. More specifically, that everything is regulated by issuing certificates and monitoring of imported goods. As *Aleksandar Naletovski*, the director of the Republic Administration for Veterinary Science of the Ministry of Agriculture, Forestry, and Water Resources, emphasizes, importation of livestock products, especially of livestock and meat, takes place exclusively with issued certificates and other required documentation. Veterinary inspectors monitor the state of health and quality. Monitoring of this type with the presence of a veterinarian inspector is performed at border crossings for cattle, and specimens are brought to the Institute for Veterinary Science in Skopje. Improper goods are turned back. Thus, so far, shipments of livestock from Bulgaria and from the Czech Republic have been turned back; likewise a shipment of spoiled milk was turned back from Bulgaria, and a shipment of ground meat from Denmark. On the average, 500 to 1,000 kilograms of meat and 300 to 500 kilograms of dried meat products are confiscated every week. Products are also monitored; nevertheless, there are cases where samples of kashkaval have been sent for testing to the Institute and starch was found. However, such goods are sanitary and not dangerous for the human organism. These are deceptions that are carried out in the production facilities of the exporting country.

For the time being, the only hard thing is to stop the chaotic situation of the sale of meat in the open air markets. These goods are not transported through the established border crossings but through different other channels. Therefore, most of this meat comes from Serbia. However, Naletovski adds, this is more a responsibility of the market inspection services and of the corresponding police services.

#### **Typhoid, Hepatitis Epidemic in Western Bosnia**

*LD1102142793 Belgrade TANJUG Domestic Service in Serbo-Croatian 1029 GMT 11 Feb 93*

[Text] Bihac, 11 Feb (Tanjug)—An epidemic of typhoid and hepatitis has spread in Bihac in the last few days, and the situation has been made worse by the shortage of main foodstuffs, the SRNA agency reports, quoting a report by the information service of the Second Krajina Corps.

The food situation is best illustrated by the fact that a litre of oil sells at 16 German marks [DM], the same as a kilogram of meat, while a litre of milk costs DM4. A packet of cigarettes of the lowest quality costs DM10 on the black market.

The road corridor used to bring humanitarian aid from Croatia through the territory of the Serb Republic [in Bosnia-Herzegovina] has been closed due to the fighting in the area, and only an occasional plane from Croatia lands at Coralic airport near Cazin bringing in amounts of food hardly sufficient to meet the demands of Bihac's citizens.

#### **Ten Children Reportedly Die From Smallpox in Kosovo**

*AU1702121693 Sarajevo Radio Bosnia-Herzegovina Network in Serbo-Croatian 1100 GMT 17 Feb 93*

[Text] As stated by the Epidemiology Institute of Kosovo, smallpox has spread to many part of Kosovo. According to the records of this institute, 1,450 children have been registered to have this disease. So far 10 of them have died. Because of this, several health organizations, particularly in Urosevac, Gnjilane, and Vitina, have declared a state of emergency.

This was reported by the Croatian radio.

#### **Smallpox Report; Corresponding Report on Scarlet Fever**

*AU1802092793 Sarajevo Radio Bosnia-Herzegovina Network in Serbo-Croatian 19 Feb 92*

The referent Sarajevo radio report, citing Croatian radio, says that 1,450 children in Kosovo have contracted smallpox (velike boginje) and 10 have died of it. Sarajevo radio carried the same report in its 1400 GMT cast.

In the meantime bureau has obtained by fax from Belgrade the Pristina KOSOVO DAILY REPORT in English issue No 32 of 16 February (published by the Democratic Alliance of Kosovo and not currently on bureau coverage), which on page 2 carries a report entitled "Death Toll of Scarlet Fever Reaches Ten" that reads in its entirety:

"According to data issued by today's edition of BUJKU, 1,343 cases of scarlet fever have occurred so far in Kosovo. The number of the dead by this decease has reached ten. Deaths by this fatal disease have occurred as a result of lack of vaccines and following closing down by the Serbian authorities of the majority of local health centers in villages and small towns throughout Kosovo."

## REGIONAL AFFAIRS

### Southern Cone Health Report 5-11 February

*PY1102171793 Various Sources in Spanish and Portuguese 5-11 Feb 93*

[Editorial Report] The following is a compilation of reports on epidemics and diseases monitored by Paraguay Bureau from 5 to 11 February. Source, date, and time are given in parentheses after each item.

#### ARGENTINA

First Cholera Case in Buenos Aires—The Ezeiza Hospital director has confirmed that the first cholera case has been detected in Buenos Aires Province. The patient is a Bolivian citizen whose name was not reported. The director said that the patient is doing well and that he may be released in a couple of days. (Buenos Radio Nacional Network in Spanish 1500 GMT 9 Feb 93)

Cholera Cases Throughout Country—The Health Ministry has officially reported 943 cholera cases and 20 deaths since the outbreak of this disease. The geographical distribution of cholera cases are: Salta 471, Jujuy 445, federal capital 4, Formosa two, Santa Fe 2, Santiago del Estero three, Tucuman three, Mendoza six, Cordoba, four, Chaco two, and Buenos Aires one. (Buenos Aires NOTICIAS ARGENTINAS in Spanish 2015 GMT 10 Feb 93) rl

#### BOLIVIA

Yellow Fever in Apolo—Health officials in La Paz Department have reported that two conscripts have died from yellow fever in Apolo, Franz Tamayo Province, and that five others are hospitalized. (La Paz PRESENCIA in Spanish 2 Feb 93 p 6)

Malaria in Robore—Health officials of Santa Cruz Department have reported 30 new cases of malaria in San Rafael and (Gavetita), 25 km from Robore. Officials decided to declare this zone in state of emergency. Five people have died in these two settlements. (La Paz Radio Fides Network in Spanish 1100 GMT 11 Feb 93)

#### BRAZIL

Cholera Cases in Paraiba—The Paraiba Health Secretariat has reported 165 cholera cases, four of them fatal, so far this year. The districts affected by the disease are Cubati, Queimadas, Soledade, Sao Bento, and Boqueirao. In 1992 there were 3,500 confirmed cholera cases and 44 deaths. (Sao Paulo FOLHA DE SAO PAULO in Portuguese 6 Feb 93 section 3 p 4)

Cholera Spreading in Minas—The Minas Gerais Health Secretariat has reported that 14 cholera cases—three of them fatal—have been detected in Pedra Azul and Almenara, in the Jequitinhonha River valley, in northeastern Minas Gerais. (Brasilia Radio Nacional da Amazonia Network in Portuguese 1000 GMT 8 Feb 93)

#### PERU

Cholera Cases in January—The Health Ministry has reported that between 3 and 15 January 1993, 4,128 people infected with cholera in contrast to 13,919 cases during the same period in 1992. Of the 4,128 cases, 2,690 were reported in the area of Lima and Callao. Cholera is spreading fast in Arequipa, where 547 cases were reported

mainly in Islay Province. Lambayeque has 43 cases, Ica 47, Loreto 36, and Ucayali 19. (Lima LA REPUBLICA in Spanish 2 Feb 93 pp 11-13)

### Southern Cone Health Report 12-18 February

*PY1802202093 Various Sources in Spanish and Portuguese 12-18 Feb 93*

[Editorial Report] The following is a compilation of reports on epidemics and diseases monitored by Paraguay Bureau from 12 to 18 February. Source, date, and time are given in parentheses after each item.

#### ARGENTINA

Cholera Cases Wrapup—The Health Ministry has confirmed 13 new cholera cases in the provinces of Salta, Jujuy, and Mendoza. The total number of cholera cases since the beginning of the year stands at 973 people, 20 of whom died. The two provinces with the highest number of cases are Salta with 492 and Jujuy with 451. (Buenos Aires NOTICIAS ARGENTINAS in Spanish 1808 GMT 12 Feb 93)

More Cholera Cases Reported—The Salta Province Health Ministry has reported eight new cholera cases in the San Martin area. The total number of cholera patients registered in the province since February 1992 is 1,014, and the number of fatal cases during the same period is 22. (Buenos Aires TELAM in Spanish 1326 GMT 18 Feb 93)

#### BOLIVIA

Report on Cholera Cases—It has been reported that 931 cholera cases, 28 of which were fatal, were registered in the country during the first week in February. Almost 50 percent of these patients were hospitalized. The highest number of cases were registered in the departments of Chuquisaca (284), Santa Cruz (154), and Tarija (166). In Cochabamba the number of cholera cases doubled that of the previous week, totalling 187. (Santa Cruz EL MUNDO in Spanish 6 Feb 93 National Section p 1)

#### BRAZIL

Rabies Outbreak Reported—The Health Municipal Secretariat has reported on a rabies outbreak in the region of Cruzeiro and Lavrinhas, Sao Paulo State, where several animals have already died and 25 people have been contaminated. No human fatalities have been reported. (Sao Paulo O ESTADO DE SAO PAULO in Portuguese 12 Feb 93 City Life Section p 9)

### Southern Cone Health Report 19-25 February

*PY2502171693 Various Sources in Spanish 19-25 Feb 93*

[Editorial Report] The following is a compilation of reports on epidemics and diseases monitored by Paraguay Bureau from 19 to 25 February. Source, date, and time are given in parentheses after each item.

#### ARGENTINA

Cholera Cases in Salta, Jujuy—The Health Ministry has reported that eight new cholera cases were detected over the past 24 hours in Salta and Jujuy Provinces. A total of 1,074 people have been infected with the disease in these provinces since early this year, which in 20 cases were fatal. (Buenos Aires NOTICIAS ARGENTINAS in Spanish 2122 GMT 24 Feb 93)

## **BOLIVIA**

Fatal Cholera Cases—The Tarija health unit has reported that three people died of cholera in Tarija Department on this seventh week in 1993, although the number of cholera cases are noticeably declining. (La Paz Radio Fides Network in Spanish 1100 GMT 19 Feb 93)

## **BRAZIL**

First Cholera Cases in Rio—Health officials on 23 February confirmed that three people were infected by cholera in the Jorge Turco shantytown in a Rio de Janeiro suburb. Experts from the Rio City Hall inspected the sanitary services of the shantytown and proved that the water was infected with the virus. (Madrid EFE in Spanish 1606 GMT 24 Feb 93)

## **PERU**

Cholera Cases Reportedly Drop—Health Minister Victor Paredes Guerra reported on 7 February that 9,386 cholera cases have been detected in the country so far this year; in 3,088 of the cases the patients have been hospitalized. He said that these figures show a significant drop in cholera cases, but that this can in no way be considered a triumph. (Lima EL COMERCIO in Spanish 8 Feb 93 p A6)

## **Southern Cone Health Report 25 Feb - 4 Mar**

PY0403215993 *Various Sources in Spanish and Portuguese*  
25 Feb - 4 Mar 93

[Editorial Report] The following is a compilation of reports on epidemics and diseases monitored by Paraguay Bureau from 26 February to 4 March. Source, date, and time are given in parentheses after each item.

## **ARGENTINA**

More Cholera Cases Reported—The health ministries of Salta and Mendoza provinces confirmed eight new cholera cases on 2 March, bringing the total to 1,136 since the outbreak that began in January. The Salta cases are located in the Bermejo region and the Mendoza ones are in the districts of Rodeo del Medio and Fray Luis Beltran, which are located in Maipu Department. (Buenos Aires NOTICIAS ARGENTINAS in Spanish 1443 GMT 2 Mar 93)

## **BRAZIL**

Cholera in Rio de Janeiro—The number of confirmed cholera cases in five northern districts of the city of Rio de Janeiro has risen to 13. The total number in the state of Rio de Janeiro stands at 15 because two cases also have been confirmed in Niteroi. (Rio de Janeiro Rede Globo Television in Portuguese 2300 GMT 1 Mar 93)

Cholera Cases Spreading Countrywide—Since the beginning of the cholera outbreak, more than 32,000 cases have been registered countrywide, most of them in the northern and northeastern regions. The number of cholera cases in Vitoria, Espirito Santo State, has increased and the illness has become epidemic. (Brasilia Radio Nacional da Amazonia Network in Portuguese 1030 GMT 2 Mar 93)

## **CHILE**

Cholera Case in Rancagua—The Chilean Health Ministry confirmed on 3 March that a Peruvian woman who arrived from Lima on 23 February to visit Rancagua, 88 km south of Santiago, is infected with cholera. So far this year nine people have been infected with cholera in Chile. (Madrid EFE in Spanish 1554 GMT 3 Mar 93)

## **PERU**

Latest Cholera Figures Reported—The Health Ministry reported 12,782 cholera cases and 60 deaths in the first 47 days of 1993, compared with 31,548 cases in the same period in 1992. The report adds that Lima-Callao, Arequipa, Libertadores-Wari, San Martin, Andres Avelino Caceres, and La Libertad have most of the cases. (Lima EXPRESO in Spanish 17 Feb 93 p A11)

## **Disease Report From 23 December - 25 January**

AB0402101393 *Various Sources in English*  
23 Dec 92 - 25 Jan 93

[Editorial Report] The following is a compilation of disease reports monitored from Abidjan Bureau coverage area from 23 December 1992 to 25 January 1993. Source, date, and time of broadcast are given in parentheses at the end of each item.

## **GHANA**

Thirteen out of the 21 patients admitted at the Holy Family Hospital at Techiman in the Brong Ahafo Region, since the beginning of January, have died of cerebro-spinal meningitis. The senior medical officer in charge of the hospital, Dr. Ignatia Bush, who confirmed the outbreak, said the team from the medical field unit has started an immunization campaign in the district to check the spread of the disease. [Accra Ghana Broadcasting Corporation Radio Network in English 0600 GMT 25 Jan 93]

## **NIGERIA**

Britain and Nigeria have signed an assistance agreement on health related programs aimed at boosting Nigeria's health system. The pact, which was witnessed by Nigeria's high commissioner to Britain, Alhaji Abubakar Alhaji, was signed in Lagos on 18 January. The agreement, which was signed by Baroness Lynda Chalker, covers a total of 23.3 million pounds for a three year period in the health sector. Already, 2 million pounds has been provided to purchase AIDS free agents and testing equipment for some of the nation's blood screening centers, while contraceptives worth 0.9 million pounds were supplied in January. [Lagos NTA Television Network in English 2000 GMT 18 Jan 93]

An outbreak of an unidentified disease has been reported from Lafia in Plateau State. The disease has already claimed six lives including a medical doctor. Reports say a woman from Akwanga with a mysterious disease was admitted to the Lafia hospital where she died a few hours later. Three nurses who attended her also died, and the doctor who also consulted her has died. The local Member of Parliament has appealed to the central government to send a team of medical experts to the area to identify the disease. [Lagos Radio Nigeria Network in English 0600 GMT 25 Jan 93]

**Regional Health Report 22-29 January***PA3001135693 Various Sources in Spanish 22-29 Jan 93*

[Editorial Report] The following is a compilation of regional health reports monitored by Panama Bureau from 22 to 29 January. Source follows in parentheses after each item.

**Colombia**

Officials have reported the cholera epidemic reappeared in La Guajira peninsula, near the border with Venezuela. San Jose de Maicao Hospital director said 30 patients were treated and a state of health alert has been declared in the area. (Mexico City NOTIMEX in Spanish 1700 GMT 25 Jan 93)

**COSTA RICA**

Two cases of hepatitis have been reported from 23 to 26 January. A total of 369 cases of hepatitis have been reported to date. (San Jose Reloj in Spanish 0100 GMT 27 Jan 93)

**Ecuador**

Over 4,000 cases of malaria, 299 cases of tuberculosis, and 19 cases of leprosy have been detected in Los Rios Province in the past 22 days, according to Los Rios Governor Victor Escudero. (Hamburg DPA in Spanish 2201 GMT 24 Jan 93)

**Nicaragua**

Health Ministry officials have reported 39 cases of cholera in Leon so far this year, four of them have died. It was reported that an 18-year old person died of cholera in Matagalpa and is the eighth person to die of cholera in the past 28 days. (Managua Radio Nicaragua Network in Spanish 1100 GMT 29 Jan 93)

Nicaraguan Health Ministry officials have reported 3,322 cases of cholera since the bacteria first appeared in the country in November 1991. (Paris AFP in Spanish 1718 GMT 26 Jan 93)

Health Ministry officials have reported 10 cases of malaria in El Viejo and five cases in Chinandega. (Managua Radio Corporacion in Spanish 2200 GMT 25 Jan 93)

**Regional Health Report 31 Jan - 5 Feb***PA0602152693 Various Sources in Spanish 31 Jan-5 Feb 93*

[Editorial Report] The following is a compilation of regional health reports monitored by Panama Bureau from 31 January to 5 February. Source follows in parentheses after each item.

**COLOMBIA**

The National Health Institute, INS, on 28 January revealed that there has been a notable increase in the cases of hemorrhagic dengue in the country over the past two years. According to the INS, 446 cases were reported last year. This represents a considerable increase from the 39 cases reported in 1990. The cases reported in 1992 by department were broken down as follows: 127 in Santander; 78 in Tolima; 56 in Valle del Cauca; 55 in Cundinamarca; 27 in Norte de Santander; and 19 in Meta. (Santa Fe de Bogota EL NUEVO SIGLO in Spanish 29 Jan 93 p 11A)

An outbreak of hepatitis B has been reported at the prison in Honda, prompting a health alert in the region. According to

the INS, nine cases were confirmed, but 104 prison inmates may be infected. Authorities have eliminated visits to the prison to contain the outbreak of hepatitis B. (Santa Fe de Bogota Inravisión Television Cadena 1 in Spanish 1730 GMT 1 Feb 93)

**GUATEMALA**

The Ministry of Public Health and Social Welfare on 2 February confirmed that 280 people have died of cholera in the country since the outbreak of the disease in July 1991. Sources explained that 326 cases of cholera have been reported so far in 1993. According to health officials, the epidemic outbreaks of cholera have been brought under control. (Panama City ACAN in Spanish 1837 GMT 2 Feb 93)

**NICARAGUA**

Health authorities have reported that 39 cases of cholera were detected in Leon in January. This represents 56 percent of the cases reported in January 1992. Two new cases were reported on the weekend of 30 January in Leon. According to authorities, 15 cases were confirmed in Salinas Grandes, while 11 cases were detected in Poneloya. Other cases have been reported in Benjamin Zeledon neighborhood, El Chague, and Las Penitas. (Managua Radio Nicaragua Network in Spanish 1100 GMT 1 Feb 93)

Health authorities have confirmed an outbreak of cholera in San Pedro de Lovago Municipality, Chontales Department. Sources indicated that one woman from Puerta de Paris died of cholera. Reports indicate that 10 persons from Puerta de Paris have also been hospitalized. The Health Ministry sent a medical brigade, which established an emergency health post in San Pedro de Lovago to prevent the spread of the disease. (Managua Radio Corporacion in Spanish 2200 GMT 2 Feb 93)

Health authorities have confirmed that the waters of Teustepe River, Boaco Department, are contaminated with the cholera virus. They urged the population to boil water before drinking it. (Managua Radio Corporacion in Spanish 2200 GMT 4 Feb 93)

**PANAMA**

So far this year, 100 cases of German measles have been reported in the Panama City metropolitan health region alone. This is an alarming figure compared to 1992, when only one case was reported. This indicates the existence of a possible epidemic of German measles which, although harmless to adults and children, poses great danger for pregnant women. (Panama City Telemetro Television Network in Spanish 1730 GMT 2 Feb 93)

Approximately 45 percent of Volcan District residents have suffered from intestinal disease after the contamination of their drinking water source. A health official explained that unhealthy conditions at the water reservoir are to blame for the spread of intestinal disease. (Panama City Circuito RPC Television in Spanish 2300 GMT 2 Feb 93)

A health official has reported an outbreak of vomiting and diarrhea in Chiriqui Province. The source reported that 45 cases were reported, mostly among children. The source explained that this phenomenon is typical during this season. (Panama City CRITICA LIBRE in Spanish 5 Feb 93 p 28)

**PERU**

Health Minister Victor Paredes has announced that the cases of cholera reported this year have been considerably reduced as compared to last year. He said that so far, 9,286

cases and 45 cholera related fatalities have been reported nationwide, as compared to 31,000 cases and 174 fatalities last year. The minister urged the people not to let down their guard on the fight against cholera and to continue preventive measures. (Lima Global de Television Network in Spanish 0000 GMT 5 Feb 93)

### Regional Health Report 5-12 February

PA1302161493 Various Sources, 5-12 February

[Editorial Report] The following is a compilation of regional health reports monitored by Panama Bureau from 5 through 12 February. Source follows in parentheses after each item.

#### Colombia

Health officials in Huila Department have reported an epidemic of classic and hemorrhagic dengue in La Plata, a town 122 km southwest of Neiva. Over the past six weeks, 34 cases have been reported, 15 of them over the past three days. The local medical corps was forced to declare a red alert and urge the Health Ministry to come to their aid. Huila authorities say that a general fumigation program is required in all neighborhoods to counteract the mosquito that transmit the disease. (Santa Fe de Bogota EL NUEVO SIGLO 5 Feb 93 p 13-A)

#### Costa Rica

During an international symposium on leprosy in San Jose on 10 February, it was disclosed that approximately 300 Costa Ricans are afflicted with leprosy. The Health Ministry reports that most of the cases are in rural areas, especially the Atlantic region. (Havana PRENSA LATINA 1629 GMT 10 Feb 93)

#### Nicaragua

There has been an outbreak of malaria in Managua, Leon, and Chinandega Departments over the past five weeks. Health authorities reported 123 cases in Managua, 86 in Chinandega, and 159 in Leon. They attribute the resurgence of the disease to the existence of damp and swampy areas where mosquitoes breed and to the crowded conditions on banana farms. (Managua Radio Corporacion 2200 GMT 8 Feb)

The Health Ministry has confirmed that it is investigating reports of five deaths from cholera and 19 other cases in Waslala, Matagalpa Department. (Managua Radio Corporacion 2200 GMT 9 Feb 93)

Health Ministry authorities in Leon Department have detected a new case of cholera, the 47th case reported in 1993. The ministry has also reported a low-intensity dengue epidemic; 76 cases were reported in January and February. (Managua Radio Nicaragua Network 1100 GMT 10 Feb 93)

The Health Ministry reports that three new cases of cholera have been detected in Masaya Department, adding that the disease is dangerously spreading in that area. The ministry pointed out that investigations are under way in other parts of the country where cases have been reported, especially in Jinotega and Matagalpa Departments. (Managua Radio Nicaragua 1100 GMT 12 Feb 93)

#### Panama

The Health Ministry has announced a new case of cholera in Darien Province, which raises the number of cases reported in 1993 to 31, three of which have died. (Panama City LA PRENSA 6 Feb 93 p 3-A)

Statistics show that the number of individuals afflicted with venereal diseases has increased considerably over the past few years. The most prevalent of these diseases are syphilis, gonorrhea, chancre, and genital herpes. More men than women are afflicted with them. In 1990 there were 688 cases of syphilis and 3,008 of gonorrhea; in 1991 there were 739 cases of syphilis and 3,271 of gonorrhea. (Panama City Circuito RPC Television 2300 GMT 10 Feb 93)

#### Peru

Peruvian Health Minister Victor Paredes announced on 8 February that so far this year 9,386 cases of cholera have been reported nationwide. He said this shows that the disease has been controlled and is virtually in remission. (Paris AFP 1758 GMT 8 Feb 93)

#### Venezuela

Health Minister Angel Rafael Orihuela reports a resurgence of cholera in Taicada de Maturin where nine cases have been reported. He added that the outbreak was caused by Indians brought from the Orinoco region to harvest the tobacco crop. (Caracas Venezolana de Television Network 1550 GMT 8 Feb 93)

### Regional Health Report 12-19 February

PA2002040493 Various Sources in Spanish 12-19 Feb 93

[Editorial Report] The following is a compilation of regional health reports monitored by Panama Bureau from 12 to 19 February. Source follows in parentheses after each item.

#### Ecuador

On 16 February, a massive vaccination campaign began in Guayaquil following 11 cases of rabies reported over the past six weeks. (Hamburg DPA in Spanish 0035 GMT 20 Feb 93)

#### Nicaragua

Health authorities report that a heavy cholera outbreak is affecting El Empalme, Mina de Rosita Jurisdiction. Five people have died and 42 are hospitalized. With the cholera death of a person in Cebaco Municipality, the number of dead has reached 60. (Managua Radio Corporacion in Spanish 2200 GMT 16 Feb 93)

#### Panama

Official sanitary reports indicate that there have been 35 new cholera cases during 1993, of which three persons have died. The cases have all been reported in the Indian Kuna Yala community and Colon Province. The report adds that out of the 35 cases, 17 have required hospitalization. Since the first outbreak in Darien Province in September 1991, there have been 3,634 cases with 83 deaths. (Panama City EL SIGLO in Spanish 19 Feb 93 p 2)

#### Peru

Authorities report an alarming increase in cholera cases, although the number of deaths has dropped. Arequipa has formed an emergency committee to fight the disease's

renewed outbreak. Currently there are 15 new cases every day, but five people have died since January. A pesticide spray program has begun in Camana, Arequipa. (Lima Panamericana Television Network in Spanish 1200 GMT 19 Feb 93)

### Regional Health Report 19-26 February

PA2702042593 Various Sources in Spanish 19-26 Feb 93

[Editorial Report] The following is a compilation of regional health reports monitored by Panama Bureau from 19 to 26 February. Source follows in parentheses after each item.

#### MEXICO

Mexican microbiologist Silvia Giono Cerezo reported at a 26 February cholera seminar in Mexico City that there have been 7,644 cholera cases in Mexico in 1992. Mexican Health Secretariat statistics indicate that the mortality rate in cholera cases is 1.3 percent. Giono Cerezo said areas with the highest mortality rates from cholera are: Mexico State with 4.3 percent; Puebla, 3.8 percent; Morelos, 3.6 percent; and Mexico City, 3 percent. She added that there were 8.6 cases for every 100,000 inhabitants in the country. (Madrid EFE in Spanish 2251 GMT 26 Feb 93)

#### PANAMA

The Panama Cholera Prevention Commission has reported six new cholera cases in Darien Province, including two people who have been hospitalized and one who died. Commission personnel indicated that there have been 42 cholera cases to date, including 19 hospitalized and four dead. It was also reported that most cholera cases have been reported in Darien and San Blas. (Panama City LA PRENSA in Spanish 21 Feb 93 p 2a)

#### PERU

Antonio Mundini, Ucayali regional health director, reported that at least five children have died of measles. He added that the measles epidemic started in the region 15 days ago and that the victims were from hamlets in the Iparia district forest. (Paris AFP in Spanish 1451 GMT 26 Feb 93)

### Regional Health Report 26 Feb-5 Mar

PA0603033793 Various Sources in Spanish 26 Feb-5 Mar 93

[Editorial Report] The following is a compilation of reports on epidemics and diseases monitored by Panama Bureau from 26 February to 5 March. Source follows in parentheses after each item.

#### COLOMBIA

In view of the increase in cases of hemorrhagic dengue, health authorities in La Dorada have requested government funds to continue the preventive campaign initiated in 1992. According to statistics, 141 patients were treated in 1992 and 59 cases have been reported during the first two months of 1993. (Santa Fe de Bogota EL NUEVO SIGLO in Spanish 26 Feb 93 p 16A)

#### ECUADOR

A violent outbreak of cholera, an alarming rabies epidemic, and dozens of cases of malaria are affecting the Pacific Coast. The Health Ministry has reported that 14 persons

have died from rabies in the past two months, eight in Guayaquil. According to official statistics, 40 new cases of cholera, including nine deaths, were reported in February. A malaria outbreak has been detected, but health authorities have not reported the exact number of cases. A high percentage of Ecuadorans are also affected by dengue and typhoid. (Madrid EFE Spanish 1814 GMT 27 Feb 93)

#### EL SALVADOR

Health authorities have reported 27 new cases of cholera were registered in La Paz Department in February, compared to 12 in January. (San Salvador Radio Cadena YSKL in Spanish 1200 GMT 1 Mar 93)

The Health Ministry has declared a state of alert in view of an outbreak of cholera in four departments. Health Minister Lisandro Vasquez Sosa has reported that 124 cases were reported from 25 February to 3 March, 50 in the past 24 hours, including the death of a five-year-old girl. Vasquez said that the most affected areas are Chalatenango; Zacatecoluca; La Libertad; and the municipalities of Mejicanos, Soyapango, Apopa, and San Jacinto in San Salvador. (San Salvador DIARIO LATINO in Spanish 4 Mar 93 p 3)

#### MEXICO

Health Secretary Jesus Kumate Rodriguez has reported that 140 new cases of cholera have been registered in the country during the first two months of 1993, compared to 400 registered during the same period in 1992. He said that there were a total of 7,644 cases of cholera in 1992, adding that more than 800 cases have been reported since the first case was detected in June 1991, including approximately 200 deaths. (Madrid EFE in Spanish 2000 GMT 5 Mar 93)

#### PANAMA

Health authorities have reported there were 98 cases of tuberculosis in the Veraguas Province in 1992. (Panama City LA ESTRELLA DE PANAMA in Spanish 3 Mar 93 p A-15)

#### PERU

It was reported that 10 peasants have died from cholera and 30 are seriously ill in Apongo, in the southeastern Andean region. Cholera arrived on the Peruvian coast in January 1991, when 322,562 cholera patients were hospitalized. The total number of cases in 1992 was 212,610. Meanwhile, 15,195 cases of acute diarrhea have been reported during the first six weeks of 1993, of which only 316 cases have been confirmed as cholera, according to official statistics. (Paris AFP in Spanish 0547 GMT 28 Feb 93)

According to statistics, since 1982 to date, 267 people have died of rabies in Peru. A breakdown by year follows: in 1982—39 cases, in 1983—31 cases, in 1984—33 cases, in 1985—22 cases, in 1986—eight cases, in 1987—seven cases, in 1988—20 cases, in 1989—17 cases, in 1990—33 cases, in 1991—28 cases, and in 1992—22 cases. So far, seven have died of rabies in 1993. (Lima Frecuencia 2 Satellite Television in Spanish 1300 GMT 28 Feb 93)

Cholera has taken more victims in the southern region. Four deaths were registered in Tacna in the past few hours. (Lima Panamericana Television Network in Spanish 1200 GMT 4 Mar 93)

## VENEZUELA

The Epidemiology Directorate in Zulia State has declared a state of alert in view of an outbreak of dengue. Approximately 70 cases have been reported in that region this year. A Health Ministry official in Maracaibo said that "the figures are high compared to 1992." He added that 52 cases of hemorrhagic dengue have been reported in Maracaibo, and 18 cases of classic dengue. (Caracas Venezolana de Television Network in Spanish 2350 GMT 2 Mar 93)

## BOLIVIA

### Anti-Cholera Measures Adopted With Argentina

PY0302015493 La Paz Television Nacional Network  
in Spanish 0000 GMT 3 Feb 93

[Excerpt] New preventive policies will be implemented after meetings held by Bolivian and Argentine health committees headed by Bolivian Health Minister Carlos Dabdoub and Argentine National Health Secretary Alberto Mazza. The new policies will seek to control the spread of cholera.

The concern caused by the rapid spread of cholera and the cautiousness with which Argentine authorities are treating Bolivian citizens—who are considered vectors of the disease—have prompted the adoption of several actions to control the entry and transit of Bolivian citizens in Argentina. Several preventive policies have been implemented. A meeting of the health commissions has been scheduled for 25 or 26 February in Santa Cruz.

[Begin Dabdoub recording, in progress] ... address the issue of the flow of food from Bolivia to Argentina and from Argentina to our country. Argentina has imposed some restrictions on some farm products. At the Santa Cruz meeting we will jointly work to eliminate those barriers.

**Mazza:** The Argentine Government's main objective is to prevent the entry into our territory of unauthorized workers or illegal immigrants who can later obtain a job because, since they are illegal immigrants, their situation can be disadvantageous and they can become vectors of this or any other disease. [end recording] [passage omitted]

## GUATEMALA

### Cholera Epidemic Kills 17 in Peten Department

93WE0217B Guatemala City PRENSA LIBRE in Spanish  
20 Dec 92 p 28

[Article by Carlos Absalon Galvez]

[Text] Ciudad Flores—More than 17 people have died in the department of Peten as a result of the epidemic of cholera morbus, health authorities have reported.

This pandemic, which is widespread in the Peten region, has caused the death of 10 peasants in San Luis, three more in Dolores, and four in the frontier town of Melchor de Mencos. New outbreaks have been reported in the hamlet of Ixlu, in the Flores zone, but Drs. Salvador Rosales Alegria and Nicolas Ceron have succeeded in bringing them under control.

On the other hand, the residents of Sayaxche have sent an urgent appeal for help to the Ministry of Public Health and Social Welfare, because hemorrhagic dengue has been found to be present in villages in that municipality.

Area residents expressed their gratitude to Drs. Ceron and Rosales, as it was they who made it possible to bring the various epidemics that developed in the department of Peten in recent months under control.

## GUYANA

### Health Ministry: Cholera Situation 'Under Control'

FL1702193193 Bridgetown CANA in English 1751 GMT  
17 Feb 93

[Text] Georgetown, Guyana, Feb 17, CANA—Guyana's health authorities say they are winning the three-month battle against cholera.

"The situation seems to be under control," the Ministry of Health said in its fortnightly update on cholera. "No further cholera cases have been reported in Regions Three (West Demerara/Essequibo Islands) and Four (Demerara/Mahaica) for the past two months."

So far there have been five deaths since the outbreak in November last year. But the Ministry repeated its warning against complacency, urging Guyanese to remain vigilant with Guyana's one-day street and costume Mashramani celebrations next Tuesday.

"With Mashramani celebrations just around the corner, the public is reminded to continue to be vigilant and observe proper personal and food hygiene," the Ministry said.

Cholera was first discovered in Mabaruma in the vast Northwest District in western Guyana near Venezuela on November 5. The disease, which has contaminated most of the rivers the Amerindians use for drinking and other purposes, has affected four of Guyana's ten regions.

## INDIA

**Drinking Water Severely Contaminated***93WE0171A Madras DINAMANI in Tamil 12 Dec 92 p 4*

[Editorial: "Danger in Madras"]

[Text] It is alarming to learn that six million people living in the highly congested areas of greater Madras get water found to be carrying germs of unacceptable levels from the Madras Water Supply Board. Those who do not heat the water before drinking may suffer from diseases like cholera, vomiting, kidney complications, brain disorder, and paralysis, according to the results of the study and experiments conducted by the government-owned King Institute. The study has revealed the actual state of affairs, which has also been confirmed. People who were affected by these germs do not show any symptoms of the disease instantly, which is more shocking news. It has also been learned that dehydration in the body resulting in a high temperature and non-functioning of the kidney may lead to death. Also learned is the fact that a special experiment is needed for identifying these germs. The iron content in the water is too much and will cause danger to health.

The Madras Corporation's Department of Sanitation also recently conducted a survey, which has revealed that out of 155 divisions 49 have impure water. Recently many have died in the city from cholera. Already there have been a number of problems in the thickly populated streets of Madras—a huge accumulation of trash, where cattle are grazing; a lack of proper sewage facilities, particularly on rainy days; sewage water stagnation, which looks like small ponds—and all these conditions make certain areas permanent breeding grounds for contagious diseases such as malaria. The canals that run through the city have become sewage canals on the banks of which hundreds of people have illegally built cottages. To add to the bad conditions, it is feared that AIDS may be spreading in the area. When we hear that the basic necessity for life, drinking water, contains germs, it looks as if there is an all around attack on the plan to make Madras a healthy city.

Rather than accommodating such dangerous situations, the Madras Corporation, Tamil Nadu Social Welfare Department, Madras Water Supply Board, and other concerned departments should consider the situation as a war-time emergency, hold a meeting, and take immediate steps on all fronts. The meeting of the officials, headed by the minister for social welfare, should meet often and review the situation. The Madras Sanitary Department should intensify its efforts. At water supply locations, water should not be allowed to accumulate and become polluted. Drinking water pipes should be kept away from the sewage system to avoid any possibilities of mixing. During festive seasons, germ killing medicine should be sprayed at least once every two days. Intensive inoculation campaigns to prevent illnesses should be undertaken. All officials from the commissioner down to the ordinary supervisor should take keen interest in making sure that these services are properly rendered.

Pure air and clean water are basic necessities for people to lead healthy lives in a city. If these are not available, hospitals will be full of patients and the government's expenditure on sanitation will be huge, which will be a big burden on the state. The people of the city should realize this and offer full support and cooperation in the government's efforts to build a healthy Madras.

## SUDAN

**Leishmaniasis Epidemic***AB0402101393 Paris AFP in English 0600 GMT 27 Jan 93*

[Editorial Report] An epidemic of leishmaniasis, also known as kala zara, has killed 40,000 people in southern Sudan and currently threatens the lives of between 300,000 and 400,000 others, WHO warned on 27 January. WHO said the disease, which normally affects only a small and relatively constant number of people, was spreading northwards and eastwards from Parayang, where it first appeared. The illness, which is spread by an insect, leads to anemia and drastic loss of weight. WHO, which said the disease will spread to still other regions unless effective measures are taken, launched an appeal for \$1 million to combat the disease.

## **Typhoid Fever in Lugansk**

### **Nineteen Cases**

93P60176A Kiev *MOLOD UKRAYINY* in Ukrainian  
17 Sep 92 p 1

[Text] A local outbreak of typhoid fever has been detected. Local because the patients, for the most part, live in the same multistory building. As the municipal sanitation and epidemiology station explains, the drinking water was contaminated through damage to the sewer system and the water supply line. On 15 September, 29 individuals were hospitalized, and the diagnosis confirmed for 19 of them.

### **Thirty Cases**

93P60177A Kiev *RABOCHAYA GAZETA* in Russian  
29 Sep 92 p 1

[Article by M. Shakalov: "And in Lugansk—Typhoid Fever"]

[Text] The news varies—somewhere a hematology center has opened, somewhere construction of a church has started, somewhere the production of goods needed by the population has begun... And in Lugansk—typhoid fever. If official reports are to be believed, the number of abdominal typhoid cases has exceeded thirty.

Commenting on this regrettable event, sanitary-epidemiological service specialists explain the appearance of this terrible disease by the fact that in one of the buildings of the Levchenko quarter household and fecal wastes accumulated in the equipment cellar for a long time owing to a breakdown in the sewer system and were sucked into the water supply system. Emergency measures are being taken to eliminate the cause of the outbreak of an epidemic unknown to us since the civil war and collapse. The water pipes are being flushed out and the drinking water is being hyperchlorinated. But where is the guarantee that a similar situation will not arise on the other side of town? After all, accumulation of sewerage in the cellars of houses is an event characteristic of Lugansk housing. The quality of the drinking water is also evidenced by the following: it is rare when you turn on a faucet that a rusty pulp doesn't come out at first.

At the same time that the "city fathers" are setting up private multi-story houses and opening gambling houses and closed clubs for the wealthy public, housing and communal housing are approaching definitive collapse, disorder and antisanitation are flourishing. When the conversation turns to the disastrous situation in a specific sphere, leading workers of all levels invariably name the reason—the absence of the necessary laws and normative acts. But what law is necessary to ensure that each person in his own work does not profit from his position to rob society but rather does everything necessary to improve its spiritual and physical health?

### **Not An Epidemic**

93P60176B Kiev *DEMOKRATYCHNOYI UKRAYINY*  
in Ukrainian 10 Oct 92 p 2

[Article by L. Aleksyeyev, *DEMOKRATYCHNOYI UKRAYINY* correspondent: "No Epidemic Has Broken Out"]

[Text] The announcement of the beginning of a typhoid fever epidemic in Lugansk, fortunately, has not been confirmed. In the opinion of the head city government sanitarian [physician] O. Tretyakov, this is a local outbreak of this dangerous disease within local borders. The source of the infection was the municipal water supply and sewerage system.

According to the latest information, 51 have been hospitalized. However, typhoid fever has been confirmed in 32 (including 6 children). They are under observation. Some of those who were examined have been discharged from the hospital.

Thus, joint efforts have localized the focus of infection. Part of the water supply system has been replaced. Not only residents of the neighborhood but also their families and friends who had contact with them, have had their state of health checked, as have workers in milk factories, stores and public catering. Also not forgotten were the communal housing workers, the drivers who deliver the products to stores, and the farmers who delivered the milk here.

When the Lugansk residents needed additional medicines for treatment and prevention of typhoid fever, they were sent by vehicle and train from Kharkov, Voronezh, Simferopol, Rostov and Dniepropetrovsk.

## **Hogg: Russian Germ Warfare Program Possibly Still Active**

LD2101165693 London *PRESS ASSOCIATION* in English  
1610 GMT 21 Jan 93

[Article by *PRESS ASSOCIATION DEFENSE* Correspondent Charles Miller]

[Text] The former Soviet Union broke international treaties by developing horrific germ weapons that could wipe out humanity, according to claims tonight by a recent defector to Britain. Dr Vladimir Pasechnik, a former Soviet expert in biology and genetic engineering, told BBC2's *Newsnight* of his "horror" at having to develop a genetically manipulated strain of plague which was immune to Western antibiotics. He said his "disgust" with this work persuaded him to defect while on a business trip to Britain.

And, on the same programme, Foreign Office Minister Douglas Hogg warned that work on a biological weapons programme could be continuing in the former Soviet Union despite a ban by Russian President Boris Yeltsin. Mr. Hogg describes Dr. Pasechnik's arrival in Britain and the information he has as "very significant". The scientist worked in St. Petersburg, then Leningrad, from 1980 as head of one of the centres of covert biological weapons research - whose work was in direct breach of a 1972 biological weapons treaty. Plague bacteria were cultivated in flasks containing an antibiotic and the process was continually repeated to produce a strain resistant to drugs in the West.

The new bacteria were to be left vulnerable to antibiotics known only to the Russians which could be used to vaccinate their own troops. The Russians believed this "super-plague" could be used against cities, not necessarily in all-out war, he claimed. Dr. Pasechnik described how it could kill half the population of a town of 100,000 inhabitants in a short period of time. He also believes it could be used by terrorists. Former Soviet leader Mikhail Gorbachev

told Western leaders he knew nothing about the development of biological weapons but officials at the Russian foreign ministry are quoted as saying he lied. And despite a ruling by President Yeltsin that all research should be stopped there is evidence that his authority is being flouted. Mr. Hogg said: "We have some information from some sources which suggests that there has not been a full compliance with President Yeltsin's decree in policy. "Now that could very well happen without President Yeltsin's knowledge. It's very difficult to make a judgement, but we would wish to go on pressing the Russians on this point," he added.

**Hundreds of Measles Cases Registered in Voronezh**  
LD2402132793 Moscow ITAR-TASS in English 1203 GMT  
24 Feb 93

[Article by ITAR-TASS correspondent Anatoliy Starukhin]

[Text] Voronezh February 24 TASS— Measles in a severe form, with fever and fainting, hit the Voronezh region this year. 545 cases were registered in January and 356 in February. No lethal cases were reported. The alarm was raised at the region's sanitary and epidemiological service, as well as infectious-disease hospitals. It is surprising that young people of student age and adults account for the majority of measles cases. Strange as it may seem, measles affected most strongly students of the medical and other institutes.

Medics noticed that the outbreaks of measles take place with regular intervals. Mikhail Chubirko, chief health officer for the Voronezh region, told ITAR-TASS: "We had an even greater measles outbreak in 1987. That time it affected 3,467 people. One of the reasons for it is that parents were prejudiced against vaccination and deliberately kept their children away from it."

**Five Cases of Malaria in Odessa**  
AU1901151593 Kiev MOLOD UKRAYINY in Ukrainian  
15 Jan 93 p 2

[Report by Ukraine's Independent Information Agency RESPUBLIKA: "Malaria in Odessa"]

[Text] Five cases of malaria have been recorded in Odessa. The disease was introduced into Ukraine from the African country Sierra Leone. According to Nina Beshko, head of the department of medical parasitology at the oblast sanitary-epidemiologic center, it is impossible to establish the exact number of carriers of the viruses of this disease in Odessa. The city's sanitary- epidemiologic center has called upon all residents of the city who arrive from abroad to be examined for malaria.

**Malaria Cases in Kiev for February Total 33**  
OW0403191593 Moscow INTERFAX in English  
1709 GMT 4 Mar 93

[Following item transmitted via KYODO]

[Text] Thirty-three cases of malaria were registered in February in the Ukrainian capital. Of the 33, 80 percent of the victims were children from 6 to 11 years of age. Measures for wiping out the disease's breeding grounds were discussed March 3 at a special session of the coordinating council for emergency situations under Kiev's state administration.

Epidemiologists believe that the carriers of the disease are foreigners - immigrants from Afghanistan, Pakistan, India, and Tajikistan illegally living in Ukraine. According to estimates, about 1000 Afghan citizens are now illegally residing in Kiev.

At the meeting, presidential spokesman in Kiev Ivan Saly advocated requiring citizens of Afghanistan and Pakistan to undergo medical examinations before being allowed to enter the city.

**Epidemiology Committee Closes Crimean Beaches**  
93WE0051B Kiev RABOCHAYA GAZETA in Russian  
3 Sep 92 p 1

[Article by L. Ryabchikov, Kerch, Crimean Republic: "Cholera in Crimea"]

[Text] Kerch beaches are closed, bathing in the sea is prohibited, and special regulations have been imposed on the work of kolkhoz markets. This was done by a decision of an extraordinary epidemic control commission, at a meeting of which cases of cholera were reported.

A 32-year-old urbanite was sent to the hospital with such a diagnosis. It was revealed that he had gone swimming in the sea, and he had eaten shrimp and mussels. Everyone who had been in contact with him was placed under medical control. Steps are being taken concurrently to enforce public health rules in trade, at enterprises and in the streets. Actions are being taken by the city medical headquarters.

**Divergent Official Figures for 1990 Diphtheria Epidemic**  
93WE0209B Moscow NEZAVISIMAYA GAZETA  
in Russian 15 Dec 92 p 6

[Article by Galina Chervonskaya: "The Epidemic Situation in the Mirror of the Press: Medical Officials Differ in Estimates"]

[Text] Galina Chervonskaya is a well known "dissident" in the world of epidemiological inspection. She was the one who began the campaign in the press demanding improvements in the vaccines we use. Correspondingly, she was the one who initiated a campaign of opposition when medical personnel argued that first of all, our vaccines are good, second, avoidance of vaccinations has the most deleterious effect upon the population's health, and third, the press maliciously conceals this from readers. The article published below, which was sent to the editor's office of NEZAVISIMAYA GAZETA by Galina Chervonskaya, raises serious doubts concerning the last supposition. Moreover, it looks as if it is the officials who have no idea of the real state of affairs. Judge for yourself.

Differences in Information on Diphtheria Morbidity for 1990

Name	Position	Where Published	Number of Diphtheria Cases in 1990	
			In the Country	In Moscow
M. I. Narkevich	Chief, USSR Ministry of Health Main Epidemiological Administration	MEDITSINSKAYA GAZETA	457	188
I. N. Denisov	USSR Minister of Public Health	Report at a March 1991 meeting of the Academy of Medical Sciences	-	688
A. I. Kondrusev	Deputy minister, chief state public health physician	RABOTNITSA, No 4, 1991	600	300
N. I. Nisevich	Academician of the Academy of Medical Sciences	MEDITSINSKAYA GAZETA, April 1991	1,500	-
E. B. Kovalenko	Public health physician, Moscow Oblast	LENINSKOYE ZNAMYA, May 1991	852	-
A. A. Baranov	USSR Deputy Minister of Health	Letter of reply to A. V. Yablokov's Ecology Committee	852 (in 1989)	-
N. N. Vaganov	RSFSR Deputy Minister of Health	MOSKOVSKIY KOMSOMOLETS, May 1991	-	500
State Public Health and Epidemiological Service	A statistical administration	ROSSIYSKAYA GAZETA, 1992	1,213	-

Here are the so-called "statistically reliable data" on the diphtheria epidemic in Moscow for 10 months of this year:

1. ROSSIYSKAYA GAZETA, 28 October 1992: According to data of the Moscow Society of Epidemiologists and Microbiologists, 340 persons caught diphtheria this year in Moscow.

2. N. Shestopalov, chief state public health physician (from a statement in a 30 October 1992 "Open Radio" broadcast): There are already 600 cases of illness in Moscow.

3. A. Karniz (NEZAVISIMAYA GAZETA, 5 November 1992): There are 688 patients in Moscow.

With officials like these, an epidemic is sure to come!

### Bubonic Plague in Kazakhstan

93WE0209C Moscow LESNAYA GAZETA in Russian 26 Nov 92 p 1

[Text] "The focus of bubonic plague has been contained, and the health of the stricken youngster is no longer in danger, although his condition is still moderately serious"—such was the encouraging communication transmitted yesterday from the city of Atyrau in western Kazakhstan. It was a week earlier that the worker from Tasshagil'skiy Sovkhoz, Kzylkoginskiy Rayon, who had come to the oblast center to attend driver school, was delivered to the hospital with a high temperature.

### Venereal Disease Epidemic Feared in Moscow Oblast

MK1002100693 Moscow MOSKOVSKIY KOMSOMOLETS in Russian 9 Feb 93 p 1

[From the "Hold the Front Page!" column: "Syphilitics Get Out of Control"]

[Text] Doctors fear that an epidemic may break out in central Russia. The Moscow Oblast Main Health Administration has noted an increased incidence of venereal diseases in 33 towns and rayons around Moscow.

The incidence of syphilis in the oblast is up 92.1 percent. Whereas in 1991 there were 7.2 syphilis cases per 100,000 people, in 1992 the figure was 13.8. The situation is critical in the Kolomna, Podolsk, and Domodedovo rayons where the incidence of syphilis has grown by a factor of 6, 12, and 13 respectively. In Lytkarino, an urban-type settlement in Lyubertsy Rayon, the number of syphilis cases has grown 7.5-fold. After a five-year break, cases of congenital syphilis in children have been recorded.

Specialists attribute this unusually high rate of incidence first and foremost to the large number of refugees and visitors from places with poor standards of venereal disease control.

### Mass Hepatitis Outbreak

LD1901145493 Moscow ITAR-TASS World Service in Russian 0757 GMT 19 Jan 93

[Text] Dushanbe, 19 Jan (KHOVAR-TASS)—A mass outbreak of hepatitis (nearly 4,000 cases) has been recorded in three rayons of Khatlon oblast in Tajikistan. According to experts' findings, the outbreak has been caused by eating bread and other flour-based food made from home-ground wheat that has not been cleared of toxic wild plant seeds.

These rayons form part of the former Kulyab oblast, which last year experienced a seven-month economic blockade; people were forced to eat poor-quality food. The government has now acted quickly to resolve all difficulties in supplying food and medicines to the area.

**Heliotrope Poisoning Causes Hepatitis Outbreak**

LD3101203693 Moscow Teleradiokompaniya Ostankino  
Television First Program Network in Russian 1200 GMT  
31 Jan 93

[From the "Novosti" newscast]

[Text] For six months, the former Kulyab oblast in Tajikistan was under economic blockade. The bread-grain was not threshed at the proper time and harvesting began only in October, when it became possible. By then, the seeds of heliotrope—a weed which always accompanies cereals and is a strong poison, destroying liver cells—had also ripened. The hungry people began eating this contaminated bread. Today, in Parkharskiy rayon alone, there are about 4,000 sufferers from heliotrope hepatitis. Most of them are children. A team of 20 professors and doctors of medicine has been rushed from Dushanbe to Parkharskiy rayon, where an extra 1,500 hospital beds have been provided. A field hospital has been set up by a medical emergency unit from Tashkent. To avoid further outbreaks, the contaminated flour has been destroyed. The whole republic is helping the sick children.

**Outbreak of Hepatitis in Kirovohrad Oblast**

AU0602171793 Kiev MOLOD UKRAYINY in Ukrainian  
2 Feb 93 p 1

[Report by Stanislav Koldunenko]

[Text] From 27-29 January, 422(!) local residents were brought to the hospitals in Kirovohrad and five rayons of the oblast with the diagnosis of "hepatitis." The source of the infection is being looked for. Quarantine measures have been taken.

**Ministry Refutes Anthrax Outbreak Reports**

934Q0004B Moscow SELSKAYA ZHIZN in Russian  
2 Feb 93 p 3

[Commentary by M. Glinka: "POSTFACTUM's Sly Fox"]

[Text] Lately, the editors have been receiving anxious letters. "Can one use the beef brought from Omsk Oblast?" ask some. "What kind of a terrible disease has struck the pig-breeding farms in Chelyabinsk and Omsk oblasts?" ask others. "Why are steps not being taken to prevent the spread into Russia from Kazakhstan of a dangerous horned-cattle disease?" still others inquire indignantly. To find out the reason for this anxiety, we asked the Main Veterinarian Administration of the Russian Federation Ministry of Food and Agriculture. This is what we were told.

The cause of all these perplexed questions was the information distributed by POSTFACTUM "Epidemics From All Directions," published by a number of mass media, including such a serious newspaper as TRUD. An epidemic of anthrax has flared up in Omsk Oblast... African plague is sweeping Chelyabinsk and Tomsk oblasts... Foot-and-mouth disease is moving in from the Central Asia.

Comrades, calm down—all of this is fiction. Both last year and this year there has not been a single case of animals contracting anthrax registered in Omsk Oblast, as well as in the regions bordering it. As we were told by the Main Veterinarian Administration of the Russian Federation Ministry of Food and Agriculture, isolated incidents of this dangerous disease have been registered, but only in the North Caucasus and the Volga region. As to the pigs contracting African plague, it is not currently encountered on the territory of Russia at all (knock on wood). The farms in Portugal and Spain are currently suffering from it. In order to prevent the transmission of this dangerous disease to our country, trade in animal husbandry products with the countries of the Pyrenees peninsula has been suspended.

Nor are the reports of the foot-and-mouth disease true. Veterinarian agencies of Kazakhstan and the Central Asian countries report that their territories are clear of this infection. As to Russia, it has not been observed there for many years. So it appears that POSTFACTUM apparently obtained its facts from the sly fox, whose truthfulness has long become a part of the folklore.

We could end at this point, had there not been one "but." All of us remember the notorious newspaper campaign on "fighting the salmonella infection." Newspapermen lacking in conscientiousness at the time accused poultry breeders—the people in the only industry that consistently had been increasing its output—of putting on the market eggs and meat infected with pathogenic bacteria. And although, as is usual for the democratic press, the facts have never been confirmed, frightened consumers stopped buying the products. Tremendous harm was done to the poultry industry system enterprises, from which they have not yet recovered. Now another blow—this time against dairy and meat farms. Does history repeat itself?

**Malignant Anthrax Outbreak Suspected in Ulyanosk**

LD2201095993 Moscow Mayak Radio Network in Russian  
0900 GMT 22 Jan 93

[Text] Symptoms of a dangerous infectious illness have been discovered among 15 bridge builders in Ulyanovsk, reports SIMBIRSKIYE GUBERNSKIYE VEDOMOSTI today. The paper was told by Aleksandr Nafeyev, senior specialist with the Oblast Sanitary and Epidemiological Center, that those in charge of mobile bridge construction team 829 purchased beef from two farms in Radishchevo rayon. The meat was sold without the requisite veterinary checks or documents. Apart from that, all ten carcasses were transported in dirty trucks. Many members of the mobile bridge construction team ate the beef, but only those directly involved in carving up the carcasses and touching the meat became ill. Doctors have established that people became infected through scratches on their hands. The paper stresses that the victims are now in agony, waiting for their diagnosis. So far, doctors diverge in their views, although the external symptoms of the illness show that infection with malignant anthrax is quite possible.

## FRANCE

### Listeriosis Traced to Pork, Cheese Products

93WE0248A Paris LE MONDE in French 16 Feb 93 p 11

[Article by Jean-Yves Nau: "Food-Related Origin of Most Cases of Listeriosis Identified"]

[Text] A group of researchers has succeeded in tracing the origin of most of the cases of listeriosis that, directly or indirectly, have caused 63 deaths and 22 abortions<sup>(1)</sup> during the last few months in France: The epidemic has been tied to consumption of "pork tongue in aspic."

Around the end of May 1992, the Pasteur Institute's specialized national center in Paris detected a disturbing increase in the number of human infections stemming from a single colony of *Listeria*. Up to then, this bacterial colony had only been responsible for some sporadic cases. From March to last December, 279 cases of listeriosis due to a specific colony of bacteria (*Listeria monocytogenes*, serotype Lb) were identified in France. These represented almost half of all the cases of human listeriosis reported during the same period.

As of June, public authorities announced that the epidemic had already caused at least 20 deaths and provoked five abortions (LE MONDE 27 June 1992). In the weeks and months that followed, an effective epidemiological surveillance and information system having been set up, official reports on this epidemic added to the anguish (LE MONDE, "Sciences Medicine," 12 August 1992).

Close collaboration among the services of the three ministries directly concerned (Health, Consumer Products, and Agriculture), made it possible, through the work of the doctors of the Health and Social Services' departmental directorates, the veterinarians of the Directorate of Veterinary Services, and agents of the Consumer Products and Fraud Repression Administration, to conduct the necessary field work in connection with the research effort. An initial phase consisted of researching a possible association between the consumption of a food stuff and the existence of the illness. It involved the questioning of 228 listeriosis patients and 324 "test subjects," persons of comparable age, living conditions, sex, etc. not affected by the disease.

It became apparent that the proportion of persons having consumed cooked pork meats was higher among the patients than among the "test subjects," the latter having been more frequently consumers of cheese products. Thorough analyses of all the cooked-pork products on the market led to the isolation of a particular colony present in many foods sold in the form of cold cuts.

It was then determined that almost half of the persons affected by the disease (46.5 percent) had consumed pork tongue in aspic. The percentage is highly significant, and leaves no doubt whatever in the minds of the experts as to the origin of the epidemic. "The epidemic colony," they explain, "has been isolated in different foods sold at the same cold-cuts counters, as well as on implements used for

slicing these products. The patients, therefore, could have been infected by ingesting products either contaminated during production or contaminated secondarily by handling during distribution."

### Elementary Hygiene

In all, 12,000 colonies of *Listeria monocytogenes* were isolated in the food product samples taken nationwide. All these colonies were sent to the Pasteur Institute in Paris for very refined bacteriological analyses. As a result, 203 food products were found contaminated by the epidemic colony: mainly hams, pates, products in aspic, and some cheese products. The existence of the problem was repeatedly called to the attention of the concerned sector as a whole (manufacturers and distributors) during the investigation. An investigation was carried out among all the manufacturers of products in which the epidemic colony was found. In these factories, manufacturing processes have been revised and disinfection measures have been instituted.

At the same time, the professional organizations of the different production and distribution sectors were alerted to the risk of epidemic. More than 2,000 dairy product establishments and more than 1,000 cooked-pork product establishments were thoroughly investigated. The Consumer Products and Fraud Repression Services carried out 800 operations at distribution centers, and the opportunity was taken in each case to call the attention of the managers concerned to the need for sound hygiene practices at the cold-cut counters.

As of now, the epidemic has been halted. "To avoid the recurrence of such a situation and to limit sporadic cases, 'the listeria risk' must be taken into account permanently by the producers," the authors of the study conclude. They urge the instituting of effective control systems inside the enterprises. Distributors, they emphasize, must insist on the observance of hygiene at cold-cut counters because of the risk of cross-contamination. Consumers must also adhere carefully to a few elementary rules of hygiene, "avoiding the contamination of food products among themselves in the refrigerator, and avoiding lengthy storage of foods that will be consumed without re-cooking."

In addition to these findings and conclusions, and in particular, considering the magnitude of the epidemic of these last few months—responsible, when all is said and done, for 63 deaths, and the source of 22 abortions—the results of this study raise serious medico-legal questions. "Pork tongue in aspic" can be produced either in a cottage-industry manner and sold in delicatessens, or industrially and marketed in supermarkets. It seems that the epidemic that has raged throughout French territory originated in products manufactured industrially. Curiously, however, the researchers disclose neither the brand or brands affected nor the name or names of the producers. This will heap opprobrium on the totality of these products, no matter what their origin. The Ministry of Agriculture points out that, generally speaking, in addition to "pork tongue in aspic" itself, all aspic-based cooked-pork products can be contaminated through faulty hygiene, since this jelly is an ideal culture medium for the germs.

**Footnote**

1. Listeriosis is normally an infrequent bacterial disease whose source of contamination is often found in food (cooked-pork products, cheese products, etc). Sometimes responsible for meningeal manifestations in adults, its most common form is listeriosis of newborns who have been contaminated by the mother during pregnancy or delivery. The study will be published in the weekly epidemiological

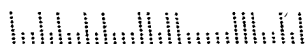
bulletin of the General Directorate of Health. It is signed by Mrs. Veronique Goulet of the National Public Health Network, Mrs. Agnes Lepoutre of the General Directorate of Health, Mrs. Jocelyne Rocourt of the Paris Pasteur Institute, Andre-Louis Courtieu of the Nantes School of Medicine, Patrick Dehauymont of the General Directorate of Food Products, and Pierre Veil of the General Directorate of Consumer Products and Fraud Repression.

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